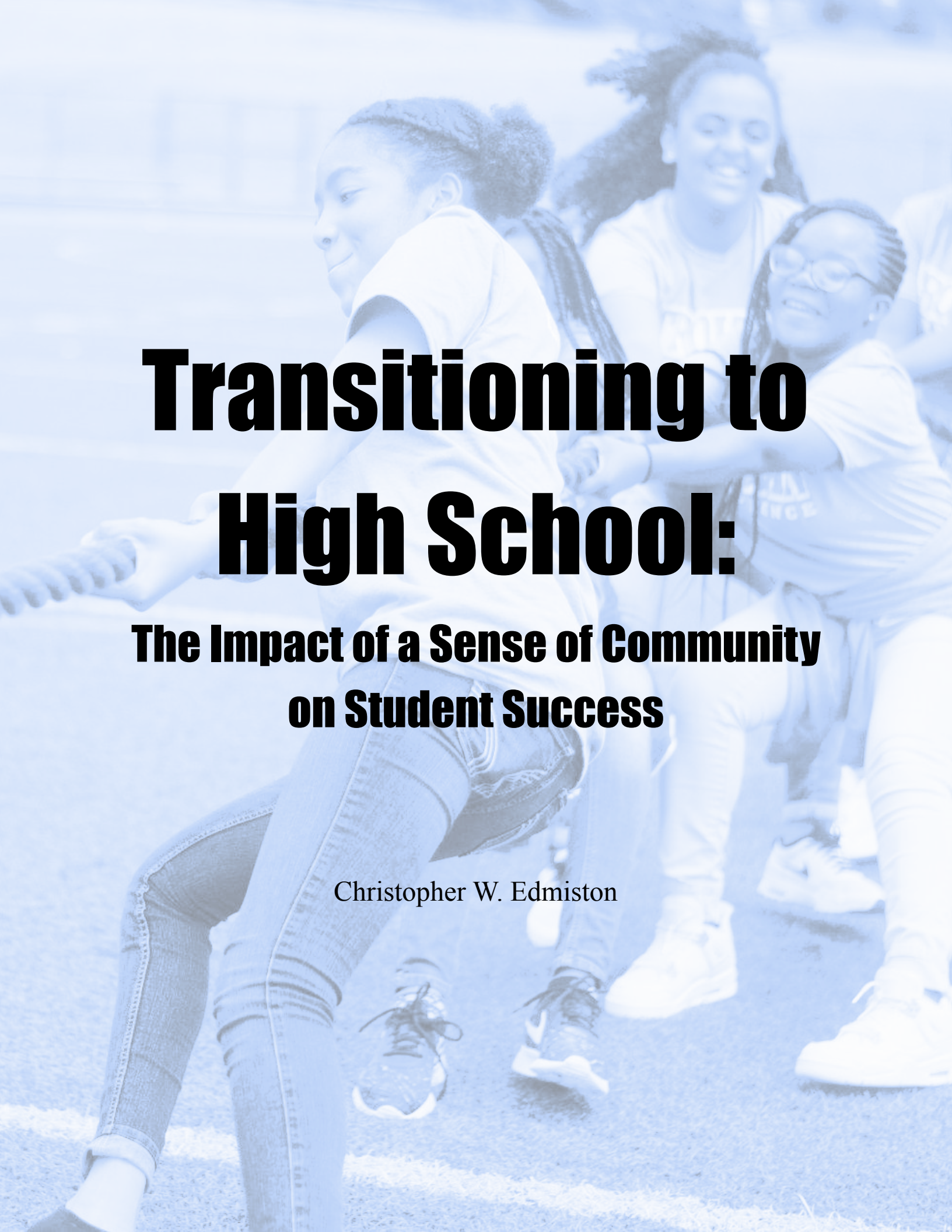

Transitioning to High School:

The Impact of a Sense of Community on Student Success

Christopher W. Edmiston

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The Impact of a Sense of Community on Student Success

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In partial fulfillment of the requirements for the degree of

Doctor of Education in Leadership and Learning in Organizations

Department of Leadership, Policy, and Organizations, Vanderbilt Peabody College

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Dedication

To my lovely wife,

the best part of everything.

Acknowledgments

Family

Your love and support are unconditional; I take that with me in everything that I do. You have instilled in me a belief that I can accomplish anything as long as I *work hard* and *work smart*. Thank you for teaching me what it means to commit, showing me when to sacrifice, and always modeling resiliency.

Dr. Christine Handy

Doc, you have trusted and supported me since day one. You are my fiercest advocate. Thank you for always pushing me to take things to *the next level*!

Ms. Carol Trawick

You are an inspiration. Your philanthropic efforts have positively impacted countless lives, my own included. Thank you for trusting me to help you make a difference.

Dr. Matthew Campbell

Your unwavering support made a small-town kid believe that he belonged in a doctoral program at one of the most prestigious universities in the world. I am thankful for your unending commitment to delivering constructive feedback and timely words of affirmation. Your guidance and mentorship improved every part of my work.

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Table 1

Definitions

Community - For the purpose of this study, a community is defined as a group of people with social ties and common perspectives who frequently engage in a shared space (MacQueen et al., 2001).

Sense of Community - For the purpose of this study, a sense of community is defined as how one experiences their interaction with the people or places of their community. The dimensions of connectivity, comfort, social influence, and social-emotional learning influence this latent construct.

- **Connectivity** - For the purpose of this study, connectivity is defined as a feeling of attachment to one's community.
- **Comfort** - For the purpose of this study, comfort is defined as a feeling that one's physical and psychological needs are met.
- **Social Influence** - For the purpose of this study, social influence is defined as one's perceived impact on their community through their actions or the actions of the members they choose as leaders.
- **Social-Emotional Learning** - For the purpose of this study, social-emotional learning is defined as one's acquisition and application of "...the knowledge, attitudes, and skills necessary to understand and manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions" (Weissberg & Cascarino, 2013, p. 9). This dimension is referred to as social-emotional learning and SEL interchangeably throughout this study.

Student Success - For the purpose of this study, student success is a quantitative measure of traditional indicators of academic performance. This manifest variable is measured using grades, attendance, and discipline data.

- **Grades** - For the purpose of this study, grades are an indicator of student success. Student grades are measured by a grade point average which serves as a numerical representation of their academic performance. This score is weighted for advanced level classes and measured on a scale from 0 to 5.
- **Attendance** - For the purpose of this study, attendance is an indicator of student success. A student's attendance score represents the percentage of school days that they attended school. This score is measured on a scale from 0% to 100%.
- **Discipline** - For the purpose of this study, discipline is an indicator of student success. A student's discipline score represents the percentage of school days that they were not suspended due to disciplinary action. This score is measured on a scale from 0% to 100%.

Executive Summary

The Jim and Carol Trawick Foundation (Trawick Foundation) supports humanitarian initiatives in Montgomery County, Maryland. The foundation provides grant funding for specific projects to *reach people in need and encourage creative activities*. In 2009 the Trawick Foundation launched its TeamUp concept to promote the collaborative development of holistic programs. The TeamUp model encourages partnerships between local schools and nonprofit organizations to help support students as they transition from middle school to high school. This study uses relevant research and student data to determine which dimension of a sense of community has the greatest impact on student success and recommendations offer innovative, yet practical, strategies for high school transition programs to facilitate a sense of community and help students achieve success.

Problem of Practice

The first year of high school is an academically and socially challenging time for many students (Allensworth et al., 2014; Felmlee et al., 2018; Lee & Burkam, 2003; Pharris-Ciurej et al., 2012; Van Eck et al., 2017). Students often find themselves unprepared to navigate the sudden upsurge in expectations, a situation compounded by their newly-found sense of independence (Baker et al., 2001). The Trawick Foundation maintains a strong commitment to helping students navigate the transition to high school. The foundation's philanthropic efforts have produced many innovative programs deemed successful by the school communities they support.

Despite its momentum, the foundation does not have a standardized measure to quantify success amongst teams or over time. As such, the foundation seeks a standardized data collection instrument to help understand how students experience a sense of community at school and the

correlation between a sense of community and a successful transition to high school. The foundation requires that the instrument is research-based, minimally disruptive to the learning environment, and easily implemented with minimal training. This sense of community data, when analyzed with academic data, will help the foundation determine the extent to which a student's sense of community at school impacts their success. Additionally, the analysis will help determine which dimension of a sense of community has the greatest impact on student success. The analysis will also enable the foundation to measure success amongst teams and evaluate any impact of program modifications, informing the foundation's future programming.

Project Questions

To explore the problem of practice, this cross-sectional, exploratory study employed a quantitative approach to answer the following project questions:

1. To what degree does a sense of community impact student success?
2. Which dimension of a sense of community has the greatest impact on student success?

Findings

The conceptual framework for this study was grounded by Astin's (1984) Student Involvement Theory and Elder's (1998) Life Course Theory. A standardized data collection instrument (Appendix A) provided student-voice data. The 12 items of the survey were adapted from previous indices to assess each dimension of a sense of community. The school district provided data on students' academic performance, attendance, and discipline. An analysis of survey responses and indicators of student success yielded the following:

Table 2

Project Questions and Findings

Project Question 1 To what degree does a sense of community impact student success?	**Finding 1** A moderate positive relationship exists between a sense of community and student success. **Finding 2** 12.5% of the variance in a student success score is explained by a sense of community.
Project Question 2 Which dimension of a sense of community has the greatest impact on student success?	**Finding 3** Social-Emotional Learning had the greatest impact on student success. **Finding 4** Item #6 of the sense of community survey had the lowest correlation to an overall sense of community. **Finding 5** Item #7 of the sense of community survey had the lowest correlation to student success.

Recommendations

Based on findings, several recommendations are offered to facilitate student success through improving a sense of community.

1. The Trawick Foundation should maintain its commitment to promoting a sense of community at school to improve student success.
2. The Trawick Foundation should expand opportunities for social-emotional learning because of the strong positive correlation between the dimension and student success.
3. The Trawick Foundation should implement the sense of community survey with modifications.

Introduction

The Trawick Foundation supports humanitarian initiatives in Montgomery County, Maryland. Since 2009, the foundation has partnered with local schools to support students transitioning from middle school to high school. This study aims to examine which dimension of a sense of community (connectivity, comfort, social influence, or social-emotional learning) has the greatest impact on student success (as measured by grades, attendance, and discipline).

Organizational Context

The president of the Trawick Foundation, Ms. Carol Trawick, cites a *Community Health Needs Assessment Report* published in 2006 as a personal call to action. The report outlined community needs in foster care, health care, housing, and education. Ms. Trawick established the Trawick Foundation in 2007 with a mission to *reach people in need and encourage creative activities*. The foundation maintains a small staff that includes the president, an executive director, an executive assistant, a grant database administrator, and resource consultants. Carol Trawick has a passion for her foundation's commitment to creative problem-solving. She offers her teams considerable latitude in their approach, often reminding them, 'keep it fun and make sure there is food!'

Since its inception, the Trawick Foundation has granted over $14 million to 132 nonprofit organizations. The foundation offers financial support through collaborative grants, co-occupant programs, capacity cooperative programs, and no-cost seminars. This study focuses on the collaborative grants, which the foundation refers to as TeamUp grants. The Trawick Foundation launched its TeamUp concept in 2009 to promote the collaborative development of holistic programs to meet the individual needs of area youth. The foundation's proposal requires three local nonprofit organizations to assemble as one team and develop an innovative program to

support one local school. All of the photos featured in this document come from the Trawick Foundation's TeamUp projects.

Based on a need identified by several school administrators, the foundation narrowed the focus of their TeamUp grants to support first-time 9th-grade students transitioning to high school. Successful proposals receive $150,000 in funding for the first year, with the foundation's option to fund the program for up to three years for a total of $450,000 in financial support. Between 2014 and 2022, The Trawick Foundation awarded 35 grants in support of local schools. This study may inform their decision-making process in addressing the identified need.

Problem of Practice

The transition to high school is a defining period in a young person's development (Abbott & Fisher, 2012; Allensworth et al., 2014; Cushman, 2006; Hertzog & Morgan, 1999; McCallumore & Sparapani, 2010; Mizelle & Irven, 2000; Neild, 2009). These formative years offer a multitude of consequential interactions between the student and their new socio-cultural context (Shanahan, 2000). Unfortunately, students often find themselves unprepared to navigate the sudden upsurge in expectations, a situation compounded by their newly-found sense of independence (Baker et al., 2001). This culmination of factors makes the first year of high school an academically and socially challenging time for many students (Allensworth et al., 2014; Felmlee et al., 2018; Lee & Burkam, 2003; Van Eck et al., 2017). Unifying themes in the research on the high school transition report a noticeable pattern of declining grades (Baber & Olsen, 2004; Barone et al., 1991; Benner & Graham, 2009; Felmlee et al., 2018; Felner et al., 1981; Gillock & Reyes, 1996; Reyes et al., 1994; Roderick, 2003; Roeser et al., 1999), attendance (Barone et al., 1991; Felner et al., 1981; Gillock & Reyes, 1996; Reyes et al., 1994; Roeser et al., 1999; Van Eck et al., 2017), and discipline (Baker et al., 2001; Barber & Olsen, 2004; Roderick, 2003). Students who fall behind academically during their first year of high school are not likely to recover (Baker et al., 2001; Pharris-Ciurej et al., 2012).

The Trawick Foundation maintains a strong commitment to helping students navigate the transition to high school. The foundation's philanthropic efforts have produced many innovative programs deemed successful by the school communities they support. Despite its momentum, the foundation does not have a standardized measure to quantify success amongst teams or over time. The foundation seeks a standardized data collection instrument to help understand how students experience a sense of community at school, and the correlation between a sense of

community and a successful transition to high school. The foundation requires that the instrument is research-based, is minimally disruptive to the learning environment, and that it can be implemented with minimal training. The sense of community data, when analyzed with academic data, will help the foundation determine the extent to which a student's sense of community at school impacts their success. Additionally, the analysis will help determine which dimension of a sense of community has the greatest impact on student success. Recommendations will provide innovative, yet practical, strategies for high school transition programs to assist students in achieving success. These recommendations will serve the Trawick Foundation in the short term as a resource they can provide to TeamUp grantees, assisting educational leaders in implementing holistic strategies.

Literature Review

A systematic exploration of seminal works initiated the literature review for this study. This extensive review explored influential research using an ancestral reference search and a forward citation search. This review aimed to explore the historical perspectives and current understanding of a sense of community and its impact on a successful transition to high school. A synthesis of extant literature operationalizes the latent construct of a sense of community through the dimensions of connectivity, comfort, social influence, and social-emotional learning.

Later, this study will compare a sense of community with the manifest construct of student success, quantified by traditional indicators of academic achievement: academic performance, measured by grades; attendance, measured by the percentage of days in school; and discipline, measured by the percentage of school days without a disciplinary event. This literature review will inform the development of a standardized data collection tool that fits the needs of the Trawick Foundation.

Sense of Community

An article published by the National Institutes for Health defines the social construct of *community* as "...a group of people with diverse characteristics who are linked by social ties, share common perspectives, and engage in joint action in geographical locations or settings" (MacQueen et al., 2001, p. 1,929). Chavis and Newbrough (1986) shared a non-exhaustive list of community values, including a presence or absence of territory, support, setting, benefits for quality of life, therapeutic value, development, fulfillment of needs, and leadership. A *sense of community*, positioned by Chavis and Newbrough (1986) as the "...organizing concept for the psychological study of community" (p. 335), is how one experiences their interaction with the people or places of their community.

Schools are a community. Boyes-Watson & Pranis (2015) asserted, “for better or worse, schools are communities where students experience either belonging or not belonging to that community” (p. 20). The academic and social challenges of transitioning to high school are not always experienced in the same manner or by the same magnitude. MacQueen et al. (2001) noted that people with diverse backgrounds define community similarly, but experience it differently, and Chavis and Newbrough (1986) proclaimed that “...knowledge of community can help us to address the social process of margination and to reverse its disastrous effects” (p. 337). For these reasons, this study will review historical iterations of a sense of community and determine a definition appropriate for the Trawick Foundation.

Defining a Sense of Community

Sense of community is a key theoretical construct of community psychology (Chavis & Newbrough, 1986; Peterson et al., 2008; Sarason, 1974). This multidimensional phenomenon, first introduced by McMillan in 1976, encapsulates how one experiences themself and how they experience their interactions with the world around them. Despite the omnipresence of this concept, researchers struggle to agree on best practices for defining and measuring a sense of community (Chavis et al., 1986; Chavis & Newbrough, 1986; Jason et al., 2015; Peterson et al., 2008; Sarason, 1974). This section reviews the iterations of conceptualization, synthesizing the findings and advancements most relevant to the current study.

Sarason (1974) framed the concept of a psychological sense of community as being “the perception of similarity to others, an acknowledged interdependence with others, a willingness to maintain this interdependence by giving to or doing for others what one expects from them, the feeling that one is part of a larger dependable and stable structure” (p.157). Sarason’s definition aligned with the researcher’s long-standing work of building individual capacity through

acceptance and involvement. Sarason advocated for the inclusion of individuals with diverse learning needs in a mainstream classroom since the 1940s, nearly half a century before it became common practice (Sarason, 1949). With this initial conceptualization, Sarason (1974) acknowledged difficulties with operationalizing and measuring this nascent concept:

> It does not sound precise, it obviously reflects a value judgment, and does not sound compatible with "hard" science. It is a phrase which is associated in the minds of many psychologists with a kind of maudlin togetherness, a tear-soaked emotional drippiness that misguided do-gooders seek to experience. And yet there is no psychologist who has any doubt whatsoever about when [they are] experiencing the presence or absence of the psychological sense of community. [They luxuriate] in its presence and despairs in its absence. (pp. 156-157)

McMillan and Chavis (1986) later referenced McMillan's (1976) unpublished manuscript for their definition of a sense of community, "...a feeling that members have of belonging, a feeling that members matter to one another and to the group, and a shared faith that members' needs will be met through their commitment to be together" (p. 9). With their definition, McMillan and Chavis (1986) reference Durkheim's (1964) conclusion that communities build around shared interests rather than locality. The researchers carefully integrate this observation into their four elements: membership, influence, integration/fulfillment of needs, and shared emotional connection maintaining applicability to a relational or a territorial sense of community.

In 1996, McMillan revised the McMillan and Chavis (1986) definition. The researcher provided an updated version: "...a spirit of belonging together, a feeling that there is an authority structure that can be trusted, an awareness that trade, and mutual benefit come from being together, and a spirit that comes from shared experiences that are preserved as art" (p. 315).

McMillan (1996) also updated the elements of a sense of community; spirit, emotional safety, boundaries, sense of belonging, trust, trade, and art. For the purpose of this study, the 1996 updates provide valuable context, with minimal contextual adjustment. The first notable modification is a change from membership to spirit. McMillan (1996) credits a movement away from boundaries and towards the spark of friendship for this change. This change could be interpreted as an advancement of the inclusivity that Sarason pursued but also viewed as a barrier to quantification. This study seeks to address that detail. The next items - emotional safety, boundaries, sense of belonging, trust, and trade are taken collaboratively to fill the space of influence, integration/fulfillment of needs, and shared emotional connection from the 1986 definition (McMillan & Chavis, 1986). Finally, art aligns with the first element, spirit, in a seemingly unintended return to the 1986 element of membership (McMillan & Chavis, 1986).

With respect to the elements of each description shared in this section, this project defines a sense of community as how one experiences their interactions with the people or places of their community.

Measuring a Sense of Community

Researchers have debated the best way to measure a sense of community since its first conceptualization. Often the "...difficulty in the scientific exploration of sense of community is in the value-laden and phenomenological nature of the experience" (Chavis et al., 1986, p. 24). This section outlines a small segment of the iterative process, stemming from the seminal work of McMillian and Chavis' (1986). The measures in this section represent foundational work and advancements applicable to first-time 9th-grade students.

The Sense of Community Index (SCI) was developed as an assessment of McMillian and Chavis' (1986) four dimensions of a sense of community (Long & Perkins, 2003; Peterson et al.,

2008). David Chavis created the SCI with input from Paul Florin, Doug Perkins, John Prestby, Richard Rich, and Abraham Wandersman (Long & Perkins, 2003). The index was first published by Perkins et al. (1990) as part of "...a framework for understanding the relationship of participation in block associations to a wide range of block-level variables (demographics, the built environment, crime, and the transient social and physical environment)" (p. 83). In this application, the SCI represented an input of *social climate*, which was hypothesized to be a predictor of *participations in block associations*.

In 2003, Long and Perkins conducted a confirmatory factor analysis (CFA) to test the theoretical fit of the SCI, producing findings that are relevant to the current study. The researchers reported a "...poor model fit for McMillan and Chavis' (1986) original theoretical formulation as well as for a single-factor index…" (Long & Perkins, 2003, p. 279) and offered reasoning. These notes serve as valid considerations for the conceptualization of the current study. Long and Perkins (2003) contend:

> The problem may be that (a) dimensions vary from place to place and/or change over time, (b) measurement may not accurately reflect McMillan and Chavis' aims, (c) crude, dichotomous response options constrained the measure's sensitivity, or (d) the original derivation, while theoretically sound, was confirmed based on items that included other constructs, such as place attachment and length of residence. (p. 291)

Long and Perkins' (2003) findings led to the development of the Brief Sense of Community Index (BSCI). Among the changes to the SCI, Long and Perkins (2003) removed seven items, categorizing four items as indicators of *place attachment* and labeling three items as poorly worded. The researchers added three face-valid sense of community items. These changes

left the BSCI with eight items distributed between the factors of social connections, mutual concerns, and community values (Long & Perkins, 2003). The CFA found BSCI to have a generally good fit despite marginal internal consistency (Long & Perkins, 2003). Critics of the BSCI question the theoretical justification (Obst & White, 2004) and label the instrument "... problematic as a multi-factor measure using observed scores" (Jason et al., 2015, p. 2). Jason et al. (2015) did not offer additional context to support their criticism beyond that included and addressed in Long and Perkins' (2003) original paper.

Many studies have followed the work of Long and Perkins (2003), each with advancements and critics. Obst and White (2004) used CFA indicators to rearrange SCI items within McMillan and Chavis' (1986) four factors but did not provide conceptual support for the move. Proescholdbell et al. (2006) combined the factors of needs fulfillment and membership for a three-factor structure and then analyzed correlations to recommend a single measure of a sense of community, citing three other studies (Brodsky et al., 1999; Buckner, 1988; Davidson & Cotter, 1986) with a similar recommendation. Tartaglia (2006) took a similar approach as Proescholdbell et al. (2006), creating a three-factor structure for the Italian Sense of Community Scale that combined the factors of needs fulfillment and influence, and included factors labeled as place attachment (previously removed by Long & Perkins, 2003) and social bonds.

Peterson, Speer, and McMillan (2008) set out to clarify the McMillan and Chavis (1986) model with completely new items. The researchers started with a concise description of a sense of community, noting that the concept "...refers to the fundamental human phenomenon of collective experience" (Peterson et al., 2008, p. 62). They then created the Brief Sense of Community Scale (BSCS), an 8-item scale designed to quantify what they referred to as the human experience. To evaluate the BSCS, Peterson et al. (2008) conducted a CFA, as done in the

work of their predecessors. However, the researchers took their validity test a step further by examining the relationship between the BSCS and the theoretical relevant variables of community participation, empowerment, mental health, and depression (Peterson et al., 2008). Ultimately, the researchers concluded that operational definitions of a sense of community depend on the environment in which the sense of community is measured (Peterson et al., 2008).

Sense of Community as a Tenent of a Conceptual Framework

Students in communities with a high sense of community are more likely to participate in prosocial behaviors (Cantillion et al., 2003). For many educational leaders, this citation alone serves as all the validation they need to recognize the importance of a sense of community as students transition to high school. Research offers additional validation, specifically related to the positive impact on student success measured by traditional indicators of academic performance. Students in communities with a higher sense of community earn higher grades (Cantillion et al., 2003), attend school more often (Roderick, 2003), and are more likely to follow school rules (Greenberg et al., 1982). Additionally, a high sense of community also leads to improved resiliency (Chavis & Newbrough, 1986; Kobasa, 1979), which may serve students through all indicators of student success.

Dimensions of a Sense of Community

This study operationalizes a sense of community through the dimensions of connectivity, comfort, social influence, and social-emotional learning. The literature and previous sense of community indices elevate these four dimensions as appropriate groupings for the purpose of this study.

Connectivity

Research shows a correlation between connectivity and academic performance (Felmlee et al., 2018), attendance (Van Eck et al., 2017), and discipline (Welsh et al., 1999). Connectivity attempts to measure a student's feeling of attachment to or engagement with their school. The Centers for Disease Control and Prevention (2010) define school connectedness as the "belief by students that adults and peers in the school care about their learning as well as about them as individuals" (p.21). Van Eck et al. (2017) concluded that connectivity is a fundamental aspect of school climate, stating that "students who feel more connected to teachers and peers show better attendance and lower rates of dropout" (p. 91). The researchers noted, "Identifying ways to foster and strengthen these relationships across the school seems to be critical for improving school climate and chronic absence rates" (p. 98). Van Eck et al. (2017) continued:

> ...effective interventions may include encouraging teachers and staff to build supportive relationships with students, monitoring and supporting positive peer relations, offering tailored resources for academic and socio-emotional student difficulties, finding creative and engaging ways to involve parents in school activities during and after the school day, and offering engrossing learning environments with increased exchange between teachers and students. (p. 98-99)

Welsh, Greene, and Jenkins (1999) reported that students with a high level of school connectedness display greater buy-in of school rules and are less likely to demonstrate deviant behaviors. Focusing on students entering high school, Felmlee et al. (2018) warned that the inevitable disruption to connectedness when transitioning from one school to another often results in adverse academic and social outcomes.

Comfort

The dimension of comfort examines the fulfillment of a student's physical and emotional needs. In productive environments, physical safety and emotional safety often coalesce (Edmondson, 1999; Edmondson & Lei, 2014; Maslow, 1943; McMillan & Chavis, 1986).

Maslow's Theory of Motivation (1943) outlines the hierarchy of needs, from basic physiological requirements to self-actualization. In this theory, Maslow (1943) describes people as "...a perpetually wanting animal" (p. 3) and contends that this wanting (or motivation) introduces needs in a predictable sequence. The dimension of comfort, as applied to a sense of community for this study, focuses on the first three levels of Maslow's hierarchy, physiological needs, safety needs, and love needs (Maslow, 1943). McMillian and Chavis (1986) listed the fulfillment of needs as a primary function of a strong community, noting that "the emotional safety that is a consequence of secure boundaries allows people to feel that there is a place for them in the community and that they belong" (McMillan & Chavis, 1986, p. 15).

Comfort may include seeking a trusted adult while navigating needs. A report from the National Scientific Council on the Developing Child (2004) posits, "young children experience their world as an environment of relationships, and these relationships affect virtually all aspects of their development" (p. 1). Responsive relationships with adults promote healthy brain development and provide the necessary support to navigate challenging experiences (Center on the Developing Child at Harvard University, 2021).

Social Influence

The dimension of social influence attempts to measure the impact a member has on their community through their actions or the actions of the members they choose as leaders. Empowerment is positively associated with a sense of community (Itzhaky & York, 2000); therefore, "members are more attracted to a community in which they feel that they are influential" (McMillan & Chavis, 1986, p. 12). Organizational behavioral scientist Amy Edmondson (1999) described psychological safety amongst teams as "... a shared belief that the team is safe for interpersonal risk-taking" (p. 354). In short, this interpersonal construct describes people's willingness to speak up or take risks without fear of consequences (Edmondson, 1999; Edmondson & Lei, 2014). When a community member does not desire direct influence, they maintain "...a need for a leadership with the status, capacity, and the role to attend to the general problems of the territory and give substance to a public philosophy" (Long, 1958, p. 225)".

Lee and Burkham (2003) reported that "some students see schools as locations where they can develop their human capital, so that staying in school longer is felt to increase their probability of success in the larger adult world" (p. 356). Unfortunately, for other students, schools can be a daily reminder of an alternate life trajectory (Lee & Burkam, 2003). Individuals with greater social influence have more resources and are better positioned to receive and convey information (Coburn & Russell, 2008).

Social-Emotional Learning

Social-emotional learning is an integral component of students' success, both in and out of school (Bridgeland et al., 2013; DePaoli et al., 2017; Greenberg et al., 2010; Jones & Kahn, 2017; Weissberg et al., 2015). Researchers define social-emotional learning as a process through which students "...acquire and effectively apply the knowledge, attitudes, and skills necessary to understand and manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions" (Weissberg & Cascarino, 2013, p. 9). Studies show a correlation between one's ability to regulate emotions and behavior and the skills one needs to succeed academically (Jones et al., 2011; Heckman & Kautz, 2013; Weissberg & Cascarino, 2013).

Social-emotional learning can be conceptualized through five core foci: self-awareness, self-management, social awareness, relationship skills, and responsible decision-making (Weissberg et al., 2015). Competence amongst these clusters may promote academic achievement, social relationships, and discipline (Elias, 2014; Jones & Kahn, 2017). A student's interactions with their peers and the professionals at school help shape a self-concept that determines how they navigate the academic and social integration of a new environment (Bean & Eaton, 2000).

Student Success

This study situates student success as a dependent variable of a sense of community. Like a sense of community, student success is also an amorphous construct. The terms *student success* and *academic success* are used interchangeably throughout the literature, with academic success having a slightly narrower focus on grades (York et al., 2015). Student success incorporates a broader scope of student performance, therefore providing a more enriched understanding of the impact of a sense of community in this study.

This study operationalizes student success using traditional indicators of academic achievement: grades, attendance, and discipline. These indicators are used with the acknowledgment of their subjective nature. First, grades often vary by teacher and do not always authentically represent learning. The second indicator, attendance, is perhaps the least subjective but still has the potential for erroneous data caused by human error. Finally, the indicator of discipline is often a focal point of conversations around school inequities (Cooper et al., 2022). Operationalizing student success with these indicators is not an assertion that every student or family defines success in this manner. Instead, this framing recognizes the indicators as acceptable mensuration for comparing groups of students.

Conceptual Framework

Astin's Student Involvement Theory (1984), Elder's Life Course Theory (1998), and the literature review findings inform the conceptual framework for this study. Student Involvement Theory and Life Course Theory both examine how outside influences shape one's development. These theories inform a guiding principle of this study of how a sense of community, or the "...acknowledged interdependence with others…" (Sarason, 1974, p. 157), may impact student success.

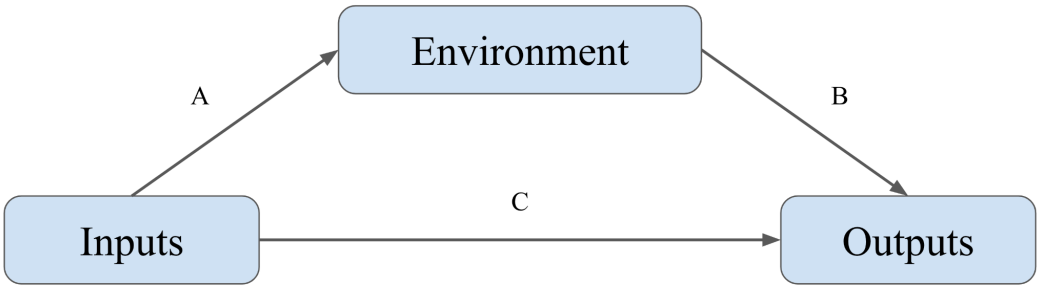
Student Involvement Theory

Astin (1984) offers a succinct definition of involvement: "the amount of physical and psychological energy that the student devotes to the academic experience" (p. 518). He asserts that student success, described as "...student learning and personal development…" (Astin, 1984, p. 519), is proportional to the quality and quantity of their involvement.

Astin's I-E-O Model (Figure 1) depicts the relationships between one's inputs, environment, and output. He notes that the field of education is often engrossed with relationship B despite the research that shows this relationship cannot be understood without also accounting for relationships A and C. Astin (1984) concludes, "the effectiveness of any educational policy or practice is directly related to the capacity of that policy or practice to increase student involvement" (p. 519).

Figure 1

Astin's I-E-O Model



Note. Figure adopted from (Astin & Antonio, 2012).

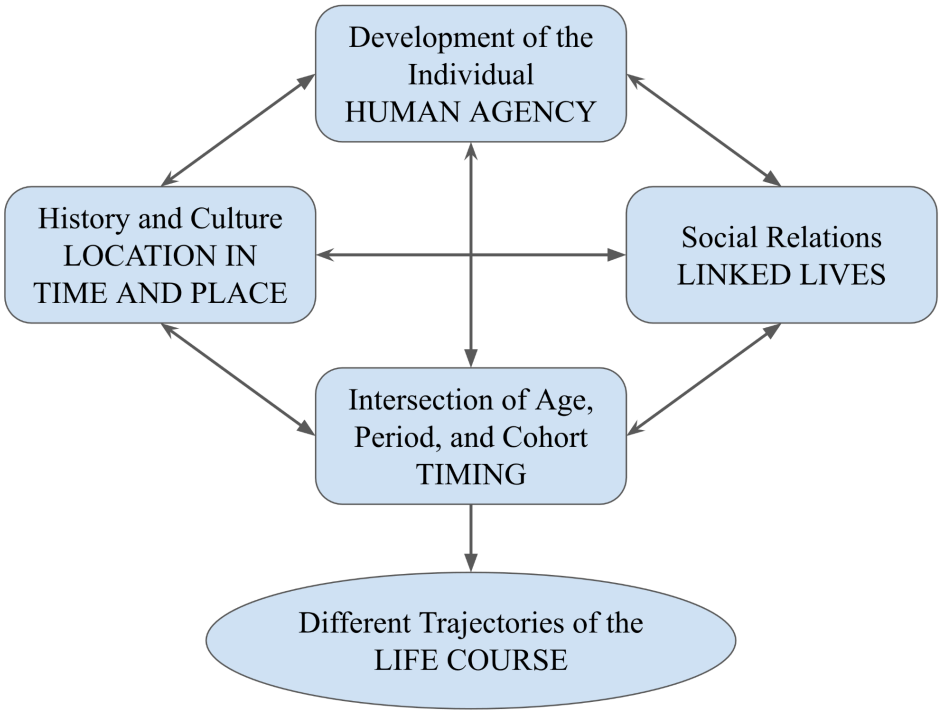
Astin contends that involvement is an active term, using descriptors such as *attach*, *commit*, and *engage*. He argues that the term is not about what the student thinks or feels but how they behave, which determines their involvement. This study diverges from Astin's Student Involvement Theory on this point, incorporating the latest available research on students' social-emotional health related to their perception of a sense of community at school.

Life Course Theory

Elder (1998) maintains that "all life choices are contingent on the opportunities and constraints of social structure and culture" (p. 2). This study draws on the central tenets of life course theory to better understand the potential interrelatedness of a sense of community and student success. Life course theory (Elder, 1998) utilizes four key elements to explain lifespan development (see Figure 2). The researcher describes the central premise of this theory as "...the notion that changing lives alter developmental trajectories" (Elder, 1998, p. 1). Essentially, lives are lived in a predictable way, altered by environmental inputs. Elder (1998) asserts, "historical forces shape the social trajectories of family, education, and work, and they in turn influence behavior and particular lines of development" (p. 2). The transition to high school is one of these historical forces, an environmental input with the potential to alter one's life course.

Figure 2

Elder's Four Key Elements of the Life Course Theory

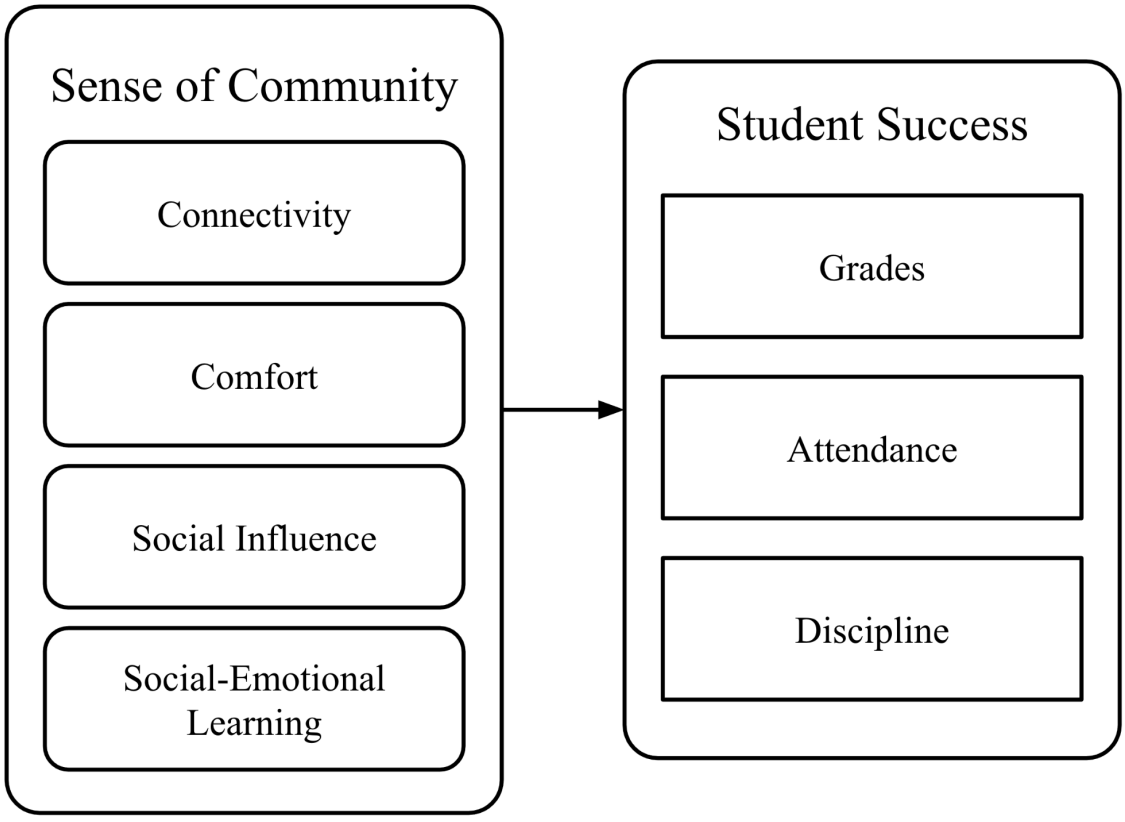


Note. Figure adopted from (Giele & Elder, 1998)

Informed by Astin's Student Involvement Theory (1984), Elder's Life Course Theory (1998), and the literature review findings, this study focuses on students' dimensions of a sense of community and their potential to influence a student's trajectory during the transition to high school. Specifically, these theories are a throughline for a deeper, multidirectional understanding of the potential unbalanced and nontemporal relationships between dimensions of a sense of community and indicators of student success to determine a hierarchy of impact. The conceptual framework illustrated in Figure 3 visually represents the relevant literature and theoretical frameworks accessed for this study.

Figure 3

Conceptual Framework: The Impact of a Sense of Community on Student Success



Project Questions

The conceptual framework illustrated in Figure 3 serves as a point of departure for addressing the problem of practice. This study seeks to answer the following project questions:

1. To what degree does a sense of community impact student success?
2. Which dimension of a sense of community has the greatest impact on student success?

Study Design

This cross-sectional, exploratory study seeks to elludicate the degree to which a student's sense of community at school impacts their success at school. Specifically, this project aims to determine which dimension of a sense of community (connectivity, comfort, social influence, or social-emotional learning) is most impactful on individual indicators of academic success (grades, attendance, and discipline) as students transition to high school. The unit of analysis is a first-time 9th-grade student.

Data Collection Methodology and Instrument

A confidential student survey served as the standardized data collection instrument for this study (Appendix A). Classroom teachers administered the 12-item survey during a non-instructional time. Appendices B through E outline the theoretical foundation for each survey item as it quantifies a sense of community for the purpose of this study. The survey used a five-point Likert scale with the options of strongly disagree, disagree, neither agree nor disagree, agree, or strongly agree. The five-point Likert scale avoided forced-choice by allowing respondents to select a neutral response. All items are scaled in the same direction, with a response of *strongly disagree* associated with the lowest representation of a sense of community and a response of *strongly agree* associated with the highest representation of a sense of community.

Respondents completed the sense of community survey between day 130 and day 150 of the 2021-22 school year, a survey window from late March through April. This survey window was chosen with the understanding that most students have an adequate understanding of how they experience their interaction with the people or places of their school community at this point in the school year. Participants were limited to one response and could choose to opt-out at any

time. The survey design did not ask for the participant's name or include any identifiable questions. The school district provided demographic information and data related to student success (grades, attendance, and discipline) without requiring action from respondents. Survey responses and indicators of student success were linked using student identification numbers. Results are reported in aggregate form to help ensure confidentiality. The survey instrument used for this study was adapted from indices described in the *Measuring a Sense of Community* section and informed by the literature review and conceptual framework.

Table 3

Survey Items by Dimension of a Sense of Community

Dimension	Survey Items
Connectivity	I feel like I am a part of this school. I enjoy being a part of a group/club/athletic team at school. I have school pride.
Comfort	I feel safe at school. I have an adult in the building that I can trust during a time of need. I have access to food at school if I am hungry.
Social Influence	I have influence over what this school community is like. I support this school's student leaders. I am on pace to satisfy my volunteer hours requirement.
Social-Emotional Learning	I enjoy being with my friends from school. Students at this school care about one another. I expect to be a part of this school until I graduate.

Sample and Data Collection

Despite the Trawick Foundation's long-standing philanthropy, the schools they support did not participate in this study. The governing school district denied the request to survey students, citing reasons related to a recent interruption to instruction.

Bayside High School (a pseudonym) is a high school in Maryland that is similar in size and demographics to the high schools that the Trawick Foundation currently supports. The leadership team at Bayside High School voted in unanimous support of conducting the sense of community survey at their school. At the time of this study, Bayside High School enrolled approximately 2,400 students in grades 9 through 12, with 584 students enrolling in 9th-grade for the first time. Table 4 provides a demographic comparison of the first-time 9th-grade students at Bayside High School (Bayside 9th-Grade Students), the students who responded to the survey (Respondents), and the students enrolled at the high schools supported by the Trawick Foundation (Trawick Schools).

Table 4

Demographic Comparison of Population, Sample, and Students at Trawick Schools

	Bayside 9th-Grade Students (n of 584)	Respondents (n of 427)	Trawick Schools (n of 3,956)
African-American	30%	28%	23%
Asian	23%	27%	8%
Caucasian/White	14%	16%	9%
Hispanic/Latin	28%	25%	56%
Multiple Races	5%	4%	4%
Receives Special Education Services	10%	9%	14%
Eligible for Free and Reduced-Price Meals	39%	33%	59%

To provide the most valuable data analysis possible, the sample group included all first-time 9th-grade students at Bayside High School, independent of any other demographic characteristics. This sample group included 584 students. The survey yielded 437 responses, corresponding to a 75% response rate. Of the responses, 10 students chose to opt-out of the study, resulting in a total of 427 responses for analysis. According to school data on reported genders, 52% of responses came from male students and 48% from female students.

An initial data review revealed that the indicator of discipline might not be a strong predictor of student success for this study. Of the 427 valid responses, only 17 students (4%) had data related to discipline. There are a number of possible reasons for this low percentage which could be explored in a future study. To provide the most accurate representation of student success, this study continued with the analysis of discipline but removed discipline as an indicator of student success. Only the indicators of grades and attendance informed the criterion variable of student success in the findings and recommendations of this study.

Findings

The design for this study situated a sense of community as the independent variable and student success as the dependent variable. Both a sense of community and student success are composite variables, with their inputs providing an equal contribution to the whole. The dimensions of connectivity, comfort, social influence, and social-emotional learning inform a sense of community, and the indicators of grades and attendance inform student success. Findings were analyzed at the composite and individual measure levels.

Issues of Scale

Dimensions of a sense of community were reported on a scale from one to five; however, indicators of student success were reported on various scales. This study standardized issues of scale by using the *z*-score formula in Figure 4.

Figure 4

Z-score Formula to Eliminate Issues of Scale

$$Z = \frac{x - \mu}{\sigma}$$

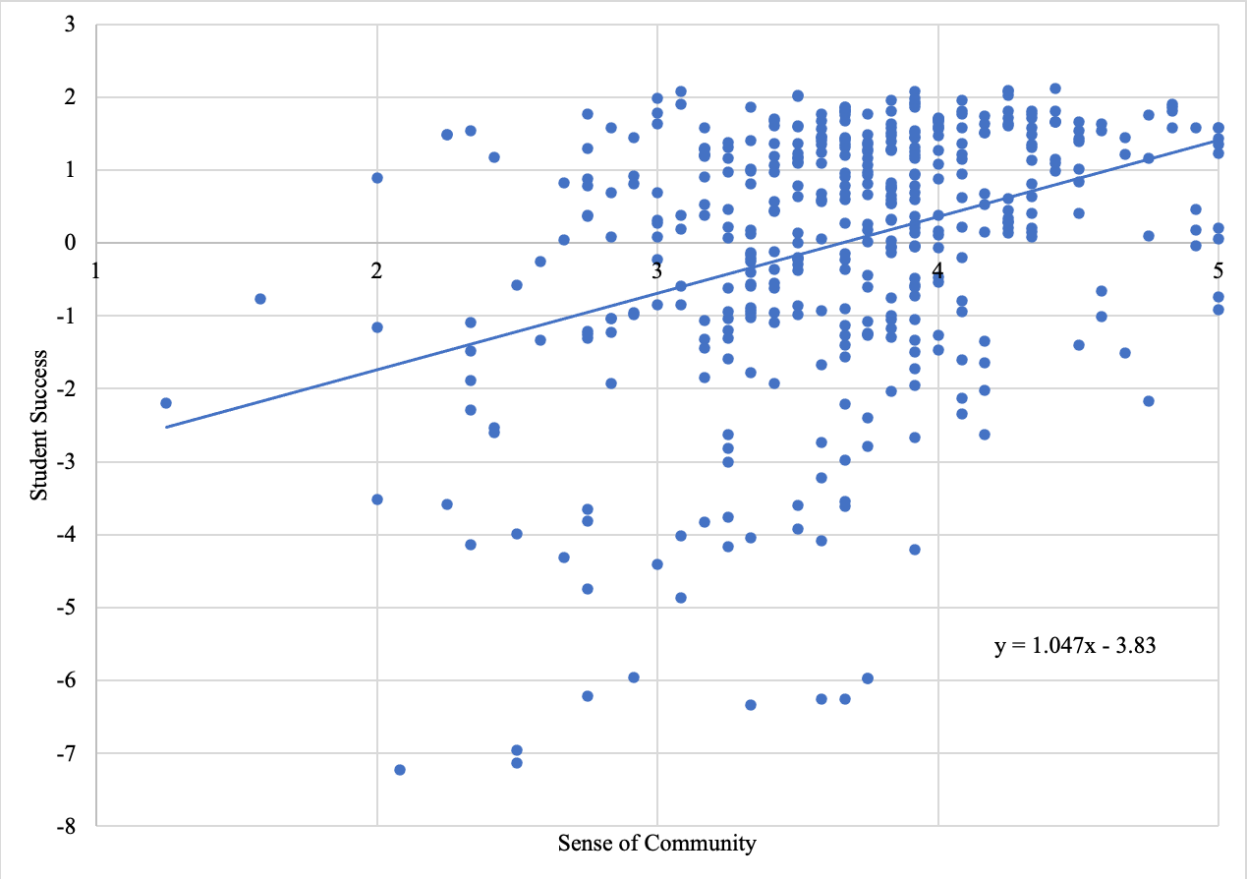
In a standardized form, student success scores are represented by how many standard deviations the score is above or below the mean. Therefore, in a standardized form, student success scores are represented by positive and negative numbers. The sense of community data and student success scores from this study are represented graphically in Figure 5 and outlined in detail in Table 7.

Bivariate Relationship

The scatter plot in Figure 5 visually represents the form, direction, and strength of the relationship between a sense of community (X) and student success (Y). Within the scatter plot, a regression line represents the relationship between X and Y, allowing for a prediction for the value of Y from a known value of X. This study used the linear regression equation $\hat{y} = bx + a$, resulting in a regression of $y = 1.047x - 3.83$. A regression analysis may provide the Trawick Foundation with the ability to predict a student's success based on their level of sense of community. A more granular regression analysis could predict a student's performance on a specific indicator of student success based on their score on a specific dimension of sense of community (for example = predicting a student's attendance based on their level of social influence).

Figure 5

The Impact of a Sense of Community on Student Success



Note. n = 427

Multicollinearity

A preliminary analysis revealed multicollinearity among dimensions of a sense of community and indicators of student success. The parameters used to describe relationships in this study are noted on Figure 6. The correlations (see Tables 5 and 6) align with the findings of the literature review.

Table 5 outlines the relationships between dimensions of a sense of community in this study. A strong positive relationship was reported between connectivity and social influence (.616), between connectivity and comfort (.603), between connectivity and social-emotional learning (.583), and between comfort and social-emotional learning (.544). A moderate positive

relationship was recorded between social influence and social-emotional learning (.489) and between comfort and social influence (.452).

Despite the multicollinearity among dimensions and indicators, the results are valuable for analyzing X and Y. The correlation among dimensions of a sense of community does not disqualify them as inputs; however, this relationship must be considered when making statistical inferences.

Table 5

Correlation Matrix for Dimensions of a Sense of Community

Dimension	1	2	3	4
1. Connectivity	-			
2. Comfort	0.603	-		
3. Social Influence	0.616	0.452	-	
4. SEL	0.583	0.544	0.489	-

Note. n = 427

Table 6 outlines the relationships between indicators of student success in this study. A strong positive relationship was noted between grades and attendance (.663) and between attendance and discipline (.522). A moderate positive correlation was found between grades and discipline (.448).

Table 6

Correlation Matrix for Indicators of Student Success

Indicator	1	2	3
1. Grades	-		
2. Attendance	0.663	-	
3. Discipline	0.448	0.522	-

Note. n = 427

Descriptive Statistics

Descriptive statistics were derived from the sense of community survey results and school data related to student success. Table 7 provides information on the central tendency, dispersion, and normality of the data. The information in this table may provide additional context for the findings of this study. The average sense of community score was 3.657, which is higher than the neutral survey response choice of 3 (associated with the response of *neither agree nor disagree*). Given the standard deviation of a sense of community (.616), there is a 95% chance that students' actual sense of community score is between [3.657 - .616, 3.657 + .616] and therefore positive (above the neutral survey response choice of 3).

Table 7

Descriptive Statistics

	Sense of Community	Student Success Score
Central Tendency		
Mean	3.657	-3.298
Median	3.667	.463
Mode	3.833	1.581
Dispersion		
Standard Deviation	0.616	1.826
Sample Variance	0.379	3.333
Range	3.75	9.344
Minimum	1.25	-7.223
Maximum	5	2.121
Normality		
Kurtosis	.642	2.424
Skewness	-0.372	-1.515
Confidence Level (95.0%)	0.0586	0.174

Note. n = 427

Project Question Findings

Drawing from Astin's Student Involvement Theory (1984), Elder's Life Course Theory (1998), and a substantial body of literature related to a sense of community this study sought to understand the impact of a sense of community on student success. A sense of community survey, adapted from the SCI (Chavis, 1990), BSCI (Long & Perkins, 2003), and BSCS (Peterson et al, 2008), collected student data. Table 8 outlines the findings of a detailed analysis.

Table 8

Project Questions and Findings

Project Question 1 To what degree does a sense of community impact student success?	**Finding 1** A moderate positive relationship exists between a sense of community and student success. **Finding 2** 12.5% of the variance in a student success score is explained by a sense of community.
Project Question 2 Which dimension of a sense of community has the greatest impact on student success?	**Finding 3** Social-Emotional Learning had the greatest impact on student success. **Finding 4** Survey item #6 of the sense of community survey had the lowest correlation to an overall sense of community. **Finding 5** Survey item #7 of the sense of community survey had the lowest correlation to student success. **Finding 6** Survey item #7 of the sense of community survey and discipline reported the least positive correlation between any one survey item and one indicator of student success.

Finding 1 - A moderate positive relationship exists between a sense of community and student success.

A Pearson's correlation coefficient test determined the strength of the relationship between a sense of community and student success. The correlation coefficient (r) provided a standardized, objective measurement of the direction and strength of these associations. This study determined the correlation coefficient by using the formula in Figure 6.

Figure 6
Correlation Coefficient Formula

$$r = \frac{\sum (x_i - \bar{x})(y_i - \bar{y})}{\sqrt{\sum (x_i - \bar{x})^2 \sum (y_i - \bar{y})^2}}$$

Note. The following parameters were used to describe relationships in this study: a weak negative relationship: -.30 < r < -.10, a weak positive relationship: +.10 < r < +.30, a moderate negative relationship: -.50 < r < -.30, a moderate positive relationship: +.30 < r < +.50, a strong negative relationship: r ≤ -.50, a strong positive relationship: r ≥ +.50, and no relationship: -.10 < r < +.10 (Cohen et al., 2002).

A Pearson's correlation coefficient analysis of a sense of community and student success reported a correlation of .353, which falls within the range of +.30 < r < +.50. The test confirmed a moderate positive relationship between the construct of a sense of community and student success. The greater a student's sense of community, the greater their student success.

Finding 2 - 12.5% of the variance in a student success score is explained by a sense of community.

A coefficient of determination, or the proportion of explained variance, quantifies the proportion of variance in student success that is accounted for by the relationship with a sense of community. The following formula determined the proportion of explained variance for each bivariate data set: r^2. The coefficient of determination = .125, therefore, 12.5% of the variance in a student success score is explained by a sense of community. The linear analysis of a sense of community and student success is outlined in Table 9.

Table 9

Linear Regression Analysis of a Sense of Community and Student Success

Relationship	Report	Interpretation
Sense of Community & Student Success	Correlation Coefficient = .353	There is a moderate positive relationship between a sense of community and student success.
	Coefficient of Determination = .125	12.5% of the variance in a student success score is explained by a sense of community.
	$\hat{y}$ = 1.047*x-3.83	Each positive unit increase in sense of community would increase student success by a predicted amount of 1.047
	Reliability (Significance F) = 5.532E-14	The results are reliable.

Finding 3 - Social-Emotional Learning had the greatest impact on student success.

A regression analysis was conducted to examine the relationship between each dimension of a sense of community and the dependent variable of student success. The analysis reported that the dimension of social-emotional learning explained the highest percentage of variance in student success. In this study, 9.8% of the variance in a student success score is explained by social-emotional learning. A preliminary analysis revealed multicollinearity among dimensions of a sense of community and among indicators of student success. Due to each dimension's value to this study, each relationship is reported and interpreted in Table 10.

Table 10

Linear Regression Analysis of Dimensions and Student Success

Dimension	Report	Interpretation
Connectivity[a]	Correlation Coefficient = .293	There is a weak positive relationship between connectivity and student success.
	Coefficient of Determination = .086	8.6% of the variance in a student success score is explained by connectivity.
	$\hat{y}$ = .618*x-2.196	Each positive unit increase in connectivity would increase Student Success by a predicted amount of .618.
Comfort[a]	Correlation Coefficient = .237	There is a weak positive relationship between comfort and student success.
	Coefficient of Determination = .056	5.6% of the variance in a student success score is explained by comfort.
	$\hat{y}$ = .623*x-2.36	Each positive unit increase in comfort would increase Student Success by a predicted amount of .623.
Social Influence[a]	Correlation Coefficient = .307	There is a moderate positive relationship between social influence and student success.
	Coefficient of Determination = .094	9.4% of the variance in a student success score is explained by social influence.
	$\hat{y}$ = .744*x-2.516	Each positive unit increase in social influence would increase Student Success by a predicted amount of .744.
SEL[a]	Correlation Coefficient = .312	There is a moderate positive relationship between social-emotional learning and student success.
	Coefficient of Determination = .976	9.8% of the variance in a student success score is explained by social-emotional learning.
	$\hat{y}$ = .807*x-3.151	Each positive unit increase in social-emotional learning would increase Student Success by a predicted amount of .807.

[a] Relationship between dimension and student success

Finding 4 - Survey item #6 of the sense of community survey had the lowest correlation to an overall sense of community.

Survey item #6 of the sense of community survey stated, “I have access to food at school if I am hungry (breakfast or lunch)”. A Pearson’s correlation coefficient test determined the strength of the relationship between each survey item and an overall sense of community. Item #6 of the sense of community survey reported a correlation of .504 with an overall sense of community. This is the lowest correlation between any one survey item and an overall sense of community (see Table 11).

Table 11

Correlations Between Survey Items and an Overall Sense of Community

Survey Item #	Correlation to Overall Sense of Community
1	0.800
2	0.697
3	0.755
4	0.595
5	0.596
6	**0.504**
7	0.594
8	0.673
9	0.521
10	0.541
11	0.647
12	0.622

Finding 5 - Survey item #7 of the sense of community survey had the lowest correlation to student success.

Survey item #7 of the sense of community survey stated, “I have influence over what this school community is like”. A Pearson’s correlation coefficient test determined the strength of the relationship between each survey item and overall student success. Item #7 of the sense of community survey reported a correlation of .043 with student success. This is the lowest correlation between any one survey item and overall student success (see Table 12).

Table 12

Correlations Between Survey Items and an Overall Student Success

Survey Item #	Correlation to Overall Student Success
1	0.270
2	0.247
3	0.236
4	0.124
5	0.207
6	0.169
7	**0.043**
8	0.230
9	0.405
10	0.220
11	0.230
12	0.280

Finding 6 - Survey item #7 of the sense of community survey and discipline reported the least positive correlation between any one survey item and one indicator of student success.

A lack of data led to the determination that discipline may not be a strong predictor of student success for this study. Although discipline was not included in the analysis of overall student success, correlations between survey items and discipline were still analyzed due to the value the analysis may provide in satisfying the foundation's request for a standardized data collection instrument to help understand how students experience a sense of community at school. The relationship between survey item #7 and the indicator of discipline reported the least positive correlation (-.018) of the 36 relationships in this study (see Table 13). Based on the parameters used for this study, item #7 and discipline had a weak negative correlation.

Table 13

Correlations Between Survey Items and Indicators of Student Success

Survey Item #	Correlation to Grades	Correlation to Attendance	Correlation to Discipline
1	0.231	0.260	0.639
2	0.260	0.191	0.189
3	0.206	0.224	0.468
4	0.138	0.089	0.060
5	0.207	0.171	0.415
6	0.124	0.184	0.254
7	0.040	0.039	**-0.018**
8	0.201	0.218	0.729
9	0.407	0.331	0.288
10	0.210	0.191	0.443
11	0.242	0.178	0.185
12	0.249	0.262	0.154

Recommendations

The following recommendations stem from the findings of this study. These recommendations are intended to help the Trawick Foundation operationalize an understanding of how students experience a sense of community at school and how a sense of community may facilitate a successful transition to high school. The recommendations of this section provide innovative yet practical strategies for the Trawick Foundation's high school transition programs.

Table 14 outlines the recommendations of this study. These recommendations will serve the Trawick Foundation in the short term as a resource as they assist educational leaders in implementing holistic strategies. The responsibility of implementing these recommendations is that of the foundation's TeamUps.

Recommendation 1 - The Trawick Foundation should maintain its commitment to promoting a sense of community at school to improve student success.

This study defined a sense of community as "how one experiences their interaction with the people or places of their community" and operationalizes the construct through the dimensions of connectivity, comfort, social influence, and social-emotional learning. Students with a strong sense of community are more likely to participate in prosocial behaviors (Cantillion et al., 2003) and, when faced with a challenge, these students demonstrate higher levels of resiliency (Chavis & Newbrough, 1986; Kobasa, 1979). Students in schools with a higher sense of community earn higher grades (Cantillion et al., 2003), attend school more often (Roderick, 2003), and are more likely to follow school rules (Greenberg et al., 1982).

To better understand the potential interrelatedness of a sense of community and student success, this study asked the question, "To what degree does a sense of community impact student success?" The findings of this study reported a moderate positive correlation between a sense of community and student success. Specifically, 12.5% of the variance in student success is explained by a sense of community. The correlation coefficient is a descriptive statistic, not one that determines causation. This study did not seek to prove that a sense of community causes student success, yet, a moderate positive correlation confirms a relationship between the variables. The Trawick Foundation does not have a direct impact on the criterion variable of student success, however, the foundation's support may have a direct impact on a student's sense of community. A defensible recommendation is that the Trawick Foundation should maintain its commitment to creating a sense of community at school to improve student success.

Ms. Trawick established the Trawick Foundation with the mission of *reaching people in need and encouraging creative activities.* The foundation maintains an innovative approach to

helping people, launching their TeamUp grant in 2009 to support local schools and recently narrowing the focus of the grant to specifically support first-time 9th-grade students as they transition to high school. The foundation operates with a hypothesized correlation between a sense of community and student success. This study validated the foundation's hypothesis. The consilience of peer-reviewed research and the findings of this study confirm that the Trawick Foundation should maintain its encouragement of creative activities with the goal of reaching people in need. Specific programming recommendations for the Trawick Foundation to maintain or expand include:

- student resource fairs for students to learn about extracurricular opportunities;
- responsive relationships between students and trusted adults; and
- mindfulness practice.

Recommendation 2 - The Trawick Foundation should expand opportunities for social-emotional learning.

Researchers identify social-emotional learning as an integral component of students' success (Bridgeland et al., 2013; DePaoli et al., 2017; Greenberg et al., 2010; Jones & Kahn, 2017; Weissberg et al., 2015). When this study asked the question, "Which dimension of a sense of community has the greatest impact on student success?", the findings reported that social-emotional learning had the highest correlation to student success. More specifically, social-emotional learning had a stronger correlation with both grades (.302) and attendance (.267) than any other dimension of a sense of community.

The findings of this study, supported by peer-reviewed research, provide evidence to recommend that the Trawick Foundation expands opportunities for social-emotional learning. The foundation's current programming includes mindfulness practice and mental health awareness initiatives for students' social-emotional learning. These programs should be maintained and expanded. Other opportunities for facilitating students' social-emotional learning include:

- restorative justice;
- student efficacy programs;
- social media citizenship; and
- mental health awareness initiatives.

Recommendation 3 - The Trawick Foundation should implement the sense of community survey with modifications.

The Trawick Foundation sought a standardized data collection instrument to help understand how students experience a sense of community at school and the correlation between a sense of community and a successful transition to high school. The foundation required that the instrument is research-based, is minimally disruptive to the learning environment, and that it can be implemented with minimal training. This study's 12-item sense of community survey satisfied the foundation's requirements. Appendices B through E outline the theoretical foundation for each survey item, the survey takes approximately five minutes to complete, and no special training is required for implementation.

The recommendation to implement the sense of community survey with modifications stems from findings 4 and 5 of this study. These findings noted low correlations between specific survey items and the independent or dependent variables. Item #6 of the sense of community survey had the lowest correlation to an overall sense of community, and item #7 of the sense of community survey had a low correlation to student success.

Survey item #6 of the sense of community survey stated, "I have access to food at school if I am hungry (breakfast or lunch)". This item was included in the sense of community survey under the dimension of comfort because the availability of food may help to satisfy one's physical needs. Maslow (1943) positions physiological needs as the most foundational in the journey toward self-actualization. Also, McMillan and Chavis (1986) listed needs fulfillment as a "primary function of a strong community" (p. 13). However, survey item #6 had the lowest correlation to an overall sense of community in this study (.504). Future research may examine why the students who were most likely to agree with the statement that food is available to them

if they are hungry were the ones who experience a sense of community at the lowest level. Until more information is available, survey item #6 should not be included in interim analyses.

Survey item #7 of the sense of community survey stated, “I have influence over what this school community is like”. This item was included in the sense of community survey under the dimension of social influence because empowerment is positively associated with a sense of community (Itzhaky & York, 2000), and one’s level of influence often predicts the likelihood of initiating or maintaining membership (McMillan & Chavis, 1986; Peterson & Martens, 1972; Solomon, 1960; Zander & Cohen, 1955). These reasons may help explain survey item #7’s relationship with an overall sense of community (.594); however, this item had the lowest correlation to student success (.043). Based on the parameters used for this study, survey item #7 and student success would be classified as having no relationship. Additionally, survey item #7 and discipline reported the least positive correlation (-.018) between any one survey item and one indicator of student success. For these reasons, survey item #7 should not be included in interim analyses.

Table 14

Summary of Project Questions, Findings, and Recommendations

Project Question 1 To what degree does a sense of community impact student success?	**Finding 1** A moderate positive relationship exists between a sense of community and student success. **Finding 2** 12.5% of the variance in student success is explained by a sense of community.	**Recommendation 1** The Trawick Foundation should maintain its commitment to promoting a sense of community at school to improve student success.
Project Question 2 Which dimension of a sense of community has the greatest impact on student success?	**Finding 3** Social-Emotional Learning had the greatest impact on student success.	**Recommendation 2** The Trawick Foundation should expand opportunities for social-emotional learning.
	Finding 4 Survey item #6 of the sense of community survey had the lowest correlation to an overall sense of community. **Finding 5** Survey item #7 of the sense of community survey had the lowest correlation to student success. **Finding 6** Survey item #7 of the sense of community survey and discipline reported the least positive correlation between any one survey item and one indicator of student success.	**Recommendation 3** The Trawick Foundation should implement the sense of community survey with modifications.

Limitations and Considerations for Future Inquiry

The limitations of this study design offer opportunities for future inquiry. Two notable limitations of the data collection method are social desirability bias and school district collaboration.

Social desirability bias occurs when participants "...give socially desirable responses by over- or underreporting their behavior" (Kwak et al., 2021). Although survey responses were confidential, they were not anonymous. Participants may have responded in a way that they *want* to experience a sense of community at school or in a way that they think they are *supposed* to experience a sense of community at school, based on how they perceive their identity. In future inquiries, an anonymous survey may limit social desirability bias when measuring a sense of community.

The absence of school district collaboration limited the findings and recommendations of this study. Despite the Trawick Foundation's long-standing philanthropy, the schools they support did not participate in this study. The governing school district denied the request to survey students, citing reasons related to a recent interruption to instruction. Bayside High School graciously participated in this study, but since the school is not currently supported by the Trawick Foundation, this study could not differentiate between the students supported by TeamUp programs and a comparison group. This analysis may have provided greater insight into the impact of the intervention and better informed future programming. Additionally. this study did not seek open-ended responses. Student interviews may have provided valuable insight when analyzed along with survey responses; however, the school district did not allow student interviews.

Lastly, future inquiries may situate a sense of community as the dependent variable. The current study positioned a sense of community as the independent variable for a number of reasons. First, the Trawick Foundation's mission is to r*each people in need and encourage creative activities*. And second, the foundation's relationship with the school district is strictly one of financial support, not one that provides them with input on curricular decisions. This study reported a moderate positive relationship between a sense of community and student success. This study did not report causation. For that reason, a sense of community and student success should both be viewed as important. Future studies may choose to analyze how student success impacts a student's sense of community at school.

Conclusion

This study validated the Trawick Foundation's hypothesized correlation between a sense of community and student success. The foundation's foresight and dedication brought social-emotional learning to students more than a decade before the district incorporated similar programming into its curriculum. Based on findings from this theoretically-grounded study, the Trawick Foundation's programming is positively impacting the success of students as they transition to high school. The foundation's model should serve as an exemplar for schools seeking innovative strategies to help students as they transition to high school.

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Appendices

Appendix A

Standardized Data Collection Instrument

Welcome! We are interested in understanding students' Sense of Community at school.

This survey should take approximately five minutes to complete. Your responses will be kept confidential and results will only be shared anonymously or in the aggregate form. Your participation in this survey is voluntary. Respondents are not required to answer any questions that they believe are an infringement upon their privacy or that they do not care to answer for any other reason. Respondents have the right to withdraw at any point during the study.

If you have any questions about this survey, please contact the Principal Investigator, Christopher Edmiston, via email at christopher.w.edmiston@vanderbilt.edu or the faculty advisor, Dr. Matthew Campbell, at matthew.d.campbell@vanderbilt.edu. If you have any questions regarding your rights as a research subject, please contact the Vanderbilt Institutional Review Board (IRB) at (615) 322-2918.

Your participation in this survey is voluntary. You are aware that you may choose to terminate your participation at any time for any reason.

[Response options included: strongly disagree, disagree, neither agree nor disagree, agree, and strongly agree.]

1. I feel like I am a part of this school.
2. I enjoy being a part of a group/club/athletic team at school.
3. I have school pride.
4. I feel safe at school.
5. I have an adult in the building that I can trust during a time of need.
6. I have access to food at school if I am hungry.
7. I have influence over what this school community is like.
8. I support this school's student leaders.
9. I am on pace to satisfy my volunteer hours requirement.
10. I enjoy being with my friends from school.
11. Students at this school care about one another.
12. I expect to be a part of this school until I graduate.

Appendix B

Theoretical Foundations of Survey Items (Connectivity)

Survey Item	Theoretical Foundation
I feel like I am a part of this school.	"The sense of belonging and identification involves the feeling, belief, and expectation that one fits in the group and has a place there, a feeling of acceptance by the group, and a willingness to sacrifice for the group. The role of identification must be emphasized here. It may be represented in the reciprocal statements "It is my group" and "I am part of the group"" (McMillan & Chavis, 1986, p. 10). SCI Item - "I feel at home on this block" from SCI (Perkins et al., 1990). BSCS Item - "I feel like a member of this neighborhood" (Peterson, Speer, & McMillan, 2008, p. 71).
I enjoy being a part of a group/club/ athletic team at school.	Participation in community groups is positively related with a sense of community (Speer, 2000; Speer & Peterson, 2000; Peterson & Reid, 2003). Group members who invest more into a group are more likely to have a higher affinity for the group (Aronson & Mills, 1959). BSCS Item - "I feel connected to this neighborhood." (Peterson, Speer, & McMillan, 2008, p. 71).
I have school pride.	Common symbols serve to create and maintain a sense of community by maintaining group boundaries (McMillan & Chavis, 1986). "The symbol is to the social world what the cell is to the biotic world and the atom to the physical world. . . . The symbol is the beginning of the social world as we know it" (Nisbet & Perrin, 1977, p. 47). A community, especially one with heterogeneity, must maintain myths, symbols, rituals, and ceremonies (Warner, 1949) Groups use social conventions such as initiations, language, dress, or symbols as boundaries to distinguish between members and nonmembers (McMillan, 1976; McMillan & Chavis, 1986). BSCS Item - "I belong in this neighborhood" (Peterson, Speer, & McMillan, 2008, p. 71).

Appendix C

Theoretical Foundations of Survey Items (Comfort)

Survey Item	Theoretical Foundation
I feel safe at school.	"If the physiological needs are relatively well gratified, there then emerges a new set of needs, which we may categorize roughly as the safety needs" (Maslow, 1943, p. 6). Psychological safety is an important factor in collaborating for a shared outcome (Edmondson, 1999; Edmondson & Lei, 2014). "The emotional safety that is a consequence of secure boundaries allows people to feel that there is a place for them in the community and that they belong" (McMillan & Chavis, 1986, p. 15).
I have an adult in the building that I can trust during a time of need.	Responsive relationships with adults promote healthy brain development and provide the necessary support to navigate challenging experiences (Center on the Developing Child at Harvard University, 2021). "Young children experience their world as an environment of relationships, and these relationships affect virtually all aspects of their development" (National Scientific Council on the Developing Child, 2004, p. 1). "Relationships are important to school adjustment" (National Scientific Council on the Developing Child, 2004, p. 2).
I have access to food at school if I am hungry.	"The needs that are usually taken as the starting point for motivation theory are the so-called physiological drives (Maslow, 1943, p. 4). "Reinforcement and need fulfillment is a primary function of a strong community" (McMillan & Chavis, 1986, p. 13). BSCS Item - "I can get what I need in this neighborhood" (Peterson, Speer, and McMillan, 2008, p. 71). BSCS Item - "This neighborhood helps me fulfill my needs" (Peterson, Speer, and McMillan, 2008, p. 71).

Appendix D

Theoretical Foundations of Survey Items (Social Influence)

Survey Item	Theoretical Foundation
I have influence over what this school community is like.	An individual must have influence over what a group does to initiate or maintain membership (McMillan & Chavis, 1986; Peterson & Martens, 1972; Solomon, 1960; Zander & Cohen, 1955). Empowerment is positively associated with a sense of community (Itzhaky & York, 2000). "Members are more attracted to a community in which they feel that they are influential" (McMillan & Chavis, 1986, p. 12). SCI Item - "I have almost no influence over what this block is like" (Perkins et al., 1990). BSCS Item - "I have a say about what goes on in my neighborhood" (Peterson, Speer, and McMillan, 2008, p. 71).
I support this school's student leaders.	Members have "...a need for a leadership with the status, capacity, and the role to attend to the general problems of the territory and give substance to a public philosophy" (Long, 1958, p. 225)". SCI Item - "People on this block do not share the same values" (Perkins et al., 1990). SCI Item - "My neighbors and I want the same things from the block" (Perkins et al., 1990). SCI Item - "If there is a problem on this block people who live here can get it solved" (Perkins et al., 1990).
I am on pace to satisfy my volunteer hours requirement.	"Personal investment is an important contributor to a person's feeling of group membership and to his or her sense of community" (McMillan & Chavis, 1986, p. 10). "McMillan (1976) contended (a) that working for membership will provide a feeling that one has earned a place in the group and (b) that, as a consequence of this personal investment, membership will be more meaningful and valuable" (McMillan & Chavis, 1986 p. 10). "...persons who donate more time and energy to an association will be more emotionally involved" (McMillan & Chavis, 1986 p. 14).

Appendix E

Theoretical Foundations of Survey Items (SEL)

Survey Item	Theoretical Foundation
I enjoy being with my friends from school.	A social support network can influence emotional and physical well-being (Cohen, 2004). People have a fundamental need to belong (Baumeister & Leary, 1995). The need to belong shapes emotion and cognition (Baumeister & Leary, 1995). "...change in belongingness is a strong and pervasive cause of emotion in ways that support the hypothesis of a need to belong" (Baumeister & Leary, 1995, p. 520). BSCS Item - "I have a good bond with others in this neighborhood" (Peterson, Speer, and McMillan, 2008, p. 71).
Students at this school care about one another.	SCI Item - "People on this block do not share the same values" (Perkins et al., 1990). "Both psychological and physical health problems are more common among people who lack social attachments" (Baumeister & Leary, 1995, p. 520). "When other people are in groups, it is vital to belong to a group oneself, particularly a group of familiar, cooperative people who care about one's welfare. Thus, an inclination to form and sustain social bonds would have important benefits of defending oneself and protecting one's resources against external threats" (Baumeister & Leary, 1995, 499).
I expect to be a part of this school until I graduate.	A member's expected length of community residency is one of the strongest predictors of a sense of community (Glynn, 1981). SCI Item - "I expect to live on this block a long time" (Perkins et al., 1990).