2018-06-01

Lunchtime Experiences and Students' Sense of Belonging in Middle School

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A thesis submitted to the faculty of
Brigham Young University
in partial fulfillment of the requirements for the degree of

Master of Arts

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ABSTRACT

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We know that it is important that students feel a sense of belonging in school, but additional research is needed to better understand the influences on belonging, especially for junior high and middle school students. Junior high lunchtime is an ideal space to study as a potential influence on belonging because it is a central part of the secondary school experience and it is a social space for students. The purpose of this study is to connect lunchtime experiences to school belonging by showing that how students experience lunchtime and how this affects their overall sense of belonging in school.

Descriptive statistical methods such as SPSS Two-Step Cluster Analysis as well as predictive statistics such as logistical regression are used to evaluate data collected during a schoolwide survey conducted in spring 2014 at a junior high (grades 7-8) located in the intermountain region of the United States. The survey provided responses from 832 students across the junior high. Results indicate that loving lunch significantly positively affects school belonging and that students naturally group into different profiles based on their lunchtime preferences. The results also indicate that these lunchtime activity preference profiles significantly affect belonging.

Three recommendations are made based on the findings of this study. (a) Offer a variety of lunchtime activity options for students to choose from aimed at making lunch a more positive experience for all students. (b) Create more structured activities for students to participate in during lunch for those who may have anxiety about what to do during lunch. (c) Involve students in making lunch more enjoyable for themselves and others through a school-wide initiative to improve lunchtime experiences for all students.

While this study confirms the suspected connection between lunchtime experiences and school belonging, further research is necessary to better understand how lunchtime is experienced by students and how lunchtime can be used as a space for fostering belonging in junior highs.

Keywords: belonging, school lunch, lunchtime, junior high, middle school

ACKNOWLEDGEMENTS

Many thanks to my thesis committee chair, Erin Whiting, for guiding me through this process and keeping me on track. Her patience and gentle reminders helped me to complete a task that at times seemed impossible. I would also like to thank the other members of my committee, Bryant Jensen and Melissa Newberry, for the hours that they spent meeting with me and giving me valuable feedback on my work. I also appreciate all of the time and encouragement that I received from other faculty and staff throughout the course of receiving my degree. Lastly, I want to thank my husband for encouraging me to keep working to reach my academic goals and for the hours of help he gave me both on this project and in our home while I was working on my thesis.

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CHAPTER 1

Introduction

The bell rings and a flood of students pour into the cafeteria for school lunch. Groups begin forming around the room. A group of chatty girls sit near the door. Another group near the snack machines begins passing around homework to be copied. Several boys take their lunches outside only to be left by the basketball court while they play ball. Another group sits outside in the grass to discuss the latest episode of their favorite TV show. And then there are the few students who do not seem to belong to any of the groups. They sit in random seats around the cafeteria quietly eating their food, isolated from their peers as if by an invisible wall. They look out of place, like they do not belong—and they likely feel that way too.

As humans, we all want to belong—to feel a part of something. In fact, feeling a sense of belonging is a psychological need (Baumeister & Leary, 1995). Belonging has been tied to several positive outcomes such as life satisfaction, physical health, emotional wellbeing, academic motivation and effort, and academic achievement (Allen & Bowles, 2012; Baumeister & Leary, 1995; Goodenow, 1993a; Osterman, 2010). Additionally, the lack of belonging is linked to negative outcomes such as worse physical health, less academic motivation, and lower grades (Allen & Bowles, 2012; Baumeister & Leary, 1995; Goodenow, 1993a; Osterman, 2010). In educational research, belonging concerns students' sense of belonging in their school community (Osterman, 2000). Goodenow (1993a) defined school belonging as "students' sense of being accepted, valued, included and encouraged by others" (p. 25).

Having a sense of belonging is particularly critical during adolescence as students transition from elementary to middle school. The combination of transitioning emotionally, physically, and educationally can be very difficult for students (Eccles & Roeser, 2010). Students

suddenly have the responsibility to get to class on time and juggle the demands of several different teachers and classes (Midgley, Anderman, & Hicks, 1995). The new structure introduced in secondary school (changing classes and teachers every 45-50 minutes) creates more opportunities for students to slip through the cracks and lose that sense of belonging they had when they only had one or two teachers in elementary school. Additionally, these schools regularly combine students from several different elementary schools, which creates a new complex social environment for students to navigate (Benner, 2011). These new responsibilities and pressures can be daunting, can cause students to feel disconnected, and can challenge their sense of belonging in the school (Benner, 2011). In fact, research has shown the middle level education to be so tumultuous for students that, generally, the longer students are in middle school, the less they feel they belong (Anderman, 2003).

Statement of the Problem

The importance of student belonging is well documented by researchers; consequently, there is a call for more research to determine how to intervene and actually improve students' sense of belonging (Allen & Bowles, 2012; Ellerbrock, Kiefer, & Alley, 2014). Relatively few studies have been conducted to determine ways of fostering belonging. Among those studies, teacher support has been one of the most common variables studied as a potential influence on belonging (e.g., Anderman, 2003; Goodenow, 1993a; Osterman, 2010), but there are other important potential influences yet to be fully examined.

It is not surprising that teacher support is an important indicator of student sense of belonging (especially in the classroom). This could explain, in part, why students struggle more with belonging on the secondary level where they often receive less direct teacher support. Unfortunately, this finding is limited in its usefulness because teacher support on the secondary

level can never match what it is for students in elementary school. Middle school teachers just cannot provide the same sort of support that elementary teachers can give; the secondary school structure does not allow for it. Teachers cannot know two hundred plus students as closely and personally as elementary teachers can know a single relatively small class of students. Because of the lessened availability of teacher support in middle school, other potential influences on student belonging must be explored. One possible area for further research is how certain aspects of school structure like class size and school recreational and social spaces—such as lunchtime—can improve student belonging in schools at the secondary level (Allen & Bowles, 2012).

During middle school there are many times during the school day when teachers are not present to influence student experiences. Less structured parts of the day such as lunchtime have little to no teacher influence, but are integral to the overall student experience in the school. Lunch is an ideal space to study student belonging because it is a crucial part of the middle school experience that all students participate in and is arguably the least teacher-influenced activity at school.

Unlike in many elementary schools, lunch in secondary settings offers students many choices, such as where to sit and what activities to participate in (e.g. outside sports, homework, talking to friend). During lunchtime, friendships are developed and strengthened (Tharp, Estrada, Dalton, & Yamauchi, 1999) or feelings of loneliness can be magnified. Lunchtime scenes such as the one introducing this paper have been depicted in countless television shows and movies.

Mealtimes not only fulfill biological needs for survival, but they also "nourish" social relationships (Absolom & Roberts, 2011; Neely, Walton, & Stephens, 2014; Symons, 1994). Studies have shown that adolescents build connections and friendships as they talk and socialize

during shared meals (Absolom & Roberts, 2011; Keller et al., 2010). Shared school lunches increase school connectedness likely because of the social interactions that happen during them (Neely, Walton, & Stephens, 2015). Therefore, it seems likely that students who have a positive experience at lunchtime and who enjoy engaging in various social activities and connecting with others during lunch will also have a higher sense of belonging in school.

Statement of the Purpose

Despite the social nature of school lunch, it has yet to really enter the conversation of student sense of belonging in middle level schools. This study aims to add an examination of lunchtime experiences to that conversation by determining the impact of student love of lunch (whether or not a student reports loving lunch) and their lunchtime activity preferences on sense of belonging in the school.

In addition to analyzing the effects of student love of lunch and lunchtime activity preferences on belonging, this study will look across a range of lunchtime activities, that may represent sociality in different ways, in order to create profiles of students based on lunchtime activity preferences. We often think of sociality as a spectrum from being completely unsocial to extremely social. This study aims to broaden this view of sociality and consider differing ways of experiencing lunchtime through examining how lunchtime activity preferences naturally group into student profiles. For example, school lunch offers students various social opportunities and activities such as playing sports outside together, completeing homework with friends, engaging in gossip, or simply "goofing off" with friends. Each of these activities may be considered social, but they are vastly different types of social activities.

Before analyzing how love of lunch and lunchtime activity preferences affect student belonging, this study will examine many different lunchtime activity preferences in order to

discover how different students choose to engage in social activities. Students will be clustered into different profile groups based on their responses about lunchtime activity preferences. These clusters, or student profiles, represent the combinations of activites selected by students to show a more holistic view of student experiences at lunchtime. This will add valuable information about how the ways of interacting during lunchtime affect student sense of school belonging.

Research Questions

Eight hundred and thirty-two students reported whether or not they "LOVE" lunch as well as what social aspects of lunchtime they liked or disliked on a schoolwide survey at one junior high school. They also completed a set of questions measuring their sense of belonging in the school.

The data collected is used to answer the following research questions:

1. How do student lunchtime activity preferences naturally group to create profiles of students?
2. What is the effect of student love of lunch on student sense of belonging?
3. What is the effect of lunchtime activity preference group membership on student sense of belonging?
4. How do student love of lunch and lunchtime activity preference groupings interact to affect student sense of belonging?

CHAPTER 2

Review of the Literature

The overarching purpose of this study is to examine the relationship between junior high school students' overall sense of belonging in the school, their lunchtime activity preferences, and their love of lunch. Thus, this section will review existing research primarily in the areas of student belonging and the social importance of school lunch.

Belonging

Belonging is a broad topic that has been extensively researched both by psychologists, social scientists, and educational researchers. First, this review of belonging seeks to define and discuss belonging broadly as a psychological need. Next, belonging is explored within educational research, and pertinent research on student belonging relating to this study is discussed.

Human need to belong. Baumeister and Leary (1995) defined belonging as the human state of maintaining multiple "lasting, positive, and significant interpersonal relationships" (p. 497). Their foundational research determined that "human beings are fundamentally and pervasively motivated by a need to belong"—not merely a desire or want to belong, but a *need* (p. 522). Because belonging is a human need, there are many potential consequences of being deprived of belongingness. These include increased stress, decreased physical health, decreased mental health, increased criminal behavior, and increased suicide, among other factors (Baumeister & Leary, 1995).

Belonging in school. For the past couple of decades belonging has been an important topic within educational research. It is a broad concept that is related to, and overlaps with many other educational concepts such as school climate, connectedness, community, membership,

inclusion, relatedness, etc. Goodenow (1993a) defined belonging as "students' sense of being accepted, valued, included and encouraged by others" (p. 25). Later Osterman (2000) connected the concept of student belonging to school community, saying that a school community only exists when "its members experience a sense of belonging or personal relatedness." She referred to McMillan and Chavis's (1986) work on the nature of community which said that "sense of community is a feeling that members have of belonging" (p. 9). This idea that student belonging is a construct of school community is consistent with the term school membership which is often used as an alternative conception of school belonging. In fact one scale, the Psychological Sense of School Membership (PSSM), which is commonly used to measure student sense of belonging in schools, refers to school membership rather than using the term belonging (Goodenow, 1993b).

Belonging is important for all humans, but it becomes crucial during the adolescent years because of the physical and emotional changes that take place (Anderman, 2003). This is also illustrated by the large portion of the research on student belonging that focuses on students during middle level schooling (e.g. Anderman, 2003; Arnold, 2013; Goodenow, 1993a; Ellerbrock et al., 2014; Niehaus, Rudasill, & Rakes, 2012). Goodenow (1993a) explained her own emphasis on examining belonging in middle level education:

> Heightened self-consciousness, increased significance of friendships and peer relations, and decreased personal contact with teachers combine to make the middle or junior high school classroom a social context in which students' sense of belonging, personal acceptance, and social-emotional support are both crucial and problematic. (p. 25)

Transitioning into secondary school takes place around the same time that most students are also transitioning into adolescence adding to higher levels of emotional stress and anxiety

(Eccles & Roeser, 2010). Researchers have found the transition to secondary school to be connected to decreased academic motivation, lower levels of academic self-confidence, and a shift from intrinsic motivational orientation to an extrinsic orientation (Eccles & Midgley, 1989; Harter, 1981; Simmons & Blyth, 1987). The difficulties of this transition can be attributed in part to the social and structural changes from elementary school to secondary settings (Harter, Whitesell, & Kowalski, 1992). Middle schools and junior high schools often have many more students per grade than elementary schools, encouraging students to develop new social groups and friendships. Students must also adjust to changing classes, teachers, and classmates for each school subject instead of the single class structure used by most elementary schools. This places increased responsibility on students both socially and academically (Midgley, Anderman, & Hicks, 1995). These changes can often negatively affect the quality of students' relationships with their teachers and peers and ultimately their sense of belonging in the school (Benner, 2011; Nichols, 2008). Research has shown that middle school can be so difficult for students that belonging actually decreases as students progress through middle school (Anderman, 2003).

Corollary outcomes. As previously mentioned, a person's sense of belonging can affect a long list of factors such as mental and physical health. Researchers have found that belonging also has many implications for student wellbeing and schooling. Some of the outcomes related to student belonging include higher levels of academic motivation (Goodenow & Grady, 2013; Anderman & Anderman, 1999) especially intrinsic academic motivation (Anderson, Manoogian, & Reznick, 1976; Battistich, Solomon, Kim, Watson, & Schaps, 1995), positive attitudes towards school (Battistich, Solomon, Watson, & Schaps, 1997), decreased emotional distress and violence (Baker, 1998; Resnick et al., 1997), decreased drug use and delinquency (Battistich & Hom, 1997), decreased dropout rates (Osterman, 2000), increased school engagement

(Osterman, 2000; Phan, 2013; Ryan, R. M., Stiller, J. D., & Lynch, J. H., 1994; Willms, 2003), and academic achievement (Goodenow, 1993a; Niehaus et al., 2012; Osterman, 2000; Phan, 2013).

Influences on belonging. Given that student belonging has so many significant outcomes relating to education, there has been a call for more research to determine potential influences on student belonging (Allen & Bowles, 2012; Ellerbrock et al., 2014). There is a growing body of research aimed at better understanding how to improve student sense of belonging.

Moreover, because belongingness deals with the quality of a person's interpersonal relationships (Baumeister & Leary, 1995), several researchers have looked to peer and teacher support to help account for a student's sense of belonging. One such study interviewed middle school students about their school-based interpersonal relationships and their sense of belonging in the school (Ellerbrock et al., 2014.) They found that student-student relationships where students felt accepted and emotionally supported as well as teacher-student relationships where teachers were caring and responsive to student needs promoted a sense of belonging.

While research shows that both peer support and teacher support contribute to student sense of belonging, teachers' influence on student belonging has been emphasized by most researchers. Goodenow (1993a) conducted a study investigating the effects of student belonging on classroom motivation, achievement, and effort. She found that, as predicted, belonging was related to those outcomes; but, interestingly, her study also revealed that among the different dimensions of student belonging that she measured, teacher support was the most influential—especially for girls. Anderman (2003) also found that teachers could influence student belonging scores by promoting mutual respect among students. Osterman (2010) agreed saying that "teachers have the strongest and most direct effect on students' [belonging]" (p. 239). She further

explained that teachers influence "belonging through interpersonal support, autonomy support, methods of instruction that support positive interaction with peers…[and] indirectly through their influence on the nature of peer relationships within the classroom" (p. 239).

School culture has also been considered as a possible influence on student belonging. Phan (2013) argued that schools with "extracurricular and/or non-scholastic activities [that] are non-competitive and non-threatening may stimulate positive student perceptions of unity, respect, and cultural acceptance…[while] a school social milieu that emphasizes academic excellence and competitions for success may alienate some students from schoolwork" (p. 127).

An experimental study of first year college students was conducted to determine if certain deliberate interventions increased student sense of belonging (Hausmann, Ye, Schofield, & Woods, 2009). Students were randomly assigned to one of three groups, one treatment group and two control groups, with the constraint of keeping White and African American students evenly distributed among groups. Interventions on the treatment group included letters from university administrators expressing appreciation and showing that they were valued members of the university and gifts of clothing and other university memorabilia to help students identify as a part of the university community. They found that students in the treatment group generally did experience a greater sense of belonging than the control groups, although, African American students in the treatment group (at the predominantly White university) did not experience a greater sense of belonging. This shows that belonging is complex and multifaceted. What may improve sense of belonging for one student may not work for another, depending on how wider social group memberships and dynamics intersect with and position students at the school.

Schall, Wallace, and Chhuon (2014) conducted a survey interviewing 34 adolescent students to determine factors relating to student sense of belonging. They found that students'

locus of control beliefs (internal vs. external control) were tied to their sense of belonging. The more students viewed themselves as in control of their situation the more they felt they belonged. This suggests that in order to improve student belonging teachers and schools should potentially try to help students focus on a growth mindset, which emphasizes internal locus of control rather than a fixed mindset where students feel helpless to the effects of external forces. For this to happen there should be spaces within the school where students can have authentic power over their own lives.

Despite the work that has been done to determine what variables influence student belonging, there is still a long way to go in this area of research (Ellerbrock et al., 2014). Allen and Bowles (2012) called for more research to determine ways of fostering belonging in schools, specifically in regards to certain aspects of school structure such as "class sizes, seating arrangements, recreational space[s]," etc. (p. 113).

School Lunch as a Social Space

Sociologists, anthropologists, and others have long acknowledged and studied the social nature of eating (e.g. Seymour, 1983; Murcott, 1983). Fox (2003) observed that the fact that we refer to the room we eat in as the "dining" room rather than the "eating" room alone tells us something about the social nature of eating. Meals are often social events or ceremonies that carry much more meaning than simply obtaining the necessary nourishment to survive (Beardsworth & Keil, 2002; Delormier, Frohlich, & Potvin, 2009; Fox, 2003; Murcott, 1983). Meals provide opportunities for social interactions such as talking about concerns, emotions, and experiences, and these interactions reinforce social relationships (Absolom & Roberts, 2011; Neely et al., 2014; Symons, 1994). Research suggests that meals shared with peers hold significant importance for adolescents in particular (Absolom & Roberts, 2011). Sharing meals

with peers helps adolescents build connections and friendships (Keller et al., 2010; Absolom & Roberts, 2011).

Most studies examining school lunch as a social space focus on how the social aspects of lunch affect student food choices and healthy eating. While these studies do not examine how lunchtime can affect student belonging, they do still offer valuable insights into the social landscape of school lunch that can prove valuable in examining lunch and belonging.

In one study, researchers examined how the secondary school environment affected student lunchtime activities and practices and ultimately their food choices (Wills, Backett-Milburn, Gregory, & Lawton, 2005). Some of their notable findings included that lunchtime caused anxiety for some students and that girls and boys tended towards different types of lunchtime activities. For example, girls enjoyed "hanging out" and other activities that included talking and eating while boys tended to do more physical activities like going outside to play. Although these findings were examined in relation to food choices rather than specifically to belonging, Wills and associates (2005) emphasize the social nature of school lunches and found some interesting patterns relating to how students socially navigate lunchtime.

Another study interviewed middle school aged adolescents about their mealtimes to determine how meals impacted their social lives. It was found that not only do mealtimes provide opportunities for bonding with peers, but they also were often "a key time to plan further social and leisure activities outside of school" (Absolom & Roberts, 2011, p. 344). This finding suggests that simply talking to friends at lunchtime could have a significant impact on student's relationships with friends and their sense of belonging in the school.

A study by Stead, McDermott, MacKintosh, and Adamsom (2011) looked at how students' food choices were affected by a desire to fit in during lunch time. They found that

students' need to feel that they belonged was so strong that students would choose less healthy food options simply because they did not want to be seen as being too concerned about healthy food choices. Janhonen, Mäkelä, and Palojoki (2016) echoed Stead's finding that students' desire for belonging was so strong that it would affect their lunchtime behavior and food choices, but also emphasized the importance of school lunch as free time and a time to talk and bond with classmates. These findings reinforce the idea that lunchtime activities, like talking to friends, can affect student sense of belonging in school.

Only recently have a handful of researchers started looking more closely at how the social nature of eating is directly related to connectedness and belonging. Neely et al. (2014) began examining how "food practices," or any activities involving food, affected students' social relationships. They found that "food practices play complex roles in young people's social lives and impact different aspects of their social relationships" (p. 57). They also urged researchers to continue looking at how food practices and social relationships interact especially in the school setting.

In a later study, Neely et al. (2015) examined how smaller "shared lunches" fostered school connectedness in secondary schools. By "shared lunches," these researchers meant a meal shared by a class and a teacher. These lunches were less formal than typical class time and encouraged sharing food and time to socialize. They were often held as some type of celebration during the school year. These shared lunches were found to increase school connectedness likely because of the increase in social interactions.

Most recently, Neely, Walton, and Stephens (2016) examined how the "health-promoting school" approach can improve school connectedness and belonging especially through its focus on different types of shared lunches. Shared lunches are structured programs in which a

relatively small group of students and faculty eat together often in a classroom rather than in the cafeteria. In this study, they focus on the shared lunches that health-promoting schools often have among school clubs and committees. They suggest school club shared lunches hold great potential for increasing school connectedness because of the variety of students from different classes and grades that may be members of a club (p. 328). These finding suggest that school lunch activities that provide opportunities for a variety of students to participate could improve school connectedness and student belonging.

The work of Neely and her research associates (2014, 2015, 2016) has only begun to explore the importance of lunch time for building social connectedness and school belonging. While their work has shown that some lunchtime factors are relevant to student belonging, further work needs to be done to better understand school lunch experiences for implications for belonging. This study will examine how lunchtime feelings and experiences affect school belonging in order to increase understanding about how lunchtime can be structured and run for increasing school belonging.

CHAPTER 3

Methods

The overarching purpose of this study is to bring lunchtime experiences into the conversation on how to better help students belong in middle level schools. This is done through an examination of student love of lunch and lunchtime activity preferences and how these variables relate to and affect student belonging. This project is part of a larger study examining belonging at a junior high school with surveys at the beginning and end of each year over a period of 3 years. This chapter will describe the research design, setting, participants, data sources, and data analysis for the current project.

Research Design

This quantitative study employs both descriptive and correlational research methodology. The first research question, "How do student lunchtime activity preferences naturally group to create profiles of students?" is answered by descriptive statistical methods, while the other three questions examining with the effects of student love of lunch and lunchtime activity preference groups on student belonging are answered using stepwise regression analysis.

Setting

This study takes place at a junior high school in a suburban community located in the intermountain region of the United States. Students in grades 7, 8, and 9 attend the junior high, and it is the only junior high in the town and therefore represents a cross section of the suburban community's entire population. Most students at the school are Caucasian (White), with the largest minority group being about 16% Hispanic. About 40% of the students receive free or reduced lunch. This school was chosen because it is part of a larger study about school belonging. As a part of previous and ongoing research projects all students in the school took a

comprehensive survey at the beginning and end of each school year for a period of three years. This study examines data from the survey given in the Spring of 2014.

Participants

The survey results include responses from 832 students representing a response rate of 86.5%. There are 416 males (50.1%) and 415 females (49.9%). Most of the participants self-identified as being White (800 or 96.2%) and 135 participants (16.2%) self-identified as Hispanic. There are 347 (41.8%) participants eligible for free or reduced lunch price. There are 297 Grade 7 participants (35.7%), 260 Grade 8 participants (31.3%), and 274 Grade 9 participants (33%).

Data Sources

All data used in this study comes from the end of year survey during the second year of the larger project and was collected during spring of 2014. Four major sets of questions from the survey are used in this study. The survey questions relating to, 1) student belonging, 2) student lunchtime activity preferences, 3) student love of lunch, and 4) demographic control variables, are described in this section.

Simple Student Belonging Scale. The Simple Student Belonging Scale (SSBS) includes 10 questions that measure students'overall sense of belonging at their school (Whiting, Everson & Feinauer, 2017). This study employs the SSBS because, unlike most measures of student belonging, it is a unideminsional measure able to pinpoint overall school belongingness rather than certain aspects of belongingness such as belonging among peers or belonging in class. It includes 10 statements about how the student feels about his or her belonging, for example, "I feel loyal to people at [school name]," or "I feel like I belong at [school name]." Students taking the survey may choose from a 4-point scale (NO!, no, yes, YES!) to what level they agree to the

statement. The benefit of this 4-point scale is that it does not give participants the choice to remain neutral, limiting the centeral tendency (Hernández, Drasgow, & González-Romá, 2004; Kulas & Stachowski, 2013; Whiting et al., 2017). A full list of questions included in the SSBS can be seen in Table 1.

Table 1

Simple Student Belonging Scale (SSBS)

People here notice when I am good at something
Other students in this school take my opinions seriously.
People at this school are friendly to me.
I am included in lots of activities at this school.
Other students here like me the way I am.
I like to think of myself as similar to others at (school name).
People at (school name) care if I am absent.
I feel like my ideas count at (school name).
I feel like I matter to people at (school name).
People really listen to me when I am at school.

Student lunchtime activity preferences. Students' lunchtime activity preferences were measured by two questions on the survey: "What do you like to do during lunchtime?" and "What do you dislike about lunchtime?" Each question had a series of possible responses, and students could choose as many answers as they wanted. Possible responses for what they liked to do during lunch included: "talk to friends," "go outside and do something active," "read a book," "finish homework," "goof off/mess around," "eating," "going to the vending machine," and "other." Responses for what they disliked about lunch included: "other kids messing around," "not having friends to spend time with," "gossip/drama," "feeling like there's not enough time to eat," "food selection," "not knowing what to do during lunch time," and "other." Six responses

were eliminated from this study because they focused mostly on food choices and/or their response frequencies were too high or too low. Eliminated response options include: “eating,” “going to the vending machine,” “food selection,” “feeling like there’s not enough time to eat,” and both “other” responses. In all, nine dichotomous variables representing student lunchtime activity preferences were used. Table 2 shows a full list of the questions about lunchtime activity preferences that are included in this analysis. In this analysis, the student lunchtime activity preferences are examined as individual variables as well as within cluster groups reflecting the combinations of these activities as an individual variable.

Table 2

Student Lunchtime Activity Preference Variables

What do you like to do during lunchtime?
Talk to friends
Go outside and do something active
Read a book
Finish homework
Goof off/mess around
What do you dislike about lunchtime?
Other kids messing around
Not having friends to spend time with
Gossip/drama
Not knowing what to do during lunchtime

Student love of lunch. Another question from the survey asks students “What are your favorite and least favorite times of the day at school?” Only one of the listed times during the school day is used for this study—lunch time. Students choose from a series of four possible ordinal responses describing how they feel about lunchtime: “HATE,” “Dislike,” “Like,” “LOVE.” Because of the distributions of frequency of responses for this sample, this analysis

organizes these responses in two groups “LOVE” and the other 3 response categories being combined into “not LOVE.” This variable simply shows whether or not a student loves lunchtime.

Demographic control variables. Various demographic control variables are also examined in this study. These include gender (“male,” “female”), ethnicity (“Hispanic,” “Non-Hispanic”), free and reduced lunch (“free or reduced,” “neither”), and grade level (“7th Grade,” “8th Grade,” “9th Grade”).

Data Analysis

Data analysis for this study was done in two phases. First, the initial research question exploring the patterns of lunchtime activity preferences is answered by clustering student lunchtime activity preferences in order to show profiles of students who have similar lunchtime activity preferences. Next, I answer the remaining questions by conducting a stepwise regression analyses to determine the effects of love of lunch, lunchtime activity preference group membership, and interactions between these variables on student sense of belonging.

Cluster analysis of student lunchtime activity preferences. The first research question addressed in this study is, “How do student lunchtime activity preferences naturally group to create profiles of students?” This project uses cluster analysis, a descriptive approach to classifying data, to answer this question. The data used for this study provides information about students’ activity preferences during lunch in the form of nine dichotomous variables (yes = 1; no = 0). This question aims to make sense of that data by organizing it into specific profiles of students based on how they responded to questions about their lunchtime activity preferences. Using SPSS’s TwoStep cluster analysis procedure, students were clustered into five groups based on their responses. Each cluster represents a set of students that have similar natural

groupings of preferences for lunchtime activities. The benefit to clustering students into profiles in this way is its ability to take into account several variables at one time. This allows the researcher to see patterns of behavior, or in this case a holistic collection of lunchtime activity preferences, among students that may otherwise go unnoticed. Cluster membership is used as the inclusive measure of lunchtime activity preferences throughout the following regression analyses.

Regression analysis. After the more descriptive analysis associated with question one is completed, research questions two, three, and four may be addressed: 2) What is the effect of student love of lunch on student sense of belonging?, 3) What is the effect of lunchtime activity preference group membership on student sense of belonging?, and 4) How do student love of lunch and lunchtime activity preference groupings interact to affect student belonging? A series of stepwise regression analyses answer these questions.

The first model, or control model, measures the effect of demographic variables including gender, grade, ethnicity, and free and reduced lunch eligibility on sense of belonging. This model acts as a baseline model for all of the other models to be built upon.

Model 2 includes the effect of the student love of lunch variable in addition to the demographic variables on belonging. This shows the effect of love of lunch on belonging while controlling for demographic variables, and answers the second research question.

In order to answer the third research question and determine the effect of cluster membership on belonging, clusters are recoded in reference to Cluster 5, which represents the Active cluster. For example, instead of Cluster 1 (Non-active) being coded 0 for nonmember and 1 for member, 0 now represents students who are members of the reference cluster (Active, Cluster 5) and 1 represents students who are members of the Non-active cluster, with all other

cases being coded as missing (completely blank). Clusters 1 through Cluster 4 are each coded in this manner. Using this reference group structure is necessary to avoid issues of collinearity since cluster membership variables are dichotomous. Cluster 5 (Active) is used as the reference group for both theoretical and statistical reasons; students in the Active cluster are those who are thriving during lunchtime with the highest percentage of students who "LOVE" lunch (79.0%), and they have the highest mean sense of belonging score (30.480). Additionally, it is the largest cluster, which makes it an ideal reference group to aid in solving issues of collinearity.

Model 3 includes the effect of the four recoded cluster membership variables on belonging in addition to the control variables and love of lunch. This shows what the effect of cluster membership on belonging is while controlling for demographic variables and love of lunch and answers the third research question.

Model 4 answers the fourth and final research question by including the effect of the interactions between love of lunch and cluster membership (represented by 5 interaction variables) on belonging in addition to the variables included in the previous three models. This shows interaction effects on belonging above and beyond demographics, love of lunch, and cluster membership.

CHAPTER 4

Results

Four research questions were asked in order to determine the relationship between junior high school students' sense of belonging, their love of lunch, and their lunchtime activity preferences. 1) How do student lunchtime activity preferences naturally group to create profiles of students? 2) What is the affect of student love of lunch on student sense of belonging? 3) What is the affect of lunchtime activity preference group membership on student sense of belonging? and 4) How do student love of lunch and lunchtime activity preference groupings interact to affect student sense of belonging? This chapter will first report findings relating to the organization of lunchtime activity preference to answer the first research question. The individual lunchtime activities are examined and then results from the cluster analysis will be described.

Descriptive statistics are explored to better understand the predictive variables used in the stepwise regression, including demographics, love of lunch, and cluster groups. These are examined to set up the context of the regression and to aid in answering questions two and three. Finally, the stepwise regression analysis including 6 models will be reported to answer questions two through four.

Lunchtime Activity Preferences

In order to fully understand the clusters that are created to answer the first research question, it is important to look at the variables used to create the clusters. There are nine dichotomous lunchtime activity preference variables. Frequencies for these variables can be seen in Table 3. Overall, 93.5% of students selected that they liked to talk to friends, making it, by far, the most popular choice. The second most popular lunchtime activity preference is liking to go

outside and do something active with 54.8% of students selecting it. Liking to goof off/mess around is the third most popular with 53.3% of students selecting it. Next is disliking gossip/drama with 51.4% of students selecting it and 33% of students reported disliking other kids messing around. Eighteen and a half percent of students reported that they disliked not knowing what to do during lunchtime. About 13.5% of students like to finish homework during lunch. 13% of students dislike not having friends to spend time with during lunch. And, finally, the least popular lunchtime activity preference was reading a book with only 9.5% of students this as a lunchtime activity.

Table 3

Lunchtime Activity Preference Frequencies

	Marked	Not Marked
Talk to friends	777 (93.5%)	54 (6.5%)
Go outside and do something active	455 (54.8%)	376 (45.2%)
Read a book	79 (9.5%)	752 (90.5%)
Finish homework	115 (13.8%)	716 (86.2%)
Goof off/mess around	443 (53.3%)	388 (46.7%)
Dislike other kids messing around	277 (33.3%)	554 (66.7%)
Dislike not having friends to spend time with	108 (13.0%)	723 (87.0%)
Dislike gossip/drama	404 (48.6%)	427 (51.4%)
Dislike not knowing what to do during lunchtime	154 (18.5%)	677 (81.5%)

Lunchtime preferences across background characterstics. All frequencies for lunchtime activity preferences by demographic variables and love of lunch can be seen in Tables 4 and 5, but only the relationships found to be significant by a Chi square test for independence will be discussed in this section. Gender is significantly associated with going outside and doing something active ($X^2(1) = 12.364$, $p = 0.000$), goofing off/messing around ($X^2(1) = 10.439$, $p =$

0.001), and disliking gossip/drama ($X^2(1) = 9.121$, $p = 0.003$). When comparing male and female participants it is interesting that a much higher percentage of boys enjoyed going outside and doing something active (60.8% compared to 48.7% of girls), which supports the findings of Wills et al. (2005). Boys also liked to goof off/mess around more than girls (58.9% compared to 47.7% of girls), whereas more girls reported disliking gossip/drama (56.6% compared to 46.2% of boys).

When comparing students by grade, significantly fewer 9th graders (47.8%) like to go outside and do something active compared to 7th (57.2%) and 8th graders (59.2%)($X^2(2) = 8.176$, $p = 0.017$). It is also notable that the higher the grade, the more likely a student is to like finishing homework during lunch ($X^2(2) = 27.707$, $p = 0.000$).

The only lunchtime activity preference to be significantly associated with ethnicity is reading a book during lunch. When comparing Hispanic and non-Hispanic students, significantly fewer Hispanic students select reading a book during lunch ($X^2(1) = 6.309$, $p = 0.012$) with only 3.7% of Hispanic students choosing that they like to read a book during lunch compared to 10.6% of non-Hispanic students liking this lunchtime activity.

Free and reduced lunch eligibility is significantly associated with liking to finish homework during lunch ($X^2(1) = 6.989$, $p = 0.030$). About 9.4% of students with free or reduced lunch eligibility like finishing homework at lunch compared to 16.3%, almost double, of the students who are not eligible for free or reduced lunch.

Lunchtime preferences and love of lunch. Love of lunch is significantly positively associated with liking to talk to friends during lunch ($X^2(1) = 22.505$, $p < 0.001$), going outside and doing something active ($X^2(1) = 10.751$, $p = 0.001$), liking to goof off/mess around ($X^2(1) = 3.896$, $p = 0.048$). Love of lunch is significantly negatively associated with liking to read a book

Table 4

Frequency of Lunchtime Activity Preference Likes by Demographics and Love of Lunch

		Talk to friends	Go outside and do something active	Read a book	Finish Homework	Goof off/mess around
Gender	Male	384 (92.3%)	253 (60.8%)***	35 (8.4%)	50 (12.0%)	245 (58.9%)***
	Female	393 (94.7%)	202 (48.7%)***	44 (10.6%)	65 (15.7%)	198 (47.7%)***
Grade	7	278 (93.6%)	170 (57.2%)*	26 (8.8%)	18 (6.1%)***	147 (49.5%)
	8	238 (91.5%)	154 (59.2%)*	25 (9.6%)	39 (15.0%)***	138 (53.1%)
	9	261 (95.3%)	131 (47.8%)*	28 (10.2%)	58 (21.2%)***	158 (57.7%)
Ethnicity	Hispanic	127 (94.1%)	66 (48.9%)	5 (3.7%)**	11 (8.1%)*	74 (54.8%)
	Non-Hispanic	650 (93.4%)	389 (55.9%)	74 (10.6%)**	104 (14.9%)*	369 (53.0%)
FRL	Free/Reduced	317 (91.4%)	179 (51.5%)	36 (10.4%)	36 (10.4%)**	189 (54.5%)
	Neither	460 (95.0%)	276 (57.0%)	43 (8.9%)	79 (16.3%)**	254 (52.5%)
Love of Lunch	Love	572 (96.1%)***	347 (58.3%)***	49 (8.2%)*	81 (13.6%)	330 (55.5%)*
	Not Love	204 (87.2%)***	107 (45.7%)***	30 (12.8%)*	34 (14.5%)	112 (47.9%)*
Total		777 (93.5%)	455 (54.8%)	79 (9.5%)	115 (13.8%)	443 (53.3%)

Significance: $p < .05$*; $p < .01$**; $p < .001$***

Table 5

Frequency of Lunchtime Activity Preference Dislikes by Demographics and Love of Lunch

		Dislike others messing around	Dislike not having friends to spend time with	Dislike gossip/drama	Dislike not knowing what to do during lunchtime
Gender	Male	127 (30.5%)	52 (12.5%)	192 (46.2%)**	85 (20.4%)
	Female	150 (36.1%)	56 (13.5%)	235 (56.6%)**	69 (16.6%)
Grade	7	105 (35.4%)	43 (14.5%)	162 (54.5%)	57 (19.2%)
	8	89 (34.2%)	36 (13.8%)	119 (45.8%)	42 (16.2%)
	9	83 (30.3%)	29 (10.6%)	146 (53.3%)	55 (20.1%)
Ethnicity	Hispanic	40 (29.6%)	19 (14.1%)	61 (45.2%)	25 (18.5%)
	Non-Hispanic	237 (34.1%)	89 (12.8%)	366 (52.6%)	129 (18.5%)
FRL	Free/Reduced	105 (30.3%)	53 (15.3%)	181 (52.2%)	72 (20.7%)
	Neither	172 (35.5%)	55 (11.4%)	246 (50.8%)	82 (16.9%)
Love of Lunch	Love	189 (31.8%)	70 (11.8%)	305 (51.3%)	84 (14.1%)***
	Not Love	88 (37.6%)	38 (16.2%)	122 (47.9%)	70 (29.9%)***
Total		277 (33.3%)	108 (13.0%)	427 (51.4%)	154 (18.5%)

Significance: $p < .05$*; $p < .01$**; $p < .001$***

at lunch ($X^2(1) = 4.096$, $p = 0.043$) and disliking not knowing what to do during lunch ($X^2(1) = 27.708$, $p < 0.001$).

Lunchtime preferences and belonging.Table 6 shows the mean and standard deviation for belonging by student lunchtime preferences. Interestingly, an independent samples t-test revealed that students who selected that they like to go outside and do something active had a significantly higher mean score for belonging (30.296) than those who did not, as did those who selected that they like to talk to friends (29.284). Students who dislike not having friends to spend time with at lunch (26.112) and who dislike not kowing what to do during lunchtime (26.847) had significantly lower means than the students who did not select those lunchtime activity preferences.

Table 6

Belonging Mean and Standard Deviation by Lunchtime Activity Preference Variables

	Belonging	
	M	SD
Talk to friends	29.284***	6.423
Go outside and do something active	30.296***	5.952
Read a book	27.987	7.26
Finish homework	29.425	6.352
Goof off/mess around	28.728	6.441
Dislike other kids messing around	28.795	7.128
Dislike not having friends to spend time with	26.112***	7.934
Dislike gossip/drama	28.707	6.642
Dislike not knowing what to do during lunchtime	26.847***	7.347
Total	28.991	6.628

Significance: $p < .05$*; $p < .01$**; $p < .001$***

Cluster Analysis of Student Lunchtime Activity Preferences

The first research question asks, "How do student lunchtime activity preferences naturally group to create profiles of students?" The nine dichotomous lunchtime activity preference variables were used to create five distinct clusters of students through two-step cluster analysis in SPSS. Clusters are organized by the collection of preferences of lunchtime social activities. These clusters represent the holistic grouping of activities that students articulate liking and not liking during lunchtime. For the sake of facility in talking about them in this paper, I have given the clusters shortened descriptive labels based on charactersitics that are most pronounced in differentiating the activity preference patterns from other cluster groups. However, it is important to also acknowledge that these labels are not meant to reduce or summarize the clusters. Rather, the label is meant as a reference to help keep track of the profiles as they are discussed in this paper. The clusters represent students who answered the lunchtime activity preference variables similarly, by maximizing the Euclidian distance between cases and grouping cases that are nearest together. However, cases are not identical, and there is variance within clusters. I have also ordered the cluster numbers according to their level of interest in going outside to do something active during lunch since that variable had the strongest association with belonging of the lunchtime social activity preferences. These emergent clusters are presented and described, then demographic characteristics associated with each one are shown to characterize the students represented in each cluster.

Student clusters of lunchtime activity preferences. Before describing each cluster's lunchtime activity preferences it is important to note that although clusters were created using the lunchtime activity preference variables, some of these variables proved more important for organizing students into distinct groups as indicated by the SPSS two-step clustering analysis

results. Liking to finish homework during lunch became the most influential variable when sorting students into cluster groups, as indicated by the SPSS predictor importance value that shows the relative importance of each variable in estimating the model. Disliking other kids messing around was next most influencial followed by disliking not having friends to spend time with, liking to go outside and do something active, disliking not knowing what to do during lunch, liking to read a book, liking to goof off/mess around, liking to talk to friends, and, least importantly, disliking gossip/drama. The student cluster frequencies for lunchtime activity preferences discussed throughout this section may be seen as a whole in Table 7.

Cluster 1-Non-active. There are 201 students (24.2% of the overall sample) in Cluster 1, which I have labeled "Non-Active" for simplicity in this paper. The students in this cluster had a lower than average selection rate for each of the lunchtime preference variables, meaning they selected fewer lunchtime likes and dislikes across the board, although, none of the variables were selected zero times. Most notably this cluster is characterized by having the lowest rate of students who selected that they like to go outside and do something active and the lowest rate of students selecting that they like to talk to friends, far below the average for the whole sample. Only seven of the 201 students (3.5%) in the cluster selected that they like to go outside and do something active when the average rate of selection was 54.8% for the student body as a whole. This is a defining difference from the other clusters because every other cluster has over a 50% selection rate for liking to go outside and do something active. Only 166 of the 201 students (82.6%) selected that they like to talk to friends, which is also much lower than the average of 93.5% of students overall. Although 82.6% seems like a high selection rate, it is by far the lowest of all the clusters with the next lowest rate being 90.3%.

Table 7

Cluster Frequencies by Lunchtime Activity Preference Variables

	Clusters					
	Non-active	Bothered	Homework Doers	No Lunch Friends	Active	Total
Talk to friends	166 (82.6%)	146 (98.6%)	125 (97.7%)	130 (90.3%)	210 (100%)	777 (93.5%)
Go outside and do something active	7 (3.5%)	76 (51.4%)	72 (56.3%)	90 (62.5%)	210 (100%)	455 (54.8%)
Read a book	13 (6.5%)	0 (0%)	58 (45.3%)	8 (5.6%)	0 (0%)	79 (9.5%)
Finish homework	1 (0.5%)	0 (0%)	106 (82.8%)	8 (5.6%)	0 (0%)	115 (13.8%)
Goof off/mess around	104 (51.7%)	43 (29.1%)	56 (43.8%)	91 (63.2%)	149 (71.0%)	443 (53.3%)
Other kids messing around	5 (2.5%)	148 (100%)	68 (53.1%)	56 (38.9%)	0 (0%)	277 (33.3%)
Not having friends to spend time with	7 (3.5%)	0 (0%)	9 (7.0%)	92 (63.9%)	0 (0%)	108 (13.0%)
Gossip/drama	68 (33.8%)	74 (50.0%)	86 (67.2%)	94 (65.3%)	105 (50.0%)	404 (48.6%)
Not knowing what to do during lunchtime	19 (9.5%)	0 (0%)	38 (29.7%)	97 (67.4%)	0 (0%)	154 (18.5%)
Total students in each cluster	201 (100%)	148 (100%)	128 (100%)	144 (100%)	210 (100%)	831 (100%)

It is also notable that this cluster had a lower rate of students select that they dislike gossip/drama with 68 of the 201 students (33.8%) in the group selecting it. This is much lower than the average 51.4% selection rate and it is by far the lowest of all of the clusters. In fact, the only activity that the students in this cluster selected which approached the average rate is liking to goof off/mess around with 104 of the 201 students (51.7%) selecting it, compared to the average of 53.3%.

It appears that this cluster represents students that are less responsive to all activity preferences offered in the survey, most notably going outside to do something active and talking to friends. It is possible that students in this cluster were unable to select activities that represent their likes and dislikes at lunchtime from the possibilities presented to them in the survey. In this data, this cluster is the only one where almost none of the students are interested in going outside to do something active during lunch. This cluster is also characterized by having the lowest number of students interested in talking to friends during lunch, even though most students in the group still enjoy it.

Cluster 2-Bothered. This cluster is made up of 148 students or 17.8% of the overall sample. The stand out difference setting this cluster apart from the others is that they all selected that they dislike other kids messing around during lunch, so it has been named "bothered." The most notable variable distribution rate and the cluster's defining characteristic is that 100% of the students in this group selected that they dislike other kids messing around. The overall average rate of selection for this variable is 33.3%. This cluster also has the lowest number of students who selected that they themselves like to goof off/mess around with 29.1% of students in the cluster selecting it, which is much lower than the average of 53.3% and the next lowest cluster rate (Cluster 3 with 43.8%).

It is also interesting to note that none of the students in this cluster selected that they dislike not knowing what to do during lunch, dislike not having friends to spend time with, like to finish homework, or like to read a book. However, all but 2 students in the cluster selected that they like to talk to friends (98.6% compared to the overall 93.5%) making it the cluster with the second highest selection rate (with Cluster 5 with the highest at 100%).

Thus, this cluster represents students that enjoy talking to friends during lunch, but do not like when other kids "mess around" during lunch and are less likely to "goof off" or "mess around" themselves.

Cluster 3-Homework Doers. This cluster is made up of 128 students, making it the smallest of the five clusters with around 15.4% of the sample being in this cluster. I have labeled Cluster 3 "Homework Doers" because this is one of the key activities that sets this cluster apart from students in other clusters. Most of the students in this cluster selected that they like to finish homework (82.8%), and this cluster had the largest number of students select that they like to read a book (45.3%), dramatically above the cluster with next highest rate of selection with only 6.5% in cluster 1. While there are several other lunchtime preferences that the students in this cluster expressed to varying degrees, being interested in doing homework and reading sets them apart from all other clusters.

It is also notable that this cluster had an above average number of students who selected that they dislike other kids messing around with 68 out of the 128 cluster members, or 53.1% selecting this variable compared to the average rate of 33.3%. Students in this cluster also selected that they dislike gossip/drama more than any other cluster with 67.2% (86 students) selecting it compared the average rate of 51.4%.

It appears that this cluster primarily represents students that are more likely to do homework or read a book during lunch, and it is not surprising that these lunchtime activities are grouped together in the same profile of students since they are similar activities in some regards. Both reading and doing homework can be done quietly by ones self, and they can both be seen as somewhat studious activities. It is interesting that the students in this cluster are also more likely to be annoyed by others messing around or gossip and drama. This begins to paint a picture of students who fall into this cluster; I envision a studious, serious, possibly introverted student as one possible member of the Homework Doers cluster.

Cluster 4-No Lunch Friends. There are 144 students in Cluster 3, or about 17.3% of the entire sample. I labeled this cluster as "no lunch friends" because it appears that this cluster represents students that are less likely to have friends to spend time with during lunch and are more likely to stress about being unsure of what to do during lunch. The most notable variable distributions in this cluster are the high selection rates for dislike not having friends to spend time with and dislike not knowing what to do during lunch. Ninety-seven students in this cluster (67.4%) selected that they disliked not knowing what to do during lunch, which is dramatically higher than the overall average of 18.5% and is well above all other cluster groups as well, with the next highest cluster being cluster 3 at 29.7%. Ninety-two of the students in this cluster (63.9%) selected that they disliked not having friends to spend time with, which is also much higher than the overall average (13.0%) and any other cluster (with Cluster 3 with the next highest rate at 7.0%).

It is also worth noting that this cluster had the second lowest rate of students who chose that they like to talk to friends during lunch (90.3%). Also, students in this cluster had an above average selection rate for liking to goof off/mess around (63.2% compared to the average of

53.3%), disliking gossip/drama (65.3% compared to the average of 51.4%), liking to go outside and do something active (62.5% compared to the average of 54.8%), and disliking other kids messing around (38.9% compared to the average of 33.3%).

The students in this cluster seemed more responsive to the lunchtime activity preference variables in general, with the exception of talking to friends. Although, for a cluster of students that is unique in its high number of students to dislike not having friends to spend time with at lunch, a slightly lower selection rate for talking to friends should not be surprising. What is interesting is that, while lower than most clusters, 90.3% of the no lunch friends cluster still selected that they like to talk to friends at lunch even though 63.9% of those same students also reported disliking not having friends to spend time with at lunch. To me this highlights a desire to talk to friends at lunch that is sadly not being met for many students.

Cluster 5-Active. This is the largest cluster with 210 students representing 25.2% of the sample. One hundred percent of students in this cluster selected that they like to go outside and do something active (compared to the average rate of 54.8%), which is the defining characteristic of this cluster and the reason for its name, "active." Every student in this cluster also selected that they like to talk to friends (compared to the average rate of 93.5%). This cluster also has the highest selection rate for liking to goof off/mess around with 149 students selecting it (71.0% compared to the average of 53.3%). Zero students in this group selected that they like to read a book or like to finish homework. Likewise no students selected that they dislike not having friends to spend time with, dislike not knowing what to do during lunch, or dislike other kids messing around. Of all these variables selected zero times by the students in this cluster, the most intriguing is disliking other kids messing around because of it is furthest from the overall average (33.3%), and it is unique to this cluster with Cluster 1 being the only other cluster with a

low selection rate (2.5%) for this variable. Fifty percent of the students in this cluster selected disliking gossip/drama, which is close to the average of 51.4%.

This cluster represents students who use lunchtime as a type of recess more than a study hall. They all enjoy outdoor activity, talking to their friends, and are more likely to enjoy goofing off and messing around. They also seem less bothered by other students messing around (maybe because they are the ones doing the messing around).

Characteristics of cluster profiles. The love of lunch variable and background demographic variables were not used in the creation of clusters, but are examined in relation to these emergent lunchtime activity cluster groups to further understand the make up of the students after clusters were organized. Demographic variables examined include gender, grade, ethnicity, and free and reduced lunch eligibility. All of the results for the love of lunch and demographic findings of the clusters may be viewed in Table 8. A Chi Square test for independence was used to assess whether or not there is a statistically significant association between cluster membership and love of lunch and demographic variables (see Table 8). Only the statistically significant findings will be discussed here.

Interestingly, the only cluster to have any significant associations with demographic variables is the Homework Doers (Cluster 3). Grade is significantly positively associated with membership in the Homework Doers cluster as 46.9% of this cluster is in the 9th grade, 32.0% is in the 8th grade, and 21.1% is in the 7th grade ($X^2(2) = 17.978$, $p < 0.001$). This statistic makes sense because one of the main characteristics of this cluster is its high interest in doing homework during lunch and the workload typically increases as students progress to higher grades.

Table 8

Cluster Frequencies by Demographic Variables

		Clusters				
		Non-active	Bothered	Homework Doers	No Lunch Friends	Active
Gender	male	100 (49.8%)	64 (43.2%)	54 (42.2%)	81 (56.3%)	117 (55.7%)
	female	101 (50.2%)	84 (56.9%)	74 (57.8%)	63 (43.8%)	93 (44.3%)
Grade	7	69 (34.3%)	62 (41.9%)	27 (21.1%)***	63 (43.8%)	76 (36.2%)
	8	61 (30.3%)	49 (33.1%)	41 (32.0%)***	43 (29.9%)	66 (31.4%)
	9	71 (35.7%)	37 (25.0%)	60 (46.9%)***	38 (26.4%)	68 (32.4%)
Ethnicity	Hispanic	39 (19.4%)	24 (16.2%)	12 (9.4%)*	26 (18.1%)	34 (16.2%)
	non-Hispanic	162 (80.6%)	124 (83.8%)	116 (90.6%)*	118 (81.9%)	176 (83.8%)
FRL	Free/Reduced	94 (46.8%)	56 (37.8%)	45 (35.2%)	70 (48.6%)	82 (39.0%)
	Neither	107 (53.2%)	92 (62.2%)	83 (64.8%)	74 (51.4%)	128 (61.0%)
Love of	Love	136 (67.7%)	90 (70.3%)	94 (65.3%)	109 (73.6%)	166 (79.0%)**
Lunch	Not love	64 (31.8%)	38 (29.7%)	50 (34.7%)	39 (26.4%)	43 (20.5%)**
Total		201 (100%)	148 (100%)	128 (100%)	144 (100%)	210 (100%)

Significance: $p < .05$*; $p < .01$**; $p < .001$***

Ethnicity is also associated with membership in the Homework Doers cluster ($X^2(1) = 5.249$, $p = 0.022$). There are significantly more non-Hispanic students in Cluster 3 than Hispanic students as seen in Table 8.

The only cluster associated with Love of lunch is the Active cluster (Cluster 5). Being a member of Cluster 5 is significantly positively associated with loving lunch ($X^2(1) = 8.078$, $p = 0.004$). About 79% of the Active cluster loves lunch, which is much higher than any of the other clusters.

Descriptive Relationships Between Control, Love of Lunch, Clusters, and Belonging

In preparation for the full regression analyses, control and independent variables are explored and described here in relation to belonging and each other. In this section, first love of lunch will be described as well as its relationship with demographic variables. Belonging will then be explored descriptively as means and standard deviations will be reported for each of the predictive variables (demographic variables, love of lunch, lunchtime activity preference cluster membership).

Love of lunch is a dichotomous variable (yes = 1; no = 0), and frequencies across background charactersitcs of students at the school are listed in Table 9. Overall, 595 of 831 students (71.6%) selected that they "LOVE" lunch, and 234 (28.2%) reported simply that they liked, disliked, or even hated lunch. Two students did not answer this survey question. Chi-Square test for independence was used to determine significant associations between the love of luch variable and demographic variables (as shown in Table 9). Significant associations were found between love of lunch and grade ($X^2(2) = 19.377$, $p < 0.001$) as well as with free and reduced lunch eligability ($X^2(2) = 6.093$, $p = 0.048$). Students in the 7th and 8th grade (with 75.7% of 7th graders and 77.6% of 8th graders selecting that they loved lunch) were very similar, but

only 62% of 9th graders reported that they loved lunch, which is considerably lower than the other two grades. Students who are eligible to receive free or reduced lunch (67.2%) are less likely to love lunch than other students (who selected that they loved lunch 75% of the time.)

Table 9

Love of Lunch Frequencies by Demographics

		Love of Lunch		Chi Square
		Yes	No	
Gender	male	299 (72.0%)	116 (28.0%)	0.031
	female	296 (71.5%)	118 (28.5%)	
Grade	7	224 (75.7%)	72 (24.3%)	19.377***
	8	201 (77.6%)	58 (22.4%)	
	9	170 (62.0%)	104 (38.0%)	
Ethnicity	Hispanic	87 (64.9%)	47 (35.1%)	3.700
	non-Hispanic	508 (73.1%)	187 (26.9%)	
FRL	Free/Reduced	232 (67.2%)	113 (32.8%)	5.977**
	Neither	363 (75.0%)	121 (25.0%)	
Total		595 (71.6%)	234 (28.2%)	

Significance: $p < .05$*; $p < .01$**; $p < .001$***

Table 10 shows the mean and standard deviation for belonging for the overall sample and by demographic variables and love of lunch. A higher belonging score indicates a greater sense of belonging with 10 being the minimum possible score and 40 being the highest. Overall, the mean score for belonging is 28.991 with a standard deviation of 6.627. Interestingly, 7th and 8th graders had a significantly higher mean belonging score than 9th graders significant at a $p <$ 0.001 level, which supports the literature that the longer students are in junior high, the less likely they are to belong (Anderman, 2003). It is also interesting the 9th graders had a higher standard deviation, meaning there was more variation within this group than between students in

the other two grades. Hispanic students have a significantly lower mean belonging score (27.938) than non-Hispanic students (29.190) at the 0.05 level (one tailed), and students who were eligible for free or reduced lunch had lower mean belonging score (28.335) than students who were not eligible for these services (29.463) significant at a 0.05 level. Hispanic students' lower sense of belonging could likely be due to the fact that they are in the minority of students at the school with a different cultural background and possibly primary language from the majority of students in the school. Students who report a love lunch had a significantly higher mean belonging score (30.097) than those who did not select that they loved lunch (26.119) a significant at the 0.001 level.

Table 10

Belonging Mean and Standard Deviation by Demographics and Love of Lunch

		Belonging	
		M	SD
Gender	male	28.990	6.627
	female	28.993	6.637
Grade	7	29.944***	6.376
	8	29.728***	6.100
	9	27.270***	7.039
Ethnicity	Hispanic	27.938*	6.341
	non-Hispanic	29.190*	6.666
FRL	Free/Reduced	28.335*	6.570
	Neither	29.463*	6.569
Love of Lunch	Love	30.097***	6.224
	Not love	26.119***	6.796
Total		28.991	6.628

Significance: $p < .05$*; $p < .01$**; $p < .001$***

Table 11 shows the mean belonging score for each lunchtime activity preference cluster. Three clusters had significantly different means from those who were not members of those clusters. Members of the Non-active cluster (Cluster 1) have a significantly lower mean belonging score (27.811) than non-members at the 0.01 level. Members of the No Lunch Friends cluster (Cluster 4) have a significantly lower mean belonging score (27.043) than students not included in this cluster significant the 0.001 level. Members of the Active cluster (Cluster 5) have a significantly higher mean belonging score (30.480) than students who are not in this cluster, significant at the 0.001 level.

Table 11

Belonging Means and Standard Devations for Cluster Groups

	Belonging	
	M	SD
C1: Non-active	27.811**	6.877
C2: Bothered	29.899	6.132
C3: Homework Doers	29.52	6.39
C4: No Lunch Friends	27.043***	7.559
C5: Active	30.480***	5.66
Total	28.991	6.628

Significance: $p < .05$*; $p < .01$**; $p < .001$***

Effects on Belonging

This analysis includes a series of nested models that examine the influences of particular variables related to lunchtime on school belonging in order to answer research questions two through four: 2) What is the effect of student love of lunch on student sense of belonging? 3) What is the effect of lunchtime activity preference group membership on student sense of belonging?; 4) How do student love of lunch and lunchtime activity preference groupings

interact to affect student sense of belonging? In particular, this analysis examines the inclusion of love of lunch and lunchtime activity preference cluster membership, along with an exploration of interactions to understand the effects of these variables for school belonging. Table 12 shows the results for these regression models.

The baseline control model, model 1, included demographic control variables including gender, grade, ethnicity, and free and reduced lunch eligibility regressed on school belonging. The results for this model indicated that the four demographic variables accounted for 3.8% of the variance in student school belonging (R^2 = .038). As foreshadowed in the descriptive relationships described above, grade negatively predicted sense of belonging (β = -0.171, p < .001). This means that students in higher grades have a lower mean sense of belonging, which is also consistent with previous research. Likewise, free and reduced lunch eligibility also negatively predicted sense of belonging (β = -0.078, p =.033), meaning that students who were financially eligible to receive free and reduced lunch services had a lower mean school belonging score.

Love of lunch predicts belonging. Model 2 adds the effect of student love of lunch in addition to the demographic variables. This model explained 9.7% of the total variance in school belonging (R^2 = 0.097). The change in R^2 from model 1 to model 2 is 5.9% (R^2 change = .059), meaning that student love of lunch alone accounts for 5.9% of the variance in students' school belonging above and beyond the demographic control variables. Love of lunch positively predicts school belonging (β = 0.245, p < .001), meaning that students who reported that they "LOVE" lunch also reported a higher sense of belonging on average. This finding highlights the significant importance of junior highschool students' lunchtime experiences to their sense of belonging. This model also finds that grade still significantly predicts belonging (β = -0.139, p <

.001), but free and reduced lunch eligibility no longer shows a significant effect on school belonging with the addition of love of lunch.

Lunchtime activity group membership affects belonging. Model 3 includes lunchtime activity groups in addition to love of lunch and demographic variables. This model explained 12.4% of the total variance in school belonging ($R^2 = 0.124$). The change in R^2 from model 2 to this model is 2.7% (R^2 change = 0.027), meaning that cluster groups representing lunchtime activity preferences account for 2.7% of the variance in student school belonging above and beyond both demographic variables and the love of lunch variable. Grade and love of lunch also still significantly predict belonging in this model without much change in coefficient value even with the addition cluster group membership.

Being a member of the Non-active cluster (Cluster 1), compared to the Active (Cluster 5) reference cluster, significantly negitively predicts school belonging ($\beta = -0.098$, $p = 0.014$) while accounting for demographic control variables and love of lunch. This is forshadowed by the descriptive relationships that showed students in the Non-active cluster have a significantly lower average sense of belonging than others.

Membership in the Bothered cluster (Cluster 2) did not significantly predict belonging ($\beta = 0.056$, $p = 0.152$). Also, being a member of the Homework Doers cluster compared to the Active reference cluster (Cluster 5) did not significantly predict belonging ($\beta = 0.063$, $p = 0.103$). These findings are not surprising since the t-test run prior to the regression models determined that there was not a significant difference between the means for members and nonmembers of these clusters.

Being a member of the No Lunch Friends cluster (Cluster 4), compared to the Active reference cluster (Cluster 5), has a significant negative effect on belonging ($\beta = -0.150$, $p <$

0.001). This was also foreshadowed by the previous descriptive statistics which showed that members of the No Lunch Friends cluster had a significantly lower mean belonging score than nonmembers of the group.

The effect of love of lunch and cluster membership interactions on belonging. The 4th and final model included five interaction terms, which represented the interactions between each lunchtime activity cluster and love of lunch, in addition to demographic control variables, love of lunch, and cluster membership. Model 4 explains 13.3% of the total variance in belonging ($R^2 = 0.133$), and 0.9% of the variance in belonging is due to the interaction variables above and beyond demographics, love of lunch, and lunchtime activity cluster membership. Three of the five interaction variables had significant effects on belonging. Membership in the Nonactive cluster (Cluster 1) and loving lunch had a significant positive effect on school belonging ($\beta = 0.184$, $p < 0.001$). Membership in the Homework Doers cluster (Cluster 3) and loving lunch also had a significant positive effect on school belonging ($\beta = 0.075$, $p = 0.023$). And membership in the No Lunch Friends cluster also had a significant positive effect on student belonging ($\beta = 0.112$, $p = 0.001$). These results reveal the protective nature of loving lunch because even within groups that negatively predicted belonging (like the Nonactive and No Lunch Friends groups) loving lunch has a positive effect on school belonging overall.

Table 12

Regression Effects on Belonging

		M1 Control		M2 Love of Lunch		M3 Cluster Membership		M4 Interactions	
		β	SE	*β*	SE	*β*	SE	*β*	SE
Demographic Controls	Gender	-0.008	0.458	-0.004	0.444	-0.010	0.431	-0.011	0.431
	Grade	-0.171***	0.276	-0.139***	0.270	-0.151***	0.265	-0.149***	0.265
	Ethnicity	-0.049	0.658	-0.043	0.640	-0.034	0.612	-0.036	0.614
	FRL	-0.078	0.487	-0.060	0.474	-0.046	0.459	-0.052	0.459
Love of Lunch	Love of Lunch			0.245***	0.500	0.224***	0.485	n/a	n/a
Lunchtime Actvity Clusters	*(ref: "Active")*								
	Nonactive					-0.098**	0.744	-0.110**	0.741
	Bothered					0.056	0.788	0.061	0.786
	Homework Doers					0.063	0.821	0.059	0.819
	No Lunch Friends					-0.150***	0.795	-0.166***	0.791
Interaction Terms	Nonactive x LL							0.184***	0.936
	HW doers x LL							0.075*	1.194
	No Lunch Friends x LL							0.112***	1.086
	Bothered x LL							0.057	1.153
	Active x LL							0.053	1.060
Variation in belonging accounted for by model	R2	0.038		0.097		0.124		0.133	
	R2 change			0.059		0.027		0.009	

Significance: p < .05*; p < .01**; p < .001***

CHAPTER 5

Discussion and Conclusions

The purpose of this study is to shed light on how student lunchtime experiences may relate to ongoing research regarding student sense of belonging in middle level schools. Because belonging relates to so many positive outcomes, as discussed earlier, finding ways to increase student belonging is important. Unfortunately, once students enter secondary school, their sense of belonging often significantly decreases, and the current research points towards teachers, who are often already overtasked, as the key resource for change. Establishing lunchtime as a valuable space for understanding and even improving student sense of belonging can be a move in the right direction for those concerned about student belonging on the secondary level.

This chapter will first review and discuss key findings as well as explore possible explanations for these findings. Second, I will examine and discuss limitations of this study and the potential for future studies. Finally, possible implications for school practitioners will be discussed.

Key Findings Explained

There are several important findings that emerge from this study. I will discuss how different variables, including grade, love of lunch, and lunchtime profiles, affect belonging as well as why these findings are important.

Grade affects belonging. This study confirms the findings from previous work (Anderman, 2003) showing that grade level predicts belonging. Students in the highest grade in the school, in this case 9th grade, generally have a lower sense of belonging than students in the younger grades. This study found grade to be a significant predictor of belonging, even while accounting for other demographic charactiristics and lunchtime experiences. This finding is

consistent with previous research (Anderman, 2003) and is a good indication of the strength of the data used in this study.

Lunchtime experiences affect belonging. The significant effect that loving lunch has on students' sense of school belonging is possibly the strongest finding of this study, and it shines a light on the influence students' feelings about lunchtime have on school belonging. Students' sense of school belonging depends in part on love of lunch, so it is important that students have a positive lunchtime experience. It appears that feelings of belonging and connections to school may be improved through deliberate attention to lunch time during these middle years of education.

This is one of the first studies to directly link lunchtime feelings and experiences to school belonging, but these findings are perhaps not terribly surprising given the research on the importance of mealtimes as a social space for building connectedness. Peer support and student-student relationships have already been tied to belongingness (Ellerbrock et al., 2014), and it is possible that lunchtime matters in part because it is a space for building and strengthening those peer relationships. Another possible reason that lunchtime activities matter so much for belonging is that lunch is a less structured space with less adult supervision and guidance. For many students, this loosened structure could be a much needed break from an otherwise highly structured school day, but for others, lunchtime could be accompanied by social anxiety, uncertainty, or even bullying.

While this finding is not shocking, it is quite surprising that more attention has not been given to this subject already. Lunchtime is a central part of the junior high and middle school day that plays a crucial role in a student's overall school experience. As a middle school teacher, I noticed the importance that lunchtime holds for students. It allows them to build connections

with their peers and become a part of the school community in an organic way rather than being forced into participation through more structured parts of the day (like in the classroom). More attention needs to be given to learning more about how lunchtime experiences influence students, especially in regards to their sense of school belonging and their overall school expereinces.

Lunchtime profiles and their effects on belonging. This study revealed that students do naturally group around certain lunchtime activities into interesting and distinct student profiles. Even though the clusters described in this study represent the natural grouping in the data as holistic activity preferences rather than being based on theory of student types, the profiles created emerge as logical and recognizable in middle level schools.

For example, liking to finish homework during lunch was grouped together with liking to read during lunch, which means that there was significant overlap between these two lunchtime activity preferences. Many of the students who like to finish homework at lunch are the same students who like to read during lunch. Students represented as Homework Doers also selected that they disliked other messing around and disliked gossip/drama more than the average of those not within the cluster. This cluster also had higher numbers of 9th grade students and those who classify as participating in the Free and Reduced lunch program. All of these characteristics make conceptual sense and create a profile or "type" of student that is recognizable to many who work in middle level eduation and that transcends this one junior high school. It stands to reason that there are students across all schools who may potentially have what appears to be a more introverted orientation or who need to use this time to keep up on schoolwork. Schools can use this information to create spaces for these students to thrive in during lunch based on their specific tastes and needs.

The Active cluster is another one of the five clusters that typifies a student profile likely recognizable in many schools. They are the students who like to play outside during lunch. They talk to friends, goof off, and have fun during the lunch break without being bothered by what other students messing around our gossiping so much. This profile of students had the highest average belonging score of all the clusters. Recognizing this need to "blow off steam" as productive to school belonging and participation across other spaces in the school can foster better understanding of how to help structure lunchtime and other times to help students feel school belonging.

The No Lunch Friends cluster also paints a picture of a type of student seen in many schools. This student dislikes not having friends to spend time with during lunch and dislikes not knowing what to do during lunchtime. Whether they unluckily were put into a lunch section that their friends were not included in, or they simply don't have friends at the school, they are missing out on the social opportunity provided by lunch which is a crucial part of building belonging according to the literature and previous research on mealtimes as a social space for building connectedness and belonging (Absolom & Roberts, 2011; Stead et al., 2011; Neely et al, 2015). Surely, schools can recognize the importance of attending to the needs of students who find themselves socially isolated for any reason, and this study suggests that attention to lunchtime activities and support during this time can be one way to make a difference for students. Providing a variety of lunchtime activities can allow students who without friends in their lunch to engage in social experiences in ways that help them to build new friendships with students in their lunch.

In addition to showing patterns of how students experience lunchtime, these profiles of students, or student clusters, have their own effect on belonging even while accounting for

student feelings about lunch. Membership in the Non-active cluster (Cluster 1) and membership in the No Lunch Friends cluster (Cluster 4) had negative effects on belonging, in comparison to the higher belonging felt by members of the Active cluster (Cluster 5). This reveals something about the underlying social structure in the school that is related to belonging. The ways in which students spend their time during lunch matters, and the way that students group into profiles based on things that they like and dislike about lunch reveals possible avenues for using lunchtime as a space for improving student belonging. For example, students in the No Lunch Friends cluster (Cluster 4 who are characterized by selecting that they dislike not having friends to spend time with during lunch and disliking not knowing what to do during lunch) have a lower mean score for belonging, indicating that these are areas for improvement. Some students may want, or need, structured activities and friendship building opportunities during lunch to help them feel a higher sense of school belonging.

Limitations and Future Research

This study uses data already collected as a part of a larger ongoing study with one junior high school. There are many benefits to using this data such as the high number of variables included with the large data set and the exteremely high student participation rate at the school, but using this data has its limitations as well. The main limitation is the inability of the researcher to modify or add survey questions for the study. While the questions used in this analysis accomplish the purpose of this study, having students asked to what extent they liked or dislike lunchtime activity preferences on a Likert scale rather than just selecting as many or as few as they liked/disliked would have made analysis more straight forward. Additionally, student feelings about lunchtime are represented in this study simply by loving or not loving lunch. More

nuanced data on students' feelings about lunch would be valuable in future studies regarding lunchtime experiences and belonging.

Another limitation is that this study only examines one junior high school. Including multiple schools, each with their own traditions and school culture could be useful in future studies, especially because school lunch practices can vary greatly from school to school. In future studies it would be interesting to look at multiple schools with various lunchtime structures. A survey of lunchtime programs across multiple schools would also be useful in collecting data about what our schools are already doing during lunchtime. These programs could be observed and compared across schools in order to determine best practices for lunchtime structures and programs.

Because this is one of the first studies looking specifically at lunchtime experiences and belonging, there is a great need for further research in this area. Future research should focus on both the effect of lunchtime experiences on belonging as well as ways to improve lunchtime experiences for students.

Although this study does not focus on the individual lunchtime preferences used in the cluster creations, the descriptive statistics revealed some interesting findings relating to some of them. For example, students who selected that they like to go outside and do something active loved lunch more and had a higher average belonging score as a group than any other lunchtime preference included in the survey. I wonder about the relationship between physical activity and feelings of belonging. It would be interesting to learn more about the possible relationships between these variables in future research.

Another interesting finding gleaned from the descriptive statistics is that students who are eligible for free and reduced lunch had a significantly lower mean belonging score than others. I

wonder if this finding is due to the lower socio-economic class that these students represent generally or if it is more related to possible anxieties triggered by lunchtime itself. More research looking into the particular lunchtime experiences for students in this food program would help to uncover possible reasons for why this relationship emerged in this data.

Hispanic students at this school also had a significantly lower mean sense of belonging than other students. It would be interesting to look more specifically at how lunchtime experiences affect minoritized students' school belonging as compared to students who are part of more normative dominant groups. Previous studies (Hausmann, Ye, Schofield, & Woods, 2009) have shown that sometimes racial minority groups may not respond to efforts to improve belonging in the same ways as racial majority students, so looking at how lunchtime experiences differ across racial groups would also be useful

Since this study confirms a connection between lunchtime and belonging through statistical analysis, a logical and useful follow up study could explore students' lunchtime feelings through interviews and other qualitative research techniques. This could improve how we understand the intricacies of school lunches and reveal additional avenues for using lunchtime as a space for improving student sense of school belonging.

Implications and Applicaitons

In light of the importance lunchtime experiences and love of lunch established by this study, school practitioners concerned with developing belonging in their schools should focus some of their efforts on helping students to have positive lunchtime experiences. This can be done in a number of ways, but I will describe three possible ways for school administrators to achieve progress in this area based on the findings form this study.

The cluster analysis and resulting profiles of students confirmed that students can be naturally grouped based on their lunchtime activity preferences. This finding suggests that there is not a one-size fits all solution to helping students enjoy lunch. This means that ideally there should be a variety of options at varying levels of noise, structure, and format for students during lunch. One way that school administrators can make positive changes is by broadening the lunchtime activity options, especially in schools where there are few available ways for socializing and being active. More lunchtime options can fulfill the needs of more students in the school.

Another way to better meet the lunchtime needs of students is by offering some structured lunchtime activities. The No Lunch Friends cluster reveals a segment of the student population that dislikes not having friends in their lunch and who also dislike not knowing what to do during lunchtime. Structured lunchtime activities and programs could meet the needs of these students and improve their overall sense of school belonging. An example of a more structured lunchtime activity is a group or club that students may join or sign up for that meets during lunch. These groups could be monitored by administrators or teachers, or it could be run by students, and it could be formed around a shared interest or purely as a friend-making opportunity. These types of lunch groups could give students who struggle to socialize in the chaotic setting of a large cafeteria opportunities for socializing in a more structured environment.

My final recommendation for improving lunchtime experiences and ultimately increasing student sense of school belonging is to get students involved in creating a positive lunchtime experience for themselves and their peers. This would help give students direction during an otherwise unstructured lunchtime, and it would help students build friendships and socialize. Creating a schoolwide initiative to help all students enjoy lunch, could be a good way to help

students look outside themselves and help one another. One school in Boca Raton, Florida has been in the news recently for similar efforts. Students there noticed that lunchtime could be improved for many students, and in an attempt to build comradery and inclusion, they created a club they called “We Dine Together” with a mission to “build relationships over the table.” This club seeks out students who are left out or are alone during lunchtime (McKenzie, 2017). Programs or initiatives like this have the potential to greatly improve school belonging by allowing students to have power over and ownership of their own situation (Schall, Wallace, & Chhuon, 2014) and improving lunchtime experiences for students, all without overburdening teachers with unrealistic expectiations of knowing each of the students (who may number in the hundreds) on a deeply personal level.

This study successfully connects lunchtime experiences to students’ sense of school belonging. Loving lunch and lunchtime activities have significant impacts on school belonging, and these findings only scratch the surface of how lunchtime experiences may interact with belongingness. With the majority of research currently focused on teacher support as the main avenue for increasing school belonging, discovering the untapped potential of lunchtime experiences for belonging is a welcome alternative. I hope that this is among the first of many studies to explore and develop lunchtime in the context of school belonging.

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