The Effect of Social Skills on Middle School Belonging and Academic Motivation in
Low-Income, Minority Students

by

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ABSTRACT

The present research investigated associations between the basic need satisfaction of belongingness and intrinsic academic motivation in low-income, minority middle school students. Current literature suggests that students in middle school suffer a drop in basic need satisfaction and school engagement. Students reporting supportive relationships are better adjusted and more academically engaged. One method used to encourage these relationships is the emphasis of social skills. Therefore, the present research explored whether adding social skills lessons to a middle school curriculum increased intrinsic academic motivation by increasing belonging among students, particularly among a low-income, minority student sample. This was tested in a three-week long study where participants enrolled in summer school (n = 95) completed baseline, weekly, and follow-up measures of need satisfaction and intrinsic academic motivation while receiving weekly social skills lessons. Results indicated that there were no significant differences between baseline and follow-up belongingness satisfaction or intrinsic academic motivation. Study limitations include a small sample size and fidelity challenges, and future research should aim for a larger sample size and a lengthier, more structured longitudinal design.

Keywords: intrinsic motivation, belonging, social skills, academic adjustment, middle school

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The middle school experience is something that every student in the United States goes through. It is a rite of passage, the start of adolescence, and the beginning of a lot of unforeseen changes. The commonality of this experience is evidenced by the popularity of television shows and movies that depict these middle school conflicts, such as Lizzie McGuire, Boy Meets World, Ned's Declassified School Survival Guide, and Eighth Grade. Each of these pieces of media shows our young protagonists going through struggles involving friends, family, teachers, schoolwork, puberty, and a plethora of other worries that plague adolescents. Even though middle school students identify with these characters' struggles, the reality of the middle school experience is even less glamorous than these Hollywood depictions. In fact, middle school has been called the "Bermuda Triangle of education" in the United States (Juvonen, Le, Kaganoff, Augustine, & Constant, 2004). What makes it so bad, and what is the transition into middle school really like for youth in the United States?

Student Motivation, Socialization, and Other Transitional Concerns

The truth is that a handful of problems begin or worsen during and after the transition to middle school. Students exhibit a significant drop in motivation and grade point average (GPA) upon entering middle school, and a lack of belongingness in school is associated with these decreases (Anderman, Maehr, & Midgley, 1999; Gutman & Midgley, 1999; Murray, 2009; Ryan, Stiller, & Lynch, 1994). The school atmosphere is much more controlled, teachers have higher expectations, and students are placed in classes with peers that they have never met before. These changes often result in poor school adjustment and a decline in

students' performance in school (Eccles & Midgley, 1989; Eccles et al., 1993). These

changes also disrupt prior friend groups and teacher relationships, which can inhibit students

from establishing a positive orientation toward their new school (Eccles, Flanagan,

Lord, Midgley, Roeser, & Yee, 1996; Sirsch, 2003). At the same time, as friend groups are

disrupted, students begin to feel more concerned about their peer relationships and social

comparison and less concerned about their academics (Hay & Ashman, 2003; LaFontana &

Cillessen, 2010). As the priority of one's reputation among one's peers peaks in middle

school, social influence from peers also increases (LaFontana & Cillessen, 2010; Simons-

Morton & Haynie, 2002). Classmates and friends dictate what to wear, who to listen to, and

what to do in the school environment. Students become more worried about fitting in and

finding a new friend group, and those who lack support from a steady friend group are more

likely to exhibit poor school adjustment and decreased academic motivation (Chen, 2005;

Wentzel et al., 2004). Further, students who suffer these larger declines in grades and

motivation and lack supportive, healthy friendships are at a higher risk of school failure,

dropout, substance abuse problems, and antisocial behavior (Bray, Adams, Getz, &

McQueen, 2003; Dishion, Capaldi, Spraklen, & Li, 1995; Kiesner & Kerr, 2004; Simmons &

Blyth, 1987).

After the transition into middle school, students face additional challenges. Beyond

social concerns, gender differences between boys' and girls' performance in school grow

dramatically. Boys perform increasingly worse than their female counterparts academically,

especially in English and language arts, while the gap is somewhat smaller (but still growing)

in math and science (OCED, 2015). In addition, middle school students also begin to suffer

from the "Matthew Effect." The Matthew Effect is the idea of accumulated advantage,

stating that those who perform well continue to perform well, while those who perform

poorly continue to perform poorly (Merton, 1968). This disparity applies to students

suffering from all achievement differences, whether based on gender, income level, race, or

even individual differences (Kuo, Casillas, Allen, & Robbins, 2012; Perc, 2014).

The negative experiences upon transitioning to middle school are even more

detrimental for low socioeconomic status (SES) and minority students. Currently, in the

United States, the number of African American, Latino, and Native American individuals

living in poverty are each double the number of Caucasian individuals living in poverty

(Census Bureau American Community Survey, 2018). Students coming from households in

poverty experience more environmental risk factors that challenge their education, such as

scarce school resources and violence in their neighborhoods (Gorski & Pilotto, 1993; Kozol,

1991). Low SES adolescents are more likely to be held back a grade, score low on

achievement tests, have more absences, repeat courses, and drop out of school compared to

their more affluent peers (McLoyd, 1998). Upon entering middle school, everything stable in

the academic lives of these students changes: they receive less support from teachers, lose

contact with their peers, and must keep up with increasing demands from the school

administration. This is when academic problems begin to accelerate and become truly

detrimental to many low-SES and minority students. For example, African American

students' GPAs, self-esteem, social support, and class grades declined significantly and many

minority students scored two grade levels behind their Caucasian peers on achievement tests

after the middle school transition (Seidman, Allen, Aber, Mitchell, & Feinman, 1994;

Simmons, Black, & Zhou, 1991; Steele, 1992). Furthermore, low SES and minority students

are obvious targets of the Matthew Effect, as the racial-achievement gap remains high and

the income-achievement gap is increasing (Reardon, 2011, 2013). The inequalities in school performance keep compounding during this time.

Benefits of Supportive Relationships

Clearly, students attending middle school face a wide array of challenges: finding new friends, meeting higher demands, restoring academic motivation, and catching up to peer performance. However, another thing becomes clear-- students who report more supportive social relationships are more academically engaged than their peers who do not report having supportive relationships (Murray 2009; Ryan et al., 1994). Adolescents who report having peer support and friend groups at school are more involved in school activities and report better psychological well-being and positive mental health outcomes (Berndt & Keefe, 1995; Wenz-Gross et al., 1997; Wentzel 1999). The presence of a peer group also increases a student's enjoyment of school and academic performance, indicating that surrounding oneself with positive-minded individuals increases one's own positive mindset toward school (Berndt, 1999; Hartup & Stevens, 1997; Ryan, 2001). It seems that if students are able to make connections with their peers, they are also able to view the new school in a more positive way, which can promote better adjustment and increased motivation.

These social support benefits, much like the transitional concerns, have unique implications for low-SES and minority students. Receiving support from stable peer friend groups and integrating into the social environment is related to better adjustment, which is vital in supporting minority students' identification with the new school, as they already feel like the odd ones out (Carnegie Council of Adolescent Development, 1995; Shoshani & Sloane, 2013). In addition, receiving support and establishing a mentor relationship with a

teacher can increase school adjustment and achievement and offer low-SES and minority

students a role model that they may not have outside of school (Cauce, Hannan, & Sargeant,

1992; Dubow & Tisak, 1989; Shoshani & Sloane, 2013). Beyond their obvious benefits,

positive relationships with peers and teachers can serve as incentives for low-SES and

minority adolescents to attend school, even when the neighborhood, student population, and

classroom atmosphere serve as deterrents (Alexander et al., 1997; Croninger & Lee, 2001; Le

Compte & Dworkin, 1991; Wehlage, Rutter, Smith, Lesko, & Fernandez, 1989). In fact,

supportive and fulfilling relationships have been found to help ameliorate the consequences

of the achievement gap and the negative environmental risks that these students uniquely

face (Alexander, Enwisle, & Horsey, 1997; Bowen & Chapman, 1996; Morrison et al., 2002;

Murray, 2009).

Social Skills as a Tool for Connection and Positive Academic Outcomes

It is quite evident that supportive relationships with teachers and peers help students

work their way through the turmoil of the middle school transition. How do we harness the

positive effects of supportive relationships to help students during this transition? One tried-

and-true practice found to increase the formation of these positive relationships is a review of

social skills (Kuperminc, Blatt, & Leadbeater, 1997). Social skills are commonly defined as

learned behaviors that are socially acceptable and enable an individual to engage with others

in a positive, interpersonal, and prosocial way (Gresham & Elliot, 1990). These behaviors

often surround themes of cooperation, responsibility, assertion, self-control, empathy, and

community (Dahlsgaard, 2005; Elliot & Gresham, 1991; Park & Peterson, 2006). Making

students develop and utilize these skills enables them to communicate with each other in

healthy ways, thus fostering positive and supportive relationships. Students who report high

use of interpersonal and social skills have higher life satisfaction, higher happiness, stronger

peer relationships, higher social support, better management of feelings, and higher

belongingness among their peers (Greenberg et al., 1995; Parks & Peterson, 2006; Shoshani

& Sloane, 2013; Wentzel 1999). Additionally, these students were more likely to form

friendships with students they had never met before within a month of acquaintanceship,

which is much like the situation students are forced into during the middle school transition

(Gottman, 1983). Students who were friends with adolescents high in social skills also

reported less conflict and higher quality friendship, even when peer acceptance was

controlled (Rose & Asher, 1999). With social concerns out of the way, students are able to

focus more on their academics (Solomon et al., 1992). Consequently, social skills use

predicts school adjustment, appropriate classroom conduct, and student GPAs (Cobb, 1972;

Green, Forehand, Beck, & Vosk, 1980; Shoshani & Sloane, 2013). These trends are also

explained by the fact that many middle school teachers begin to have behavioral expectations

that align with multiple social skills, including but not limited to self-control, cooperation,

conflict resolution, and self-assertion (Lane, Wehbu, & Cooley, 2006). Being able to utilize

these skills in the correct situations speaks to a student's adaptability, which is vital in

analyzing and reacting to middle school changes (Elias et al., 1986, Greene & Ollendick,

1993; Mott & Krane, 1994; Platt et al., 1974).

    Social skills interventions aimed at helping low SES and minority students transition

into middle school have found these same trends and more. It is especially important that

social skills be reviewed in low SES schools, as teachers at these schools in particular believe

self-control and self-assertion skills to be vital to a student's academic success (Lane et al.,

2006). Social skills interventions applied in these settings have found that male students had

fewer physical altercations (sustained over multiple years) and felt like they had better self-control and social skills, while female students felt more assertive and adjusted (Taylor, Liang, Tracy, Williams, & Siegle, 2002). Students also experience a shift from competition and comparative performance to cooperation in the classroom, facilitated by the use of teamwork, communication, and community-building skills (Eccles & Midgley, 1989; Kagan & Kagan, 2009). Low SES and minority students already experience high comparative performance as they try to catch up to their more affluent, majority peers. Cooperation in the classroom works to encourage all students, as opposed to the selectivity found in competitive classrooms. Subsequently, social skills put in practice can help close performance gaps in the classroom and promote collective student success (Kagan & Kagan, 2009).

Belongingness Need Satisfaction and Intrinsic Academic Motivation

Clearly, supportive relationships, along with social skills, can do a lot to aid adolescents in adjusting to the middle school environment and encouraging their academic studies, but how exactly can we measure these improvements? Deci and Ryan's Self-Determination Theory (SDT) states that three basic psychological needs motivate human behavior: belongingness (also known as "relatedness;" feeling belonging and connected to peers), competence (feeling knowledgeable and capable), and autonomy (feeling self-driven and authentic) (Ryan & Deci, 2000). An activity that allows an individual to feel belonging, competent, and/or autonomous satisfies that individual's needs ("need satisfaction"), while an activity that does not allow an individual to feel belonging, competent, and/or autonomous fails to satisfy that individual's needs ("need frustration"). According to SDT, the degree to which a behavior or activity fulfills an individual's basic needs dictates how motivated that person becomes to complete said action. Their level of motivation will fall somewhere along

a continuum, ranging from extrinsic to intrinsic motivation. Extrinsic motivation refers to the desire to complete a behavior due to some external reward completely separate from the activity itself (Ryan & Deci, 2000). In the case of academic motivation, this would be something like a student completing their homework because their parents will give them a $10 allowance for doing so. This activity does not satisfy their basic needs in any way, and therefore the behavior is only motivated by an external incentive. On the opposite end of the continuum is intrinsic motivation. Intrinsic motivation refers to the desire to complete an activity because of the inherent joy and pleasure that the activity gives you, absent from any external reward (Ryan & Deci, 2000). Academically, an example of this would be a student completing their homework because they enjoy the process and are excited by the idea of learning something new. This activity satisfies their basic needs completely, and therefore the behavior is motivated by their internal pleasure when engaging in the activity.

Measuring belongingness and intrinsic academic motivation in the school setting has shown the importance of these concepts for student outcomes. As previously mentioned, belongingness decreases during the middle school transition, likely due to disruptions of peer friendship groups and teacher relationships established over multiple years in elementary school (Sirch, 2003). However, with peer support and positive relationships, a student's need for belonging can be met, which results in that student's sense of motivation, positive adjustment, and positive academic performance in school also increasing (Battistich et al., 2004; Brown, 2004; Deci et al., 1991; Deci & Ryan, 2000; Kiefer, Alley, & Ellerbrock, 2015; Nichols, 2006, 2008; Patrick et al., 2007). Furthermore, this need satisfaction leads to higher in intrinsic academic motivation, which results in higher achievement outcomes, higher perceptions of academic competence, and lower academic anxiety through adolescence

(Gottfried, 1985, 1990; Gottfried, Fleming, & Gottfried, 1994; Gottfried & Gottfried, 1996;

Gottfried, Gottfried, Bathurst & Guerin, 1994).

The positive results of belongingness and intrinsic motivation are extended to low-

SES, minority students as well. The need for belonging has been significantly associated with

academic motivation and engagement in low-income, minority students, and in an African

American and Latino student sample, intrinsic academic motivation predicted increased

academic engagement and higher GPAs (Froiland & Worrell, 2016; Goodenow & Grady,

1994). However, yet again, low-SES and minority students face unique challenges during the

middle school transition and are more likely than their more affluent peers to have lower

levels of belongingness in school (Martinez, Degarmo, & Eddy, 2004). Along with the

regular stressors that come with the middle school transition, part of the unique struggle that

low SES and minority students face is acculturative stress. Acculturative stress comes when

there is a mismatch between one's own socio-cultural characteristics and an unfamiliar and

different environment (Blanco-Vega et al., 2008; Gonzales & Kim, 1997; Suarez-Orozco &

Suarez-Orozco, 2001). The individual facing acculturative stress tries to find a balance

between adapting to the majority culture without sacrificing their own minority culture

(Chavez, Moran, Reid, & Lopez, 1997). Middle school, with its elevated expectations,

increased student population, and controlled atmosphere, is certainly a new environment for

students coming in, and they likely feel this acculturative pressure from the school climate

and its majority culture. Unfortunately, adolescents who fail to develop a sense of belonging

in school and suffer lower levels of intrinsic academic motivation are at a higher risk for poor

academic outcomes and school adjustment (Goodenow, 1993; Gottfried et al., 2001; Wentzel

et al., 2010). If a student in middle school suffers from low intrinsic academic motivation,

this loss of motivation is likely to persist, putting them at risk for future academic failure as well (Gottfried et al., 2001). Therefore, in the case of low-income, minority students, interventions aimed at increasing their sense of belongingness and academic motivation must be applied earlier in their academic career, before or during the transition to middle school, rather than later.

The Present Study

The present study was conducted at a charter middle school in a large southeastern city in the United States. This middle school serves its immediate community, where half of the inhabitants reported living below the poverty level (United States Census Bureau, 2018). Therefore, many of the students attending this charter middle school come from low-income households. All students at the school are members of a racial/ethnic minority.

The present study focused on using SDT's concept of belongingness as a tool for promoting academic motivation. As previous literature has shown the link between the concepts of social skills, belongingness, and motivation, this study aims to utilize these constructs in an intervention with a unique student population. The current study proposes that social skills utilization will increase student belongingness satisfaction and decrease belongingness frustration, which will increase intrinsic academic motivation. Broken down step-by step: the researcher-given social skills lessons will promote the use of social skills among students; applying these skills will increase the sense of belonging that students feel in school; and this sense of belongingness will motivate students to attend and engage with school.

The first three hypotheses test whether there are any measured differences in the three primary outcomes over the course of the study, from baseline to follow-up. Since I predicted that social skills use would lead to an increase in students' sense of belongingness, I expected that belongingness satisfaction would increase. Although need satisfaction and need frustration are not strictly inverse constructs (a lack of need satisfaction does not necessarily indicate need frustration), it is still expected that belongingness frustration will decrease. Finally, since belongingness satisfaction was expected to increase and its connection to motivation has been explained, intrinsic academic motivation among students was expected to increase as well.

Hypothesis 1: Student need satisfaction for belongingness will be higher at follow-up than at baseline.

Hypothesis 2: Student need frustration for belongingness will be lower at follow-up than at baseline.

Hypothesis 3: Student intrinsic academic motivation will be higher at follow-up than at baseline.

The remaining hypotheses test the direction of the associations between our variables of interest:

Hypothesis 4: Baseline intrinsic academic motivation will predict residual increase in follow-up belongingness satisfaction.

Hypothesis 5: Baseline intrinsic academic motivation will predict residual decrease in belongingness frustration.

Hypothesis 6: An alternative hypothesis that baseline belongingness satisfaction will predict residual change in intrinsic academic motivation.

Hypothesis 7: An alternative hypothesis that baseline belongingness frustration will predict residual change in intrinsic academic motivation.

Method

Participants

Participants were selected through their enrollment in 6th grade at the aforementioned charter school for the upcoming academic year. The school administration requires all incoming 6th-grade students to enroll in a one-month long summer school program to learn about the school's behavioral expectations and review the foundational academic knowledge necessary for 6th grade. Participants had to submit both parental informed consent and child assent forms before being enrolled in the study and taking the baseline survey. Students who took the baseline survey (n = 39) were 71.89% male and 28.21% female. The racial breakdown of participants included 48.72% Native American/American Indian, 12.82% Black/African American, 7.69% Multi-Race, and 30.77% Hispanic/Latino. This breakdown is not fully representative of the total sample of participants, as 95 students enrolled in the study before its conclusion, however only 39 students turned in consent forms in time to complete the baseline survey.

Procedure

Upon the start of summer school, I visited the students' Character Building class to recruit them for the study. The study was called the "SHIP (Social Helper In Practice)

Program" and was given a pirate theme to keep students engaged. Students were told that they were "sailors," and I was the "captain" helping them navigate the "wavy waters" of middle school. This framing piqued initial student interest. Students were then taught what research is, what they would be asked to do, and were given a packet to take home. This packet included informed consent forms in both English and Spanish for the parents and students, as well as basic study information, researcher contact information, and a randomized I.D. number (to write at the top of their surveys so their study completion could be tracked) (Appendices A-F). Students were instructed that in order to participate in the research, they had to turn in their signed informed consent and child assent forms to their Character Building teacher. Upon submitting the signed forms the following day, I distributed the baseline survey to the students (Appendix G). The baseline survey included demographic questions and measures of basic need satisfaction, basic need frustration, and intrinsic academic motivation (Lockwood, Jordan, & Kunda, 2002; van der Kaap-Deeder, Vansteenkiste, Soenens, & Mabbe, 2017). After the baseline survey, when I expected most students planning to enroll in the study to have returned their consent forms in a timely manner, all students were given the same skill lessons so that no student was refused the potential benefits or knowledge gained from the program. No student submitted their consent forms after the second week of the study.

The day after receiving the baseline survey, all students received their first skill lesson. I created the skill lessons in collaboration with the school administration, with references to the Niroga Institute's Transformative Life Skills Program and Curriculum for specific skill activities (Bose, Ancin, Frank, & Malik, 2017). The lessons were designed to promote social skills acquisition, which is one of the primary objectives of social skills

training (Elliott & Gresham, 1991, 1993). The first skill lesson taught the concept of "how to deal with stress" in healthy ways. The skill lesson consisted of me visiting the Character Building class and interactively reviewing a PowerPoint with the students in each class period. Students were then challenged to practice social skill behaviors focusing on self-control, such as meditation, asking for help, calming their emotions, communicating about stressors, and making time for hobbies over the following week. Students were also given a personal journal to log their skill practice in (like a diary) or to use as part of their skill practice (ex: relieving stress by drawing in the journal until they calmed down). These instructions promoted student autonomy and competence by giving students the opportunity to practice the skills in appropriate situations both inside and outside of school, another important part of social skills training (Elliott & Gresham, 1991; Taylor et al., 2002). The following week, I gave the students their first "reflection" survey, which gauged how they used the stress management skill from the previous week, how they felt after practicing it, and measured their need satisfaction (Appendix H) (van der Kaap-Deeder, Vansteenkiste, Soenens, & Mabbe, 2017). I chose to omit intrinsic academic motivation and need frustration in the weekly reflection surveys to shorten the length and ease the burden on students and teachers.

The following day, the students received their second skill lesson on the concept of "malleable intelligence." This time, due to administrative concerns with the school, I was unable to give the lesson in person. Instead, the lesson on malleable intelligence was a video that the Character Building teacher showed the class. The video was my computer screen, clicking through a malleable intelligence PowerPoint similar to the stress management slideshow, but with my voice-over recorded on top of the presentation. This skill lesson

discussed ideas like growth mindset, multiple intelligence theories, and academic self-efficacy, which are important concepts in promoting student success (Gutman & Midgley, 1999). The social skills taught to promote the realization of these theories included asking for help, encouraging peers, cooperating with others, and practicing positive speech. The next week, the students completed their second reflection survey, given to them by the teacher, answering about their malleable intelligence skill use and need satisfaction (van der Kaap-Deeder, Vansteenkiste, Soenens, & Mabbe, 2017). However, without me being present, the teacher did not differentiate between students who submitted informed consent forms and those who did not, and instead all students were given the second reflection survey (Appendix I). This occurred the following week as well, when the teacher handed out the follow-up survey. All students, regardless of enrollment in the study, completed the follow-up survey (Appendix J). After the follow-up surveys were collected, the study was concluded.

Figure 1. Study Calendar

	Monday	*Tuesday*	*Wednesday*	*Thursday*	*Friday*
Week 1		- Consent forms distributed	**Study Begins:** - Baseline survey completed	- First skill lesson (Stress Management) - Practice skill until Monday	
Week 2	- Stress Management Reflection survey	- Second skill lesson (Malleable Intelligence) - Practice skill until Monday			

Week 3	- Malleable Intelligence Reflection Survey			Study Ends: - Follow-up survey completed	

Measures

Baseline Survey Measures

Demographics. The baseline survey included demographic questions on gender, ethnicity, and racial background.

Baseline and Follow-Up Survey Measures

Intrinsic Academic Motivation. Intrinsic Academic Motivation was measured using the Academic Motivation Scale (AMS) (Lockwood, Jordan, & Kunda, 2002). Cronbach alphas were .82 and .74 (standardized) for baseline and follow-up data, respectively. The AMS contains 14 items describing the participant's intentions to increase their positive academic behaviors (e.g., "I plan to put more time into my schoolwork," "I plan to be more organized"). All items are rated on an 11-point Likert scale, ranging from "Not true at all" to "Very true." Students were told that "6" (the midpoint) on the Likert scale indicated "Somewhat true" to increase their comprehension of the scale. No items were reverse-scored.

Basic Need Satisfaction and Frustration. Basic need satisfaction and frustration were measured using the Basic Psychological Need Satisfaction and Frustration Scale Diary Version (BPNSF-Diary) (van der Kaap-Deeder, Vansteenkiste, Soenens, & Mabbe, 2017). The measure was modified to fit into a middle school context and comprehension level.

Overall need satisfaction (α = .73) and need frustration (α = .67) were scored separately. The BPNSF-Diary contains 12 items measuring belongingness need satisfaction (α = .29 (baseline), .77 (follow-up); e.g., "I feel connected with classmates and teachers who care about me, and who I care about"), belongingness need frustration (α = .32, .49; e.g., "I feel kept out from the group I want to belong to at school"), autonomy need satisfaction (α = .62, .62; e.g., "I feel a sense of choice and freedom in the things I do at school"), autonomy need frustration (α = .23, .35; e.g., "Most of the things I do at school feel like 'I have to'"), competence need satisfaction (α = .56, .62; e.g., "I feel like I am able to do my school activities"), and competence need frustration (α = .44, .26; e.g., "I feel unconfident about my abilities at school"). All items are rated on a 5-point Likert scale, ranging from "Not at all true" to "Completely true." No items were reverse scored.

Weekly Reflection Survey Measures

Social Skill Use. Weekly reflection surveys included questions about students' social skill use over the previous week, from the time of the skill lesson to the time of the reflection survey. These questions are meant to make students think about whether the skills were beneficial and useful and for researcher feedback on the effectiveness of the skill lessons.

The reflection questions were: "Please rate on a scale from 1 to 5 how helpful you thought this week's lesson on *(insert skill)* was," "Did you practice anything that the *(insert skill)* lesson taught you this week?," "Please explain how you practiced *(insert skill)* this week," "Do you think the way you practiced *(insert skill)* helped you in the situation you were in?," "How did you feel after practicing *(insert skill)*?," and "If you didn't practice *(insert skill)*, why not?."

Basic Need Satisfaction. Basic need satisfaction was again measured using the Basic Psychological Need Satisfaction and Frustration Scale Diary Version (BPNSF-Diary) modified for the middle school context and comprehension level (van der Kaap-Deeder, Vansteenkiste, Soenens, & Mabbe, 2017). However, as previously mentioned, in order to shorten the weekly survey and ease the burden on students and teachers, only need satisfaction items were included, while need frustration items were taken out from the measure. The total number of items was reduced to six, two items to measure the satisfaction of each basic need: belongingness (α = .61 (week one), .64 (week two); e.g., "I feel connected with classmates and teachers who care about me, and who I care about"), autonomy (α = .34, .50; e.g., "I feel a sense of choice and freedom in the things I do at school"), and competence (α = .37, .61; e.g., "I feel like I am able to do my school activities"). All items are rated on a 5-point Likert scale, ranging from "Not at all true" to "Completely true." No items were reverse scored.

Results

Table 1 in the supplementary materials shows the correlation matrix between the three primary outcome variables of interest across all timepoints (intrinsic academic motivation, belongingness need satisfaction, and belongingness need frustration across baseline, week one, week two, and follow-up surveys). Table 2 displays the results of the within-persons ANOVA tests showing the differences in intrinsic academic motivation and basic needs (belongingness, autonomy, and competence) satisfaction and frustration from baseline to follow-up. Table 3 lists the results of the simultaneous regressions, where baseline intrinsic academic motivation was regressed onto the satisfaction and frustration of the three basic needs and vice versa, controlling for baseline levels of the outcome variable.

Hypothesis 1: Student need satisfaction for belongingness will be higher at follow-up than at baseline.

To test whether belongingness satisfaction increased from baseline to follow-up, a within-persons ANOVA test was conducted using time as the repeated measure. Results indicate that there was no significant difference in belongingness satisfaction from baseline to follow-up $F(1,30) = 1.04$, $p = .32$. This means that hypothesis 1 was not supported. Further, any potential time effect was not significantly moderated by gender, $F(1,30) = 1.43$, $p = .24$.

Hypothesis 2: Student need frustration for belongingness will be lower at follow-up than at baseline.

To test whether belongingness frustration decreased from baseline to follow-up, a within-persons ANOVA test was conducted using time as the repeated measure. Results indicate that there was a significant difference in belongingness frustration from baseline to follow-up, $F(1, 30) = 4.62$, $p = .04$. However, belongingness frustration increased, rather than decreased, from baseline ($M = 2.125$) to follow-up ($M = 2.656$). This means that hypothesis 2 was not supported. This effect was not significantly moderated by gender, $F(1, 30) = 0.18$, $p = .68$.

Hypothesis 3: Student intrinsic academic motivation will be higher at follow-up than at baseline.

To test whether intrinsic academic motivation increased from baseline to follow-up, a within-persons ANOVA test was conducted using time as the repeated measure. Results

indicate that there was no significant difference in intrinsic academic motivation from baseline to follow-up, $F(1, 30) = 0.04$, $p = .23$. This means that hypothesis 3 was not supported. Further, any potential time effect was not significantly moderated by gender, $F(1,30) = 1.48$, $p = .23$.

Hypothesis 4: Baseline intrinsic academic motivation will predict residual increase in belongingness satisfaction.

To test the association between baseline intrinsic academic motivation and follow-up belongingness satisfaction, a simultaneous regression model was computed with follow-up belongingness satisfaction being regressed upon baseline intrinsic academic motivation, along with baseline intrinsic motivation.

Results indicate that there was no significant residual change in motivation from baseline to follow-up, $F(1, 29) = 0.21$, $p = .65$. This means that hypothesis 4 was not supported.

Hypothesis 5: Baseline intrinsic academic motivation will predict residual decrease in belongingness frustration.

To test the association between baseline intrinsic academic motivation and follow-up belongingness frustration, a simultaneous regression model was computed, with follow-up belongingness frustration being regressed upon baseline intrinsic academic motivation, along with baseline belongingness frustration.

Results indicate that there was no significant residual change in motivation from baseline to follow-up, $F(1, 29) = 3.36$, $p = .08$. This means that hypothesis 5 was not supported.

Hypothesis 6: Baseline belongingness satisfaction will predict residual change in intrinsic academic motivation.

To test the association between baseline belongingness satisfaction and follow-up intrinsic academic motivation, a simultaneous regression model was computed, with follow-up intrinsic academic motivation being regressed upon baseline belongingness satisfaction, along with baseline intrinsic academic motivation.

Results indicate that there was a significant residual change in belongingness satisfaction from baseline to follow-up $F(1, 29) = 5.71$, $p = .024$, $b = -.651$, $r = -.41$. This means that hypothesis 6 was supported.

Hypothesis 7: Baseline belongingness frustration will predict residual change intrinsic academic motivation.

To test the association between baseline belongingness frustration and follow-up intrinsic academic motivation, a simultaneous regression model was computed, with follow-up intrinsic academic motivation being regressed upon baseline belongingness frustration, along with baseline intrinsic academic motivation.

Results indicate that there was no significant residual change in belongingness frustration from baseline to follow-up, $F(1, 29) = 0.00$, $p = .95$. This means that hypothesis 7 was not supported.

Post-Hoc Analyses

Although belongingness was the primary basic need of interest in this study, the

BPNSF-Diary measure also included measures of autonomy and competence. Additionally,

some aspects of the study's procedure, such as the personal journals and independent skill

practice, were added to give the students some degree of autonomy and competence support.

Therefore, post-hoc analyses were conducted regarding autonomy satisfaction, autonomy

frustration, competence satisfaction, and competence frustration.

Post-Hoc Hypothesis 1: Student need satisfaction for autonomy will be higher at follow-up than at baseline.

To test whether autonomy satisfaction increased from baseline to follow-up, a within-

persons ANOVA test was conducted using time as the repeated measure. Results indicate

that there was no significant difference in autonomy satisfaction from baseline to follow-up

$F(1, 30) = 3.28$, $p = .08$. This means that post-hoc hypothesis 1 was not supported. Further,

any potential time effect was not significantly moderated by gender, $F(1, 30) = 0.52$, $p =$

.48.

Post-Hoc Hypothesis 2: Student need frustration for autonomy will be lower at follow-up than at baseline.

To test whether autonomy frustration decreased from baseline to follow-up, a within-

persons ANOVA test was conducted using time as the repeated measure. Results indicate

that there was no significant difference in autonomy frustration from baseline to follow-up,

$F(1, 30) = 1.01$, $p = .32$). This means that post-hoc hypothesis 2 was not supported. Further,

any potential time effect was not significantly moderated by gender, $F(1, 30) = 0.06$, $p = .80$.

Post-Hoc Hypothesis 3: Student need satisfaction for competence will be higher at follow-up than at baseline.

To test whether competence satisfaction increased from baseline to follow-up, a within-persons ANOVA test was conducted using time as the repeated measure. Results indicate that there was a significant difference in competence satisfaction from baseline to follow-up, $F(1, 30) = 8.41$, $p = .007$. However, competence satisfaction decreased, rather than increased, from baseline ($M = 4.484$) to follow-up ($M = 4.078$). This means that post-hoc hypothesis 3 was not supported. This effect was not significantly moderated by gender, $F(1, 30) = 1.22$, $p = .28$.

Post-Hoc Hypothesis 4: Student need frustration for competence will be lower at follow-up than at baseline.

To test whether competence frustration decreased from baseline to follow-up, a within-persons ANOVA test was conducted using time as the repeated measure. Results indicate that there was no significant difference in competence frustration from baseline to follow-up $F(1, 30) = 0.87$, $p = .36$. This means that post-hoc hypothesis 4 was not supported. Further, any potential time effect was not significantly moderated by gender, $F(1, 30) = 0.11$, $p = .74$.

Post-Hoc Hypothesis 5: Baseline intrinsic academic motivation will predict residual change in follow-up autonomy satisfaction.

To test the association between baseline intrinsic academic motivation and follow-up autonomy satisfaction, a simultaneous regression model was computed, with follow-up

autonomy satisfaction being regressed upon baseline intrinsic academic motivation, along with baseline autonomy satisfaction.

Results indicate that there was no significant residual change in motivation from baseline to follow-up $F(1, 29) = 2.54$, $p = .12$. This means that post-hoc hypothesis 5 was not supported.

Post-Hoc Hypothesis 6: Baseline intrinsic academic motivation will predict residual change in follow-up autonomy frustration.

To test the association between baseline intrinsic academic motivation and follow-up autonomy frustration, a simultaneous regression model was computed, with follow-up autonomy frustration being regressed upon baseline intrinsic academic motivation, along with baseline autonomy frustration.

Results indicate that there was no significant residual change in motivation from baseline to follow-up $F(1, 29) = 1.12$, $p = .30$). This means that post-hoc hypothesis 6 was not supported.

Post-Hoc Hypothesis 7: Baseline intrinsic academic motivation will predict residual change in follow-up competence satisfaction.

To test the association between baseline intrinsic academic motivation and follow-up competence satisfaction, a simultaneous regression model was computed, with follow-up competence satisfaction being regressed upon baseline intrinsic academic motivation, along with baseline competence satisfaction.

Results indicate that there was no significant residual change in motivation from baseline to follow-up $F(1, 29) = 0.01$, $p = .94$. This means that post-hoc hypothesis 7 was not supported.

Post-Hoc Hypothesis 8: Baseline intrinsic academic motivation will predict residual change in follow-up competence frustration.

To test the association between baseline intrinsic academic motivation and follow-up competence frustration, a simultaneous regression model was computed, with follow-up competence frustration being regressed upon baseline intrinsic academic motivation, along with baseline competence frustration.

Results indicate that there was no significant residual change in motivation from baseline to follow-up, $F(1, 29) = 0.31$, $p = .58$. This means that post-hoc hypothesis 8 was not supported.

Post-Hoc Hypothesis 9: Baseline autonomy satisfaction will predict residual change in follow-up intrinsic academic motivation.

To test the association between baseline autonomy satisfaction and follow-up intrinsic academic motivation, a simultaneous regression model was computed, with follow-up intrinsic academic motivation being regressed upon baseline autonomy satisfaction, along with baseline intrinsic academic motivation.

Results indicate that there was no significant residual change in motivation from baseline to follow-up, $F(1, 29) = 0.49$, $p = .49$. This means that post-hoc hypothesis 9 was not supported.

Post-Hoc Hypothesis 10: Baseline autonomy frustration will predict residual change in follow-up intrinsic academic motivation.

To test the association between baseline autonomy frustration and follow-up intrinsic academic motivation, a simultaneous regression model was computed, with follow-up intrinsic academic motivation being regressed upon baseline autonomy frustration, along with baseline intrinsic academic motivation.

Results indicate that there was no significant residual change in motivation from baseline to follow-up $F(1, 29) = 1.95$, $p = .17$. This means that post-hoc hypothesis 10 was not supported.

Post-Hoc Hypothesis 11: Baseline competence satisfaction will predict residual change in follow-up intrinsic academic motivation.

To test the association between baseline competence satisfaction and follow-up intrinsic academic motivation, a simultaneous regression model was computed, with follow-up intrinsic academic motivation being regressed upon baseline competence satisfaction, along with baseline intrinsic academic motivation.

Results indicate that there was no significant residual change in motivation from baseline to follow-up, $F(1, 29) = 0.00$, $p = .99$. This means that post-hoc hypothesis 11 was not supported.

Post-Hoc Hypothesis 12: Baseline competence frustration will predict residual change in follow-up intrinsic academic motivation.

To test the association between baseline competence frustration and follow-up intrinsic academic motivation, a simultaneous regression model was computed, with follow-

up intrinsic academic motivation being regressed upon baseline competence frustration, along with baseline intrinsic academic motivation.

Results indicate that there was no significant residual change in motivation from baseline to follow-up, $F(1, 29) = 0.03$, $p = .87$. This means that post-hoc hypothesis 12 was not supported.

Discussion

Hypothesis 1 was not supported. Students' need satisfaction for belongingness did not increase significantly from baseline to follow-up. This means that my belief that the social skill lessons and practice would increase student belongingness satisfaction cannot be supported. Hypothesis 3 was also not supported. Students' intrinsic academic motivation did not increase significantly from baseline to follow-up. Additionally, hypotheses 4, 5, and 7 were not supported. Students' intrinsic academic motivation at baseline did not predict a residual increase in their belongingness need satisfaction or a residual decrease in their belongingness need frustration, and students' belongingness frustration at baseline did not predict residual change in their intrinsic academic motivation.

Hypotheses 2 and 6, on the other hand, did yield significant results. First, hypothesis 6 stated my belief that students' baseline belongingness satisfaction would predict residual change in their intrinsic academic motivation. The results support this hypothesis. Students who had higher levels of belongingness need satisfaction at baseline also had higher levels of intrinsic academic motivation at follow-up, controlling for baseline intrinsic academic motivation. This aligns with recent literature, which has noted that increased belongingness can lead to increased academic motivation (Deci et al., 1991; Deci & Ryan, 2000; Gottfried

et al., 2001; Kiefer et al., 2015; Nichols, 2006, 2008; Patrick et al., 2007). It is possible that students who began summer school with a higher sense of belonging struggled less to gain a new sense of belonging and were able to engage with classes more, leading to increased motivation by the end of the one-month-long summer school program.

Hypothesis 2 stated my belief that students' belongingness need frustration would decrease from baseline to follow-up. On the contrary, the results indicate that students' belongingness need frustration significantly increased from baseline to follow-up. Similarly, only one of the post-hoc analyses revealed significant results. Post-hoc hypothesis 3 claimed that students' competence need satisfaction would increase from baseline to follow-up. Results indicate that this hypothesis, too, was reversed. Instead, competence need satisfaction significantly decreased from baseline to follow-up.

There are a couple of potential explanations for these results. First, as previously mentioned, need satisfaction and need frustration are not strictly inverse but rather co-occurring concepts (Vansteenkiste & Ryan, 2013; Warburton et. al., 2020). This explains why need frustration for belongingness increased significantly and need satisfaction for competence decreased significantly even though belongingness satisfaction did not decrease and competence frustration did not increase. Second, a student's belongingness and competence are expected to decrease due to disrupted peer friendships and increased academic demands during the initial introduction to middle school (Alspaugh, 1998; Sirch, 2003). As this summer school program was the students' first introduction to middle school expectations and academic rigor, it is expected that they, too, would experience decreased belongingness and competence. Both of these needs are expected to be increasingly satisfied as students adjust to the middle school environment; however, it is probable that four weeks

of interrupted summer school (i.e. holidays, weekly field trips, absences) did not qualify as a

satisfactory adjustment period for these students, especially for those entering from local

elementary schools instead of the charter school system. Additionally, the degree of control

and structure incorporated into the month-long summer school program can further explain

these results. A students' fit into their middle school environment can be inhibited by the

increased emphasis on rules, discipline, and control in the middle school context (Eccles et

al., 1996). As the primary goal of this summer school program was to introduce new students

to the charter school's expectations and enable these disadvantaged students to catch up to

their more affluent peers' performance, there were strict guidelines set into place. While

students had to be enrolled in summer school to attend the school during the academic year,

teachers did not need to keep them in summer school all day. Therefore, if students were

acting disruptive in class by disregarding teacher's instructions, ignoring the class lessons, or

talking to their peers too much, teachers could send them home for the day. These

occurrences happened daily. It is possible that students felt they had to decide whether to

prioritize socialization and risk being sent home, or prioritize academic engagement and risk

their belongingness development. With these rules in place, it is possible that students felt

purposefully inhibited in their ability to connect with peers, therefore increasing their

belongingness frustration. This idea aligns with the results from hypothesis 6, which

indicated that baseline belongingness satisfaction predicted follow-up intrinsic academic

motivation. Students who had higher belongingness satisfaction at baseline had increased

intrinsic academic motivation at follow-up. These students did not struggle to gain a sense of

belonging, and therefore when presented with the same dilemma of socialization or academic

engagement, the decision was much more evident. Since they did not lack a sense of

belongingness, they were able to prioritize their academics, leading to a higher sense of academic motivation by the end of the program. This is supported by literature that shows once social concerns are diminished, students' focus on academics increases (Solomon et al., 1992). Therefore, it is likely that the combination of the program being students' first introduction to middle school, its rules and regulations, and its focus on academic and behavioral expectations can explain why students exhibited significantly increased belongingness need frustration and significantly decreased competence need satisfaction from baseline to follow-up.

It is also possible that offering students statements regarding their feelings about school made them confront feelings they did not fully realize. This is similar to some studied concerns of critical incident stress debriefing (CISD). CISD is an intervention where individuals exposed to a severely stressful event go through several stages of guided group discussion with the goal of reducing the negative psychological impact of the stressor (Kenardy et. al., 1996). However, some studies have found no significant reduction of PTSD symptoms, and some have even found increased PTSD manifestation in individuals who underwent debriefing compared to those who did not (Griffiths & Watts, 1992; McFarlane, 1988). It is argued that this is because CISD forces individuals to relive the distressing event and recognize their feelings of stress, fear, and discomfort (Bisson, Jenkins, Alexander, & Bannister, 1997). It is possible that similarly, while certainly not the intention of this study, the questions asked in the BPNSF-Diary and AMS measures made students aware of deficits in their feelings of belongingness, competence, autonomy, and motivation at summer school. Because of the lack of a control group, there is no way to distinguish whether the present study itself exacerbated these feelings more than the general introduction to middle school

did; however, aforementioned literature suggests that the absence of basic need satisfaction and motivation is a challenge that all students face during this transition and is especially prevalent in low SES, minority students, as is the sample in this study. Also as previously mentioned, making students aware of their strengths and promoting the development of these skills can increase life satisfaction and overall happiness, which was what I attempted to encourage during the skill lessons (Seligman, Rashid, & Parks, 2006; Seligman, Steen, Park, & Peterson, 2005). Additionally, as this study was meant to be a pilot for a later, more developed program evaluation, it is beneficial that this possible adverse effect was recognized now rather than later.

The results of this study do not intend to suggest that social skills cannot increase a student's level of belongingness satisfaction or serve as a protective factor during the middle school transition. On the contrary, the literature seems to support that social skills do enhance student's belonging in the middle school environment and result in many positive benefits (Greenberg et al, 1995; Parks & Peterson, 2006; Shoshani & Sloane, 2013; Wentzel 1999). However, the program evaluation conducted in this study did not encounter these same levels of studied success.

Limitations

This study did encounter multiple complications, which may account for part of its limited success.

First and foremost is the small sample size. While 95 students turned in their informed consent forms in a timely manner and completed a majority of the study surveys, only 39 students turned in their forms before the baseline survey. Although all students

received surveys three and four because the teacher administered them, I was initially reluctant to survey students who did not immediately submit their consent forms. Due to this, only 39 students completed the baseline survey, and only 32 of these participants provided complete and analyzable data. Therefore, as all of the hypotheses analyzed in this study relied on comparisons of baseline and follow-up scores, the sample size for analyses (excluding the correlation matrix) was limited to 32 participants. This means that the study had low statistical power to detect true effects, with only 30 degrees of freedom. In turn, this also means that the results found to be statistically significant had sizeable effects.

Another detriment of this low baseline sample size is the missing demographic information from participants who submitted consent after the baseline survey (n = 56). Students were also confused over the difference between race and ethnicity, so ethnicity was omitted from demographic analyses and I suspect that the racial breakdown may not be completely accurate either.

The second most prominent limitation is the lack of treatment fidelity that occurred over the course of the study. As foreshadowed in the procedure section, many unforeseen challenges arose during the study's implementation and many adjustments were made in response. Initially, the Institutional Review Board (IRB) overseeing the study encountered delays in approving the study. This forced the charter school administration and me to cut the program short by one week, in turn removing a third social skill and weekly reflection survey and moving the follow-up survey ahead one week. Once the study was approved, I was informed that the students lacked access to school computers and tablets, contrary to what was initially planned. Transitioning the surveys from digital versions to hard paper copies delayed the start of the study by another day, and also increased the burden on students and

teachers by increasing the amount of class time taken to complete the surveys. As mentioned in the procedure section, halfway through the study's implementation, I was unable to visit the school in person due to administrative concerns. As a result, I recorded a video going through and discussing the second skill, which was given to the students by the teacher as the second skill lesson. My inability to visit the school inhibited the establishment of rapport and the autonomy- and competence-supportive comments that I was able to offer the students in person. Past research has shown the positive impact of having a college student mentor on middle school students' socio-emotional learning and behavior management, and in fact proved to be most effective with disadvantaged student populations (Hughes, Cavell, Meehan, Zhang, & Collie, 2005). Therefore, my presence in the Character Building classes could have been beneficial in increasing students' engagement with the lessons and skill practice. Additionally, as the teacher was left to distribute the surveys, all students received the second reflection and follow-up surveys rather than just those who submitted informed consent forms. It is not likely that this was detrimental, as students and parents were informed in the study packet that the student would receive the same skill lessons and complete mock surveys even if they did not officially enroll in the study (Appendices C & D), however this did prove to be an additional challenge when the results needed to be differentiated during data cleaning.

I did submit a Reportable New Information Action Response and eventually a modification to the IRB in order to document these unforeseen changes and the deviations from study protocol taken in order to accommodate for these adjustments (Appendix K). Unfortunately, the modification was delayed IRB approval for five months, which meant the data was not able to be cleaned or analyzed for an additional six months after the study's

conclusion. This caused data analysis to be put on a condensed and delayed timeline as well. Overall, every change made in the study's procedure was documented with the IRB and the procedure detailed in this thesis is accurate. However, these deviations from the study's initial protocol meant that the treatment fidelity of the study was compromised, as it was not fully carried out as initially planned. This loss of fidelity is not uncharacteristic of classroom programs carried out in disadvantaged schools, but classrooms with higher reported fidelity experienced the most positive outcomes (Bierman et al., 2010; Conduct Problems Prevention Research Group, 1999). Therefore, although these changes may not have resulted in dramatically different results (e.g., the minimal impact of switching surveys from computerized to pencil-and-paper), had the survey been carried out with full fidelity, it may have reported more improvements in students' basic need satisfaction and intrinsic academic motivation.

Another limitation the study encountered is the lack of access to supplemental qualitative and quantitative information. For example, behaviors related to academic engagement include attendance, participation in class, paying attention during lessons, and putting effort into schoolwork and related activities (Fredricks, Blumenfeld, & Paris, 2004). As mentioned above, the summer school had very clear behavioral expectations, and students who were behaviorally disruptive were sent home for the day. Each student had a 'behavioral log' that they carried with them from class to class. The respective teacher would mark whether the student was present, whether the student misbehaved, and whether the student was being sent home. In addition to these behavioral logs, every teacher took attendance in each class period. These logs would have been useful non-self-report measures that could supplement the study's survey measures. If the teachers' attendance logs and the students'

behavioral logs were available to review, further analyses could be conducted on whether students who reported higher skill use, who scored higher in baseline and/or follow-up intrinsic academic motivation, and who scored higher in baseline and/or follow-up belongingness need satisfaction were more engaged in school. It would also be possible to test whether students lower in belongingness satisfaction or higher in belongingness frustration had more disruptive events and more absences. However, this information is not accessible, as the school administration has completely changed since the summer school program. Additionally, if I was able to visit the school at the study's conclusion to collect the students' skill practice homework journals, similar analyses could be conducted on whether students who utilized the journal more scored higher in belongingness need satisfaction or intrinsic academic motivation at follow-up. If this information was available, it would be possible to gain a better understanding of the students' behaviors and their connection to basic psychological needs and motivation. Furthermore, the summer school program did not assign mandatory homework or give grades, which could have been considered quantitative, non-self-report measures of academic motivation and generally given a more comprehensive view of student engagement.

A final limitation of this study is that the BPNSF-Diary measure is not solely a belongingness measure. Although it does measure belongingness, it is meant to generally measure all three basic psychological needs: belongingness, competence, and autonomy. Although the BPNSF-Diary measure was chosen due to its deep connection with SDT literature, it is possible that the study would have benefitted from a more belongingness-focused measure, as that was one of the primary outcomes of interest. Perhaps there is a habit or dimension of belongingness that the present study was unable to capture due to its limited

belongingness measurement items. However, it is still highly probable that the lack of notably positive belongingness outcomes is due to the condensed study timeline and fact that summer school was the students' first introduction to middle school.

Future Directions

Future research should explore the utility of summer school programs as primary introductions to middle school. Maybe by taking a month in the summer to present students with middle school's behavioral and academic expectations and allowing them to interact with their peers, the transition to middle school over the subsequent fall semester will be less turbulent for students and they will become better adjusted. Especially for schools in similar situations as the present charter school, where summer school is mandatory and the student population is labelled high-risk, the productive use of such a summer school program could prove particularly beneficial for the upcoming school year. A future line of research should look at how to best utilize this month of summer school to increase positive student outcomes over the following academic semester.

Future research should also aim to gain a more comprehensive view of students' behaviors. This means a combination of quantitative, qualitative, self-report, and observation measures, as well as a larger sample size and a lengthier longitudinal design. These measures together will allow us as a field to develop a better understanding of students' functioning during and after the middle school transition. This will also allow for higher powered studies, which enables researchers to find true effects more accurately. If the field wishes to improve students' experiences in middle school, it must first have a precise and holistic understanding of what goes on amongst students during and beyond this transition. Obtaining data from

many viewpoints and multiple methods will enable the field to achieve this goal and create programs that support students' development in several areas at this time.

Another interesting path of future research would be investigating the benefit of having college student mentors teach the social skills lessons to smaller groups of students. The benefits of mentorship are extensive and the exploration of this methodology comprises a whole entire field itself. College student mentors could establish rapport with students easier than instructors or researchers and can provide real-world, generalizable examples of when they utilized these social skills in their own lives. It is likely that students will identify more closely with these mentors and with their stories and will use the social skills more often so that they can share their own stories with the group. This methodology also incorporates more cooperative learning techniques and allows the students to practice the novel social skills immediately within the mentor group.

Conclusion

The present study tested the correlations between the basic need for belongingness and intrinsic academic motivation. The researcher hypothesized that adding social skills lessons to a school curriculum could increase students' belongingness need satisfaction and, in turn, intrinsic academic motivation, particularly in a low SES, minority student sample. Results indicated that rather than increasing student belongingness and academic motivation, students suffered an increase in belongingness need frustration and a decrease in competence need satisfaction. However, results did support the hypothesis that baseline belongingness need satisfaction would predict follow-up intrinsic academic motivation. These results contribute to literature revealing the connection between belongingness and academic

motivation and serve to reiterate the decline in students' belongingness and competence during the middle school transition, especially among disadvantaged students. This study encountered multiple limitations, including a small sample size, a constrained timeline, and fidelity challenges. Future research should investigate the utility of summer school programs and should focus on obtaining a larger sample size, carrying the study out with high fidelity, and running a lengthier longitudinal design.

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Table 1. Correlation Matrix for Primary Study Variables

	Baseline Intrinsic Academic Motivation (BIAM)	Baseline Belongingness Satisfaction (BBS)	Baseline Belongingness Frustration (BBF)	Belongingness Satisfaction Week 1 (BSW1)	Belongingness Satisfaction Week 2 (BSW2)	Follow-Up Intrinsic Academic Motivation (FIAM)	Follow-Up Belongingness Satisfaction (FBS)	Follow-Up Belongingness Frustration (FBF)
BIAM		**.432 ****	**-.348***	.295	.127	**.484****	.194	.157
BBS	**.432****		-.141	.137	.201	-.109	.280	.142
BBF	**-.348***	-.141		**-.369***	.182	-.196	.084	.319
BSW1	.295	.137	**-.369***		**.426****	.139	.167	.035
BSW2	.127	.201	.182	**.426****		**.296****	.175	-.102
FIAM	**.484****	-.109	-.196	.139	**.296****		.162	-.154
FBS	.194	.280	.084	.167	.175	.162		**.214***
FBF	.157	.142	.319	.035	-.102	-.154	**.214***	

Notes: Correlation matrix among primary outcomes of interest (belongingness satisfaction, belongingness frustration, and intrinsic academic motivation) across timepoints. Excludes autonomy and competence satisfaction and frustration.

* correlation is significant at the 0.05 level

** correlation is significant at the 0.01 level

Table 2. Repeated Measures ANOVA Tests Assessing Changes in Intrinsic Academic Motivation and Basic Psychological Needs Satisfaction and Frustration

Variable	*F*	*p*	*df*
Δ Intrinsic Academic Motivation (IAM)	.04	.23	30
Δ Belongingness Need Satisfaction (BNS)	1.04	.32	30
Δ Belongingness Need Frustration (BNF)	**4.62**	**.04***	**30**
Δ Autonomy Need Satisfaction (ANS)	3.28	.08	30
Δ Autonomy Need Frustration (ANF)	1.01	.32	30
Δ Competence Need Satisfaction (CNS)	**8.41**	**.007****	**30**
Δ Competence Need Frustration (CNF)	.87	.36	30

Notes: Within-persons ANOVAs conducted with time as the repeated measure to assess changes in intrinsic academic motivation and basic needs (belongingness, autonomy, and competence) satisfaction and frustration from baseline to follow-up. Gender was tested as a moderating variable but was not found to be significant in any association and is therefore not displayed in the table.

* change is significant at the 0.05 level

** change is significant at the 0.01 level

Table 3. Simultaneous Regressions Assessing Associations between Intrinsic Academic Motivation and Basic Psychological Need Satisfaction and Frustration

Predictor Variables (baseline levels) →	Intrinsic Academic Motivation	Belongingness Satisfaction	Belongingness Frustration	Autonomy Satisfaction	Autonomy Frustration	Competence Satisfaction	Competence Frustration
Criterion Variables (follow-up levels) ↓							
Intrinsic Academic Motivation		**5.71, .024*, -.651, -.41**	.00, .95	.49, .49	1.95, .17	.00, .99	.03, .87
Belongingness Satisfaction	.21, .65						
Belongingness Frustration	3.36, .08						
Autonomy Satisfaction	2.54, .12						
Autonomy Frustration	1.12, .30						
Competence Satisfaction	.01, .94						
Competence Frustration	.31, .58						

Notes: Follow-up levels of criterion (outcome) variables are regressed onto baseline

levels of predictor variables. Baseline levels of criterion variables were controlled in each

regression. Degrees of freedom is 29 across all regressions. Results are listed as *F, p* in each

table grid box. For significant results, *b* and *r* are included below *F* and *p*.

* change is significant at the 0.05 level

** change is significant at the 0.01 level

Appendix A

Basic Study Information in English

Basics of the study:

Who?

- University of Houston research student Ersie Gentzis and professor Dr. Raymond C. Knee
- Your students are participants

What?

- Social skills lessons
- Surveys seeing if the lessons work
- Surveys seeing if they help your child feel more related to their peers

When?

- During the school day of KIPP Liberation's Power Scholars Summer Bootcamp program
- Starts July 1st and ends July 19th

Where?

- In one of their Enrichment classes
- It's a part of their class curriculum, so it's not extra work

Why?

- To see whether teaching social skills helps kids feel like they belong in school and increases their internal academic motivation

How?

- Students will take an initial survey measuring how they feel about school
- Then they will receive one lesson from the researcher and watch one social skills video lesson
- They will practice the skills during the week
- Then they will take a survey on how they think the video lesson helped
- Finally, a last survey to see any differences in how they feel about school

What do I need to do to enroll my student in this study?

- Sign the parental consent form
- Have your child sign the child assent form
- That's it!

Researcher Contact Information:

- Researcher Ersie Gentzis: egentzis@uh.edu
- Supervisor Dr. C. Raymond Knee: knee@uh.edu
- University of Houston Institutional Review Board: cphs@central.uh.edu or (713) 743-9204
- S.H.I.P. Program Study Team: kipp.ship.program@gmail.com or (713) 743-7026

Appendix B

Basic Study Information in Spanish

Fundamentos del estudio:

¿Quien?

- La estudiante de investigación de la Universidad de Houston Ersie Gentzis y el profesor Dr. Raymond C. Knee
- Sus alumnos son participantes

¿Qué?

- Clases de habilidades sociales
- Encuestas para ver si las lecciones funcionan
- Encuestas para ver si ayudan a su hijo a sentirse más relacionado con sus compañeros

¿Cuando?

- Durante el día escolar de "Power Scholars Summer Bootcamp" de KIPP Liberation
- Empieza el lunes 1 de julio y termina el viernes 19 de julio

¿Dónde?

- En una de sus clases de Enriquecimiento
- Es parte del plan de estudios de su clase, por lo que no es un trabajo extra

¿Por qué?

- Ver si el enseñanzar habilidades sociales ayuda a los niños a sentirse como si pertenecieran a la escuela y aumentara su motivación académica interna

¿Cómo?

- Los estudiantes tomarán una encuesta inicial para medir cómo se sienten con respecto a la escuela
- Luego recibirán una lección del investigador y verán una lección de video de habilidades sociales
- Practicarán las habilidades durante la semana
- Luego tomarán una encuesta sobre cómo creen que ayudó la lección de video
- Finalmente, una última encuesta para ver las diferencias en cómo se sienten acerca de la escuela

¿Qué debo hacer para inscribir a mi estudiante en este estudio?

- Firmar el formulario de consentimiento de los padres
- Haga que su hijo firme el formulario de consentimiento del niño

- ¡Eso es todo!

Información de contacto:

- Investigador Ersie Gentzis: egentzis@uh.edu
- Supervisor Dr. C. Raymond Knee: knee@uh.edu
- Junta de Revisión Institucional de la Universidad: cphs@central.uh.edu o (713) 743-9204
- S.H.I.P. Program Study Team: kipp.ship.program@gmail.com o (713) 743-7026

Appendix C

Parental Consent Form in English

UNIVERSITY of HOUSTON
A CARNEGIE-DESIGNATED TIER ONE
PUBLIC RESEARCH UNIVERSITY

Title of research study: K.I.P.P.'s "S.H.I.P." (Social Helper in Practice) Program
Investigator: Ersie Gentzis under the supervision of Dr. Raymond C. Knee

Key Information:

The following focused information is being presented to assist you in understanding the key elements of this study, as well as the basic reasons why you may or may not wish to consider regarding your child taking part. This section is only a summary; more detailed information, including how to contact the research team for additional information or questions, follows within the remainder of this document under the "Detailed Information" heading.

What should I know about a research study?

- Someone will explain this research study to you and your child.
- Taking part in the research is voluntary; whether or not you decide to provide permission for your child to take part is up to you.
- In most cases, your child will also be asked for his/her assent to take part.
- You can choose not to provide permission for your child to take part.
- You can agree to provide permission and later change your mind.
- Your decision will not be held against you or your child.
- You and your child can ask all the questions you want before you decide and can ask questions at any time during the study.

We invite you to take part in a research study about social skills in schools because your child is a 5th grade KIPP Liberation student who is in the summer school "bootcamp" program.

This research is being funded by the University of Houston Office of Undergraduate Research.

In general, your child's participation in the research involves watching 2 social skills lessons, taking 4 short surveys, and completing optional, non-mandatory homework for 2 of the 4 weeks of KIPP Liberation's 5th grade summer school program.

There are no known risks of this research study, which you can compare to the possible benefit of your student learning healthy methods to communicate with their peers and increasing their engagement in school. Your student will not receive compensation for participation.

Detailed Information:

The following is more detailed information about this study, in addition to the information listed above.

Why is this research being done?

Our research team is interested in how social skills lessons affect a student's sense of belonging in a classroom and their internal academic motivation. Students' sense of belonging remains at a good level throughout elementary school, however once middle school begins, there is a noticeable and measurable drop in belonging. Research shows that students begin to worry more about their relationships with their peers and focus less on their academics. However, students who have more supportive peer relationships are more academically engaged. So, in line with this research and current theories, increasing students' practice of social skills should help restore their lack of belonging and increase internal academic motivation. Therefore, the aim of the current research study is to provide these benefits to the students through teaching them a handful of key social skills.

How long will the research last?

We expect that your child will be in this research study for three weeks. This three-week period is during KIPP Liberation's 5th grade summer school "bootcamp," spanning from Tuesday, July 2nd to Thursday, July 18th. The students will participate in this study a total of six times: one beginning survey, one researcher-taught social skills presentation, one social skills video lesson, two social skills practice surveys, and one ending survey. All parts of the study (including all video lessons and surveys) will last no longer than ten minutes. In total, your student will spend a total of an hour participating in this study over the span of three weeks during KIPP Liberation's summer school.

How many people will be studied?

We expect to enroll about 110 people in this research study (a majority of the KIPP Liberation 5th grade summer school students).

What happens if I say yes, I want to provide permission for my child to be in this research?

This study will begin on Tuesday, July 2nd during KIPP Liberation's 5th grade summer school "bootcamp" program. After obtaining informed consent documents, the students will begin their participation in this study by taking the "baseline" survey. The baseline survey is meant to measure how much the students feel self-driven, knowledgeable, internally motivated in academics, and like they belong among their peers. On Wednesday, the students will watch the researcher-given first lesson. The two social skill lessons they will watch will be covering the skills of stress management (what to do when they are stressed to manage their feelings) and processing things in an unbiased way (to not immediately react positively or negatively to an event but to think about it from an objective view). After the student finished watching the skill video, they will be encouraged to practice the methods they learned from the video that can help them succeed in that certain skill. They will be given an optional, non-mandatory "homework" assignment where they submit proof that they practiced the skill they learned about. This can be a paragraph describing how they practiced it, a drawing of them practicing it, or even a photograph of them practicing it with a friend or family. These optional assignments will be due on Monday so we can track how students are interacting with the lessons. Also, on Monday, the students will take a quick, five-to-ten-minute-long survey reflecting on how they practiced the skill and whether they feel it helped them. This schedule (lesson, weekly homework, and short survey) will repeat for two weeks, until Monday, July 15th, when the last reflection survey is given. The following Thursday, July 18th, the students will take the "follow-up" survey, again measuring their feelings of being self-driven, knowledgeable, internally motivated in academics, and like they belong among their peers. This will help us see whether the social skills helped increase the students' scores in these four categories.

All study materials (lessons and surveys) will be given during the "character building" class in KIPP Liberation's summer school schedule. The students will not have to leave class, nor will they have to be at KIPP Liberation at any time outside of the regular summer school schedule. This study is integrated into this class, so no extra effort will be required of the students. All surveys will be given in class, so there are no restrictions to participation based on access outside of school. There are no questions of sensitive subject matter in the surveys except potentially the demographic questions included in the baseline survey (ex: self-identification of gender, race, and ethnicity). If students are uncomfortable with any questions given to them over the course of the surveys, they always have the option to skip the question rather than answering it. Additionally, we are not dividing students into "real study" (experimental) and "pretend study" (control) groups, so all students will receive the

video lessons and the potential benefits associated with this study (if consent to participate is given).

What happens if I do not want my child to be in this research?

You can choose not to provide permission for your child to take part in the research and it will not be held against you or your child. Choosing not to take part will involve no penalty or loss of benefit to which your child is otherwise entitled.

A decision to provide permission or not, or to withdraw your child from the research will have no effect on their grades or standing with their school. They will still be able to attend KIPP Liberation's 5th grade summer school "bootcamp" and will still receive all the same lessons as the other students. They will also still be able to receive the social skills lessons, however their participation will not be tracked by the study surveys. This way, they are taught all the same materials, but are not participating in the study. In addition, they do not receive grades during summer school, so if they choose not to participate in the study and do not complete the optional homeworks, it does not have any effect on their standing with the school.

Your child's alternative to taking part in this research study is not to take part. Again, this choice is completely up to you and your student, and this decision has no effect on their enrollment, participation, or engagement in summer school, nor on their status with KIPP Liberation.

What happens if I say yes, but I change my mind later?

You can withdraw your permission (and/or your child may withdraw his/her assent) and leave the research at any time and it will not be held against you or your child.

If you decide to withdraw permission for your child to take part in the research, the only loss is the potential of deepening your child's understanding of the social skills lessons through the study surveys and optional homeworks. Otherwise, there are no direct costs or losses to withdrawing from the study.

If you withdraw your permission (and/or your child may withdraw his/her assent), already collected data will not be removed from the study record and will be used for analyses unless you and your child request the data to be removed.

Is there any way being in this study could be bad for my child?

We do not expect any risks related to the research activities. If you choose to provide permission for your child to take part and he/she undergoes a negative event you feel is related to the study, please contact the researcher/study team.

Will I or my child receive anything for being in this study?

There is no compensation or payment for your student's participation in this study. The students will be receiving a free journal to use as a log for their optional homework and will decorate it with stickers on the first day of the study. However, again, there is no compensation for taking part in this study.

Will being in this study help my child in any way?

We cannot promise any benefits to your child or others from his/her taking part in this research. However, possible benefits include deepening your child's understanding of social skills and increasing their internal academic motivation and ability to communicate healthily with their peers.

What happens to the information collected for the research?

Efforts will be made to keep your child's personal information private, including research study records, to people who have a need to review this information. Each child will be given a code number, which will appear on their written assent forms and which they will enter at the beginning of all study surveys in order to link a single student's surveys together. The list pairing the child to the assigned code number will be kept separate from these materials. We cannot promise complete secrecy. Organizations that may inspect and copy your information include the Institutional Review Board (IRB) and other representatives of this organization, as well as collaborating institutions and federal agencies that oversee our research. The sponsor of the research (the University of Houston Office of Undergraduate Research) may also review research records upon request.

While this study is confidential, there are certain aspects that may be limitations on this. As the students will be taking the surveys at school, they may be able to tell who is participating in the study and who is not. In order to decrease the probability of this, students will take turns completing the survey and continuing their desk work in two groups. This way, no individual student who is or is not participating will stand out. Additionally, students not participating in the study will still watch the social skills videos so that they are not withheld from any of the lessons that their peers receive. This also works limit anyone's ability to identify which students are and are not participating in the study. It should also keep students who are not participating from feeling left out.

Your child's information that is collected as part of this research will not be used or distributed for future research studies, even if all your child's identifiers are removed. We may share and/or publish the results of this research. However, unless otherwise detailed in this document, we will keep your name and other identifying information confidential.

Can my child be removed from the research without my OK?

The person in charge of the research study or the sponsor can remove your child from the research study without your approval. Possible reasons for removal include missing the baseline or follow-up surveys or incompletion of two or more skill reflection surveys.

What else do I need to know?

Just to review, this study is a low-risk study that is completely integrated in your student's character-building class. Therefore, no additional demands or burdens will be asked of you or your student. However, if you and your student choose to opt out (do not consent or withdraw your consent), there are no penalties toward you or your student. Your student's summer school will be the same as their peers. No lessons or information will be withheld from them. They will not participate in the study measurements, but they will still watch the social skills videos, so they have the possible benefits associated with learning healthy communication skills. This choice will not change your student's summer curriculum or their standing with KIPP Liberation.

Who can I talk to?

If you have questions, concerns, or complaints, or think the research has hurt your child, you should talk to the principal investigators, Ersie Gentzis at egentzis@uh.edu, Dr. Raymond C. Knee at knee@uh.edu, or the research team at (713) 743-8524.

This research has been reviewed and approved by the University of Houston Institutional Review Board (IRB). You may also talk to them at (713) 743-9204 or cphs@central.uh.edu if:

- Your questions, concerns, or complaints are not being answered by the research team.
  - You cannot reach the research team.
  - You want to talk to someone besides the research team.
  - You have questions about your child's rights as a research subject.
  - You want to get information or provide input about this research.

May we contact you regarding future research opportunities?

In the future, our research team may be interested in contacting you for other research studies we undertake, or to conduct a follow-up study to this one. There is never any obligation to take part in additional research. Do we have permission to contact you to provide additional information?

- o Yes
- o No

~~~~~~
~~~

Your signature documents your permission for the named child to take part in this research.

_____
Printed name of child

_____   _____
Signature of parent or individual legally authorized to consent   Date
for the child's participation in the study

_____   ❑ Parent
Signature of parent or individual legally authorized to consent   ❑ Individual legally authorized to consent
for the child's participation in the study   for the child's participation in the study

_____   _____
Signature of parent   Date

_____
Printed name of parent

Appendix D

Parental Consent Form in Spanish

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A CARNEGIE-DESIGNATED TIER ONE
PUBLIC RESEARCH UNIVERSITY

Título del estudio de investigación: Programa "S.H.I.P." de K.I.P.P. (*Héroe social en práctica*)

Investigador: Ersie Gentzis bajo la supervisión del Dr. Raymond C. Knee

Información Clave:

Se presenta la siguiente información enfocada para ayudarlo a comprender los elementos clave de este estudio, así como las razones básicas por las que puede o no desear considerar la participación de su hijo. Esta sección es sólo un resumen; En el resto de este documento, bajo el encabezado "Información detallada", se incluye información más detallada, que incluye cómo ponerse en contacto con el equipo de investigación para obtener información adicional o preguntas.

¿Qué debo saber sobre un estudio de investigación?

- Alguien le explicará este estudio de investigación a usted y a su hijo.
- Participar en la investigación es voluntario; Depende de usted decidir si otorga o no permiso para que su hijo participe.
- En la mayoría de los casos, a su hijo también se le pedirá su consentimiento para participar.
- Puede optar por no proporcionar permiso para que su hijo participe.
- Usted puede aceptar proporcionar permiso y luego cambiar de opinión.
- Su decisión no se llevará a cabo contra usted o su hijo.
- Usted y su hijo pueden hacer todas las preguntas que quieran antes de tomar una decisión y pueden hacer preguntas en cualquier momento durante el estudio.

Lo invitamos a participar en un estudio de investigación sobre habilidades sociales en las escuelas porque su hijo es un estudiante de 5º grado de KIPP Liberation que está en el programa de "campamentos de entrenamiento" (conocido como "bootcamp") de la escuela de verano.

Esta investigación está siendo financiada por la Oficina de Investigación de Pregrado de la Universidad de Houston.

En general, la participación de su hijo en la investigación implica ver 2 lecciones de habilidades sociales, realizar 4 encuestas cortas y completar tareas opcionales, no obligatorias, durante 2 de las 4 semanas del programa de escuela de verano de 5º grado de KIPP Liberation.

No hay riesgos conocidos de este estudio de investigación, el cual puede comparar con el posible beneficio de que su estudiante aprenda métodos saludables para comunicarse con sus compañeros y aumente su participación en la escuela. Su estudiante no recibirá compensación por la participación.

Información detallada:

La siguiente es información más detallada sobre este estudio, además de la información mencionada anteriormente.

¿Por qué se está haciendo esta investigación?

Nuestro equipo de investigación está interesado en cómo las lecciones de habilidades sociales afectan el sentido de un estudiante de pertenecer a su salón de clases y su motivación académica interna. El sentido de pertenencia de los estudiantes se mantiene en un buen nivel a lo largo de la escuela primaria, sin embargo, una vez que comienza la secundaria, hay una disminución notable y mensurable en el sentido de pertenencia. Las investigaciones muestran que los estudiantes comienzan a preocuparse más por sus relaciones con sus compañeros y se enfocan menos en sus estudios académicos. Sin embargo, los estudiantes que tienen más relaciones de apoyo entre compañeros están más involucrados y atentos académicamente. Por lo tanto, en línea con esta investigación y las teorías actuales, aumentar la práctica de las habilidades sociales de los estudiantes debería ayudar a restablecer su falta de pertenencia y aumentar la motivación académica interna. Por lo tanto, el objetivo de este estudio de investigación es proporcionar estos beneficios a los estudiantes a través de enseñandoles habilidades sociales clave.

¿Cuánto durará la investigación?

Esperamos que su hijo participe en este estudio de investigación durante tres semanas. Este período de tres semanas es el mismo que el "bootcamp" de la escuela de verano de quinto grado de KIPP Liberation, que se extiende desde el martes 2 de julio hasta el jueves 18 de julio. Los estudiantes participarán en este estudio un total de seis veces: una encuesta inicial, una lección del investigador de habilidades sociales, una lección de video de habilidades sociales, dos encuestas de práctica de habilidades sociales y una encuesta final. Todas las partes del estudio (incluyendo todas las lecciones en video y las encuestas) no durarán más de diez minutos. En total, su estudiante pasará un total de una hora participando en este estudio durante tres semanas de escuela de verano de KIPP Liberation.

¿Cuántas personas se estudiarán?

Esperamos inscribir a unas 110 personas en este estudio de investigación (la mayoría de los estudiantes de la escuela de verano de quinto grado de KIPP Liberation).

¿Qué sucede si digo que sí, quiero dar permiso para que mi hijo participe en esta investigación?

Este estudio comenzará el martes 2 de julio, durante el programa de "campamentos de entrenamiento" de la escuela de verano de quinto grado de KIPP Liberation. Despues de obtener documentos de consentimiento informado los estudiantes comenzarán su participación en este estudio tomando la encuesta de "línea de base". La encuesta de línea de base pretende medir cuánto se sienten los estudiantes auto-motivados, informados, internamente motivados en lo académico, y de que pertenezcan con sus compañeros. El jueves, los estudiantes verán su primera lección del investigador. Los lecciones de habilidades sociales que verán incluyen habilidades para el de manejo del estrés (qué hacer cuando están estresados para manejar sus sentimientos) y como procesar las cosas de manera imparcial (para no reaccionar de manera positiva o negativa a un evento, sino para pensar en ello de manera objetiva). Una vez que el alumno haya terminado de ver el video, se les invitara que practiquen los métodos que aprendieron del video que pueden ayudarles a tener éxito en esa habilidad específica. Se les asignará una "tarea" opcional, no obligatoria, donde presentarán una prueba de que practicaron la habilidad que aprendieron. Esto puede ser un párrafo que describe cómo lo practicaron, un dibujo de ellos practicándolo o incluso una fotografía de ellos practicándolo con un amigo o familia. Estas tareas opcionales se entregarán el lunes para que podamos rastrear cómo los estudiantes interactúan con las lecciones. También el lunes, los estudiantes realizarán una encuesta rápida de entre cinco y diez minutos, reflexionando sobre cómo practicaron la habilidad y si creen que les ayudó. Este horario (lección, tarea semanal, y encuesta corta) se repetirá durante dos semanas de la escuela de verano, hasta el lunes 15 de julio, cuando se dé la última encuesta de reflexión. El jueves siguiente, 19 de julio, los estudiantes tomarán la encuesta de "seguimiento", una vez más midiendo sus sentimientos de ser auto-motivados, informados, internamente motivados en lo académico, y de que pertenezcan con sus compañeros. Esto nos ayudará a ver si las habilidades sociales ayudaron a aumentar las calificaciones de los estudiantes en estas cuatro categorías.

Todos los materiales de estudio (lecciones y encuestas) se darán durante la clase de "desarrollo del carácter" en el horario de la escuela de verano de KIPP Liberation. Los estudiantes no tendrán que abandonar la clase, ni tendrán que estar en KIPP Liberation en ningún momento fuera del horario regular de la escuela de verano. Este estudio está integrado en esta clase, por lo que no se requerirá ningún esfuerzo adicional de los estudiantes. Todas las encuestas se darán en clase, por lo que no hay restricciones para la participación basada en el acceso fuera de la escuela. No hay preguntas sobre temas delicados en las encuestas, excepto las preguntas demográficas incluidas en la encuesta de referencia (por ejemplo, autoidentificación de género, raza y etnicidad). Si los estudiantes no se sienten cómodos con alguna pregunta que se les haga durante el curso de las encuestas, siempre tienen la opción de saltear la pregunta en lugar de responderla. Además, no estamos dividiendo a los estudiantes en grupos de "estudio real" (experimental) y "estudio pretendido" (control), por lo que todos los estudiantes recibirán las lecciones en video y los beneficios potenciales asociados con este estudio (si se otorga el consentimiento para participar).

¿Qué sucede si no quiero que mi hijo participe en esta investigación?

Puede elegir no proporcionar permiso para que su hijo participe en la investigación y no se usara su decision en contra de usted o su hijo. La elección de no participar no implicará ninguna sanción o pérdida de beneficio a la que su hijo tiene derecho.

La decisión de otorgar permiso o no, o de retirar a su hijo de la investigación no tendrá ningún efecto en las calificaciones de su hijo o su posición en la escuela. Todavía podrán asistir al "campamento de entrenamiento" de la escuela de verano de quinto grado de KIPP Liberation y seguirán recibiendo las mismas lecciones que los otros estudiantes. También podrán recibir las lecciones de habilidades sociales, sin embargo, no participaran en las encuestas del estudio. De esta manera, se les enseña todos los mismos materiales, pero no participan en el estudio. Además, no reciben calificaciones durante la escuela de verano, por lo que si deciden no participar en el estudio y no completan las tareas opcionales, no tienen ningún efecto sobre su posición en la escuela.

La alternativa de su hijo a participar en este estudio de investigación es no participar. Una vez más, esta elección depende completamente de usted y su estudiante, y esta decisión no tiene ningún efecto en su inscripción, o participación en la escuela de verano, ni en su estado con KIPP Liberation.

¿Qué pasa si digo que sí, pero luego cambio de opinión?

Puede retirar su permiso (y / o su hijo puede retirar su consentimiento) y dejar la investigación en cualquier momento y no se usara su decision en contra de usted o su hijo.

Si decide retirar el permiso para que su hijo participe en la investigación, la única pérdida es la posibilidad de profundizar la comprensión de su hijo de las lecciones de habilidades sociales a través de las encuestas de estudio y tareas opcionales. De lo contrario, no hay costos directos o pérdidas por retirarse del estudio.

Si retira su permiso (y / o su hijo puede retirar su consentimiento), los datos ya recopilados no se eliminarán del registro del estudio y se usarán para análisis a menos que usted y su hijo soliciten la eliminación de los datos.

¿Hay alguna forma de que este estudio pueda ser malo para mi hijo?

No esperamos ningún riesgo relacionado con las actividades de investigación. Si elige proporcionar permiso para que su hijo participe y él / ella experimenta un evento negativo que cree que está relacionado con el estudio, comuníquese con el investigador / equipo de estudio.

¿Recibiré yo o mi hijo algo por participar en este estudio?

No hay compensación ni pago por la participación de su estudiante en este estudio. Los estudiantes recibirán un diario gratuito para usar como registro para sus tareas opcionales y lo decorarán con pegatinas/stickers el primer día del estudio. Sin embargo, nuevamente, no hay compensación por participar en este estudio.

¿Estar en este estudio ayudará a mi hijo de alguna manera?

No podemos prometer ningún beneficio a su hijo u otras personas por su participación en esta investigación. Sin embargo, los posibles beneficios incluyen profundizar la comprensión de las habilidades sociales de su hijo y aumentar su motivación académica interna y su capacidad para comunicarse de manera saludable con sus compañeros.

¿Qué pasa con la información recolectada para la investigación?

Se harán esfuerzos para mantener privada la información personal de su hijo, incluyendo los registros del estudio de investigación, a las personas que tienen la necesidad de revisar esta información. A

cada niño se le dará un número de código, que aparecerá en sus formularios de consentimiento por escrito y que ingresarán al comienzo de todas las encuestas de estudio para vincular las encuestas de un solo estudiante. La lista que empareja al niño con el número de código asignado se mantendrá separada de estos materiales. No podemos prometer el secreto completo. Las organizaciones que pueden inspeccionar y copiar su información incluyen la Junta de Revisión Institucional (IRB) y otros representantes de esta organización, así como instituciones colaboradoras y agencias federales que supervisan nuestra investigación. El patrocinador de la investigación (la Oficina de Investigación de Pregrado de la Universidad de Houston) también puede revisar los registros de la investigación si así lo solicita.

Si bien este estudio es confidencial, hay ciertos aspectos que pueden ser limitaciones al respecto. Como los alumnos realizarán las encuestas en la escuela, podrán saber quién participa en el estudio y quién no. Para disminuir la probabilidad de esto, los estudiantes se turnarán para completar la encuesta y continuar su trabajo de escritorio en dos grupos. De esta manera, ningún estudiante individual que esté o no participando sera notado como tal. Además, los estudiantes que no participan en el estudio seguirán viendo los videos de habilidades sociales para que no se les retenga ninguna de las lecciones que reciben sus compañeros. Esto también sirve para limitar la capacidad de cualquier persona para identificar qué estudiantes participan y no participan en el estudio. También debe evitar que los estudiantes que no participan se sientan excluidos.

La información de su hijo que se recopila como parte de esta investigación no se utilizará ni se distribuirá para futuros estudios de investigación, incluso si se eliminan todos los identificadores de su hijo. Podemos compartir y / o publicar los resultados de esta investigación. Sin embargo, a menos que se especifique lo contrario en este documento, mantendremos su nombre y otra información de identificación confidencial.

¿Se puede retirar a mi hijo de la investigación sin mi autorización?

La persona a cargo del estudio de investigación o el patrocinador puede retirar a su hijo del estudio de investigación sin su aprobación. Las posibles razones para la eliminación incluyen la faltar la línea de base o las encuestas de seguimiento, o fallar en completar dos o más encuestas de reflexión de habilidades.

¿Qué más necesito saber?

En resumen, este estudio es un estudio de bajo riesgo que está completamente integrado en la clase de desarrollo del carácter de su estudiante. Por lo tanto, no se le pedirá a usted ni a su estudiante que le exija o haga cargas adicionales. Sin embargo, si usted y su estudiante optan por no participar (no consientan ni retiren su consentimiento), no hay sanciones para usted o su estudiante. La escuela de verano de su estudiante será la misma que la de sus compañeros. Ninguna lección o información será retenida de ellos. No participarán en las mediciones del estudio, pero seguirán viendo los videos de habilidades sociales para que tengan los posibles beneficios asociados con el aprendizaje de habilidades de comunicación saludables. Esta opción no cambiará el currículo de verano de su estudiante o su posición con KIPP Liberation.

¿Con quién puedo hablar?

Si tiene preguntas, inquietudes o quejas, o cree que la investigación ha afectado a su hijo, debe hablar con la investigadora principal, Ersie Gentzis en egentzis@uh.edu, el Dr. Raymond C. Knee en knee@uh.edu, o el equipo de investigación al (713) 743-8524.

Esta investigación ha sido revisada y aprobada por la Junta de Revisión Institucional (IRB) de la Universidad de Houston. También puede hablar con ellos al (713) 743-9204 o cphs@central.uh.edu si:

- Sus preguntas, inquietudes o quejas no están siendo respondidas por el equipo de investigación.
- No se puede llegar al equipo de investigación.
- Quieres hablar con alguien además del equipo de investigación.
- Tiene preguntas sobre los derechos de su hijo como sujeto de investigación.
- Desea obtener información o proporcionar información sobre esta investigación.

¿Podemos contactar con usted sobre futuras oportunidades de investigación?

En el futuro, nuestro equipo de investigación puede estar interesado en contactarlo para otros estudios de investigación que realicemos o realizar un estudio de seguimiento a este. Nunca hay ninguna obligación de participar en investigaciones adicionales. ¿Tenemos permiso para comunicarnos con usted para proporcionar información adicional?

- ○ Sí
- ○ No

~~~~~~

Su firma documenta su permiso para que el niño nombrado participe en esta investigación.

_____
Nombre impreso de niño

_____   _____
Firma del padre o la persona legalmente autorizada para dar su   Fecha
consentimiento para la participación del niño en este estudio

_____   ❏ Padre
Nombre impreso del padre o de la persona legalmente   ❏ Persona legalmente autorizada para
autorizada para dar su consentimiento para la participación del   consentir la participación del niño en
niño en este estudio   este estudio

_____   _____
Firma del padre   Fecha

_____
Nombre impreso del padre

Appendix E

Child Assent Form in English

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ASSENT TO TAKE PART IN A RESEARCH STUDY

PROJECT TITLE: KIPP's "S.H.I.P." (Social Helper in Practice) Program

You are invited to take part in a research study conducted by Ersie Gentzis (a student) and Dr. Raymond C. Knee (a professor) from the University of Houston.

You can say no if you do not want to be a part of this study. Adults cannot make you be in this study if you do not want to. If you agree to take part in the study now, but change your mind about it later, you can stop being in the study, and no one will be mad at you.

WHAT IS RESEARCH?

Research is a way to learn information about something. Researchers study different subjects the way you study English or math as a subject in school.

There are many reasons people choose to be in a research study. Sometimes people want to help researchers learn about ways to help people or make programs better.

You should understand why you would say yes to be a research subject. Take the time you need to decide if you want to be in this study. You can ask Ersie and your teacher any question you have about the study.

WHY ARE WE DOING THIS RESEARCH?

In our research we want to learn about social skills in the classroom. Going from elementary to middle school is hard, and we want to help make that change easier for you. We are trying to see if the video lessons that you will be watching are helpful or not, and to test in what ways they are helping. Like mentioned above, we are trying to make this program better.

WHAT WILL HAPPEN DURING THE STUDY?

This study starts today and ends the last week of summer school.
On Tuesday the 3rd, you will be taking a short survey (answering questions about how you feel and what you think). Don't worry, these survey questions are not hard. We are giving you this survey to see how you feel now, at the beginning of summer school.
After the survey, you are going to watch a presentation on the first skill we are teaching you. After you watch the presentation, we challenge you to try and practice the skill you learned over the week. You can practice with friends, siblings, parents, or anyone else you want to practice with. If you want, you have the choice to take a photo, draw a picture, or write about practicing the skill as your homework for the week to show us that you practiced what you learned. You do not have to do this homework, but if you do it, it can help you understand the lesson better.
When you come back to school on Monday, you will take another short survey asking about how you practiced the skill and how you feel that day.
You will do this process (lesson, practice skill and homework, and take short survey) for two weeks of summer school (Tuesday, July 2nd to Monday, July 15th). This means you will watch 2 lessons, practice 2 different skills, and do 2 short surveys.
Then on the last Thursday of summer school, we will give you the very first survey again to see how you feel at the end of summer school.

Here is a calendar of the study:

	Monday	Tuesday	Wednesday	Thursday	Friday
Week 1 July 1 - 5		- Consent forms distributed	**Study Begins:** - Consent forms returned - Baseline survey	- First lesson (stress management)	Field trip
Week 2 July 8 - 12	- Participatory homework due - Reflection survey	- Second and final lesson (unbiased processing/malleable intelligence)	Practice skill	Practice skill	Field trip

Week 3 July 15 - 19	- Participatory homework due - Last day to submit consent forms and participate in study - Last reflection survey			**Study Ends:** - last survey	

COULD GOOD THINGS HAPPEN TO ME FROM BEING IN THIS STUDY?

We do not know how exactly this research will help you, but we think the lessons can help you learn how to talk and communicate with your friends and teachers in middle school. We want to give you a head start on how to prepare for middle school so the change isn't hard for you. If you know how to act before school starts, then you can feel comfortable when school starts and not worry about the change so much. We think this program can help!

COULD BAD THINGS HAPPEN TO ME FROM BEING IN THIS STUDY?

Sometimes things happen to people in research studies that may hurt them or make them feel bad. In this study, we do not think anything we ask you to do will hurt you or make you feel bad.

Sometimes when we give you a survey, it might ask you questions you are embarrassed to answer. If you do not want to answer a question, you do not have to. You can skip that question if you do not feel comfortable answering it.
We will not share any of your answers with you parents, teacher, classmates, or friends. Your answers are completely private, so you do not have to worry about anyone finding out what you said.
Sometimes you might be one of only a small number of students doing a survey or practicing a skill. That's okay! You do not need to feel bad or embarrassed. Just remember that other students are in the study too, they just do the surveys at different times in class.
Other times, you might be one of only a small number of students who decide not to be in the study. That's okay too! We are asking if you want to join the study and help us out, but if you don't want to, you do not have to. Nobody can change your mind or make you feel bad about your choice! No matter what you choose (to be in the study or not), you won't be the only one.

If you are ever uncomfortable being or not being in the study, let Ersie or your teacher know, and we will do our best to help you.

DO I HAVE OTHER CHOICES?

You can choose not to take part in this study, and you can decide you no longer want to be in the study at any time. You may also choose to not answer any question that you are not comfortable with. If you choose to stop being in the study at any time, you will not be penalized (nothing bad will happen and nobody will be mad at you). It also will not change your enrollment in summer school or change the lessons you are taught. It is entirely your choice whether you do the study, and nothing bad will happen no matter your choice.

WHAT IF I HAVE QUESTIONS?

If you have any questions or worries about the research, you can ask Ersie Gentzis at (713) 743-7026 or at egentzis@uh.edu before, during, or after the research. If you wish to talk to someone else or have questions about your rights as a research subject, call the University of Houston Institutional Review Board at (713) 743-9204.

_____

DOCUMENTATION OF SUBJECT ASSENT

I agree to take part in this study called: KIPP's "S.H.I.P." (Social Hero In Practice) Program.

Signature of minor participant:
_____

Date: _____

I.D. Number: _____

Any questions regarding my rights as a research subject may be addressed to the University of Houston Institutional Review Board (IRB) at 713-743-9204. All research projects that are carried out by investigators at the University of Houston are governed by requirements of the university and the federal government.

Appendix F

Child Assent Form in Spanish

UNIVERSITY of
HOUSTON

UNA AUTORIZACIÓN DE CONSENTIMIENTO PARA PARTICIPAR EN UNA INVESTIGACIÓN

TÍTULO DEL PROYECTO: Programa "S.H.I.P." de KIPP (Héroe social en práctica)

Te invitamos a participar en una investigación realizada por Ersie Gentzis (una estudiante) y el Dr. Raymond C. Knee (un profesor) de la Universidad de Houston.

Puedes decir no si no quieres participar en este estudio. Los adultos no pueden hacerte participar en este estudio si no quieres. Si aceptas participar en el estudio ahora, pero cambias de opinión más adelante, puedes dejar de participar en el estudio y nadie se enojará contigo.

¿QUÉ ES LA INVESTIGACIÓN?
La investigación es una forma de aprender información sobre algo. Los investigadores estudian diferentes materias de la misma manera en que estudias inglés o matemáticas como una materia en la escuela.

Hay muchas razones por las que las personas eligen participar en un estudio de investigación. A veces, las personas desean ayudar a los investigadores a aprender formas de ayudar a las personas o mejorar los programas.

Debes entender por qué dirías que sí a ser un sujeto de investigación. Tómate el tiempo que necesites para decidir si deseas participar en este estudio. Puedes hacerle a Ersie y a la Sra. Griffin (su maestra) cualquier pregunta que tengas sobre la investigación.

¿POR QUÉ ESTAMOS HACIENDO ESTA INVESTIGACIÓN?

En nuestra investigación queremos aprender sobre habilidades sociales en el salón de clase. La transición de la escuela primaria a la intermedia es difícil, y queremos asegurar que esta transición sea más fácil para ti. Estamos tratando de ver si las lecciones en video que estarás viendo son útiles o no, y para probar de qué manera están ayudando. Como se mencionó anteriormente, estamos tratando de mejorar este programa.

¿QUÉ PASARÁ DURANTE EL ESTUDIO?

Este estudio comienza hoy y termina la última semana de la escuela de verano.

Mañana, harás una breve encuesta (las preguntas se tratan de cómo te sientes y qué piensas). No te preocupes, estas preguntas de la encuesta no son difíciles. Te damos esta encuesta para ver cómo te sientes ahora, al comienzo de la escuela de verano.

Después de la encuesta, verás una lección corta sobre la primera habilidad que te estamos enseñando. Después de ver la lección, te desafiamos a que practiques la habilidad que aprendiste durante la semana. Puedes practicar con amigos, hermanos, padres o cualquier otra persona con la que quieras practicar. Si lo deseas, tienes la opción de tomar una foto, hacer un dibujo o escribir sobre cómo practicas la habilidad como tu tarea para la semana para mostrarnos que practicaste lo que aprendiste. No tienes que hacer esta tarea, pero si lo hace, puede ayudarte a comprender mejor la lección.

Cuando vuelvas a la escuela el jueves, harás otra breve encuesta preguntándote cómo has practicado la habilidad y cómo te sientes ese día.

Harás este proceso (lección, práctica y tareas, y breve encuesta) durante dos semanas de la escuela de verano (del martes 2 de julio al lunes 15 de julio). Esto significa que verás 2 lecciones, practicarás 2 habilidades diferentes y harás 2 encuestas cortas.

Luego, el último jueves de la escuela de verano, te daremos la primera encuesta nuevamente para ver cómo te sientes al fin de la escuela de verano.

Aquí está un calendario del estudio:

	Lunes	Martes	Miércoles	Jueves	Viernes
Semana 1 1 - 5 de Julio		- Recibir formularios de consentimiento informado	**HOY:** **Comienzan la escuela de verano y el estudio:** - Devolver formularios de consentimiento - Primera encuesta	- Entregar tareas (si decides hacerlo) - Encuesta semanal	Viaje de estudios

Semana 3 8 - 12 de Julio	- Entregar tareas (si decides hacerlo) - Encuesta semanal	- Segunda lección	Practicar la habilidad	Practicar la habilidad	Viaje de estudios
Semana 4 15 - 19 de Julio	- Entregar tareas (si decides hacerlo) - Último día para enviar formularios de consentimiento y participar en el estudio - Encuesta semanal			**Estudio finaliza:** - última encuesta	**Termina la escuela de verano!**

¿ME PUEDEN PASAR COSAS BUENAS SI ESTOY EN ESTE ESTUDIO?

No sabemos exactamente cómo te ayudará esta investigación, pero creemos que las lecciones pueden ayudarte a aprender cómo hablar y comunicarse con tus amigos y maestros en la escuela intermedia. Queremos prepararte para la escuela intermedia para que la transición no sea difícil para ti. Si sabes cómo comportarte antes de empezar las clases, entonces puedes sentirte cómodo cuando empiecen las clases y no preocuparte tanto por el cambio. Creemos que este programa puede ayudarte!

¿ME PUEDEN PASAR COSAS MALAS SI ESTOY EN ESTE ESTUDIO?

A veces, a las personas les ocurren cosas en los estudios de investigación que pueden lastimarlos o se hacer sientar mal. En este estudio, no creemos que nada de lo que te pedimos que hagas te va a hacer daño o te va a hacer sentir mal.

A veces, cuando te demos una encuesta, puede hacerte preguntas que te avergüenzan responder. Si no quieres responder una pregunta, no tienes que hacerlo. Puedes omitir esa pregunta si no te sientes cómodo respondiéndola.

No compartiremos ninguna de tus respuestas con tus padres, maestros, compañeros de clase o amigos. Tus respuestas son completamente privadas, por lo que no tienes que preocuparse de que nadie descubra lo que dijiste.

A veces puedes ser uno de los pocos estudiantes que realizan una encuesta o practican una habilidad. ¡Esta bien! No necesitas sentirte mal o avergonzado. Solo recuerda que otros

estudiantes también están en el estudio, solo hacen las encuestas en diferentes momentos de la clase.

Otras veces, puedes ser uno de los pocos estudiantes que deciden no participar en el estudio. ¡Eso está bien también! Te preguntamos si deseas unirte al estudio y ayudarnos, pero si no lo deseas, no tienes que hacerlo. ¡Nadie puede cambiar tu opinión o hacerle sentir mal por su elección! No importa lo que elijas (de participar o no en el estudio), no serás el único.

Si alguna vez te sientes incómodo por estar o no en el estudio, avísele a Ersie o a la Sra. Griffin y haremos todo lo posible para ayudarte.

¿TENGO OTRAS OPCIONES?

Puedes elegir no participar en este estudio y puedes decidir que ya no quieres participar en el estudio en qualquier momento. También puedes optar por no responder a cualquier pregunta con la que no te sientas cómodo. Si eliges dejar de participar en el estudio en cualquier momento, no serás penalizado (no ocurrirá nada malo y nadie se enojará contigo). Tampoco cambiará tu inscripción en la escuela de verano ni cambiará las lecciones que te enseñan. Es totalmente su decisión si realizas o no el estudio, y nada malo sucederá a causa de tu elección.

¿QUÉ PASA SI TENGO PREGUNTAS?

Si tienes alguna pregunta o inquietud sobre la investigación, puedes consultar a Ersie Gentzis al (713) 743-7026 o en egentzis@uh.edu antes, durante o después de la investigación. Si deseas hablar con otra persona o tienes preguntas sobre tus derechos como sujeto de investigación, llama a la Junta de Revisión Institucional de la Universidad de Houston al (713) 743-9204.

DOCUMENTACIÓN DEL ASENTIMIENTO SUJETO

Estoy de acuerdo en participar en este estudio llamado: El programa "S.H.I.P." (Héroe social en práctica) de KIPP

Firma del participante menor: _____

Fecha: _____

Nombre: _____

Cualquier pregunta sobre mis derechos como sujeto de investigación puede ser dirigida a la junta de revisión institucional (irb) de la universidad de houston al 713-743-9204. Todos los proyectos de investigación que realizan los investigadores de la universidad de houston están gobernados por los requisitos de la universidad y el gobierno federal.

Appendix G

Baseline Survey

KIPP SHIP Survey # 1 😊

Please circle your answer choice:

1. What is your sex?
    a. Male
    b. Female
    c. Other _____

2. What is your Racial Background?
    1. White/Caucasian
    2. Native American/American Indian
    3. Black/African-American
    4. Asian
    5. Native Hawaiian/Pacific Islander
    6. Multi-Race
    7. Other _____

3. What is your ethnicity?
    1. Hispanic/Latino
    2. Nonhispanic/Nonlatino

1	2	3	4	5	6	7	8	9	10	11

Not at
all true

Very
true

Please rate how much you think these sentences are true in your life and write the number in the blank:

1. _____ I plan to put more time into my schoolwork.
2. _____ I plan to study harder for tests and exams.
3. _____ I plan to spend less time hanging out with friends.
4. _____ I plan to put extra effort into the rest of my tests.
5. _____ I plan to keep up with reading assignments.
6. _____ I plan to procrastinate less.
7. _____ I plan to start studying for my tests before the week of the test.
8. _____ I plan to spend more time at the library.
9. _____ I plan to stop engaging in social activities that interrupt my schoolwork.
10. _____ I plan to avoid wasting time.
11. _____ I plan to be more organized.
12. _____ I plan to avoid missing homework deadlines.
13. _____ I plan to be less casual about schoolwork.
14. _____ I plan to focus more on my studies.

1	2	3	4	5
Not at all true	A little true	Somewhat true	Pretty true	Completely true

Please rate how much you think these sentences are true in your life and write the number in the blank:

1. _____ I feel a sense of choice and freedom in the things I do at school.
2. _____ I feel disappointed with how I perform at school.
3. _____ I feel that my classmates and teachers are cold and distant towards me.
4. _____ Most of the things I do at school feel like "I have to".
5. _____ I feel confident that I can do things well at school.
6. _____ I feel that my decisions at school show what I really want.
7. _____ I feel connected with classmates and teachers who care about me, and who I care about.
8. _____ I feel kept out from the group I want to belong to at school.
9. _____ I feel forced to do many things I don't choose to do at school.
10. _____ I feel like I am able to do my school activities.
11. _____ I experience a warm feeling with my classmates and teachers that I spend time with.
12. _____ I feel unconfident about my abilities at school.

Thank you for your help! See you later, Sailor!

Appendix H

Weekly Reflection Survey One

KIPP SHIP Survey # 2 (Skill of the Week: Stress Management) 😊

1	2	3	4	5
Not helpful at all	A tiny bit helpful	Kind of helpful	Pretty helpful	Completely helpful

1. Please rate on a scale from 1 to 5 how helpful you thought this week's lesson on *stress management* was: _____

2. Did you practice anything that the *stress management* video taught you this week?
    1. Yes
    2. No

3. Please explain how you practiced *stress management* this week. (What was happening, what you did, which of the tips did you try):

    _____

    _____

    _____

    _____

    _____

    _____

    _____

4. Do you think the way you practiced *stress management* helped you in the situation you were in? If so, how/why? (Ex: "I understood the other person better," "I was able to focus," "I ended the disagreement")

_____

_____

_____

_____

_____

_____

_____

5. How did you feel after practicing *stress management*? (Ex: "I felt helpful because I knew

    what to do," "I felt smart because I used what I learned")

    _____

    _____

    _____

    _____

    _____

    _____

    _____

6. If you didn't practice *stress management*, why not?

    1. I didn't find a situation where I needed it

    2. I used another skill (if so, which skill?):

        _____

    3. I didn't like any of the tips I learned

    4. Another reason (explain):

        _____

1	2	3	4	5
Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree

Now, these next questions are **not** about the skill of the week. These are about how you feel about school this week.

Please rate on a scale from 1 to 5 how much you think these sentences represent how you feel this week and write the number in the blank:

1. _____ I feel a sense of choice and freedom in the things I do at school.
2. _____ I feel confident that I can do things well at school.
3. _____ I feel that my decisions at school show what I really want.
4. _____ I feel connected with classmates and teachers who care about me, and who I care about.
5. _____ I feel like I am able to do my school activities.
6. _____ I experience a warm feeling with my classmates and teachers that I spend time with.

Thank you for your help! See you later, Sailor!

Appendix I

Weekly Reflection Survey Two

KIPP SHIP Survey # 3 (Skill of the Week: Malleable Intelligence) 😊

1	2	3	4	5
Not helpful at all	A tiny bit helpful	Kind of helpful	Pretty helpful	Completely helpful

7. Please rate on a scale from 1 to 5 how helpful you thought this week's lesson on *malleable intelligence* was: _____

8. Did you practice anything that the *malleable intelligence* video taught you this week?
    1. Yes
    2. No

9. Please explain how you practiced *malleable intelligence* this week. (What was happening, what you did, which of the tips did you try):

    _____

    _____

    _____

    _____

    _____

    _____

    _____

10. Do you think the way you practiced *malleable intelligence* helped you in the situation you were in? If so, how/why? (Ex: "I understood the other person better," "I was able to focus," "I ended the disagreement")

_____

_____

_____

_____

_____

_____

_____

11. How did you feel after practicing *malleable intelligence*? (Ex: "I felt helpful because I

knew what to do," "I felt smart because I used what I learned")

_____

_____

_____

_____

_____

_____

_____

12. If you didn't practice *malleable intelligence*, why not?

1. I didn't find a situation where I needed it

2. I used another skill (if so, which skill?):

_____

3. I didn't like any of the tips I learned

4. Another reason (explain):

_____

1	2	3	4	5
Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree

Now, these next questions are **not** about the skill of the week. These are about how you feel about school this week.

Please rate on a scale from 1 to 5 how much you think these sentences represent how you feel this week and write the number in the blank:

7. _____ I feel a sense of choice and freedom in the things I do at school.

8. _____ I feel confident that I can do things well at school.

9. _____ I feel that my decisions at school show what I really want.

10. _____ I feel connected with classmates and teachers who care about me, and who I care about.

11. _____ I feel like I am able to do my school activities.

12. _____ I experience a warm feeling with my classmates and teachers that I spend time with.

Thank you for your help! See you later, Sailor!

BYE!

Appendix J

Follow-Up Survey

KIPP SHIP Survey # 4 (Last One!) 😊

1	2	3	4	5	6	7	8	9	10	11

Not at
all true

Very
true

Please rate how much you think these sentences are true in your life and write the number in the blank:

15. _____ I plan to put more time into my schoolwork.
16. _____ I plan to study harder for tests and exams.
17. _____ I plan to spend less time hanging out with friends.
18. _____ I plan to put extra effort into the rest of my tests.
19. _____ I plan to keep up with reading assignments.
20. _____ I plan to procrastinate less.
21. _____ I plan to start studying for my tests before the week of the test.
22. _____ I plan to spend more time at the library.
23. _____ I plan to stop engaging in social activities that interrupt my schoolwork.
24. _____ I plan to avoid wasting time.
25. _____ I plan to be more organized.
26. _____ I plan to avoid missing homework deadlines.
27. _____ I plan to be less casual about schoolwork.
28. _____ I plan to focus more on my studies.

1	2	3	4	5
Not at all true	A little true	Somewhat true	Pretty true	Completely true

Please rate how much you think these sentences are true in your life and write the number in the blank:

13. _____ I feel a sense of choice and freedom in the things I do at school.
14. _____ I feel disappointed with how I perform at school.
15. _____ I feel that my classmates and teachers are cold and distant towards me.
16. _____ Most of the things I do at school feel like "I have to".
17. _____ I feel confident that I can do things well at school.
18. _____ I feel that my decisions at school show what I really want.
19. _____ I feel connected with classmates and teachers who care about me, and who I care about.
20. _____ I feel kept out from the group I want to belong to at school.
21. _____ I feel forced to do many things I don't choose to do at school.
22. _____ I feel like I am able to do my school activities.
23. _____ I experience a warm feeling with my classmates and teachers that I spend time with.
24. _____ I feel unconfident about my abilities at school.

Thank you for all your help! You're all set, Sailor! Have fun for the rest of your summer and good luck in middle school!

Appendix K

Summary of Reportable New Information and Modifications Submitted to the IRB

Summary of Modifications Made

- In the Protocol Packet:
  - Study timeline dates were adjusted in the "Recruitment Methods" section
  - Study timeline dates were adjusted in "Study Timelines" section
  - Study timeline dates were adjusted in "Procedures Involved" section
  - Methods of delivery were adjusted in "Procedures Involves" section
  - Study timeline dates and daily actions were adjusted in calendar located in "Procedures Involved" section
  - Study timelines dates were adjusted in "Informed Consent" section
  - Survey method was adjusted in "Provisions to Protect the Privacy Interests of Subjects" section
- In the Study Basic Questions in English and Spanish:
  - Delivery methods were adjusted in "How?" section
- In the Child Assent in English and Spanish:
  - Delivery methods were adjusted in "What will happen during the study?" section
  - Study timeline dates were adjusted in "What will happen during the study?" section
  - Study timeline dates and daily actions were adjusted in calendar located in "What will happen during the study?" section
- In the Parental Consent in English and Spanish:
  - Study timeline dates and lesson delivery methods were adjusted in "How long will the research last?" sections
  - Study timeline dates and survey method were adjusted in "What happens if I say yes, I want to provide permission for my child to be in this research?" section

These changes (change in survey delivery, change in lesson delivery, and change in timeline dates) were initially introduced via Reportable New Information because of the time-sensitive and unforeseen nature of the changes. After distributing consent forms on July 2nd, the researcher learned that the students would not have access to computers in their character-building class. Therefore, the researcher had to move all programmed surveys from Qualtrics to printable Word documents (document attached) by July 3rd and had to step in and provide an in-person PowerPoint lesson rather than the voiceover video lessons previously created. During study delivery, the researcher was also unable to follow the intended Monday lesson, Wednesday homework, Thursday survey schedule due to the unpredictable schedule of the partner school. The researcher instead worked directly with the

character-building class teacher to work around the fluctuating schedule and deliver the study components on days that worked for the teacher. The researcher did maintain four-to-five days between the lesson delivery and respective weekly reflection survey as to maintain the intended intervals between study components (see calendar below). Additionally, because of a grant awarded to the partner school by the YMCA, the researcher had to pass an additional YMCA background check during study delivery. Unfortunately, due to delays in processing the secondary background check and convenience for the class, the researcher had to switch the second skill lesson back to the initial voiceover PowerPoint video. In this case, the teacher presented the video to the class as to mimic the style of the first researcher-taught PowerPoint in class.

Adjusted Study Timeline:

	Monday	Tuesday	Wednesday	Thursday
Week 1 July 1 - 5		- Consent forms distributed	**Study Begins:** - Consent forms returned - Baseline survey - First lesson (stress management)	Practice skill
Week 2 July 8 - 12	- Participatory homework due - Reflection survey	- Second and final lesson (unbiased processing/malleable intelligence)	Practice skill	Practice skill
Week 3 July 15 - 19	- Participatory homework due - Last day to submit consent forms and participate in study - Last reflection survey			**Study Ends:** - Follow-up survey