

*“It made me closer to the people in my group”:*

Group-Level Processes Related to Deepening Relationships among Adolescents in a Social  
Intervention

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### Abstract

This mixed-methods study examined a group-based, social-emotional learning intervention for adolescents to identify group-level processes associated with positive relational outcomes and how these processes functioned in different settings. *The Connection Project (TCP)* was implemented with matched control groups in two settings: eight intervention groups from a small private school in Charlottesville, Virginia, and 40 intervention groups from public schools in St. Louis, Missouri. Pre- and post-intervention data were collected from all participants, including a sociometric measure of self-reported ‘relationship depth’ with classmates. A multi-level model predicting change in relationship depth controlling for baseline student demographics demonstrated significant group-level variation in both samples. Data were collapsed to the group-level and hierarchical regression analyses were used to predict change in relationship depth for *TCP* groups controlling for change in control groups, to produce a residual score for each intervention group. These were then rank ordered to identify the two ‘highest bonding’ and ‘lowest bonding’ groups in each setting, which were then qualitatively analyzed. Five themes emerged around (1) facilitator engagement, (2) trust, (3) discussions of marginalized identities, (4) the role of humor, and (5) rupture and repair processes. Findings suggested several markers of high bonding groups regardless of setting: ‘off-script’ group discussions, automatic trust in facilitators, deeper discussions about identity issues, effective rupture and repair processes, and student vulnerability met with student support. There were also key differences across settings, including the greater importance of discussions about racial and ethnic identities to group bonding among groups in which the majority of students held marginalized racial/ethnic identities. Also, the higher rates of negative humor among low bonding groups of students from a highly-resourced school where the cultural norm was that of high academic engagement.

Together, findings suggest that the same program can be beneficial to youth in various settings, *and* should be tailored somewhat to students' unique strengths and needs based on their ecological contexts.

Key Words: group-level analysis, group processes, social-emotional intervention

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“It made me closer to the people in my group”:

Group-Level Processes Related to Deepening Relationships among  
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Adolescence is a critical developmental period during which teens struggle to understand and shape their emerging identities (Meeus, 2011). This process is both personal and social, as teens naturally begin to turn away from their parents as primary sources of support and towards peers (Allen et al., 2015). Teens must ask themselves not only ‘who am I?’ but ‘who am I *to*, *with*, and *because of* my peers?’ (Allen et al., 1994). Thus, one of the major tasks of adolescence is negotiating one’s identity in the context of one’s social environment. To navigate this task successfully, teens must learn how to *connect* to their peers in meaningful, prosocial ways (Noom, Deković, & Meeus, 1999; Eccles, Early, Fraser, Belansky, & McCarthy, 1997).

Failing to do so leaves them susceptible to a multitude of risks. These risks stem from an evolutionary imperative; humans, much like other pack animals, thrive primarily through forging cooperative relationships with others to help ensure survival (Burkart, Hrdy, & Van Schaik, 2009). As a result, social isolation is linked to the production of cortisol, a stress hormone that activates the fight-or-flight response to potential threats (Skosnik, 2000). While this process is useful when facing a hungry bear, it becomes physically harmful when cortisol is released in small amounts over time, as is the case with individuals experiencing chronic social isolation. In fact, social isolation is a strong predictor of cardiovascular and other health problems and is even predictive of early mortality (Grant, Hamer, & Steptoe, 2009). Social support, on the other hand, helps suppress cortisol and decrease stress responsiveness (Heinrichs, Baumgartner, Kirschbaum, & Ehlert, 2003). In other words, feeling connected to and supported by one’s “pack” allows humans to feel safe and to thrive. Which is why exclusion from the pack can have such

detrimental effects, particularly for adolescents whose own identity formation relies on a kind of feedback loop with their social experiences.

Indeed, from ‘The Breakfast Club’ to ‘Mean Girls’ to ‘Pretty Little Liars,’ (Brammer, 2009; Holladay, 2010; Hall, West, & Herbert, 2015) popular culture is flush with storylines featuring high school as the backdrop for a kind of social Darwinism, where classmates ruthlessly compete for status and the socially weak are mistreated and alienated. These storylines are inspired by the real world, where one in four high school students reports experiencing peer victimization (National Center for Educational Statistics, 2015), and one in three reports feeling lonely or alienated in high school (Qualter et al., 2015). Importantly, environments of disconnection forged through bullying and exclusion lead to poor mental health for youth; teens who feel socially alienated are more likely to experience depression and anxiety (Brackney & Karabenick, 1995), and are more vulnerable to suicidality (King & Merchant, 2008). This is particularly true for marginalized youth, such as those who are part of the LGBTQ+ community, who are more likely to experience homophobic victimization as well as depression, suicidality, and truancy in the context of a negative school climate (Birkett, Espelage, & Koenig, 2009).

Poor mental health, in turn, works to impair academic performance by decreasing motivation and increasing cognitive burden (Cunha & Heckman, 2006). In fact, even brief experiences of social exclusion have been shown to negatively impact performance on standardized measures of achievement (Eisenberger, Lieberman, & Williams, 2003; Twenge, Catanese, & Baumeister, 2003), and a lack of social connection is one of the most potent predictors of truancy, absenteeism, academic failure, and school non-completion (Brown, Higgins, & Paulsen, 2003). It has also been linked to disruptiveness in school and other antisocial behaviors, such as delinquency and substance abuse, which impede academic and later

financial and career success (Schulz, 2011). Thus, while there are many reasons why teens may not successfully establish healthy peer connections, failing to do so places them at increased risk for poor mental well-being and poor academic outcomes, which in turn are associated with poor *life* outcomes (Sampson & Laub, 1997).

### **Social Connection and Ecological Context**

Youth across various sociodemographic backgrounds may share a common vulnerability to the effects of social isolation. However, youth also face risks specific to their ecological context. Understanding risks and assets specific to youths' experiences and environments provides nuance to broad statements on the universality of adolescent development. This is particularly important given that much of the research grounding general claims has been conducted primarily on middle-class, White youth (Betancourt & López, 1993; Williams & Deutsch, 2016). In relation to connection processes, youths' specific ecology may not change the fundamental fact that humans are most likely to thrive when they have meaningful connections to others (Burkart et al., 2009), but it may ground an understanding of what impedes these connections for youth in different circumstances, and how best to tap into their natural strengths.

For example, marginalized youth from low socioeconomic and/or racial/ethnic minority backgrounds face a plethora of structural injustices that, among other disadvantages, results in access to fewer opportunities and resources, and disparities in power, politics, and even health outcomes (Carter & Reardon, 2014). Relevant social processes are also affected. Marginalized youth are less likely to be exposed to structured, prosocial peer programming, like clubs and summer camps, than are more advantaged youth (White & Gager, 2007), which can mean more of their social experiences are likely to be had outside the purview of adult guidance. Parents, who themselves are suffering from undue stress due to the effects of poverty and racism, are less

able to provide the social supports needed by youth in environments characterized by many risks and few resources (Ceballo & Hurd, 2008). At school, youth from racial or ethnic minority groups are faced with negative stereotypes that contribute to an elevated sense of threat in their environments, demanding cognitive energy that diminishes the ability to cope with stressors and directly undermines academic performance (Cohen & Garcia, 2008). Marginalized youth are also more likely to experience discrimination by teachers and peers; in 2015, 9% of Black students, 7% of Hispanic students, and 11% of non-White students from other racial/ethnic backgrounds reported being called a hate-related term while at school (IES, 2015). And this trend may only be increasing in reaction to the modern-day political climate; in the ten days following Donald Trump's election to the presidency in November, 2016, the Southern Poverty Law Center (SPLC, 2016) recorded 867 hate incidents. Over 20% of these occurred in K-12 settings, including the following recount from a mother in Colorado: "My 12-year-old daughter is African American. A boy approached her and said, 'Now that Trump is president, I'm going to shoot you and all the blacks I can find,'" (SPLC, 2016). Such explicit threats of racially-based violence and experiences of racial discrimination are profoundly detrimental to students' wellbeing (Flannery, Wester, & Singer, 2004), and are unsurprisingly related to academic disengagement (Dotterer, McHale, & Crouter, 2009), and increased feelings of social alienation and isolation (Cohen & Garcia, 2005).

Among marginalized youth, *positive* social processes have been found to buffer against some of these risks and contribute to resilience (e.g., Grotevant & Cooper, 2005). Relationships with caring adults who express high expectations of youth, whether developed through family, community, or school, help counter negative stereotypes and foster in marginalized youth a positive vision of their future and sense of self-competence (Aronowitz, 2005). Indeed, positive

relationships with adult mentors have been found to contribute to African American youths' academic attainment over time via positive changes to racial identity and beliefs about the importance of school performance (Hurd, Sánchez, Zimmerman, & Caldwell, 2012). Similarly, positive peer relationships and perceived social support are associated with positive psychological adjustment for marginalized youth (Demaray & Malecki, 2002). In sum, although marginalized youth face multiple layers of challenge unique to their socioeconomic and racial/ethnic cultural context, their capacity for forming healthy connections, and the associated benefits, are quite clear.

On the other end of the socioeconomic spectrum, affluent youth who, in America, are also far more likely to be White (e.g., Orr, 2003), may at first seem unlikely candidates for experiencing the risks associated with social isolation. And for good reason; White youth face none of the structural and systemic forms of oppression forced on minority youth, and youth from wealthy families are absent suffering from chronic stress associated with poverty (Evans & Kim, 2013). Affluent youth have an abundance of resources available to them: They are more likely to attend highly resourced schools with plenty of adult guidance, live in safe neighborhoods, and participate in structured social activities (Leventhal & Brooks-Gunn, 2000; White & Gager, 2007).

However, research on this population has found disproportionately high incidences of maladjustment, including high rates of substance abuse, and notable vulnerability for internalizing and externalizing symptoms (Luthar & Barkin, 2012). Causes of distress among affluent youth include achievement pressures, unrealistic and maladaptive perfectionistic strivings, and importantly, *social disconnection* (Luthar & Becker, 2002). Affluent adolescents are often literally and figuratively distant from their parents, with structured activities taking the

place of time spent together with family (Luthar & Becker, 2002). Indeed, among 12-17 year olds, closeness to parents was found to be *inversely related to family income*, with more adolescents reporting feeling close to their biological mothers in households where the annual income was less than \$15,000 than above \$75,000 (U.S. Department of Health and Human Services, 1999). This emotional isolation from parents is in turn linked to higher rates of depression and substance use among suburban youth (Luthar & Barkin, 2012).

Affluent youth also face social environments in which peer influence can be damaging, with researchers finding “high peer status [to be] linked with overt displays of low academic effort, disobedience at school, aggressiveness among girls, and substance use among boys,” as well as “startlingly strong links between physical attractiveness and peer popularity among affluent girls,” (p. 3, Luthar & Latendresse, 2005). Overall, although this population of youth is often considered “low risk,” research suggests that the context of wealth presents specific vulnerabilities for social isolation and alienation that may be similarly damaging for these youth as it is for youth in other contexts.

### ***The Connection Project: A Group-Based Intervention***

If seemingly any youth can be subject to the negative effects of social isolation, are *all* youth doomed to suffer through the pitfalls of adolescence? Not necessarily; adolescents’ intense focus on peers can be a potent source of *good* – if they successfully form significant, supportive relationships. As adolescents struggle to balance needs for both autonomy and connection, supportive peer relationships have the potential to meet youths’ attachment needs without threatening their sense of independence. Indeed, peer support and influence has been shown to protect against risky behaviors (Maxwell, 2002), and predict better academic performance (Gonzales, Cauce, Friedman, & Mason, 1996) and academic motivation (Nelson & DeBacker,

2008). Positive peer relationships have also been associated with higher self-esteem in youth via increased empathy and prosocial behavior, a finding “consistent with the notion that close, supportive relationships with peers likely provide adolescents with unique opportunities to develop perspective taking and empathy,” supporting the development of moral processes (p. 712, Laible, Carlo, & Roesch, 2004). Thus, youths’ social relationships, if channeled effectively, are a potentially powerful point of intervention.

*The Connection Project* is the result of efforts over several recent years to develop just such an intervention. *The Connection Project* was designed to capitalize on teens’ interest in their social world by using a group-based format to build prosocial relationships and reduce the risks of social isolation. The intervention consists of 12, one-hour weekly sessions led by trained facilitators for small groups (6 to 12 students) of 9<sup>th</sup> and 10<sup>th</sup> graders during the school day. Broadly speaking, the sessions are designed to both teach and experientially *show* youth what it feels like to engage in supportive peer relationships. Program components pull from existing micro-interventions, or single-session interventions that have been empirically tested and found to have moderate-to-large effect sizes in rapidly and sustainably improving youth outcomes. Content varies from session to session and includes group discussions, paired skills-building activities, and other exercises.

These various micro-interventions work together to facilitate students’ interactions and promote their engagement with their peers through four different mechanisms:

(1) **Values affirmation**, or helping teens identify and enunciate their own prosocial values. This principle is based on the ‘saying is believing’ effect (Arkowitz, Miller, & Rollnick, 2015) and self-affirmation interventions, which demonstrate that even briefly articulating one’s core values has substantial positive impacts on academic performance (Cohen & Sherman,

2014). For example, in one activity – ‘You Can Quote That’ – students receive a list of quotes from a diverse group of famous people (e.g., Socrates, Lady Gaga) on the importance of human connection and are asked to identify those which resonate most, then explain their selection to the group. In so doing, students hear notable figures, their *peers*, and then *themselves* proclaiming values of trust, loyalty, friendship, openness, and connection.

(2) ***Social belonging***, or increasing youths’ perceptions and actual experience of connection to others. This principle stems from research demonstrating the impact of belongingness on academic motivation and achievement (e.g., Furrer & Skinner, 2003). Belonging activities are peer-oriented and followed by group discussion. For example, in ‘Behind the Masks,’ students fill out worksheets anonymously identifying the myriad ways that they present a false image of themselves to others via “masks.” These sheets are then collected and redistributed. Students stand for each ‘mask’ endorsed on their sheet, thus seeing how many and how often their classmates use the very same masks that they do.

(3) ***Helper Therapy***, or enhancing youths’ self-efficacy through creating contexts in which they are reaching out to others, not just passively receiving help and resources from adults. This shift in self-perception for youth has been linked to a host of positive outcomes (e.g., Yeager & Walton, 2011). Notably, volunteerism was the central element of change in the *Teen Outreach Program* that resulted in drastic reductions in school failure for adolescents (Allen, Philliber, Herrling, & Kuperminc, 1997). *The Connection Project* taps into youths’ capacity for help-giving by, for example, asking students to identify a community member who positively impacts their lives but is usually unrecognized (e.g., a custodian), and then working together to demonstrate their gratitude and appreciation to that community member.



(4) *Narratives of Connection*, or helping youth develop coherent life stories of strength and connection to a broader community. This principle is derived from Pennebaker's (1993, 1997, 2012) work demonstrating numerous benefits to organizing past challenges into a broader narrative of resilience. *The Connection Project* works to scaffold this process for youth. For example, in one activity based on Walton & Cohen's (2011) brief intervention shown to reduce academic failure up to *four years* later, students briefly write about a challenge that they overcame and how it helped shape them into a better person. Facilitators then open the floor for voluntary sharing aloud. As students craft their own narratives of resilience, they also hear their peers frame challenges as common and passing. Youth tend to respond in supportive ways to group members who choose to share, and students *experience* that they are not alone, embedding their narratives within a context of peer connection.

Together, these mechanisms compose *The Connection Project*, which in a randomized controlled trial study, was found to significantly increase the quality of peer relationships – as rated by participants *and* as observed by their peers – increase academic engagement, and decrease depressive symptoms for youth (Allen, Narr, Nagel, Costello, & Guskin, 2019; Narr, 2019).

### **Understanding *The Connection Project* at the Group-level**

Previous research demonstrating the effectiveness of *The Connection Project* has examined outcomes at the individual level (Allen et al., 2019; Narr, 2019). Yet *TCP* is dependent upon each *group's* experience of coming together, becoming vulnerable, and recognizing their common humanity in order to allow for real connections to take root. As such, the processes that happen at the *group-level* are vital in understanding *how and why* the intervention works, and is thus the focus of the proposed research.

Intervention evaluations at the group-level allow for a better understanding of both programmatic elements and process elements of implementation that are likely to impact effectiveness. Indeed, randomized controlled trial evaluations must statistically account for the messy reality that *who* is in a group and *how* that group functions will interact with intervention effects. This is captured by the intraclass correlation (ICC), which tells researchers the proportion of the intervention effect that is accounted for by differences among the groups themselves (e.g., that some groups ‘work’ better than others, even within the same intervention). Group differences are thus acknowledged and expected (to a degree) in group-based intervention evaluation research. Although traditional program evaluations are concerned with accounting for and removing the effect of the ICC to better isolate program effects, group differences are particularly salient with regards to *The Connection Project*, as the group itself is an integral component of the intervention, rather than statistical ‘noise’ or error. Indeed, the group context is a *tool* to facilitate change at the individual level, and is therefore even more valuable to examine as a level of change unto itself.

Some previous research has explored group effects directly to better understand the group characteristics that may drive differential program outcomes. This level of analysis can be used to shape developing interventions. For example, in an online, group-based intervention designed to help patients manage serious health conditions, researchers found that decreases in depression and increases in self-efficacy were moderated by group characteristics, specifically, group duration and size, as well as the types of communication available to participants (Rains & Young, 2009). These insights were important to informing modifications to this newly-developing, computer-based, health communication technology. Group-level analysis can also provide novel, or more in-depth understandings of established and well-validated interventions.

For example, The *Teen Outreach Program*, a school-based intervention for youth that combines volunteer service with guided group discussions, had already demonstrated strong positive program effects to reduce rates of teenage pregnancy and school non-completion by substantial margins (Philliber & Allen, 1992). Researchers then examined the *site-level* characteristics associated with program effectiveness and found that sites better at promoting students' autonomy and connection through group facilitation and volunteer experiences were more effective at reducing problem behaviors in middle schoolers (Allen & Kuperminc, 1994). This more nuanced understanding of program effects suggested that middle school sites might benefit even more from the intervention if they leaned *into* students' desire for autonomy, rather than pushed against it. Thus, a group-level analysis provided information beyond *whether* the program worked, to suggest how and under what circumstances it was working best.

Examining the *composition* of intervention groups can also provide important information about the combinations of characteristics that can serve to enhance or undermine intervention goals, particularly the youths' baseline levels of functioning. Research at the individual level has found that youth who enter interventions with different levels or types of risk benefit differentially. However, findings are inconsistent; some suggest that youth who are most vulnerable when entering a program are those most likely to make the greatest gains as a result (DuBois, Portillo, Rhodes, Silverthorn, & Valentine, 201; Allen & Philliber, 2001), while other research has shown that universal youth interventions benefit the most advantaged youth and serve to maintain or widen initial disparities in the outcomes of interest (Ceci & Papierno, 2005).

Group-level findings on youth interventions also provide mixed evidence on the ideal combination of participants' baseline levels of functioning. In interventions aimed to reduce antisocial behavior, groups with a combination of youth exhibiting antisocial and prosocial

behavior at baseline were more effective than groups with all antisocial youth (Ang & Hughes, 2001). In fact, groups in which all participants were engaging in antisocial behavior were more likely to demonstrate iatrogenic effects, in which the groups inadvertently reinforced problem behavior and led to poorer long-term outcomes (Dishion, McCord, & Poulin, 1999). This ‘peer contagion effect’ is evident in other domains. Depression, anxiety, obesity, and unhealthy body image in adolescence have all been linked to co-rumination, a peer process that leads to greater symptomology in teens (Dishion & Tipsord, 2011). However, blended groups of youth may also come with tradeoffs; in an intervention designed to reduce children’s aggressive behavior, “the individual child was ‘pulled’ toward peers’ mean level of aggression,” reducing aggression in the most hostile children but making those low on aggression *more* aggressive (p.1, Boxer, Guerra, Huesmann, & Morales, 2005). The composition of the group in relation to baseline functioning on outcomes of interest seems likely to matter, but it is unclear in what way. Examining group composition may therefore be a valuable component of exploring group-level effects.

### **Understanding Group Processes**

Although comprised of individuals, a group can be conceptualized as its own entity; small groups tend to develop in a series of stages that ultimately lead to defined group roles and a group identity with unique norms and values (Tuckman & Jensen, 1977). Theorists suggest that the small group setting has elements that facilitate change apart from a given curriculum (Rose, 1990). One’s peers provide an effective source of feedback and model diverse behaviors while sharing some common characteristic; when group bonding is strong, the positive influence is likely to be strong also (Rose, Tolman, & Tallant, 1985). This understanding of the power of small groups has been tapped into by therapeutic modalities, where “the act of being in a group is the intervention tool rather than just a setting for ‘crowded individual therapy’” (Martsch, 2005).

Examining interactions at the group level helps researchers understand more deeply the group *processes*, or interactive social dynamics, that are associated with positive outcomes.

For instance, in a mixed-methods study of an adolescent mentoring program with a structured group component, researchers quantitatively differentiated groups in which the youth participants reported high or low levels of satisfaction with their one-on-one mentoring relationships. They then qualitatively analyzed groups in both the high- and low-level categories to understand group processes related to the individual-level outcome of relationship satisfaction. They found that high-satisfaction groups were characterized by more behaviors supportive of connection, including caretaking and support-giving, whereas lower-satisfaction groups were characterized by more superficial connection processes, as well as more frequent negative behaviors like disconnection, disengagement, and rejection (Deutsch, Wiggins, Henneberger, & Lawrence, 2013). Similarly, a meta-analysis of adolescent group interventions designed to reduce aggression found that specific social processes enhanced the treatment. For older adolescents (15-18 years old), groups that effectively facilitated cohesion, elicited broad participation, had high levels of interaction among the members, and emphasized self-determination and choice were more effective than interventions with the same curricula but without these group processes (Martsch, 2005). The effectiveness of group-based interventions is therefore tied in important ways to the social dynamics at play between group members and leaders. This is perhaps even more salient for adolescents who are, in a sense, biologically hardwired to be particularly responsive to social processes (Chein, Albert, O'Brien, Uckert, & Steinberg, 2011).

**Situating Group Processes Within Ecological Contexts**

Just as group outcomes may be influenced by the characteristics of group members and the social dynamics between them, they are also likely influenced by the broader contexts in which they are situated. As delineated in Bronfenbrenner's Ecological Model of Development (Bronfenbrenner & Morris, 1998), youth are positioned within layers of interacting context, from the most proximal (self, close relationships) to more distal (community, society). Intervention groups can be conceptualized using a similar model, in which the group is composed of individuals and develops its own processes (proximal) but is positioned within a school, a community, and society (distal). Groups that operate within different ecological contexts defined by certain characteristics are likely to operate differently, even when the curriculum and, importantly, the underlying theorized mechanisms of change, remain constant. This reflects a general tension in intervention research: universal approaches, built from developmental research that theoretically taps into common processes, are applied widely to different contexts where youth may face challenges and present with strengths specific to their environment and experiences.

*The Connection Project* has thus far been implemented in two very different contexts. The differences between the settings are many, but are notable in relation to the racial/ethnic makeup and socioeconomic status of the participants and their larger communities. One setting includes schools in which the majority of youth are African American, most of whom are eligible for free or reduced lunch at school, situated within a broader community in which the majority of community members are African American. A second setting includes a school in which the majority of youth are White and predominantly from affluent families, situated in a broader

community in which the majority of community members are White. The racial/ethnic and socioeconomic context of each setting will be discussed in more detail below.

In an effort to ground group-level analyses within an understanding of ecological context, it is important to note the ways in which prior research on youth programming has addressed race, ethnicity, and cultural context in relation to differences in program effects. Much research (historically conducted by mostly middle-class, White researchers) has focused on race and ethnicity as a proxy for cultural contextual features (Betancourt & López, 1993; Williams & Deutsch, 2016). Williams and Deutsch (2016) argue that this is typically done in one of three ways: (1) researchers treat membership in a racial/ethnic minority group as a risk factor; (2) they examine race/ethnicity as a factor that contributes to youth's decisions to participate in programming; or (3) they compare the outcomes of programs on the basis of race or ethnic group or control for race/ethnicity in their outcome models. Williams & Deutsch (2016) argue that all three approaches fail to capture the complexity of the broader issues, and instead argue for a more comprehensive approach that understands race/ethnicity as a contextual factor of youth development that impacts an individual's *experience* of an intervention or program. Further, they emphasize the importance of understanding and allowing for within-group differences, stating that, "simply assuming that all youth of color are highly vulnerable is misleading as it overlooks within-group heterogeneity and may further perpetuate deficit-oriented explanations of youth functioning" (p. 206).

Thus, intervention evaluations should seek to ground research questions in culturally-informed theory to understand *why* (rather than only checking for whether) group differences in race, ethnicity, or socioeconomic status might exist, as well as to account for differences within these groups. Relating these recommendations to the proposed research, a group-level analysis

should similarly be wary of treating intervention groups comprised of youth from specific backgrounds as homogenous clusters. *The Connection Project* includes youth from two non-representative samples with differences in students' majority race and socioeconomic status, but instead of quantitatively controlling for these differences, the proposed research seeks to understand *qualitatively* what is happening within intervention groups, *within a given setting*, that may influence individuals' experiences of the program. Understanding group processes within an ecological context deepens our understanding of factors that may influence intervention effects beyond variables of 'race' and 'SES,' acknowledging that individual intervention groups may be unique beyond their demographic make-up.

However, *The Connection Project* was also designed as a universal intervention, built from research on youth development and, like most universal programming, stemming from a belief that 'kids are kids' who share many of the same emotional needs and benefit similarly from the meeting of those needs. From this perspective, comparing group processes of *The Connection Project* across these two different contexts may point to the presence of processes that promote or constrain program goals in both settings. This may serve as a starting point to explore potential 'universal ingredients' of this new intervention.

### **Research Questions**

To this end, the current research aimed to apply a group-level lens to explore group processes associated with more and less successful intervention groups, with consideration of broader ecological contextual factors that may have shaped the way groups functioned.

Specifically, the current study addressed the following research questions:

- (1) Which *Connection Project* groups demonstrated the most and least positive change in group-level bonding as a result of the intervention?**



The goal of this research question, addressed in Phase I of the current study, was to replicate previous research demonstrating significant group-level variation in student's reported bonding and connection with fellow group members (Allen et al., 2019), and use this outcome as the basis for creating a rank-order of all *Connection Project* groups within settings – from most to least bonded.

**(2) Which group characteristics and types of social processes differentiated groups that changed the most and least in bonding within each setting?**

Using the quantitative results from Phase I, the goal of this research question was to qualitatively explore group processes by analyzing sessions from the two highest and two lowest ranking groups (within each setting) in terms of positive change in group-level bonding, exploring data for themes including self-disclosure, instances of connection and disconnection, and disruptive or negative student behavior, as well as for emergent themes. In this way, patterns in the types of processes and their utilization could be compared between more and less bonded groups within each ecological setting. Given previous research regarding important social processes facilitating connection (e.g., Deutsch et al., 2013), it was hypothesized that groups who bonded more as a result of the intervention would be characterized by more frequent behaviors supportive of connection, more instances of personal disclosure, and fewer instances of disruptive or negative behavior compared to less bonded groups. As is typical in qualitative research, hypotheses were not included for all potential themes that may differentiate groups, as a primary goal was to identify themes and social processes specific to *The Connection Project* as they became apparent from the data.

**(3) What similarities or differences were there in group-level processes among high and low bonding groups *across* different ecological contexts?**

This analysis was exploratory in nature, comparing themes that emerged as frequent and important across settings for both the most and least connected groups. No preconceived hypotheses guided comparisons, as extant literature could align with conflicting predictions. For example, one could have hypothesized that a ‘self-disclosure’ code would occur more frequently among high bonding groups in the setting with mostly White youth as compared to high bonding groups in the setting with predominantly Black youth, given research suggesting that marginalized youth experience a heightened state of arousal due to threat appraisal that might discourage displays of vulnerability in an academic setting (Cohen & Garcia, 2008). However, one could also have hypothesized that ‘self-disclosure’ would occur more less frequently in a highly resourced school setting, as compared to less resourced schools, as youth in that setting might have access to numerous group-based activities both in and out of school where they might feel connected and supported (White & Gager, 2007), and therefore be *less* likely to confide in an intervention group they feel they do not “need.” This exploratory analysis examined patterns across settings to explore whether specific processes contributed to *The Connection Project’s* success in various contexts.

The current study used a convergent parallel mixed-methods approach. This design relies on the concurrent collection of quantitative and qualitative data, analyzed separately but synthesized by using the results from both to discover patterns or contradictions. Methods and Results are presented separately for quantitative (Phase I) and qualitative (Phase II) components, in that order.

## PHASE 1: QUANTITATIVE RANKING OF GROUPS

### Method

#### Settings, Participants, and Context

The study examined data from *The Connection Project* implemented in two settings with two non-representative samples.

##### *Greater St. Louis Metropolitan Area*

This sample, primarily from St. Louis and Ferguson, Missouri (referenced as ‘St. Louis’ following), came from four schools engaged in a randomized controlled trial of the intervention, implemented in partnership with The Wyman Center. ‘Wyman’ is a practitioner-based nonprofit organization with headquarters in St. Louis, with a strong history of implementing evidence-based interventions for youth (e.g., *The Teen Outreach Program*, Allen et al., 1994). Data were collected from 610 high schoolers (322 intervention, 288 control, 295 male and 311 female) across two years (Fall, 2016 to Spring, 2018), with 40 total *Connection Project* groups. The majority of students enrolled in the four targeted school districts were members of racial/ethnic minority groups (82% African American, 4% Hispanic, 12% White, 2% from other racial/ethnic groups) and eligible for free or reduced-price lunch (67%), a proxy for low family socioeconomic status. The overall sample in the current study mirrored these characteristics: 362 (59%) African American students, 61 (10%) Multiethnic students, 55 (9%) Hispanic/Latinx students, 106 (17.4%) White students, and 26 (4.3%) students from other racial/ethnic groups. Overall, 92% of participants identified as members of a racial/ethnic minority group and/or were eligible for free/reduced-price lunch (Allen et al., 2019).

*Racial and Cultural Context.* The broader city in which the schools were situated has a population that is over 67% African American and 29% White. In recent years, the city suffered

tumult as the result of racially-charged tensions between citizens and police. Incidents of egregious violations of African-American citizens' rights have been widely publicized, including the 2014 shooting death of Michael Brown, an 18-year-old African American man, at the hands of a White police officer, which led to widespread protests and violent clashes between protesters and police (e.g., Apuzzo, 2015; Lind, 2014; Scher Zagier, 2014). Since this incident, and for the duration of data collection in St. Louis, these issues remained a salient part of the community context. Resultant changes following these events were mixed; while the police force and political leadership in St. Louis became significantly more racially diverse and reflective of the populace, the area failed to implement widespread community policing reforms. In short, "the events of 2014 drove a racial wedge through the heart of Ferguson, leaving a wound that's a long way from healed" (Associated Press, 2019).

#### *Charlottesville, Virginia*

This sample comes from a small, private school in Charlottesville, Virginia engaged in a randomized controlled trial of the intervention. Data were collected from a total of 95 students (52 intervention, 43 control) across two years (Spring, 2016-Spring 2018) and 8 intervention groups. The school's student population was majority White (71%), with 29% of students identifying as members of a racial/ethnic minority; 22.4% of the student body were non-local boarding students (most of whom were from East Asia) and spoke English as their second language. The majority of students were from families with sufficient income to afford the annual tuition for the upper school, which in 2019-2020 was \$28,560 for non-boarding students and \$60,690 for 7-day boarding students. 41% of students received financial aid, with an average award of \$20,840. Participants in the current study were demographically similar to the overall school population; 16.5% were boarding students, and the majority were White (racial/ethnic

breakdown: 63.1% White, 21.4% Asian/Pacific Islander, 3.6% African American, 1.2% Hispanic/Latinx, and 10% multiethnic).

*Racial and Cultural Context.* The broader city in which the school is situated has a population that is over 69% White and 19% African American. Considered a liberal spot of ‘blue’ in an otherwise ‘red’ central Virginia, Charlottesville has long been considered a progressive enclave and has, at various points, been touted as the ‘happiest city’ in America (Helmore, 2014). However, as part of the Jim Crow South, Charlottesville also has a long history of racial oppression and segregation; Charlottesville public schools were among the last to desegregate in the United States in 1959, and resisted complete desegregation until 1966 (Crow, 1972). In July, 2017, controversy over the removal of a statue depicting a Confederate Civil War General led to a protest by the KKK and counter-protests by community members (Yan, Sayers, & Almas, 2017), bringing to the forefront ongoing racial-based conflict. This event was followed by a large-scale ‘Unite the Right’ rally in August, 2017, in which the KKK, neo-Nazis, and other white supremacist groups from across the nation converged on Charlottesville, met by thousands of counter-protesters, with the explicit intention of inciting violence and causing social upheaval. During the weekend-long event, more than 30 people were injured, and a 32-year-old woman was killed when a ‘Unite the Right’ protester slammed his car into a crowd of counter-protesters in an act of domestic terrorism (Yan et al., 2017). This incident brought global attention to Charlottesville (e.g., *The South Asian Times*, Ians, 2017), a community which was in the throes of coping with the incident and its aftermath during data collection for the current study. It also spotlighted nationally growing racial tensions and political divides, epitomized by strong reactions of support and outrage by each side of the political aisle when President Trump blamed the violence at the rally “on both sides.”

## Design

The randomized controlled trial format of *The Connection Project* utilized a multi-group, pre-post design, with block randomization. All students who returned a signed parental consent form in participating classes (in Charlottesville, a Life Skills class; in St. Louis, a Health class or Study Hall) completed a pre-survey. Participants were then randomized into treatment or control groups with blocking for gender and ethnicity/international student status. Control groups engaged in “business-as-usual” class activities while treatment groups participated in the intervention. In St. Louis, intervention groups were facilitated by two trained staff employed by The Wyman Center, both with extensive experience working with adolescents. In Charlottesville, intervention groups were facilitated by two research staff (at least one graduate student on the research development team, paired with either a second graduate student or an undergraduate research assistant). Sessions in both settings were audio recorded. Following the final session, participants from both treatment and control groups completed the same survey again.

## Measures

*Demographics.* Participants self-reported their gender, grade, race/ethnicity, family structure, and level of parental education. Participants from the Charlottesville setting also self-reported on their international student status (including country-of-origin if applicable).

*Student bonding within groups.* The level of student bonding to fellow group members was measured using a sociometric approach based on Coie, Dodge, and Coppotelli (1982). Students were asked to consider the extent to which each member in their class was someone to whom they felt “really close and connected” and someone they could “really be myself around” by assigning a rating to each class member from “1 – *I always keep my guard up [around this person]*” to “5 – *I am always open [around this person].*” This measure yielded several different

constructs depending on how the data were examined; for instance, an individual's average rating of their classmates or group members generated a score that represented how comfortable that participant felt with their class/groupmates, or their reported 'relationship depth' with identified others, whereas the average of the class/groupmates scores *about* that student represented how comfortable *others* tended to feel around that student. The focus of the current study was on examining the extent to which student bonding occurred in different groups using the average of individuals' average relationship depth ratings about their groupmates to yield a measure of *group bonding*.

## Results

The proposed analytic plan for this study involved first fitting a series of multilevel models for all major outcomes of interest, for the specific purpose of determining which outcome or set of outcomes produced statistically significant intraclass correlation coefficients to indicate intervention-driven group-level differences in student bonding. Allen and colleagues (2019) performed these analyses on all key outcomes for this intervention in St. Louis and found that "group effects were significant and sizable for all of the measures involving student ratings of comfort and approachability regarding other students [e.g., student bonding]" (Allen et al., 2019, p. 5). They found that ICCs for all other measures were nonsignificant ( $<.05$ ), indicating that these other measures were not good indicators of *group level* differences. As such, the current study begins with these identified group-level effects on student ratings of comfort with their peers (i.e., relationship depth) and then uses them to first identify groups that did and did not produce positive changes in levels of relationship depth so as to explore the ways in which the interactive processes of those groups differed.

Multilevel models were fitted separately for each of the datasets from Charlottesville and St. Louis, in which students (Level 1) were nested within classrooms (Level 2). The treatment indicator was at the student level (Level 1), with random effects for classrooms included at Level 2. Demographic characteristics (gender, parent education level, grade, and minority racial/ethnic group status) as well as baseline scores on sociometric measures were included as Level 1 covariates in the model so that post-intervention assessments predicted gains in outcomes controlling for demographic differences. A dummy code was created with the control as the reference group (code = 0) to account for variability in the outcome explained by treatment condition. Following is the two-level model that was used separately for each dataset (St. Louis and Charlottesville).

For an outcome of student  $i$  in classroom  $j$ :

Level 1:

$$Y_{ij} = \beta_{0j} + \beta_{1j}*(Treatment_{ij}) + \beta_{2j}*(Student\ covariates_{ij}) + r_{ij}$$

where  $Y_{ij}$  is the outcome for a student  $i$  in classroom  $j$ , which is modeled as a function of the mean of that outcome for all students in classroom  $j$  ( $\beta_{0j}$ ), the effect of treatment for classroom  $j$  ( $\beta_{1j}$ ), the effect of student level baseline score and demographic characteristics, and a random term ( $r_{ij}$ ).

Level 2:

$$\beta_{0j} = \gamma_{00} + \gamma_{01} + u_{0j}$$

$$\beta_{1j} = \gamma_{10} + \gamma_{11} + u_{1j}$$

$$\beta_{2j} = \gamma_{20}$$

where  $\beta_{1j}$  is the effect of the intervention for classroom  $j$ , which is modeled as a function of the mean of treatment-outcome slopes across classrooms and a random term.



Consistent with reported findings in Allen et al. (2019), the intervention had a significant effect in helping students' feel more comfortable with other students in the St. Louis sample ( $B = 1.21, p < 0.001$ ) and in the Charlottesville sample ( $B = 0.27, p < 0.01$ ). However, the focus of the current study was not on whether the intervention was effective but rather on the *intraclass correlation coefficients (ICCs)*, which indicate the nesting structure of the data, or the extent to which students' outcomes, nested under classrooms, are correlated (Raudenbush & Bryk, 2002). ICCs provide an estimation of the percentage of the variance in the outcome explained by each analytical level (i.e., students or classrooms), with higher ICCs indicating that which classroom a student was in was a significant determinant of that student's outcome (Fransen, Twisk, Creemers, & Van Riel, 2004). This provides an indication of the extent to which the effects of the intervention differed for different groups of students within the treatment group (i.e., different groups produced different levels of student bonding as measured at the conclusion of the intervention).

In both settings, the above model yielded a statistically significant ICC (see Table 1), suggesting that the sociometric outcome varied at the *group-level* in meaningful ways.

Table 1

*ICCs by Setting*

Setting	Estimate	Residual	ICC
St. Louis	0.19	0.66	0.22***
Charlottesville	0.08	0.18	0.31***

Data from both settings were collapsed to the group-level (within setting) by summing and averaging sociometric scores within *Connection Project* groups so that remaining analyses reflected group-level, as opposed to student-level, scores (Allen et al., 1994). The next step was to identify groups that had the greatest relative increases or relative decreases in group members'

reported relationship depth with one another, relative to their specific control group. To achieve this, hierarchical regression analyses were used for each dataset separately to predict change in group averages of sociometric ratings from pre- to post-intervention, controlling for change in control groups. Regression analyses produced a residual score, or the difference between the observed and predicted value of the outcome, for each data point; in this case, each data point represented one *Connection Project* group. This residual was conceptualized as a ‘*group change in bonding*’ score for *each* intervention group (Allen et al., 1994), which were rank-ordered to identify the two ‘highest bonding and two ‘lowest bonding’ groups in each setting (see Tables 2 and 3).

The ‘high bonding’ groups in St. Louis (Groups 1 and 25) and Charlottesville (Groups 1 and 7) and the ‘low bonding’ groups in St. Louis (Groups 11 and 30) and Charlottesville (Groups 2 and 8) were subsequently selected for in-depth qualitative analysis (following).

## **PHASE 2: QUALITATIVE ANALYSIS OF SELECTED GROUPS**

### **Methods**

#### **Positionality**

I was the lead researcher responsible for interpreting this data, and the only researcher on the analysis team who repeatedly listened to and read the transcript of every session included in the dataset. As such, my position in the project is relevant to readers evaluating the results presented herein. I began work on *The Connection Project* when the program was an idea of the Primary Investigator and my primary advisor, Joseph Allen, PhD. I was a member of the project development team from its inception, and played a role in co-creating the curriculum content and program structure, as well as developing and identifying avenues for implementation and evaluation. In partnership with a graduate student colleague, I initiated and helped to lead the

program's launch in Charlottesville. Over the course of two years, I ran several of my own *Connection Project* groups in the small, private school in the Charlottesville setting (referred to throughout simply as 'Charlottesville') and trained undergraduate and graduate facilitators to co-lead groups. One of my groups (Charlottesville Group 2) was included in the dataset as a low bonding group.

I was also engaged with the evaluation of the program in the four public schools in the greater St. Louis area (referred to throughout simply as 'St. Louis'). I participated in weekly supervision sessions with the St. Louis facilitators over two years, hearing first-hand about groups' high and low points, difficult group dynamics, harrowing personal stories of students, and triumphant moments of connection. I helped provide supervision and was part of the decision-making team for changes to the curriculum in response to specific groups' needs (e.g., St. Louis Group 11, for which we replaced the standard Session 7 with an "alternate" version without structured activities, to support building the group's connection).

My personal experience with the intervention shaped my approach to the qualitative analysis. My initial codebook draft was informed, in part, by my experience as a facilitator and my knowledge of the facilitators' experiences in St. Louis; for example, facilitator reports that low bonding groups felt like "pulling teeth" led to my early code of "Silence." To minimize bias, I capitalized on the multiple perspectives of my coding team, who were all outsiders to *The Connection Project* before joining this project and therefore could help balance my insider's view:

- I did not code any sessions from my own group
- I kept coders blind to the bonding-level of each group and assigned coders transcripts across numerous groups and settings

- I solicited input from the coding team at each stage of analysis – developing and redeveloping the codebook, interpreting findings – to balance my own perspective.

I approached this analysis from the perspective of a researcher *and* program developer, seeking to understand the *what* and *how* of group dynamics as well as what they might mean for the program and facilitators moving forward.

### **Group Demographics**

Demographic characteristics at the group-level mirrored those of their respective larger populations (see Tables 4 and 5). Groups from both settings had mean ages of approximately 15 years and a range of gender balances. St. Louis groups were largely comprised of students from minority racial/ethnic groups and reported parent education levels of ‘High School Graduate’ to ‘Some College.’ Three of the four Charlottesville groups were comprised of mostly White students, with one group of majority non-White students. Parent education levels among Charlottesville groups were reported mostly as ‘College graduate or more advanced degree.’ There were no notable patterns in group demographics to differentiate high vs. low bonding groups.

### **Facilitator Demographics and Training**

All facilitators in both settings were women, ranging in age from approximately 20 to 35 years old. In St. Louis, both facilitators were women of color (African American and bi-racial) and in their late-twenties to mid-thirties. They were full-time employees of The Wyman Center, the practitioner organization that partnered with the research team for this randomized controlled trial, and hired for two years exclusively to facilitate *TCP* groups. Both women facilitated every group in the study, including both high and low bonding groups. They had many years of experience working with adolescents as teachers and program leaders. St. Louis facilitators

received two days of intensive training in the *TCP* curriculum by representatives of the research team prior to implementation. They also engaged in weekly supervision meetings with the research team for ongoing guidance and support.

In Charlottesville, the four groups included in the current study were facilitated by seven women (one facilitator co-led both Group 1 and Group 2, a high and a low bonding group, respectively). Their ages ranged from early to late-twenties, and they included both undergraduate students, post-graduate research lab managers, and graduate students, all a part of the research team. Five of the women were White and two were women of color (Latina and bi-racial). Undergraduate facilitators received several weeks of formal training before co-facilitating; while more advanced members of the research team were not formally trained, they were all involved in the program's initial development and ongoing refinement. Charlottesville facilitators had a range of prior experience working with adolescents (from none at all to 1-2 years of clinical psychotherapy experience with youth). Due to the complicated schedule structure at the Charlottesville school setting, it was not possible for both of the assigned facilitators for a given group to consistently lead every session, so approximately 1/4<sup>th</sup> of total sessions were led by only one of the assigned facilitators.

### **Data Selection Procedure**

Intervention sessions from groups in both settings were audio recorded (with student permission and awareness) by facilitators using a small, inconspicuous recorder. Approximately five sessions of 12 from each identified intervention group were selected for qualitative coding. Group 30 from St. Louis had only four audio recordings available due to facilitators' failing to record sessions; I explored selecting an alternative group to replace Group 30 using the rank order produced by quantitative analyses, above. However, the following four groups that were

ranked after Group 30 also had only four audio recordings available, and so Group 30 was retained. Session selection was guided by Tuckman's model of small group development (Tuckman & Jensen, 1977), which outlines five stages: (1) 'Forming' – group members orient to the group and its goals; (2) 'Storming' – group members exhibit more emotional responses to group tasks; (3) 'Norming' – group members begin to communicate openly; (4) 'Performing' – group members create solutions to better function within group roles; and (5) 'Adjourning' – group members react to its termination. Mapping this model onto the intervention and, informed by session content, I identified the sessions that captured these five stages – sessions 1-2 as 'forming,' sessions 3-5 as 'storming,' sessions 6-8 as 'norming,' sessions 9-10 as 'performing,' and sessions 11-12 as 'adjourning.'

My original analytic strategy was to code the same five sessions from each target group that reflected the stages of group development. Several factors rendered such a neat approach impossible: (1) facilitators were inconsistent in their recording of sessions, particularly in the St. Louis setting. Two of the four target St. Louis groups had only four or five total recordings available, which were consequently those used for analysis; (2) school schedule changes (e.g., snow days), alterations to the curriculum across semesters, and a general emphasis on flexibility and responsiveness to group needs (e.g., spending more or less time on an activity depending on the group's engagement) changed the sequencing of sessions slightly between groups. For instance, Groups 7 and 8 from the Charlottesville setting had a total of only 10 sessions instead of 12 due to scheduling conflicts. As such, I allowed the content of the sessions to guide my selection, with the primary goal of capturing each group's development over time to the extent made possible by available data (see Table 6, below).

**Table 6***Sessions Selected for Qualitative Analysis Based on Available Audio Recordings*

Setting	Group #	Sessions with Audio Recordings	Sessions Selected
St. Louis	1	5, 6, 10, 11, 12	5, 6, 10, 11, 12
	25	2, 3, 4, 5, 6, 7, 9, 10, 11	2, 5, 7, 9, 11
	11	3, 4, 5, 6, 7, 9, 10	3, 5, 7, 9, 10
	30	7, 8, 10, 12	7, 8, 10, 12
Charlottesville	1	2, 3, 4, 5, 6, 7, 8, 9, 11, 12	2, 5, 7, 9, 12
	7	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	2, 5, 7, 9, 10
	8	2, 3, 4, 5, 6, 7, 8, 9, 10	2, 5, 7, 9, 10
	2	2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12	2, 5, 8, 10, 12

Audio recordings from the selected sessions were professionally transcribed using the service ‘GMR’ (<https://www.gmrtranscription.com>). A team of six trained research assistants then cleaned the transcripts to correct any errors and uploaded them to Dedoose, a qualitative data analysis program (Dedoose Version 8.0.35, 2018). Transcripts denoted whether a speaker was a facilitator or a male/female student; it was not possible to consistently and accurately track individual student speakers, nor was it deemed necessary given the current study’s focus on group-level processes.

### **Data-Analytic Strategy**

The same team of research assistants received basic training on group dynamics, adolescent development, qualitative data analysis, and *The Connection Project’s* curriculum and goals. Thematic analysis was conducted based on the six guidelines presented by Braun and

Clarke (2006): I (1) *familiarized myself with my data* by listening to all 40+ hours of audio sessions and reading and re-reading the transcripts in order to (2) *generate initial codes*. This inductive qualitative coding followed strategies suggested by Miles, Huberman, and Saldana (2014), using first and second cycle coding to identify important concepts and patterns in the data. I combined codes I had proposed *a priori* with codes that both I and my coding team deemed important after a first pass. I dropped several codes that were theoretically relevant but practically unusable; for example, codes specific to “mechanisms of change” underlying the curriculum were dropped when it became clear that the mechanisms were intermingled throughout the sessions and therefore not able to be linked to specific group processes. Similarly, I had proposed coding “timing of the sessions,” taking the roughly 75-minute sessions and breaking them into roughly 25-minute chunks to denote the beginning, middle, or end of each session. This code was dropped as it significantly slowed down the coding process within the qualitative software for little reward, as group-level processes were more likely to evolve throughout the course of the 12-session curriculum rather than within a single session. Codes for ‘laughter,’ ‘humor,’ and ‘supportive statements’ were added after the coding team listened to audio and read transcripts of several sessions.

For training and reliability, the team coded and reconciled two transcripts in their entirety. Subsequently, each assigned transcript was double-coded by two research assistants and reconciled, with any disagreements brought to the weekly reconciliation meeting wherein final codes were decided by group consensus. Each coder also completed a memo for every transcript coded, which included their report on how much of the curriculum was used in the session (“1 - none” to “4- all”), how the curriculum was adapted or changed, and their general impressions of



the session (e.g., how well they felt it went, how connected the group felt, any standout moments – see Appendix for a sample memo).

After coding was completed, I then (3) *searched for themes* by examining specific codes for thematic importance and coalescence. For instance, ‘Disruptive behavior’ and ‘Efforts of control’ were folded into a broader theme, “*Rupture and repair processes related to group-level bonding.*” At this stage, it also became clear that a significant theme of “Identity” was missed, with no codes to reflect on or analyze. An additional code, ‘Discussions of Marginalized Identities,’ was added and the data were recoded accordingly (see Table 7 for final codebook). Further, I used memoing and within-and cross-group comparisons to identify and explore key themes. I then (4) *reviewed the themes* to ensure that they worked well across the dataset, dropping some that did not hold up to the full picture of the data; for example, a preliminary theme “*Self-disclosure happens on a gradient*” was dropped as it was inconsistent with the self-disclosure code evaluated in the context of timing of the sessions in the curriculum (self-disclosure generally occurred more frequently in sessions in the middle of the curriculum rather than sessions late in the curriculum as hypothesized, largely because the curriculum activities in the middle sessions called for it explicitly).

Finally, I (5) *defined and named themes* to be maximally descriptive, and selected a number of extracts to be used when (6) *producing the report*, using a vignette-style to present extracts in order to accurately capture the context. The final themes presented here epitomize the processes that appeared to most notably distinguish high and low bonding groups.

**Table 7***Final Codebook Used for Data Analysis*

Code Type	Primary Code with Sub-Code(s)
<i>Organizational Codes</i>	
	Facilitator Speaking
	Curriculum
	Spontaneous
	Questions for the Team
<i>Content Codes</i>	
	Self-disclosure
	Facilitator
	Student
	Moments of Connection
	Supportive Statements
	Facilitator
	Student
	Humor
	Facilitator
	Student
	Laughter
	Moments of Disconnection
	Disruptive Behavior
	Efforts of Control
	Negative Statements
	Facilitator
	Student
	Silence

### Reporting Method for Qualitative Results

In quantifying the qualitative findings in the results section below, I present the *percentages* of a given code distributed across a given type of group. In other words, if a code appeared 100 times across high and low bonding groups, and of those 100 times, 55 of the codes appeared in high bonding groups and 45 of the codes appeared in low bonding groups, the percentages presented would reflect the 55% and 45% distribution of that code among high and low bonding groups, respectively. For example, the code ‘Moments of Connection’ may be presented as a percent distribution across high (64.3%) versus low (35.7%) bonding groups, or as a percent distribution across St. Louis (51.8%) versus Charlottesville (48.2%) settings. This method of presenting data was selected in order to most accurately examine how a particular code was distributed across group type, to provide a snapshot of when the construct appeared more or less often.

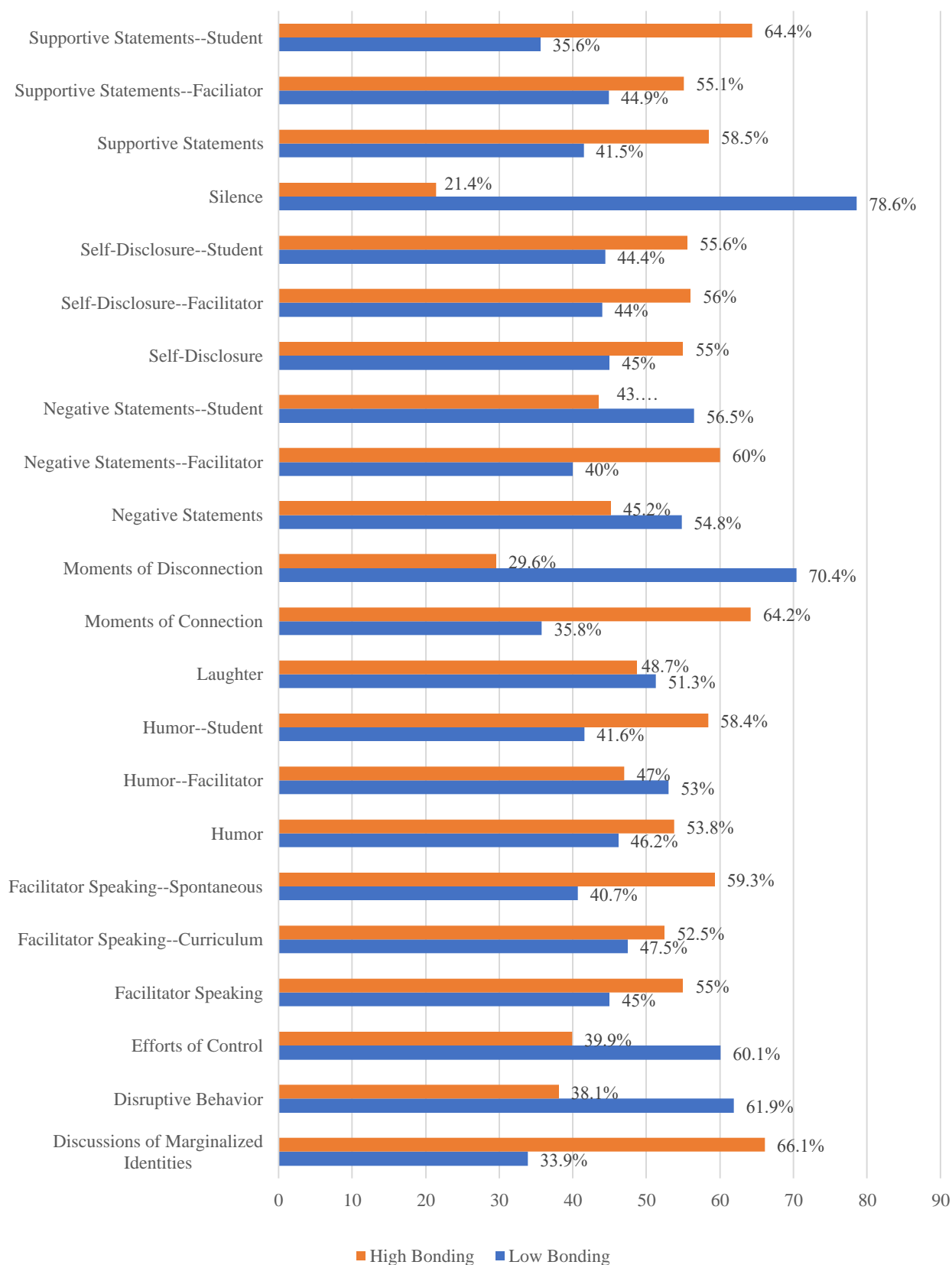
Other potential methods of presenting the data were deemed an ill-fit given the coding structure. For instance, one could compare a given code to the average number of *total codes* within a group type. However, this method would compare conceptually unrelated codes to one another, and would combine organizational and content codes together for an inflated denominator that would yield a less meaningful interpretation. Another method might be to examine the number of *sessions* within a group type in which a code is present, a common approach in qualitative research. However, the majority of codes appeared at least once in every session, making this analysis uninformative. In the context of the current study, it is therefore *most* helpful to examine how a particular code is distributed when making comparisons across group type, particularly given that each group type had roughly the same number of sessions.

### Qualitative Results

The research questions guiding my analysis asked: what *group-level* processes and characteristics differentiated groups that resulted in the *most* versus the *least positive change* in individual student's ratings of their depth of relationships with other group members, controlling for change in relationship depth among matched control groups? And how did those processes and characteristics compare across ecological settings? My findings highlight five important themes that were relevant both in characterizing groups where students did or did not ultimately form more open, trusting bonds (termed throughout 'high vs. low bonding groups') and in revealing relevant differences across settings. As such, I first present a brief, broad, overall description of the high and low bonding groups, including vignettes to illustrate the general *tone* of each type of group, then present the five themes in answer to both major research questions.

*A Broad Snapshot of High and Low Bonding Groups.* Groups in which students ended up feeling more deeply connected to their group members by the end of the intervention were generally characterized by high levels of student engagement, excellent rapport between facilitators and students (enabled and deepened through mutual self-disclosure), and frequent moments of connection at both the dyadic- (between facilitators, facilitator-student, between students) and group-level. These groups experienced fewer ruptures, less disruptive behavior, and accordingly, fewer efforts of control on the part of facilitators. The flow was generally easy and pleasant and there were few silences. The tone was positive with explicit and implicit support demonstrated by facilitators and students. As sessions progressed, the content shared by group members deepened and warmth among group members increased, indicating that students felt seen and supported.

Groups in which students ended up becoming the *least* connected to their group members by the end of the intervention were generally characterized by more disruptive behavior and, as a result, more efforts of control by facilitators. Disruptions often seemed to be rooted in a lack of student buy-in, asserted through implicit and explicit resistances to the curriculum and overall group goals. Relatedly, groups in which individuals reported the least positive change in bonding with their groupmates had more moments of disconnection, and there were often tense, awkward, or derisive undercurrents. Figure 1 displays the percentage distribution of each code across high and low bonding groups.

**Figure 1***Comparison of All Codes Across High and Low Bonding Groups*

In short, a wide-lens, qualitative snapshot demonstrates that the ranking of groups based on student relationship *outcomes* produced in Phase 1 of the current study was clearly linked to meaningful differences in *group-level* dynamics. These differences were most starkly apparent when comparing sessions with similar curriculum content. The following vignettes serve to illustrate the difference in overall *tone* of the high vs. low bonding groups before focusing on specific group processes linked to groups associated with more vs. less connected student outcomes.

*Team-building games in high vs. low bonding groups.* Early in the session curriculum (session 2), students were asked to engage in one of several types of team-building games that required group communication, strategizing, and working together to reach their goal more quickly and efficiently with each iteration of the game. Here, a high and low bonding group approached this task quite differently. Bolded selections are intended to spotlight particular moments of connection (Vignette 1) or disconnection (Vignette 2).

### **Vignette 1: St. Louis Group 25 Session 2 – High Bonding Group**

*The activity is called ‘Group Juggle.’ The facilitator explains that they will start with a single object, and each group member must catch the object and throw it to someone else, and if it is dropped or if the same student touches the object twice, the game restarts. More objects are added as the game progresses.*

*The group starts by excitedly asking questions, e.g., “Can I step off the circle to catch it?” and “Can I try to catch it if it’s gonna drop?”*

*As the game begins, it becomes clear to them that they need to create a strategy. The group tries several systems to indicate who should catch the object next—e.g., putting a leg forward, throwing in a specific order—and discusses after each iteration whether they should make an adjustment.*

Facilitator 1: Okay, you got it. Let’s go back to our seats. So, what did we – as we’re walking over, what did we do that worked well?

**Student 1: We communicated. We cooperated together.**

**Facilitator 1: We cooperated. We communicated.**

**Student 2: We planned it out before we did it. We didn’t just like throw.**

**Facilitator 1: We came in with a plan, yeah.**

Facilitator 2: I liked that...he *[referring to a student]* was encouraging people because he was like, “Alright. So, pay attention. Make sure you all are focused.” And I was liking that.

Facilitator 1: I super appreciate that. We’ve...done this where like people curse each other out. Like it gets ugly. It gets ugly.

Student 3: What? It’s not that serious. A dog and a ball *[referring to the objects they threw in the game]*.

...

Facilitator 1: It depends on how – like some people respond.

Student 3: *(Sarcastically)* Why you didn’t catch the ball?

Facilitator 1: Yeah, some people get really frustrated. Some people get mad when they feel like other people aren’t taking it seriously.

Student 4: It’s not a competitive game, so it’s not like ‘why you ain’t catch the ball?’ My God.

**Facilitator 2: So, you all aren’t competing against each other.**

...

**Facilitator 1: Who takes the W? *[as in who takes ‘the win’]***

**Student 4: Everybody, at one time. As a group.**

**Student 3: We’re a team.**

**Student 1: It’s a win-win situation.**

**Facilitator 1: It’s a win-win situation, right.**

...

Facilitator 2: Were there any takeaways or anything you noticed about people?

**Student 1: That everybody listened and, um, respected everybody’s choices.**

This group was excited to play the game from the start, demonstrating buy-in early on through questions and suggestions. The group members worked together, supporting one another to generate new ideas and trying new approaches to improve their process. They treated each other as teammates rather than opponents, taking responsibility if they made a mistake (e.g., “My bad!”) and not lashing out at one another (e.g., “That’s alright”). The game was punctuated by laughter and jokes throughout. Afterwards, the students engaged in post-processing with the facilitators, effectively deepening and internalizing the experience of connection.



**Vignette 2: Charlottesville Group 8 Session 2 – Low Bonding Group**

*The activity is called “Key Punch.” Facilitators randomly tape down sheets of paper with a number (1-12) to the floor creating the game board. Students stand behind a line and, one at a time, touch the numbers in order in a relay-style race against the clock. The group gets multiple tries to beat their time, and the game is presented as a competition against other Connection Project groups.*

*As the facilitators present the instructions, students are talking over one another and talking over the facilitators. Students begin voicing protest to the activity:*

**“Dude, this is like a concussion test, you actually have to move! (Sigh).”**

**“Do we all have to do it?”**

*They begin to put pressure on their fellow group members to perform:*

**Student 1:** You guys better dive for these numbers!

**Student 2:** Um, I’m not allowed to bend over. *[referring to a medical condition known to the group]*

**Facilitator 1:** You don’t have to bend over to touch them, if you want you can use your foot or can do whatever.

**Student 1:** No, you better dive, you might not be able to bend but you better lunge forward like this...

**Facilitator 1:** No, do exactly what you’re able to do.

*When the facilitators suggest that the group create a strategy before they play the game, one student proclaims that he should do it alone:*

**Student 3:** What is our strategy?

**Student 4:** Try to order them...

**Student 5:** *(Cuts off other student)* Let me do it. Let me do it.

**Student:** Do all of it?...*(Sarcastically)* Okay...

*The students then do not further engage to create a strategy and begin an off-topic discussion.*

*Just before facilitators start the activity, a student suggests,*

**Student 3:** “Guys, alright, guys, I have a strategy for us. *(Raising voice above everyone still talking)* Listen to me! Okay guys, when you touch a number, just, like scream the number that you touched out so everyone knows...”

**Student 4:** Scream it? Like, screeeeaaam?!

***(Students start screaming random noises)***

*The group completes the first round. The facilitators encourage them to create a strategy as a team. They begin talking over one another, with some students disengaging, (“I don’t even know,”) and others forcefully pushing a strategy (in response to which a student responds, “You’re scaring me!”). They complete the relay a second time with a faster time and cheer. One student says, enthusiastically, “We can do better, let’s do better!” to which other students respond, “No,” and “We’re sitting.”*

**A student again claims he could just do it faster alone, and another group member challenges him to do it with facilitators timing. He completes the relay alone.**

**Student 1:** Interesting game!

**Student 2:** That was a big nope for me.

*The group changes the topic.*

This group was resistant to the activity from the start. The students spoke over one another so often that the transcript was practically unreadable, as it tracked random sentence fragments in an attempt to transcribe the near constant crosstalk. Students were not listening to one another or to the facilitators and generally operated such that the loudest person got the floor, effectively silencing some group members while others dominated. The group did not view themselves as a team; when one student stated that she could not bend over for medical reasons, she received no support but was rather treated as a liability. This individualistic mindset manifested in one student performing the team activity *alone* to prove that the other group members only slowed him down. The group would not engage in strategizing nor in debriefing the activity with the facilitators.

These two scenes captured the difference in the overall tone of high and low bonding group sessions. Using my personal reactions as a barometer for tonal shifts, I noticed that listening to the audio recording from the high bonding excerpt left me smiling, excited to hear more, and with a general warm feeling, while listening to the audio recording for the low bonding excerpt engendered frustration, irritation, and sympathy for the facilitators, who were noticeably struggling to focus their group.

This broad snapshot verified that high and low bonding groups were clearly different. Next, I dive more deeply into the groups' processes and present five specific themes detailing exactly *how* they differed, both within and across settings, to produce greater or lesser positive change in students' relationship-depth outcomes.

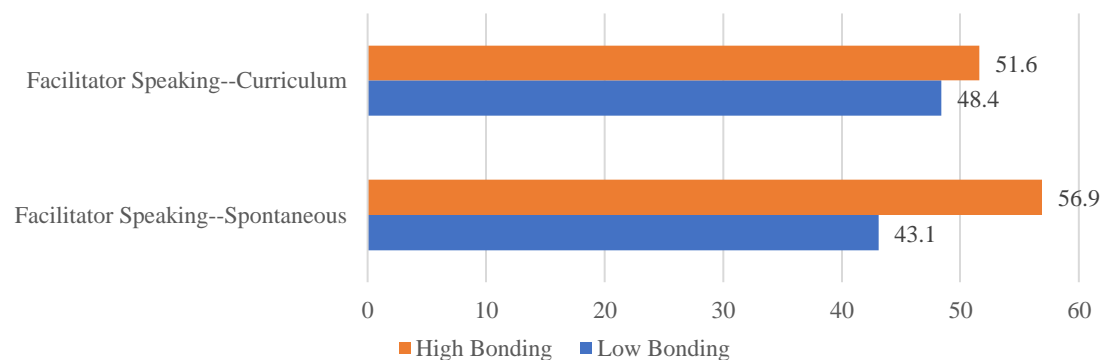
**Theme 1: Role of facilitators beyond simply administering the curriculum***Facilitator Use of Self*

In clinical psychology and social work, ‘use of self’ refers to an understanding of the practitioner as an instrument of change, facilitating clinical progress through a conscious use of their own relationship with, and reactions to, the client (Heydt & Sherman, 2005). The practitioner does not simply administer a set of interventions, but rather *is* a sort of intervention. In a similar sense, facilitators of *TCP* were vital to their group successfully bonding, but in different ways depending on the needs and demands of the group. Importantly, patterns in facilitator behavior differed across settings. I first present findings that were relevant in both settings, and then explore setting-specific results.

*Facilitator engagement.* The code ‘Facilitator Speaking’ tracked excerpts from the session transcripts in which facilitators (as opposed to students) were speaking, and whether the facilitator’s speech was ‘Curriculum,’ meaning dictated by or furthering a curriculum activity, or ‘Spontaneous,’ meaning unrelated to a curriculum activity. I selected these codes *a priori*, hypothesizing that in high bonding groups, facilitators would have a higher percentage of spontaneous speech because they would engage in more dynamic and varied discussions, and facilitators in low bonding groups would have a higher percentage of curriculum speech because they would rely more on the session script to guide the discussion in the absence of more organic conversation. Results partially supported this hypothesis. The proportion of curriculum speech was roughly the same between high and low bonding groups, and was therefore not a clear differentiator between groups that did and did not result in positive change in students’ relationship depth. But as hypothesized, facilitators *did* engage in more *spontaneous* speech in high bonding groups (see Figure 2, below).

**Figure 2**

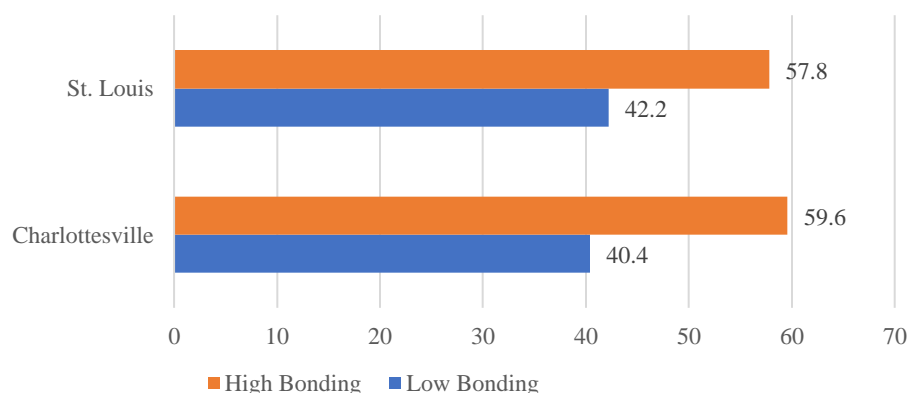
*Percent of Facilitator Speech in High versus Low Bonding Groups*



This spontaneous speech was often a result of facilitators leaning into interests expressed by students and following their lead as a way to build connection. For example, in Charlottesville Group 7 Session 7, the facilitator spent the first *14 minutes* of the 50-minute session engaged in spontaneous, back-and-forth dialogue with the students before beginning the first planned activity (an excerpt from this data is presented below). This pattern was seen in both St. Louis and Charlottesville, with facilitators in both settings engaging in more spontaneous dialogue with students in high bonding groups as compared to low bonding groups (see Figure 3), suggesting that dynamic, off-script discussions between students and facilitators were a marker of groups in which students ultimately deepened their relationships with their groupmates.

**Figure 3**

*Percent of Facilitator Spontaneous Speech in St. Louis and Charlottesville High vs. Low Connection Groups*



*Setting differences in the balance of facilitator and student speech.*

Given the coding structure used for the current study<sup>1</sup>, examining the type of facilitator speech alone could not fully capture how facilitators' engagement compared to students' engagement, in terms of overall contributions to the group dialogue. To explore facilitator-to-student ratios of spoken contributions, I examined the raw count of the average number of facilitator statements and student statements per session to capture the number of discrete statements made, and found important differences across settings.

*Balance of facilitator and student speech in St. Louis.* In St. Louis high bonding groups, facilitators spoke on average 1.3x more per session than students (facilitators = 353 times per session and students = 263 times per session) and in low bonding groups, facilitators spoke on average 2.1x more per session than students (facilitators = 262 times per session, students = 125 times per session). These ratios demonstrate that in St. Louis high bonding groups the engagement between students and facilitators was fairly even, while facilitators in St. Louis low bonding groups were contributing more than *twice as often* as students on average across sessions.

Why were facilitators in low bonding groups speaking so much more often than students? A deeper examination of the qualitative data of the two low bonding groups suggests that there were actually *two types of low bonding groups* in St. Louis: the quiet, difficult-to-engage group, and the raucous or resistant, difficult-to-control group. The 'difficult-to-engage' group had the greatest disparity in facilitator-to-student speech, with facilitators talking 2.3x more than students

<sup>1</sup> Student comments were not coded within Dedoose as the volume of total codes resulted in the software being slowed down significantly. Further, the coding scheme called for excerpts to sometimes 'chunk together' related statements, whereas the raw statement count captured discrete statements.

on average in this group. Facilitators often referred to their experience in this type of group as “tap dancing” to keep the sessions flowing. To briefly demonstrate, the following excerpt is from an early session (Session 3) with the difficult-to-engage group.

### **Vignette 3: St. Louis Group 11 Session 3 – Low Connection Group (Difficult-to-Engage)**

*The session has just begun and students are coming in and taking their seats.*

Facilitator 1: What's going on, guys? All quiet and calm. *(Silence)*. Well, I know we're waiting on some people, but I think we should go ahead and do our check in... That way we have enough time to get through everything. Um, so. So usually we do check ins just like a quick, like " Hey. What's up? What's going on?" I wanted to do something a little bit more specific this time. Um, since we're still learning about each other. And so, what I wanted to do was, it requires a little vulnerability so I hope you guys are okay with that. I wanted to do guilty pleasures. Do you guys know what a guilty pleasure is? What's a guilty pleasure?...*(Silence)*

Facilitator 2: *(awkward chuckle)* Guilty pleasure. *(Silence)*

Facilitator 1: What does it sound like?

*(Silence)*

Facilitator 2: Guilty. What's that?

Student 1: Something you did.

Facilitator 2: Something you did. And how do you feel about it?

Student 1: Not good, I guess.

Facilitator 2: Not good. And then what about pleasure.

Student 1: Enjoy.

Facilitator 2: Enjoy. So ... you put those two together. Guilty pleasure is something you feel bad about enjoying. *(Laughs)* Um, so I want to know. Take a second to think if you have a guilty pleasure. And what it might be. And I'll share mine first. So you guys will know what I'm talking about.

Facilitator 1: And I'll share mine.

Facilitator 2: *(Clears throat)* Gosh, I get a little embarrassed to say it. But that's okay.

Facilitator 1: Yours wasn't even that... ridiculous.

***The facilitators then spend several minutes speaking almost exclusively, with occasional comments from students. They talk about their favorite 'bad' TV shows with over-the-top plotlines. Facilitators are speaking roughly twice as often as students.***

Notable in the excerpt above were the long pauses and silences and the extra ‘space’ in the group that facilitators filled by ‘tap dancing.’ The excerpt below provides a brief example of the second type of St. Louis low bonding group, the ‘difficult-to-control’ group.

**Vignette 4: St. Louis Group 30 Session 7 – Low Connection Group (Difficult-to-Control)**

Facilitator 1: I want you to choose an emoji card that represents...how you feel about your role here for the rest of the semester. So, how you feel about the rest of the time that we'll be spending in *The Connection Project* for the semester...Your level of...interest and your level of, like, willingness to, to be here ... and engage. Okay? Does that make sense? So, take a look at the emoji cards. Come on over. Take a look...What do you feel like represents how you feel about your own, like, level of commitment and willingness and interest in doing the program for the rest of the semester?

*[Crosstalk]*

Facilitator 1: And if you feel like you need a combination, you can choose two.

Facilitator 2: Yes. And you will not have to share these out loud. We're actually gonna have you write about it for a second. So, you don't have to say it out loud.

...

*[Crosstalk]*

Student 1: My mama talking about 'You're not gonna die' *[referring to her mother responding to her, presumably after she complained about being in TCP]*. I said I just might....Ah, man, what time is lunch? **I'm, like, I don't know [about doing this activity]. I'm too hungry.**

Student 2: *[Laughs]*

*Students engage in a side conversation about wanting to go to McDonald's and their favorite meal there.*

Facilitator 1: So, take a note card.

*[Crosstalk]*

...

Facilitator 1: Take a note card. Take a pen if you need one.

*[Crosstalk]*

*Students continue having a side discussions. Several minutes have passed since the activity was introduced and students have not begun to engage.*

...

Facilitator 1: While we're at it, if there's something more that you would want or need from this space and from the time here, go ahead and make a note of that too...Kinda like how we talked the other week. Like, is there something else? Is there more that you would, like –

*[Crosstalk]*

**Facilitator 2: Are y'all listening? [Facilitator 1] is, like, in the middle of saying something.**

Here, facilitators had to be active to focus the group, which was consistently holding side conversations and was clearly disengaged from the task. Facilitators repeated instructions and called for their attention explicitly. The task at hand was, incidentally, designed to get their feedback and buy-in to the group following difficult sessions that made apparent their negative group ethos. The distracted and disinterested quality of the exchange above typified the 'difficult-to-control' type of low bonding group in St. Louis. Taken together, facilitators in St.

Louis groups were in fact *more active* in less engaged, less connected groups, with the groups requiring them to speak more often in an attempt to generate forward momentum.

*Balance of facilitator and student speech in Charlottesville.* In Charlottesville, facilitators spoke on average roughly the same number of times as students in high bonding groups (Facilitators = 197 times/session, Students = 172 times/session, 1.1x ratio of facilitator to student speech) and in low bonding groups (Facilitators = 264 times/session, Students = 252 times/session, 1.0x ratio of facilitator to student speech). This is because, unlike in St. Louis, neither of the low bonding groups in Charlottesville were quiet and difficult to engage. Low bonding groups were instead characterized by a lack of student focus on the curriculum content *and* a lack of genuine buy-in of the program goals (explored in detail in Theme 4). Recall Vignette 2, above, a Charlottesville low bonding group that was distracted, resistant to the team-building activity, and difficult for the facilitators to focus. Students in that excerpt (and in that group generally) still spoke frequently and in response to facilitators, but in ways that served to undermine or distract from curriculum goals. Thus, while there were differences in how the students in Charlottesville low bonding groups ‘showed up’ (i.e., in more or less authentic ways, see Theme 4), Charlottesville low bonding groups in general did not require extensive facilitator interaction in order for the students to simply keep talking.

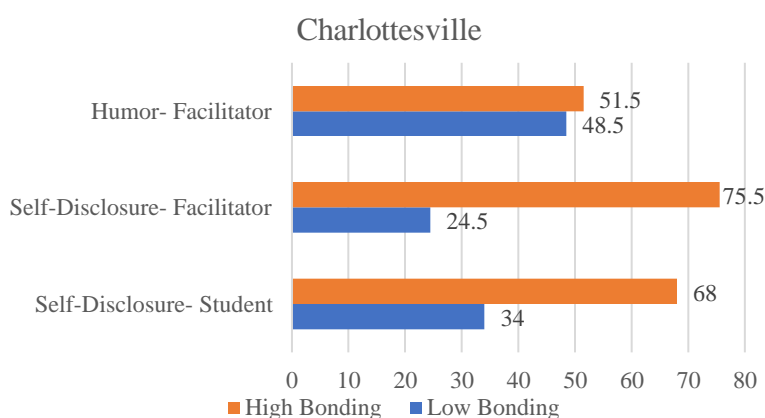
*Facilitators’ use of humor and self-disclosure in St. Louis vs. Charlottesville.* Codes capturing other aspects of facilitator use-of-self – humor and self-disclosure – were also selected *a priori* with the hypothesis that facilitators would use them *more* in high bonding groups as part of general connection-promoting processes. This hypothesis was again only partially supported, with differences found across settings.



In Charlottesville, facilitators used humor roughly equally across high and low bonding groups (with slightly more use in high bonding groups), thus not serving as a particular marker of group bonding. However, *self-disclosure* was a notable characteristic differentiating high and low bonding groups, with facilitators using *and* receiving self-disclosure from students substantially more in high than low bonding groups (see Figure 4).

**Figure 4**

*Self-Disclosure and Facilitator Humor in Charlottesville High vs. Low Bonding Groups*



Charlottesville facilitators in high bonding groups effectively used self-disclosure to create a comfortable, open environment that was the context for successful connection at the group-level. They pulled on their own experiences, feelings, and perspectives to effectively elicit more self-disclosure from students. Referring back to the instance noted above in which a facilitator spends the first *14 minutes* engaged in spontaneous discussion with the students, a closer look at this exchange exemplifies how a Charlottesville facilitator of a high bonding group effectively wove self-disclosure throughout a casual conversation with her group members to deepen their connections.

**Vignette 5: Charlottesville Group 7 Session 7 – High Bonding Group**

*There is only one facilitator present in this session. Students enter the room, several of them dressed in costume for Halloween, and the facilitator asks about each student's costume and why they chose it. She then asks the students about their weekend:*

Student 1: Are you going to Coachella? *[an outdoor music festival]*

Student 2: I wish.

Facilitator: Beychella. *[a joke referring to Beyoncé, the musician to be headlining at Coachella]*

Student 3: What is Beychella?

Facilitator: Beyoncé took over Coachella. I'm actually a little mad that you didn't know.

Student 2: Hashtag #Beychella.

Student 3: I didn't know that.

Facilitator: Have you watched her performance yet? I went and watched like the stream of it.

...

Facilitator: How was everybody else's weekend?

Student 4: How was *your* weekend?

Student 2: Yeah.

**Facilitator: It was pretty good. My boyfriend came up to visit.**

Student 2: I was gonna ask – how have you all been?

**Facilitator: Went to – how have we been? We've been good. We're looking for apartments, so...**

**Student 3: That's a next step.**

**Facilitator: It's a step but it's also stressful because I hate looking for apartments in Charlottesville.**

Student 2: Oh, yeah?

Facilitator: Like, you have to say, "I want that one now," when they post it otherwise someone else gets it.

Student 1: That's true.

Facilitator: College town life, man.

Student 1: Yeah.

Facilitator: What about you all?

...

*Conversation returns to Halloween costumes. They discuss what other students dressed as, joking about inappropriate costumes with the facilitator joining in on the jokes. The group hears students in the classroom overhead laughing and stomping, which prompts the facilitator to tell a story about her loud upstairs neighbors.*

Facilitator: Amazing. I didn't think there were that many college kids in the complex I live in. Apparently, there are. So, it makes sense.

**Student 4: Are you in grad school?**

**Facilitator: I'm like in between. So, I graduated in 2016 and I'm gonna start grad school next year. So, it's like –**

Student 2: Does it ever get annoying, like the freshman college students?

Facilitator: It's really hard to tell who is who...it's hard to tell like who's what age.

Student 1: I'm sure.

**Facilitator: I've been carded trying to buy lottery tickets before and stuff, like I don't think anybody knows how old I am. So, they might think I'm a first year too.**

**Student 1: I don't know – how old are you?**

**Facilitator: 23.**

Student 3: It would be really hard to tell.

...

Student 1: You could be like 18 to 25.

Facilitator: It's kind of an ambiguous like age...Same with like young teens too. I would never know what age you all are, honestly.

...

**Student 5: Last year, I was mistaken for being a third grader.**

Facilitator: Oh, no.

Student 1: Oh, my gosh.

Student 2: So funny.

Facilitator: Does that – is that a good – how do you feel about that? *[Laughter]*

**Student 5: It's mainly just like funny. I think it's funny...**We were in the theater and the third graders were going one way and we were going the other way and it was Miss Kingsley.

Student 4: No, Miss Kingsley!

Student 5: She goes, "Come on, guys, we're leaving." ...and I was walking the other way with the eighth graders. And she grabbed my shirt, turned me around and started pulling me back the other way.

Facilitator: What?

**Student 5: She goes, "Come on, come on." And, um, and I just go, "I'm in eighth grade." She just goes, "Oh..." And turns around and walks the other way. *[Laughter]***

Facilitator: Oh, no.

**Student 5: And for the next like three months, whenever she saw me in the hallway, she always turned around and walked the other way.**

Facilitator: Oh, no. She probably feels really bad.

...

Student 1: I mean, knowing Miss Kingsley.

**Student 4: That's so funny.**

**Student 2: That's classic.**

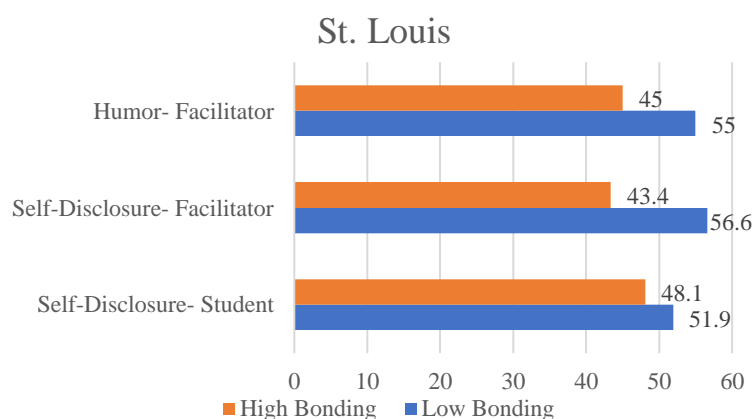
In this excerpt, the facilitator casually engaged the students in small talk about their weekend, their interests, and joined with them in their humor about their student experiences. She offered several personal, disclosing facts about herself – that she was in a serious relationship, that she was in an in-between age and place in life – that invited students to share their own personal stories (e.g., about being mistaken for a third grader). In this way, self-disclosure begot student self-disclosure that matched in tone and depth and elicited student support and engagement (e.g., "Oh my gosh," and "That's classic"). These lighter, less vulnerable self-disclosures paved the way for the remainder *of that same session*, which had numerous activities that asked students to share deeper, more personal stories. The facilitator

continued to disclose, sharing stories about moving schools and feeling betrayed by a friend, prompting students to share about their own moves, feeling lost and out of place, feeling overwhelmed by a friend's mental health needs, and being publicly harassed. This excerpt typified facilitator self-disclosure functioning as hypothesized, with more disclosure from facilitators being met with more disclosure from students, in a process that enhanced group-level bonding.

In St. Louis, a different pattern emerged; facilitators in St. Louis, used humor *more* and used self-disclosure *more* in low bonding groups than in high bonding groups, with similar student self-disclosure across St. Louis groups. (see Figure 5, below).

**Figure 5**

*Self-Disclosure and Facilitator Humor in St. Louis High vs. Low Bonding Groups*



These findings reflect that in St. Louis, when a group was not connecting well, facilitators leaned even more heavily on the tools at their disposal – namely, themselves. In Charlottesville (where facilitators were less experienced working with adolescents) facilitators were more likely to demonstrate use-of-self in groups that connected easily, sharing more about themselves and effectively learning more about students in turn. In St. Louis, facilitators made

even greater efforts to infuse their character, humor, and personal narratives into low bonding groups to jump-start group-level connection, using themselves as the spark. They worked harder in low bonding groups to achieve similar results (although not identical, see Theme 2) with regards to student self-disclosure. The following excerpt demonstrates how facilitators leaned into their personalities and humor to create a sense of connection in their group.

### **Vignette 6: St. Louis Group 11 Session 5 – Low Bonding Group**

*The facilitators open the session by asking students if they had completed the “homework” assigned the previous session – to pay someone a compliment and notice their reaction.*

**Student 1: I did the homework.**

**Facilitator 1: You did? What happened? How’d it go? What they say? Tell me all – tell me everything.**

Student 1: I forgot some of the compliments.

Facilitator 1: That’s okay.

...

**Student 2: I told my grandma she was nice the other day.**

**Facilitator 2: What’d she say?**

**Student 2: She said, “What do you want?”**

**Facilitator 1: Yeah. Make sense. [Laughs]**

**Student 2: [Laughs]**

*Students become quiet as sharing dwindles. The facilitators then spend several minutes each telling stories from their lives; they share about their pregnant co-worker who was “glowing like Beyoncé,” one facilitator talks about spending time with her father, and the other about helping a neighbor chase their young child who had run down the street. The stories are humorous and the facilitators’ banter gets some laughter from the students.*

*As this group is the quiet, ‘difficult-to-engage’ type, the facilitators introduce “emoji-cards” (flashcards with cartoon emotion faces) to help students share about how they’re feeling that day without needing to rely extensively on discussion. A facilitator jokes that there was “an incident with a Capri Sun in a bag, so they might be a little sticky...It was a tragedy, sorry.” Students select the card that represents their mood and share to the group. Several students share that they’re feeling “just okay,” “chill,” or “tired.”*

Student 3: I chose this one. The crying face.

Facilitator 1: Oh no.

**Student 3: Because I’m very emotional today.**

**Facilitator 2: Oh. I’m sorry.**

**Facilitator 1: We need to get somebody? [joking about tracking down whoever hurt the student’s feelings]**

Student 3: No.

**Facilitator 1: You sure? Because we can go have a talk with someone.**

**Facilitator 2: We have done it before.**

**Facilitator 1: Okay. Just see us if we need to go get somebody. Think on it. If you need us to handle your life weight, just let us know.**

**[Laughter]**

**Facilitator 1: We got you.**

The facilitators in this scene were playful and humorous. This group was difficult to engage; they were not generally talkative, there were often pauses between facilitators' questions and student responses, and students tended to speak very quietly. The facilitators infused the group with energy by making jokes and telling stories, responding to one another with interest and follow-up questions to model the behavior they wanted to see from the students. They used casual self-disclosure to help students really get to know them. Importantly, the facilitators made it clear that they liked and cared about the students. When a student shared that she was feeling sad, the facilitators immediately (and facetiously) offered to track down the emotional offender to "have a talk" with them and "handle it" for the student. The facilitators played off one another, building on one another's humor, and implicitly inviting the students to be a part of their connection. Through this humor, they also made it clear that they would be there for the students to support and protect them.

Yet, this was a *low* bonding group; despite facilitators' increased use of humor and self-disclosure in St. Louis, their efforts did not result in increased group-level connection. They did, however, appear to effectively build *individual* relationships between facilitators and students, creating a foundation of trust upon which group-level connection might be built. The next theme explores this idea in greater depth.

**Theme 1 Summary: Role of facilitators beyond simply administering the curriculum**

- High bonding groups in both settings had more dynamic, spontaneous discussions apart from curriculum elements than low bonding groups.
- Beyond this overall finding, a major difference emerged across the two settings, such that facilitators in St. Louis typically had to work harder both in terms of amount of speech and in use of humor and self-disclosure in low bonding groups, simply to keep the group process moving forward. Whereas in Charlottesville, even the low-bonding groups at least went through the motions of participating in the group process. More specifically:
  - In St. Louis:
    - Facilitators were *more* active (i.e., spoke more often compared to students) in low bonding groups than in high bonding groups, likely in response to low bonding groups either being ‘difficult-to-engage’ or ‘difficult-to-control’ and thus requiring more facilitator intervention.
    - Facilitators used *more* humor and self-disclosure in low bonding than high bonding groups, which may have served to build stronger *individual* relationships with the students.
  - In Charlottesville:
    - Facilitators spoke roughly as many times as students in both high and low bonding groups (i.e., the low bonding groups did not require as much facilitator intervention to keep talking).
    - Facilitators used more self-disclosure in high than low bonding groups, where it felt easy and comfortable for facilitators to engage and to be themselves.

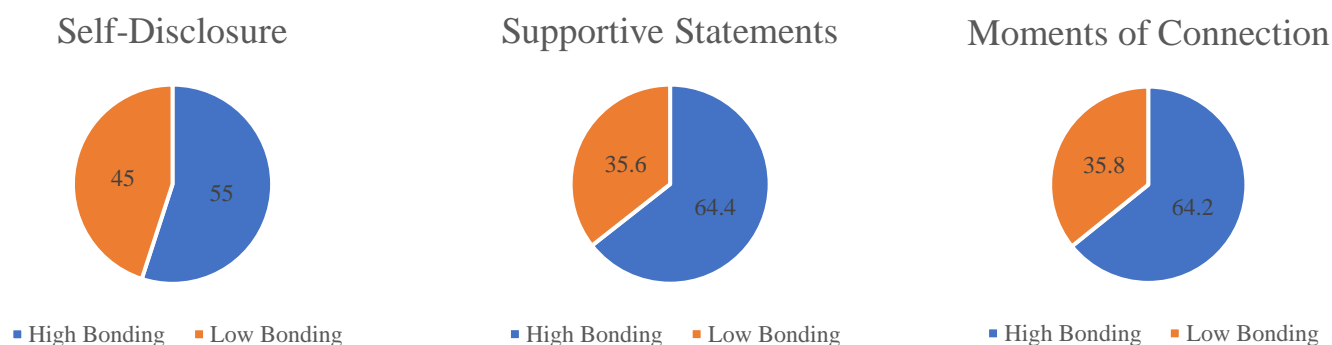
**Theme 2. Relation of group-level trust to group bonding, and students’ baseline openness.**

According to Tuckman’s model of group development (Tuckman & Jensen, 1977) and the models that have followed from it, group members begin to work together more effectively and gain trust in one another during the ‘norming’ phase. This trust is essential to group cohesion; without it, groups cannot achieve the desirable ‘performing’ stage, as they are unable to rely on one another and relax into a comfortable, safe dynamic. Although not measured directly in the current study, ‘trust’ as a construct was inferred from a constellation of variables – student self-disclosure, student supportive statements, moments of connection – that are all closely tied to trust as a concept and reflect elements of comfort, safety, and confidence among groups that will here be referred to as ‘trust.’ The higher rates of these codes in high bonding groups as opposed to low bonding groups indicates that trust was a significant differentiator

between groups that resulted in the greatest vs. the least positive *change* in individual students' reported relationship depth with their groupmates, even *after* accounting for their initial level of openness to their groupmates in pre-intervention surveys (See Figure 6).

**Figure 6**

*Elements of Trust in High vs. Low Bonding Groups*



*Trust in High Bonding Groups*

The finding that high bonding groups had more group-level trust is important, but perhaps unsurprising. More informative is understanding how they *built* trust as a group, given that the outcome measure of bonding already accounted for their pre-intervention levels of self-reported openness to their groupmates. In high bonding groups in both settings, trust was built because members in groups that were ultimately high bonding were willing to share personal information earnestly and early in the curriculum, eliciting curiosity and support from the group, leading to moments of connection that enhanced comfort with and trust in the group. The following excerpt captures this type of exchange that characterized high bonding groups.



**Vignette 7: St. Louis Group 1 Session 5 – High Bonding Group**

*The session opens with facilitators asking how everyone's weekend had been. It was Homecoming, and students take out their phones to share photos with the facilitators.*

Facilitator 1: You look so pretty. *[referring to a photo being shown by a student]*

Student 1: Thank you.

**Facilitator 2: Did you have a date or did you go with friends? Why does everyone giggle about this? I feel like you all are not telling me something. What? Did you go with anyone?**

**Student 2: Yes, she did.**

...

Facilitator 1: You're blushing. Okay. We don't have to talk – is this your boyfriend? No? Okay.

Student 2: This is the previous boy that she liked.

**Student 4: *[referring to the photo]* That's cute.**

**Student 1: Girl, why's you tell – why is you telling everybody my business?**

**Student 2: Because you all are so cute.**

**Facilitator 2: Oh my goodness, you all *are* so cute.**

...

**Facilitator: Is he a nice guy?**

**Student 1: Yeah.**

**Facilitator 2: Yeah?**

**Student 1: He and my mom met. We went out to eat afterwards. He met my mom. I met his mama.**

**Student 4: Oh my god, you all better stay together.**

Facilitator 2: Were you nervous? Was it kind of weird?

Student 2: You know how parents are.

**Student 1: It was weird. They was talking for like 20 minutes and they got each other's numbers and stuff, his mama and my mama.**

**Student 3: About to be best friends.**

**Student 1: He's trying to make it all like all sneaky and stuff. So, I was sitting at the table with my mom and then and he was like, "Here's the money..."**

**Student 2: Oh, that's so cute.**

Student 3: Money for your all what?

Student 1: Food.

**Student 3: He paid for the food?**

**Student 1: Yeah.**

**Student 3: That is so nice.**

*The students continue talking about their weekends, with one student sharing that she had met a group of "Jamaican males" with "accents and everything" who were "so hot." The students also ask the facilitators about what they had done over the weekend.*

In this excerpt, a student's willingness to be open about her experiences and feelings in this casual discussion pulled for warmth and support from her group members (e.g., "That is so nice," and "Because you all are so cute"). This type of connecting exchange (the excerpt above was coded also as a 'Moment of Connection') set a foundation for deeper and more vulnerable sharing later in the group's development; in other words, a growing trust in the safety of the group was foundational for group-level bonding. This very idea that was named explicitly by this group *later in this same session*. In the following excerpt, the group acknowledged that trust already was, and would only grow to become more so, a key element to their group's success.

### **Vignette 8: St. Louis Group 1 Session 5 – High Bonding Group**

*The group has just completed an activity entitled, "If You Really Knew Me," which asked students to anonymously respond to a series of prompts beginning with, "If you really knew me..." and a number of different statements to complete the prompt. In the first round, prompts are less vulnerable (e.g., "you would know that one thing I'm really proud of is..."). In the second round, the prompts require more vulnerability (e.g., "the thing I find hardest in my life is..."). The facilitators have just read the responses aloud from the second round; they included worries about wanting to be liked by everyone, having OCD and anxiety, not being taken seriously by others, and worries about family, failure, and loss.*

Facilitator 1: Was there anything that surprised you about any of the responses?

...

Student 1: They're all relatable.

Facilitator 1: They're all relatable? Yeah. How did it feel answering these questions?

Student 2: Um, harder than the first one.

Facilitator 1: Yeah. Why?

Student 2: Because they're deeper.

**Facilitator 1: Why is it harder to share deeper information?**

**Student 1: Because we don't know each other – like we know each other but we don't know each other.**

**Facilitator 2: Yeah. Some of our relationships aren't as deep or we don't know each other as well. And so...why did that play a role in us maybe not feeling as comfortable?**

Student 3: Because we've only known each other since the beginning of the year or since we've, um, been in this one program.

Student 4: We're just like still getting to know each other and stuff.

**Facilitator 1: And so, why would we not want to share like deeper stuff about ourselves?**

Student 1: Because we're not that deep.

Student 4: Not close.

**Student 5: Scared.**

**Facilitator 1: Maybe scared? What could the fear come from?**

**Student 2: Probably judgement and stuff. You know.**

Facilitator 1: Yeah. So, maybe people will judge your answers or judge something about you. What else? What are things that people worry about that would keep them from wanting to share stuff?

Student 2: How they would come off.

Student 1: Reactions.

Student 4: Yeah, what she said, reactions.

...

**Facilitator 1: So, why would we do this? Why would we *want* to share these things?**

**Student 1: I guess so we can get close to each other and know each other more.**

**Student 2: Like, so you can talk to somebody about it to like build trust. So, if you have a problem, you know that like you can come here and talk about it.**

**Student 3: Build a friendship.**

**Facilitator 1: Yeah.**

Facilitator 2: Is that good?

Student 3: Yeah.

Facilitator 1: Cool. So, the activities that we do...some of them will be like lighter stuff, like the first part...where we just kind of talked about things that we're good at. And some of it might be a little bit deeper. It might make you dig a little bit deeper into, you know, things that you're worried about or things that could be kind of hard...**Are we aware of what vulnerability means, like what it means to be vulnerable? Yeah?**

**Can you all kind of explain in your own words what you think that means?**

**Student 4: Like when your emotions are all over the place and it's just like – people take advantage of that.**

**Facilitator 1: Okay.**

**Student 2: Or it's like you feel cornered.**

Facilitator 1: Mm –

Student 2: Like if you tell someone too much information and then they just –

**Student 3: Or you give them an opportunity to do that. You like put yourself out on a limb or whatever.**

...

**Facilitator 1: Yeah. Like you put yourself out there, right? Yeah.** So, you give them an opportunity to do something good or something bad with whatever information you give them.

**Facilitator 2: And what I'm hearing is that it sounds like some of you guys have some pretty negative connotations with being vulnerable...So, is being vulnerable, is it always a bad thing?**

**Student 1: No.**

Student 2: No.

**Student 3: Because you can't be strong all the time. You've got to be vulnerable to at least one or two people.**

**Student 1: That was so nice.**

Facilitator 1: But it can be kind of hard.

Student 3: Yeah.

**Student 4: It has to be the right person.**

**Student 1: The right person, the right one.**

...

**Facilitator 1: I appreciate you all sharing. I just want to say like I appreciate it. Like I recognize that can be difficult sometimes and it does take a certain degree of trust and I really appreciate that you all trust this group enough to share.**

Here, students anonymously shared personal information with their group members and heard it being read aloud. The group then explicitly and with a fair degree of candor processed how difficult it was to share deeper content with the group, acknowledging together that sharing more intimate parts of themselves required *trust* within the group. They identified that sharing was necessary for deeper connection, and trust was necessary for sharing safely. With prompting from the facilitator, they went on to explore the role of vulnerability. The students struggled somewhat to define the word, describing associations with being “cornered” or “taken advantage of;” the facilitators helped them frame vulnerability as a choice – “putting yourself out there” – and students were able to articulate that it is *good* to be vulnerable within the context of *trust* (e.g., finding “the right person”). The facilitators then reflected that the group already trusted one another enough to share within the session, helping to make salient their growing sense of safety.

In sum, groups that resulted in the greatest positive change in individual students’ ratings of relationship depth with their fellow group members were those that engaged in a *process* in which (1) students were open about their lives and experiences early in the curriculum, (2) this openness was met with interest and support from fellow group members, which (3) created moments of connection at the group level, that (4) increased *trust* in the group as a safe space to share.

### *Trust in Low Bonding Groups*

Groups that were ultimately low in bonding were marked by the *absence* of the process noted above. Similar to how a sense of trusting openness was infused throughout high bonding groups, a sense of mistrust permeated low bonding groups. In its most covert form, this manifested as biting humor and is explored in greater depth in Theme 4, below. But more generally, the students in low bonding groups in both St. Louis and Charlottesville were acutely

aware of their reticence to trust others and discussed it openly. Following is an excerpt from a low bonding Charlottesville group, also a session 5 (as above), in which students openly question the wisdom and value of trusting others.

### **Vignette 9: Charlottesville Group 8 Session 5 – Low Bonding Group**

*The facilitators have just attempted to lead the students through a trust exercise, leading a blindfolded partner through an obstacle course. The students were fairly disengaged during the task. The facilitators then initiate a conversation about trust, both within the group and more generally.*

Facilitator 1: So...what do you guys think trust means to you? Like, what does it feel like or what – **how do you know you trust someone?**

**Student 1: You don't.**

Facilitator 1: You don't?

*(A student laughs)*

**Student 1: I don't trust many people, yeah.**

**Student 2: I don't [either], yeah.**

Facilitator 1: But do you have somebody that you do trust?

...

**Student 1: I trust myself.**

**Facilitator 1: You trust yourself?**

**Student 1: Yeah.**

*(Laughter)*

Facilitator 1: That's important. That's good. Yeah.

**Student 1: Self-trust. Trust nobody else.**

...

**Student 2: Trust nobody else.**

**Student 3: It's a dog-eat-dog world.**

**Student 1: Exactly.**

...

*The facilitator then introduces an activity and explains that students are to move to one wall if they agree with a statement to be read aloud, and another wall if they disagree with the statement.*

Facilitator 1: So, first statement is... **"it is difficult to trust others."**

Student 1: I'm gonna stay where I am. *[On the wall that would indicate agreeing with the statement]*

**Facilitator 1: All right. So, everyone agrees with that statement.**

**Student 2: It's kinda depressing.**

Facilitator 1: Anyone want to say why? Why they're standing at agree?

**Student 3: I mean, I don't think it's good ... to easily trust someone.**

...

**Student 2: If you too easily trust someone, they could hurt you.**

Facilitator: Mmm.

Student 4: You also shouldn't be too [pessimistic] and think the worst of everybody. I mean.

Facilitator 1: Okay. So, it's like you have to strike a balance between not trusting too easily because you might get hurt but then also –

Student 4: Also, letting yourself trust people.

**Facilitator 1: ...What's the benefit of letting yourself trust a little bit at least?**

**Student 4: Because then you're not, like, completely alone.**

...

**Student 3: And you have people that you can, like, tell things to.**

Student 4: Yeah.

Student 1: Here's another question.

Student 4: Oh, here we go.

Facilitator 2: We're ready.

**Student 1: Telling people your secrets or whatever, so trusting people, does that help you in any way?**

**Facilitator 1: Does trusting people help you?**

**Student 1: Or does it only hurt you?**

Facilitator 1: I would throw that question back to you. What do you think?

Student 3: That's a good question.

**Student 1: I think it can only hurt you.**

...

Facilitator: And why is that?

...

**Student 2: You don't know if people are gonna turn on you.**

...

Student 1: And, I mean, like, so what? You tell them something and they keep it a secret. Did that help you at all? I mean, I guess you let out your feelings but you can let out your feelings to a tree. You can just talk to something –

Student 2: Your dog, your cat, your fish, or –

...

Facilitator 1: What's the difference between talking to, uh– a dog or an inanimate object versus people?

...

Student 1: Well, people will tell people and the dog can't.

...

**Facilitator 1: Okay. So ... does talking to people sometimes – does that ever have any benefit? Or trusting people in general?**

**Student 1: Not for me.**

...

Student 2: Oh, yeah, there are totally benefits. But, I mean, do the benefits outweigh the non-benefits?

...

Student 3: Yeah, do you want to take that risk?

...

*The students then engage in a discussion about trust as a liability, noting that even if someone seems trustworthy for a long time, they could always betray you.*

Facilitator 1: So, it's sounding like there's just a lot of, like, cons to trusting anyone.

Student 4: That's [Private School]. (*school name redacted*)

(*Laughter*)

...

Student 2: Welcome to [Private School]. Where we stab you in the back. [*a joke based on the school name's acronym*]

This vignette captured several important aspects of low bonding groups with regards to trust. First, the ethos around trust vacillated and was sensitive to the *most negative student*, such that statements made by group members with strong personalities set and shifted the tone in a way that explicitly undermined trust-building. Here, the group was initially expressing hesitation about trusting others but this was seemingly balanced by an underlying assumption that trust was fundamentally good and important (e.g., to not be “completely alone”). An influential student then posed the question of whether trust was *ever* worthwhile, drawing the rest of the group to weigh their doubt more heavily and shift the tone of the conversation towards trust as foolishness or weakness. This negative ‘pile on’ effect occurred often in low bonding groups in response to a more dominant personality establishing a norm. Based on the group’s response to the dominant group member presented above (Student 1), it was likely that this student had sufficient social status to rally agreement around his ideas.

This vignette also reflected, more broadly, that members of low bonding groups behaved as though they were simply not ready to trust an entire group of people. In short, students in low bonding groups did not or could not engage in as much vulnerable self-disclosure and support-giving, which were crucial elements to the process of building group trust.

#### *Trust in facilitators as a precursor to group-level trust*

Part of students’ building of trust as a group seemed to depend on students first trusting their facilitators. As introduced in Theme 1, students in high bonding groups engaged in more dynamic, back-and-forth sharing early on with their facilitators, indicating that they liked and trusted their facilitators almost immediately. In other words, trust in facilitators was *automatic* in high bonding groups across settings, and seemed to provide a foundation of trust that grew rather quickly. In contrast, students in low bonding groups were disengaged from facilitators and/or

pushed back against facilitators' efforts to have the group connect. Students in low bonding groups simply did *not* implicitly trust the adults in the room.

How facilitators managed this lack of trust differed across settings. Again tying back to the results from Theme 1, Charlottesville facilitators engaged in and received substantially less self-disclosure in low bonding groups compared to high bonding groups, whereas facilitators in St. Louis leaned into their interpersonal tools, using *more* humor and self-disclosure in low than in high bonding groups. This difference seemed to result in *individual students* feeling more connected to and trusting of the facilitators in St. Louis low bonding groups by the end of the curriculum (excerpt illustrating this process is presented below). There was no evidence of this process in Charlottesville low bonding groups.

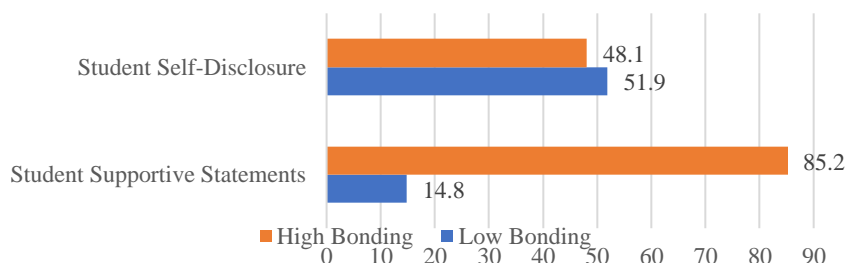
The question, then, is if St. Louis facilitators in low bonding groups more effectively gained individual students' trust, and trust in facilitators was a key step towards building group trust, why did St. Louis low bonding groups not exhibit signs of trust at the group-level? Two nuances in the data help answer this question. First, while St. Louis facilitators elicited roughly equal numbers of student self-disclosure in both high and low bonding groups (see Figure 7, below), the quality and content of the sharing differed. The 'self-disclosure' code captured anything shared in the group that met the "stranger on the bus" criterion as defined by the codebook; this meant that coders counted any comments shared by group members that likely *would not* have been shared to a stranger on a bus. Therefore, even within this code there was a range in depth and vulnerability of the comments. In St. Louis low bonding groups, student self-disclosures were less intimate on average than those shared in St. Louis high bonding groups. Second, there were far fewer *supportive statements* made by students in low bonding groups than high bonding groups (see Figure 7), suggesting that even when students responded to facilitators'



increased efforts to connect with some self-disclosure, it was *not met with support* and thus did not serve to ultimately further group-level connection.

**Figure 7**

*St. Louis Student Self-Disclosure and Supportive Statements in High vs. Low Bonding Groups*



Taken together, this suggests that facilitators' use-of-self in St. Louis low bonding groups seemed to build trust with individual students, but without the *process* seen in high bonding groups of students' vulnerability being met with student support, it did not rise to the level of group trust. The following excerpt demonstrates each part of this process.

#### **Vignette 10: St. Louis Group 11 Session 10 – Low Bonding Group**

*The group has just finished an activity in which students reflected on a memory each from Elementary School, Middle School, and the Past Year. The student below is sharing a story from Elementary School.*

Student 1: So, like the teacher went out of the class, right? And, then we start talking, right? And, then this girl ask me, did I like her as a friend? So, I said no. And, I got in trouble for no apparent reason. *[Laughter]*

Facilitator 1: By who?

Student 1: The teacher.

Facilitator 2: Why?

Student 1: Because she was crying. Yeah, I remember that.

Facilitator 1: You got in trouble with the teacher because you said you didn't like [that girl]?

...

Student 1: It was in third grade.

**Facilitator 1: Yeah. It's okay to not like someone. At least you were honest with her.**

**Facilitator 2: She wasn't ready for the truth.**

**Facilitator 1: She wasn't ready for honesty.**

**Facilitator 2: Sure wasn't.**

**Facilitator 1: That's a great story.**

...

Facilitator 1: Did they call your parents?

Student 1: I don't know. When I got home, I got in trouble though.

...

Facilitator 2: Did your parents say you were being mean?

Student 1: Uh-huh.

...

Facilitator 1: You know I've done that. You know I've done that.

...

Facilitator 2: See, and what if you would've lied to her though. And then all these years she would've thought you liked her as a friend. And then when she got older and found out you didn't, she'd be even more heartbroken. So, you really just saved her a lot of hurt.

**Facilitator 1: You did the right thing.**

...

**Facilitator 1: Thank you for sharing. Thank you. I love that story.**

**Facilitator 2: It's a really good story.**

Facilitator 1: I'm going to take it as my own. I'm just going to use it myself. So, all right. Um, so we're going to kind of do one more round of like, um, memory, experience. And we're going to dig a little bit deeper on this last one.

*[Student 1 sighs]*

**Facilitator 1: I know. You're doing such good digging. You're doing a great job.**

*Next, the facilitators explain that students should think about an experience or a challenge that they have overcome that has shaped them into the person they are today. They hand out a prompt sheet that guides students to write about the challenge, why it was hard for them, and what they gained from having gone through it.*

Facilitator 1: Okay. Would anyone like to share their [story] with the group?

*Several students share their stories (below) – note that facilitators, but **no students, respond to the student who shared** after each story.*

Student 2: Um, things I jotted down below, I said, in middle school, you find out who your real friends are.

**And you have to be careful who you tell your business to because in middle school, a lot of stuff is going around. And it was just a bunch of stuff. ...It shaped me by not trusting a lot of people.** Thinking wisely and watching who to hang around more often. And then the last one, I said, I learned to have [very few] friends because a big crowd of friends, your business get out to everyone. And you get into a lot of fights, too.

Facilitator 1: Thank you for sharing that.

...

Student 3: I said... dealing with a lot of fake friends that changed...It was hard because I felt like as soon as I got close to someone, like, they started acting funny around others. **It shaped me by showing me that all I got or really need is myself.** And then, um, I grew by I stopped hanging around them and stayed to myself, which bettered me and kept me away from the drama with unreliable people.

...

**Student 5: Um, my parents would pay me for every "A" I get. And shape me by getting A – getting "A's" as a habit instead of an objective. And, the positive thing is they pay me for everything – for something I'm already good at.**

**Facilitator 2: Mm-hmm.**

**Student 5: That's it.**

...

***Several students decline to share their stories when invited to share by facilitators, including Student 1. The facilitators then share their stories, which are very personal and deep; one facilitator shares about experiences with racism as a young child, and how they inspired her to fight against racial injustice. The other facilitator shares her experience of having been in the foster care system and being adopted. No students respond to either story at all.***

Facilitator 1: Thank you, guys, for sharing what you shared. Um, next week is our last session. So, we really wanted to do this activity because it's kind of like our final chance to really share something about who we are. Um, next week will be – I think a good session. It will be exciting. It'll be fun. Um, so just kind of be mindful of that, knowing that next week's our last session...

*[Bell rings]*

You can recycle or take with you all the papers *[referring to the prompt sheet the students just completed]* and just leave your pencils on the table. Have a great day.

*[Students shuffling bags, students leaving the room]*

**Student 1: I'm gonna leave mine with you guys *[referring to leaving his story with the facilitators]* and you guys can read it.**

**Facilitator 1: Okay, if you'd like us to.**

**Student 1: Yeah, I want you guys to read it, I gotta go to class.**

**Facilitator 2: Yeah, we'd be happy to read it.**

*[Audio ends]*

This excerpt began with facilitators working hard to relate to a student about their story; they sided with him, they made jokes with him, and they gave him considerable praise for being willing to share. This is one example of many of the St. Louis facilitators working to build relationships with *individual* students in their low bonding, less trusting groups. This kind of individual-level focus paid off when, at the end of the session, *the same student* left his story for the facilitators to read on their own. This signaled that the student trusted the facilitators, *even though he may not have trusted the group*. The second activity in the excerpt highlighted that the content of students' self-disclosures in low bonding groups were somewhat guarded and less deep and vulnerable, with several students speaking explicitly about important life experiences that taught them *not to trust others*. Last, it showcased the lack of student supportive statements in response to sharing that characterized lower levels of trust and connection among group

members. In sum, this excerpt demonstrated that individual students seemed to grow to trust their facilitators in low bonding groups, but devoid of students supporting one another in their vulnerability as in high bonding groups, *group-level* trust was not achieved.

*Quantitative finding on the importance of baseline openness*

Underlying both of these findings – that high bonding groups more effectively built group-level trust, and that high bonding groups automatically trusted facilitators whereas low bonding groups did not – is a consideration of the general *openness* of the individual students who comprised the groups. I examined this quantitatively to examine whether students' baseline levels of openness towards their peers was related to the *group's* change in bonding score.

For this analysis, I used the same sociometric measure used as the outcome in Phase I, but instead of taking the average of group members' ratings of relationship depth with their fellow *groupmates*, I examined the average ratings of relationship depth for *all* of a student's classmates (i.e., in their *TCP* group, in the control group, and non-participants) to serve as a proxy for that students *baseline openness* with their peers. These individual scores were aggregated to the group level and correlated with the group-level outcome variable, change in group-level bonding. These correlations were positive in both samples –  $r = 0.11$  in St. Louis,  $r = 0.23$  in Charlottesville – although not significant which is unsurprising given the small numbers of groups involved. This finding suggests that a group's development was at least partly dependent on who was in it; individual group members' baseline, general openness towards relationships with their peers at the start of the intervention impacted group-level processes that resulted in the group building more – or less – group trust, and ultimately, was related to group

bonding. In short, students' level of openness with their peers at the start was related to how connected the group could ultimately become.

### Theme 2 Summary:

- High bonding groups demonstrated more group-level trust than low bonding groups.
  - High bonding groups built this trust through a process of student openness being met with support from the group in a way that furthered connection; this process was able to take hold because students were comfortable being open early on in the curriculum.
- High bonding groups demonstrated implicit, automatic trust in facilitators, but low bonding groups did not.
  - In St. Louis (but not in Charlottesville), facilitators' use-of-self seemed to build trust with *individual* students, but without the group engaging with vulnerability and support, it did not rise to the level of group trust.
- These findings may be explained, in part, by the baseline openness with which students entered the group.

### Theme 3: The role of discussions of group members' most salient identity stressors across contexts.

A third important theme that emerged in characterizing groups that resulted in student's reporting the greatest versus the least positive change in the deepening of their relationships with their group members was in *how* and *how often* groups discussed aspects of marginalized identities. These discussions of various identities occurred in large and small ways, through humor, cultural references, and deep disclosures of personal experiences. Codes for 'Discussions of Marginalized Identities' broadly captured references to or discussions about: racial/ethnic minority people and/or racial/ethnic stereotypes; gender as a basis of discrimination and/or gender stereotypes; sexual orientation; poverty; and mental illness. I first present findings of patterns that emerged in how these discussions were had in high vs. low bonding groups across settings, then present important differences in the frequency and content of these discussions between settings.

*Comparing High vs. Low Bonding Groups' Discussions of Marginalized Identities*

Every instance of a low bonding group discussing marginalized identities across both settings fell into one of five categories:

(1) A group member offered a one-off reference or comment that introduced an aspect of identity into the discussion but was not further discussed by the group. For example, in Charlottesville Group 8 Session 2, there was a brief conversation about recommending the movie, “Love Simon,” which chronicled the coming-out story of a gay teenage boy, and in St. Louis Group 30 Session 12, there was a reference to the show, “Dear White People” but in both cases, *no one* replied or engaged in further discussion about these topics.

(2) The topic of marginalized identities was directly introduced by the curriculum, and students responded accordingly. In the second year of data collection, a session was added to explicitly discuss race/ethnicity and gender; the students watched two short videos on stereotypes, and answered some discussion questions. Additionally, stories specific to marginalized identities were added to a session in which facilitators read aloud brief narratives from adults who had overcome challenges. As such, some of the identity discussions were the result of more structured questions or activities. For example, in St. Louis Group 11 Session 7, the facilitators read a story to the students entitled “Race and Connection” about a young person who felt they did not fit the stereotypes of their racial/ethnic group that were prevalent in their high school.

Facilitator 1: Was anything surprising about what you guys heard? Was there something like you had never heard before, you had never thought of before in those two stories?

**Student 1: The race story because I’ve got a mixed friend. She looks more white than she looks black and when we hang out, all of us hang out together. People look at us when we go out like, “Why is she hanging out with us?” But she’s mixed.**

In this example, a student was able to share an example from her own life about racial identities because the topic was introduced explicitly by the curriculum.

(3) In other cases, marginalized identities were introduced into the group by the facilitators via facilitator self-disclosure, but students did not respond to the disclosure with their own stories and the topic was not further explored.

### Vignette 11: St. Louis Group 11 Session 10 – Low Bonding Group

*The group has just completed a handout in which they reflected on a challenge that they have experienced, what was hard about it, and how it shaped them. A facilitator shares her story first.*

Facilitator 1: Okay. Um, so I wrote about, um, the challenge **I wrote about were like racist incidents that happened when I was in elementary school. So, I had a friend who was Indian-American and her parents would not let me in the house...** They let our White friends in the house. And, they just like really – like, I couldn't come in because I was Black. **And then I had a White friend whose sister would call me the "N" word.** And what was hard about it was that I felt less than. I felt less than a person. Um, and I liked my friends. I wanted to have a friendship but there was always that barrier. So, I eventually stopped being friends with them. And I learned that – I mean, I was little, and my parents taught me about racism but I experienced it first-hand and so I knew that it was real. **And I knew that people in the world would hate me just because I was Black before they knew me at all.** Um, and I learned that I never wanted anybody else to feel how I felt. And, so that, I think, really shaped me in being open and accepting everybody regardless of their race or ethnicity because I would hate for them to feel how I felt. That was mine.

*No students respond to the facilitator's story. The room is quiet. The second facilitator asks two students if they would like to share, and they decline. **The themes of racism and discrimination that the facilitator introduced are not discussed further.***

(4) Occasionally, it was a *student* who introduced or self-disclosed around a topic of marginalized identity, but the *group* failed to deepen the conversation. In these cases, the facilitators noted relevant themes or emotional experiences, but the group did not further engage beyond the facilitators' responses to the student's self-disclosure.

**Vignette 12: Charlottesville Group 2 Session 10 – Low Bonding Group**

*As above, this session has just had students complete an activity in which they chronicle a challenge that they've overcome in their lives. (Edited very slightly for clarity).*

Student 1: So...I was in sixth grade when **my family moved to America from Vietnam**. And then it was tough because...my dad [didn't] really know where to send me to school. So, he sent me and my brother to a public school near Georgetown. It was like really not that good.

Facilitator 1: Hm-hmm.

Student 1: Like the teachers and the people were good, **but then it started to happen [that] people [would]start to make fun of me because of things like where I came from and stuff like that**. And then there is a guy who's, like, one day just started to bully me out of like, no reason...Like after a year or so in seventh grade, I start to get over it and then one day, like, when he did that to me as usual, like, **hit me down, knock me down and drag me back around**, I would just dodge him and fight him back...Nobody really want to get involved because he's, like, ninth or eighth grader or something. So, nobody wants to get involved into it because he's like a really famous bully. And then we would both, like, get called to the principal, and then after that he stopped bullying me...That make me feel stronger... and taught me how to take risk, and then makes me tougher and want to help other people out because if they're in my situation, and I feel like I can't really talk to anybody, because I was afraid of being beaten.

...

**Facilitator 1: Wow.**

**Facilitator 2: It sounds like ... it was the lesson of standing up for yourself, but not just that, of like finding the courage to stand up for other people, and fighting through a really tough situation.**

Student 1: I think so.

Facilitator 1: Wow. Thanks for sharing.

Facilitator 2: Yeah.

Student 1: Thank you guys for listening (*seems to be referring to the facilitators*).

***The group switches topics to another student's story without any comments from student group members.***

In this example, the facilitators summarized some of the themes (e.g., standing up for oneself and for others) and gave the student affective feedback (e.g., Wow). But the other students in the group did not respond with support or with their own stories related to identity-based victimization. Of note, the facilitators did *not* engage with a key theme in this student's story of being bullied *because of his race/ethnicity/country of origin*.



(5) Finally, several of the more personal student self-disclosures around issues of marginalized identities were *anonymous*. These were often part of the “If You Really Knew Me” exercise in Session 5. For example, in a Charlottesville low bonding group Session 5, a student anonymously shared, “The thing I find hardest in my life is depression that makes it difficult to even say ‘hi’ to people.” And similarly, in a St. Louis low bonding group Session 5, a student anonymously shared, “If you really knew me, you’d know that the one part of the real me that people are most likely to not realize is that I struggle with depression.” These disclosures around marginalized identities (in this case, mental illness) were offered only within the context of anonymous sharing, and did not lead to deeper discussions.

Taken together, these types of exchanges about marginalized identities in low bonding groups are consistent with findings presented above; they indicated less engagement, self-disclosure, and support, meaning that *they were unable to build trust through these discussions*. As low bonding groups did not or could not engage in the process of trust building as a group in other ways (see Theme 2), they lacked a necessary foundation for engaging in discussions of marginalized identities safely. In short, low bonding groups were *less likely to engage with and deepen the discussion* in a way that built group-level connection.

Accordingly, high bonding groups modeled just that – a deepening of discussions about race, ethnicity, mental health, or other aspects of marginalized identities when introduced by either the facilitators, students, or the curriculum itself. The following excerpt presents a high bonding group from the same session in the curriculum as the previous two excerpts from low bonding groups (note: Session 9, below, contains the same curriculum elements as Session 10, above). The facilitator again uses self-disclosure to introduce the topics of racism and

discrimination, but in this group the students engage with the issue using their own stories and experiences to create a deeper and more connecting group experience.

### Vignette 13: St. Louis Group 25 Session 9 – High Bonding Group

*The students have just been tasked with completing a worksheet about a challenge they've overcome and how it has shaped them.*

Facilitator 1: So, I wrote that in elementary and middle school... **I was bullied a lot because of my race. Um, from Black kids and white kids.** So, Black kids said that I talked like a White girl, and I wanted to be White... And White kids said that I was the Whitest Black girl they knew, and I was a good Black person if they were my friends, or they straight out called me the n-word... I didn't feel accepted from any side. Like, I was getting made fun of and hurt from my own people, and from White people... ways that I grew from those situations is that **it confirmed that racism is real, and stills exists**, and that I would never treat anyone like that because of their race... **And I learned that there's no one way to be Black. So, for me, being Black is who I am.** It's not like I have to act a certain way, or dress a certain way, or talk a certain way... I am Black. And so, all that negativity just helped me, kind of, realize that. So, that's my story. [Applause] Thank you. [Laughter]

...

*The facilitators give the students several minutes to think and to write their own stories. The first student shares.*

Student 1: I was in like, sixth grade. And then, there's this kid in seventh grade, and my best friend that I knew since kindergarten is Black, and I was playing football with him at the time for our school. And I had known him since kindergarten, and this kid that I already didn't like this much, he was being a bully. And **there was this White kid who was calling him names and stuff, and like, he's openly racist.** Like, I confronted him about it, and then he tried to punch me, so I got in a fight. [Laughter] But like, at the end of the day, like, I stopped the bullying because after that he stopped.

Facilitator 1: Mm-hmm.

Student 2: Did you win?

Student 1: See I tried to – I said I tried to avoid the fight, but he hit me, so I couldn't do anything about that. But...

Facilitator 2: I love that.

Student 1: So, pretty much I said like, if somebody needs help, don't just sit back and watch it happen. Try to help as much as you can.

[Applause]

Facilitator 2: Thank you. [Applause] I love that.

...

Student 3: Could I speak? ... So like you said, mine wasn't necessarily a specific event that happened. It's more like, being observant and watching like, my family members and the people around me. But I know that, like, one thing growing up, that me and my sister have both experienced, is ... [my family] are very close-minded when it comes to things. So, every time we're super passionate about social justice, and leadership, and everything going on, but we can't share that with them because they don't accept it. And being around them, especially my mom's side of the family **because we are biracial, my mom is White, and my dad is Black, and they make little remarks, and like, "Oh, well, I'm not racist because I have a Black niece."**

[Multiple speakers]: Mm-hmm.

Student 3: No, you can be. Just because you have a Black niece does not mean you're not racist.

Facilitator 1: Right.

Student 3: And, so struggling with that growing up, like, seeing them – and they also have bad drug abuse. And all of them never graduated high school, so –they’re like, constantly being close minded. Anyways, so for me ... I don’t want to be like them, and grow up ignorant, and not be aware of what’s going on. And also...**because I feel like I wasn’t accepted by some of my family members, even my parents... I’ve been depressed**, and going from that, it’s like, I know that I have to be there to support others, but I haven’t been supporting myself. So, lately I’ve been, you know, been taking care of myself because just because you take care of yourself does not mean you are selfish.

...

Facilitator 1: Mm-hmm. Oh, I love that. Thank you so much.

[Applause]

*A facilitator then relates to this story, **sharing her experience of her White grandfather and father expressing racist views but denying that they could be racist because, “My kids are Black.”** Another student shares that she **‘unfriended’ several family members on Facebook after they posted ignorant and racist content.** The group realizes that they have run out of time, but several other students state that they would like to share their stories. The facilitators collect the worksheets and the group makes a plan for the students to share at the start of the following week.*

In this exchange, the facilitator initially introduced the theme of racism into the group through her personal story, a call that was answered by several students echoing their shared experiences. The stories built from one another and led to natural questions and answers from students and facilitators alike. Here, sharing their experiences with marginalized identities was key to deepening their connection as a group. Across settings, students in high bonding groups were more likely to *engage* with content matter related to marginalized identities and experience the discussion as connecting. Below, an example of this type of discussion in a Charlottesville high bonding group.

## Vignette 14: Charlottesville Group 7 Session 7 – High Bonding Group

*The group has just completed an activity that prompted students to reflect on a challenge in their lives that had shaped them.*

Student 1: Well, mine, um, I mean, I think we all remember **what happened in August in Charlottesville and the KKK stuff**. Well, the night before that, my dad and I went to hear, uh, Cornell West speak at a church that was across from UVA. He was –

Student 2: The Unitarian Church.

Student 1: Yeah, yeah, and he was amazing. He's a Princeton professor. You know, **he was talking about politics and he was talking about Black Lives Matter, which is something that, you know, my dad and I have been involved in from like the beginning**. Um, but then like – we'd been listening for about two hours and this guy gets up and he says, um, **"So, the KKK has surrounded the church and we can't get out."** So, we all were sitting there and everyone was so scared. Then we were in a church and someone just started singing. So, then we were singing for a really long time. But still, it was like an hour. And you know, we had been there for so long and it was getting super late. So, then my dad and I decided that we had to leave. Um, so, we went through the back and we went around to get our car at the front. And it was just – **it was, I mean, life changing because we saw... a ton of people in the KKK who were just standing there and they were coming down and they had torches**. And I mean, my dad is like old enough that he remembers when the KKK like first came – because he's from North Carolina. Um, he remembers when the KKK kind of came to his hometown. **So, seeing that, I just – I don't think I'll ever be able to kind of get that image out of my head**. But it just – **it inspired me to be so much more active in like political causes and just try to get the right people elected in office because I just – I never want that to be the future for our America and for our Charlottesville**. I never thought that – especially the events of the next day, could happen here because this is such an amazing town. So, I just – **I feel like that changed me in a way that like I couldn't even begin to comprehend**.

Student 3: Yeah.

Student 4: **That – that's – that was something that I never ever thought that would happen here.**

Facilitator 1: Absolutely.

Student 4: **So, that kind of put a label on Charlottesville.**

Student 2: **For sure.**

Student 4: **It's like a bad city.**

Student 4: Look at Google images... You look up Charlottesville and it's...

Student 5: Yeah. I was at, uh, Dumont in February, which is a conference and they would say, "Oh, what city are you from?" And I'd say, "Oh, I'm from Charlottesville." And they'd be like, "Oh..."

Facilitator 1: Yeah.

Student 4: Yeah.

Student 5: **It's embarrassing.**

Student 2: Most of the people involved in that are from out of town.

Student 3: Yeah. They're not even from here.

Facilitator 1: It's terrible.

Student 3: **Yeah. And, um, I've stayed in touch with a couple of my friends from California... and the day after that happened, I got like texts from people that I didn't even know still remembered me saying, "Hey, are you okay?"**

Facilitator 1: **Yeah.**

Student 3: **That was the scariest part.**

Student 4: **That was – it was scary but then also, it was like almost like that happening like brought more people together, I think.**

Student 3: **Yeah.**

Facilitator 1: I hope that there's that part of it.

In the above excerpt, a student shares about her experience of spending hours trapped in a church on the night of August 11<sup>th</sup>, 2017 as the KKK surrounded it with lit torches. She shared her fear, and how the event shook and changed her at her core. The students immediately picked up the discussion, sharing their shock and horror that racially-based violence had happened in their hometown, their shame for their community, and ultimately their hope that the events brought many people together.

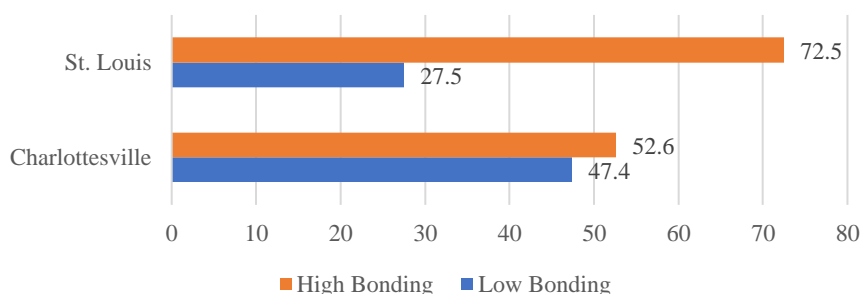
In sum, it was not enough to simply introduce issues of marginalized identities into groups. What most differentiated groups that resulted in individual students' reporting the greatest change in relationship depth with their groupmates from those that resulted in the least change was *deep, group-level engagement* with the issues. Tying back to the findings in Theme 2, high bonding groups used discussions of marginalized identities as *one* way to build trust, modeling a process of openness, support, and group-level connection.

#### *Comparing 'Discussions of Marginalized Identities' Across Settings*

While deep discussions of marginalized identities were a marker of high bonding groups across settings, they seemed to matter *more* to group bonding in St. Louis than in Charlottesville. First, the code appeared much more often in St. Louis (67.8%) than in Charlottesville (32.2%) – more than two-thirds of the 'Discussions of Marginalized Identities' codes appeared in St. Louis groups. Further, it was coded more often in high bonding than in low bonding groups in St. Louis, but with about the same frequency in high and low bonding groups in Charlottesville (see Figure 8).

**Figure 8**

*Discussions of Marginalized Identities in Each Setting in High vs. Low Bonding Groups*



Importantly, not only were discussions of marginalized identities happening more often in St. Louis than in Charlottesville, the students were also focusing on different identities. In Charlottesville, the majority the total codes (63%, 12 of 19) were in reference to mental health issues – either an anonymous or non-anonymous self-disclosure, or a story about a friend or family member who was experiencing or had experienced mental health issues that impacted the group member; in St. Louis, only 0.1% of the total codes (3 of 40) pertained to mental health issues. In St. Louis, 60% of the total codes (24 of 40) referenced race or ethnicity in some way, whereas in Charlottesville, only 32% (6 of 19 codes) referenced race or ethnicity, and of those, most (4) were specific to the experiences of international students boarding at the Charlottesville school. As such, students in each setting seemed to discuss the marginalized identities that felt most salient to the majority of group members given their ecological contexts. In Charlottesville, this was an *invisible* and even often *transient* marginalized identity (mental illness) but in St. Louis, the majority of students in the groups held *visible* and *static* marginalized identities (belonging to a racial/ethnic minority group), which was likely more central to their lived experiences in general, and therefore also more important to their forming of deeper connections with their group members. However, considerations of the intersectionality between identities are important to consider with regards to this finding, and will be explored in greater depth in the Discussion section.

The elevated importance of discussions of marginalized identities to students in the St. Louis setting is evidenced by how St. Louis high bonding groups engaged with these issues. While high bonding groups in both settings had more non-anonymous and deeper discussions about marginalized identities that supported group-level connection, high bonding groups in St. Louis did *more* than dive deeply into the vulnerable parts of identity; they also presented with a

wide range of ways in which identity was woven into their sessions, through casual conversation about current events and through the use of humor. Identity thus became part of the fabric of the group at every level – the deep disclosures, the small talk and warm up discussions, and the banter. For instance, in a St. Louis high bonding group, the group was meeting the week after Donald Trump won the 2016 Presidential Election. The facilitators asked the students about their

### **Vignette 15: St. Louis Group 1 Session 11 – High Bonding Group**

Facilitator 1: We haven't seen you guys. Was there a lot of time spent at school talking about it?

Student 1: Yes.

Student 2: There was people crying. Did you all know the Canadian embassy crashed due to so many people trying to get to Canada?

Student 3: Oh, yeah.

Facilitator 1: I did see that.

**Student 2: And did you also know that the suicide hotline was putting people on hold because of that?**

Facilitator 2: Really?

Student 2: They're like, "Hold on, someone else is calling."

**Facilitator 1: The suicide hotlines were slammed**

**Student 2: "Donald Trump is President. Hold on."**

Facilitator 2: I didn't hear that.

**Facilitator 1: There was a higher number of like specifically trans teens calling that were struggling...**

**Student 4: That's sad.**

feelings on the election outcome.

They group continued to discuss some of Trump's more controversial campaign promises, positing hopefully that much of it was campaign bluster, with both students and facilitators contributing to the discussion. Notably, the group did *not* blithely agree on all issues, but rather shared a range of opinions – for example, on deportation for immigrants who had committed crimes, one student said, "They're a part of society now. You're making them go back. They're already here," to which another student replied, "I don't care. *My* visa expires," implying that remaining in the country was not a guaranteed right. The group picked up each

thread of conversation introduced by facilitator or student, gently challenging or agreeing with one another, and gradually pivoted to watching a related, humorous YouTube video together on a student's phone (i.e., ending the discussion with a moment of connection). This scene highlighted how St. Louis high bonding groups often had issues of racial/ethnic identity embedded into their discussions, connecting by sharing their thoughts and opinions in addition to their personal experiences.

St. Louis high bonding groups also related to one another on aspects of marginalized identities through humor. One group in particular (excerpt presented below) is a model case study; early in the sessions, three young men in the group who self-identify as Mexican initiated a series of jokes with students and facilitators about their Mexican ethnicity that evolved into a thread of humor referenced throughout all the sessions included in the dataset. The young men are obviously “in” on the joke, inserting humor about being Mexican into various activities or discussions. For example, in Session 2, the group was tasked with trying to recall each other's names and something about each person after having just met the previous week. A student said, referring to one of the group members who self-identified as Mexican, “One thing he say he like is, um, he knows that they like to play soccer – that Mexicans are supposed to play soccer – but he like basketball,” and the student to whom she is referring (“Hector<sup>2</sup>”) responded, “I *don't* like soccer,” and the group laughed. In a later session (11), when the group activity is listing out strengths/compliments for each student in turn to be added to a large poster and it is Hector's turn, a student offers, “You like basketball,” and Hector jokes, “No, just put Mexican... That's even better.” Humor about the boys' ethnicity was smattered throughout sessions. For instance, in Session 5, each group member was assigned an animal and, while blindfolded, had to find

<sup>2</sup> All student names presented are pseudonyms.



their partner (another group member assigned the same animal) using only that animal's sounds.

The following exchange occurs:

### **Vignette 16: St. Louis Group 25 Session 5 – High Bonding Group**

*Several students (including the three male students who self-identify as Mexican) are asking lots of questions about the game, joking about not knowing what sounds their animals make. The facilitators playfully redirect the students.*

*Note: The three students who self-identify as Mexican are underlined below when speaking to better identify them from other students.*

**Facilitator 1:** Cool, yeah. Okay, I don't trust y'all. There's something about y'all three.

**Student 1:** It's 'cause we're Mexican.

**Facilitator 2:** (*Sarcastic*) That's exactly it.

**Facilitator 1:** Uh-uh, I don't trust it. So, don't tell each other – I feel like I have to tell you three specifically– don't tell each other [*what animal you were assigned*].

**Facilitator 2:** (*Joking*) 'Cause y'all are Mexican.

(*Laughter*)

**Student 3:** Y'all stick together... y'all's like best friends.

**Facilitator 2:** (*Joking*) Racists.

**Student 1:** What's that three peoples called?

**Student 2:** We're not racist I'm just –

**Student 1:** The Three amigos!

**Facilitator 1:** The Three amigos! Wait, aren't they from Spain, though?

**Student 4:** Yeah. Or were they from Mexico?

**Student 2:** The Three Musketeers!

...

**Facilitator 1:** Yeah! Who – who was from Spain? The Three Musketeers? Were they from Spain?

**Facilitator 2:** They were from France.

....

**Student 1:** They were from Mexico!

*Other group members join in and begin offering guesses as to the origins of literary figures like The Three Musketeers and Zorro. Several students offer their own ethnic origins, as well, with one student sharing that he is from Japan and another that he is from Colombia.*

Here, racial/ethnic humor is introduced by a student identifying as Mexican and continued by the facilitators, with eventually the whole group joining in on humor and lighthearted discussions about the ethnic identities of group members and historical figures alike.

There was laughter throughout, and the quick back-and-forth dialogue captured the banter that was often rooted in humor based on racial/ethnic stereotypes. *In this context* for this group, as indicated by the students who held the marginalized identity that was at the heart of the jokes *initiating and participating* in the humor, these seemed to be *connecting* experiences. It is important to note that given a different set of power dynamics within the group, this kind of humor could have been experienced as marginalizing. Generally, this kind of casual and humorous dynamic around discussions of marginalized identities was not reflected in Charlottesville groups.

These additional ways in which St. Louis high bonding groups engaged with issues of marginalized identities – most often with issues of race and/or ethnicity – in combination with the higher frequency of these discussions in St. Louis and in St. Louis high bonding groups specifically, suggests that, for students in that ecological context, engaging in discussions of race/ethnicity was a more crucial component of how groups bonded.

### Theme 3 Summary:

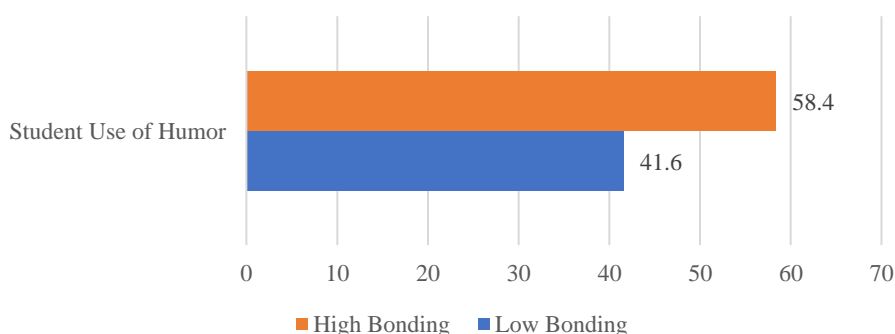
- High bonding groups in both settings engaged in discussions of marginalized identities *more deeply* than in low bonding groups.
- But the frequency and content of discussions of marginalized identities differed across settings:
  - Marginalized identities were discussed more frequently in St. Louis than in Charlottesville
  - In St. Louis, discussions of marginalized identities were much more likely to be centered around race and/or ethnicity, while in Charlottesville, discussions of marginalized identities were much more likely to be centered around mental health issues.
  - Further, marginalized identities were discussed much more often in St. Louis high bonding groups than low bonding groups, but roughly equally across Charlottesville groups.
    - St. Louis high bonding groups used casual conversation and humor to embed identity into all aspects of their sessions, in addition to deeper identity discussions.
  - Taken together, this suggests that discussions of marginalized identities may be more important among groups of youth who mostly hold a *visible* marginalized identity (e.g., racial/ethnic minority identity in St. Louis) than among youth who mostly hold an *invisible* marginalized identity (e.g., mental health issues in Charlottesville).

**Theme 4: The role of humor and the significance of *type* of humor.**

Humor was a significant part of all groups, across connection levels and settings, with humor and laughter among the most frequently used content codes (639 total humor codes, 1,346 total laughter codes). Humor was also one of the most difficult codes to refine during analysis, as so many statements made by both facilitators and students were intended to be at least somewhat humorous. Ultimately, humor here refers to single jokes, a joking exchange, or a funny story clearly intended to pull for laughter from other group members (with varied results).

*Humor in High vs. Low Bonding Groups*

Most often, humor was used as an avenue for connection; for example, the humor code co-occurred with ‘Moments of Connection’ 145 times and with ‘Moments of Disconnection’ only 8 times. Focusing specifically on students’ use of humor (as facilitator humor was included in Theme 1), students used humor more often in high bonding groups than in low bonding groups (see Figure 9, below).

**Figure 9***Student Use of Humor in High vs. Low Bonding Groups*

Importantly, humor functioned in different ways in high and low bonding groups. In high bonding groups, humor was often lighthearted and silly, and though sarcasm was used often, it

was rarely biting. There were literally hundreds of instances of high bonding groups using humor in rather nondescript but nevertheless connecting ways. Below are several very brief examples.

### **Vignette 17: St. Louis Group 1 Session 12 – High Bonding Group**

Facilitator 1: *(Referring to a student, “Samantha”)* She’s gonna do something big [later in life].

Student 1: *(Speaking to Samantha)* So, can I ask you for \$10 now?

*[Laughter from the group]*

Facilitator 1: What you say?

**Student 1: She gonna be successful, so why not ask for \$10 now?**

**Samantha: And what are you gonna do with \$10 now?**

**Student 1: I don’t know. That’s a good question. I’m gonna save it.**

**Facilitator 1: You’re silly.**

### **Vignette 18: Charlottesville Group 1 Session 7 – High Bonding Group**

*Students are talking about the snacks provided for that session (presumably Oreo Cookies).*

Student 1: You’ve gotta twist and pull.

Student 2: I’m twisting and pulling.

Student 1: You’re twisting and pulling. Here, watch out, watch out. It kinda worked. That was pretty good.

**Student 3: Amateur hours.**

**Student 1: I’ll give you an eight out of ten. It’s all good. See, mine’s not that good. It’s hard to get it super clean.**

### **Vignette 19: Group 25 Session 7 – High Bonding Group**

*Group members who still have their middle school identification badges are sharing their old photos with the group.*

Student 1: Were you chubby?

**Student 2: I look like a constipated chicken nugget, dude.**

...

**Student 3: He glew up.** *[referring to ‘glowing up,’ or “a mental, physical, and/or emotional transformation for the better,” (urbandictionary)]*

*[Laughter]*

Facilitator 1: I know, right?

Student 4: He glew up.

*[Laughter]*

Facilitator 1: How do you look so grown?

These brief examples demonstrate the spirited, lighthearted humor that was common in high connection groups. The humor often built on the content of the discussion and added to the positive tone, as in the first example in which the student joked about borrowing \$10 from a fellow group member because of her obvious potential for later success. Humor was used to enhance stories and invite fellow group members to laugh, or to playfully tease a fellow group member, as in the third example. This teasing was rarely mean and was usually characterized either by a clear duality in the banter, and/or an eventual softening of the teasing as seen in example above (e.g., “It’s hard to get it super clean”). Last, students in high bonding groups used self-deprecating humor as seen in the final example (e.g., “I look like a constipated chicken nugget”), and used humor to pay compliments to one another in a way that likely felt less emotionally intense than sincerity.

Relatedly, high bonding groups used humor to more generally modulate the intensity of emotional self-disclosures during deep sharing. This process was not that of avoiding affect-laden topics, but rather seemed to allow the groups to dive into vulnerability and ‘come up for air’ briefly before reengaging. In this way, humor was used as a form of *group-level emotion regulation* that seemed to allow the groups to share deeply without becoming overwhelmed. The following excerpt models how the process functioned in one group.

**Vignette 20: Charlottesville Group 7 Session 7 – High Bonding Group**

*The group has just completed an activity in which they picked a word or phrase and drew a symbol to represent each of three time periods in their lives: Elementary School, Middle School, the Past Year. The facilitator shares first about the difficult time she had in middle school because of moving far away and moving often, and the resultant challenges of transitioning schools. She invites students to share. \*Edited very slightly for clarity.*

Student 1: I'd love to. So, in elementary, I had like 'discovery' as my word because I was kind of like learning about the earth and like how...it seems really big. And you're learning about how society works at the same [time as you're learning] about yourself. And then in middle school...I said breezy because like I don't really remember any of it. It just kind of like, passed... I didn't have a lot of struggles or anything. I was pretty fine. **But then switching from eighth into high school was kind of eye-opening...[not] necessarily in the best way.** In elementary, I was kind of discovering and everything seemed really good, but then...another discovery is how high school works and how the world actually *is*, kind of with like discovering about yourself. So, yeah, I said eye-opening. **Then my picture is...a person and they're questioning – they have themselves – I did the shadow because it's like – you're – you're confused by yourself.**

...

*Students build on themes of self-doubt and self-realization.*

Student 2: So, in elementary school, I just remember it being really chill ... I drew building blocks because it sort of – it laid a foundation, you know, to build everything on. Middle school, it was all about friends and I thought it was a lot of fun...I liked middle school a lot. **And then this past year has been growth, you know, things that I know I want to do again and things that...you know, self-personal growth and I drew a tree with a little bird ready to fly off because that's how I feel.**

*More students share experiences of feeling out of place. A student comments on the similar themes in the stories they are sharing, noting:*

Student 3:...in middle school it's reassuring what you know or what you think you know, and **high school is just like – it's like, "Nah." You still have things to learn, sort of.**

*Three more students share, also disclosing their personal experiences of feeling out of place in high school, challenging themselves to try new things but feeling unsure of themselves. Several students note times they have felt isolated and/or without friends. The facilitator summarizes these themes and asks students to think about an experience that has shaped them into the person they are today. As they are completing the handout for this activity, a student quietly announces:*

**Student 1: I'm gonna get some ice cream after school today.**

**Student 2: I was just thinking that.**

**Student 3: That sounds so good.**

**Student 2: I'm going to Shell and getting ice cream.**

**Student 4: You know what I kind of want to try?...I kind of want to put Cheetos in my ice cream.**

**Student 5: That sounds disgusting.**

**Student 2: I mean, like French fries in ice cream are good.**

..

*The students chat about ice cream preferences for several minutes, describing their favorite flavor combinations, their favorite restaurant serving ice cream, the restaurants they have yet to try, etc.. After some minutes, the facilitator gently redirects the group back to the task of sharing challenges. She starts by sharing her own narrative; student immediately re-engage and respond to her story with support. **She then asks students to follow, and they share their own vulnerable, personal stories (e.g., discovering a friend who had overdosed).***

In this vignette, the students engaged deeply with the first activity, sharing about their struggles and exploring themes of disillusionment and personal growth. During a clear break between activities, they lightened the mood in the room by connecting over a shared love of ice cream and playfully teasing one another about their favorite brands and styles of ice cream. When the facilitator implicitly asked them to reengage by offering to share her story first, the students do so seamlessly, returning to a thoughtful, emotional space. In this way, they are able to – as a group – *remain regulated* and balance the discomfort of vulnerability with the comfort and connection of humor.

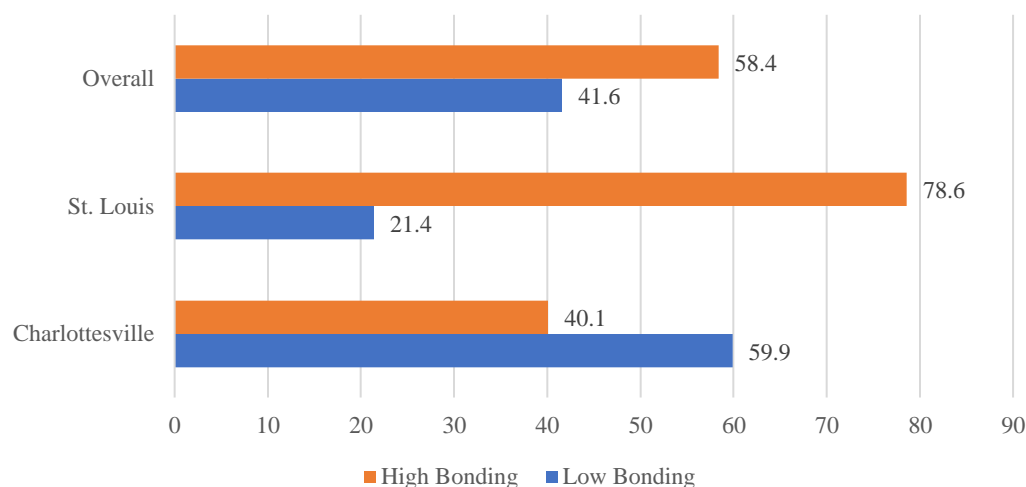
#### *Humor in Low Bonding Groups Within Settings*

In low bonding groups, students used less humor overall than in high bonding groups (see Figure 10). However, while high bonding groups used humor in similar ways across both settings, humor functioned differently in low bonding groups in St. Louis than in Charlottesville. It is important to note that there were moments when humor was used in all low bonding groups in similar ways to high bonding groups – to enhance a story, to express positive emotion in a safe way, to be silly and lighthearted. However, humor more often took on other qualities in low bonding groups, and these are the focus of the following section.

First, students in low bonding groups in St. Louis used humor significantly less often than in St. Louis high bonding groups, whereas students in low bonding Charlottesville groups used humor *more* often than high bonding Charlottesville groups (see Figure 10).

**Figure 10**

*Student Use of Humor in High vs. Low Bonding Groups Across Settings*



This difference in frequency was related to differences in function. In St. Louis low bonding groups, humor was often a component of disruptive or off-task behavior; of the 26 excerpts in which ‘Disruptive Behavior’ co-occurred with ‘Humor,’ 21 (80.8%) were from St. Louis groups, and *over half* (15, or 57.7%) were from St. Louis *low bonding* groups, meaning that over one-third (34.88%, or 15 of 43 total codes) of *all* student humor coded in St. Louis low bonding groups was within the context of disruptive behavior. This was often in the form of a side conversation between subgroups of students or an off-task discussion. In other cases, students used humor but it was not received well by the group and/or contributed to a moment of disconnection rather than connection. The following example shows one way in which a student was trying to use humor in their group, but the story (intended, it seemed, to pull for laughter) did not quite land, and the resulting discussion ended up being somewhat disconnecting.



**Vignette 21: St. Louis Group 11 Session 3 – Low Bonding Group**

*The facilitators are discussing the student talent show that is scheduled for the weekend, sharing that they plan to attend and encouraging the group members to also come to show their support.*

**Student 1: I can't go cause I'm rude...I went to the talent show one time and this girl said something to me and I'm like, 'That's why you was off key and everyone else did good.'**

**Facilitator 1: (Gasp) Okay...**

**Student 2: (Admonishingly) [Student 1]! (name redacted)**

**Facilitator 2: That was probably really hurtful for her.**

Student 1: She said something first.

Facilitator 2: I hear you. I think some of its probably just a maturity thing. It's just a skill we need to work on.

Student 2: Mmm-hmm.

Facilitator 1: Hashtag no shade

**Facilitator 2: You know, like I could be petty and say something really mean, or I could like be the bigger person. WWJD?**

**Student 1: What's that mean? That's a wrestling move?**

Facilitator 1: Ask your granny.

Facilitator 2: Go to church.

...

Student 1: Oh what would God- you said WWJD, it's G-D.

Facilitator 2: Yeah, Jesus.

**Student 3: Duh, [Student 1].**

**Thomas: Oh I thought it was what would God do, oh.**

**Student 2: Just be quiet.**

In this example, it seemed that Student 1 wanted to share a story that might make the other group members laugh, but instead his bid for negative attention caused some of the students to mock him (e.g., “Duh,”) and express irritation with him (e.g., “Just be quiet,”). The attempt at humor was ultimately a disconnecting experience at the group-level.

In Charlottesville low bonding groups, the higher rate of student humor reflected a specific *kind* of negative humor that permeated low bonding groups in this setting. The humor was often biting, sarcastic, or a putdown masked by humor. It functioned to undermine group-level bonding, however it was often brief or well-enough disguised that it was rarely coded as a Moment of Disconnection. For example:

**Vignette 22: Charlottesville Group 8 Session 2 – Low Bonding Group**

*The group is discussing group rules, and a facilitator brings up the importance of honesty.*

Student 1: Can we tell white lies?

Facilitator 1: Um –

**Student 2: [Sings] Whiiiiite lies!**

**Student 1: [Student 4], you look good today.**

**Student 3: Wow.**

**Student 4: He's bullying me right now which is not okay. I'm very upset! (over-the-top reaction)**

Student 3: He's inflicting pain upon others!

**Student 1: [Teasing voice] Ow, my feelings!**

Facilitator 1: Uh—this is—this is a hate free zone.

In this snapshot example, students used sarcasm to tease and mock, and while it reads as though Student 4 is 'in' on the joke by pretending to be extremely offended, the overall tone of the exchange had a notable edge, as though perhaps some unfriendly dynamics from outside of the group were playing out within the group, using humor as a façade. This is an example of humor that might have been neutral or even positive in the context of a different type of group, and was not coded as a Moment of Disconnection, but was clearly a negative experience when considered as part of a larger pattern.

An activity in one of the later sessions highlighted this pattern plainly; named "Sharing our Strengths," the activity was designed such that each group member took a turn receiving authentic compliments from their fellow group members which were recorded on a large poster. The target student was not allowed to deflect, and the group members were not allowed to repeat a compliment. In high bonding groups across settings, this session was utterly endearing; group members acknowledged one another's strengths in touching and sincere ways, also often using humor (e.g., in a Charlottesville group, students playfully used variants of the word 'goddess' when asked to name a strength of one of their group members before listing more specific,

authentic assets). In Charlottesville low bonding groups, this session often included *backhanded* compliments and outright insults, again with the façade of being ‘just kidding.’ Following are several examples from within this activity in low bonding Charlottesville groups.

### **Vignette 23: Charlottesville Group 2 Session 12 – Low Bonding Group**

**Student 1: I think you’re a really good soccer player except the fact that you skip practice. [Laughs]**

Facilitator: Or maybe she’s so good that she doesn’t have to go to practice and still be good at it.

Student 1: Okay, she doesn’t have to go to practice.

...

**Student 2: She’s afraid of rain.**

**Facilitator 1: Afraid of rain?**

**Student 2: Yeah.**

*[Laughter]*

**Facilitator 1: Is that, is that a positive thing?**

Student 2: Yeah, yeah. Because like, whenever she straightens her hair out and then at soccer practice before, she’s really afraid of it.

Facilitator 1: And that, like, you think that that’s kind of charming?

Student 2: Yeah. Yeah, it’s charming.

...

**Student 3: You really try to draw although you are not good.**

*[Laughter]*

**Facilitator 1: No backhanded! Nothing backhanded!**

Facilitator 2: That was 80% what we’re looking for.

*[Laughter]*

Student 3: She’s determined.

Facilitator 1: Determined. I like that. It’s a good reframe.

...

**Student 4: [Referring to a picture another student had drawn of him on his poster] You made me look like a duck.**

*[Laughter]*

**Student 1: That’s what everyone thinks.**

...

**Student 5: So many backhands.**

Facilitator 1: *(Laughs)* What did you say?

Facilitator 2: I feel like that’s how you know that people really like you is that they’re willing to say that when they’re supposed to say something else.

...

Facilitator 1: Yeah. I totally agree. There’s like a certain level of banter that needs to be there.

**Student 4: Even though you suck at drawing (laughs).**

...

*(Laughs)*

Facilitator 1: There’s a fine, fine line.

In this group, at least one comment for each target students was either a backhanded compliment or undermining in some way. The facilitators worked after each statement to reframe using more positive language, and even explicitly reminded students to avoid backhanded compliments. This group process was noted by a student (“So many backhands,”) and the facilitators again tried to reframe the dynamic into one that could denote interpersonal comfort (e.g., “banter”). While some comments were genuine, the overall tone of the session despite many humorous student comments was significantly less warm and connecting than this same session in high bonding groups.

**Theme 4: The role of humor and the significance of *type* of humor.**

- Humor was a significant part of all groups but was generally used by students more often in high bonding groups than low bonding groups when data were collapsed across settings.
- In high bonding groups, humor was used to build on positive content, enhance stories, playfully tease, and balance the intensity of authentic compliments.
  - It was also used as a means to modulate the group’s affect during moments of deep disclosure and vulnerability (i.e., group-level emotion regulation).
- Humor in low bonding groups was more likely to be part of a disconnecting group experience. It functioned differently across settings.
  - In St. Louis, students used humor less in low bonding groups than in high, and humor was more likely to be disruptive to the group’s goals and/or not received well by the group.
  - In Charlottesville, students used humor *more* in low bonding groups than in high, and humor was more likely to be biting, sarcastic, or critical.

**Theme 5: Rupture and repair processes related to group-level bonding.**

Conflict is natural as relationships deepen, and is an expected phase of group development (Tuckman et al., 1977). In the context of the current study, one type of group-level conflict was captured through the codes ‘Disruptive Behavior’ and, relatedly, ‘Effort of Control’ by the facilitators. This set of codes did not include all types of conflict; disagreements or tensions that did not disrupt the group’s goals or general rhythm were not included, such as

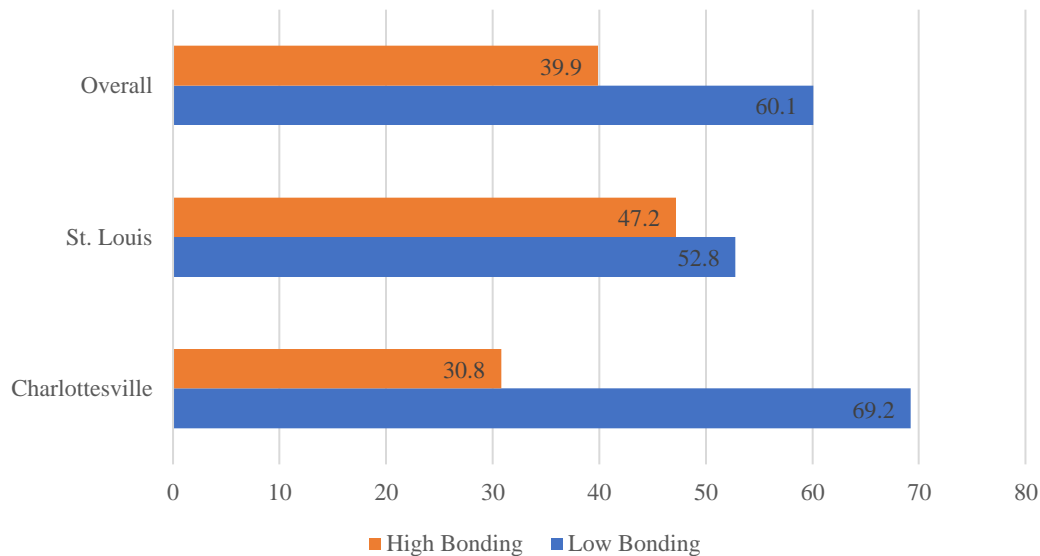
disagreements between students during on-task discussions of complex issues (recall Vignette 14 from Theme 3, in which students respectfully disagreed about the political risks of Trump's election). Instead, this pairing of codes included comments, behaviors, and/or interactions that disrupted the group in some way and required redirection from the facilitators, thereby capturing one type of rupture and repair process.

In a therapeutic relationship, ruptures “can be defined as a tension or breakdown in the collaborative relationship between patient and therapist...Although the term rupture may imply, to some, a dramatic breakdown in collaboration, ruptures vary in intensity from relatively minor tensions, which one or both of the participants may be only vaguely aware of, to major breakdowns in collaboration, understanding, or communication” (Safran, Muran, & Eubanks-Carter, 2011). Similarly, at the group level, ruptures ranged from mostly quite minor (e.g., students disengaged and having side conversations), to more significant (e.g., facilitators reacting with open frustration and hostility). Students' disruptive behavior and the facilitators' reactions to those disruptions reflected fractures, or ruptures, in the generally positive group experience.

Disruptive behavior and resultant efforts of control occurred more often in low bonding groups than in high bonding groups (60.1% vs. 39.9%). However, as with Theme 4, more meaningful analysis comes from looking *within settings* rather than collapsing across settings. ‘Efforts of Control’ was coded much more often in St. Louis (73.2%) than in Charlottesville (26.8%); however, within St. Louis, ‘Efforts of Control’ was coded with roughly the same frequency in high vs. low bonding groups (47.2% vs. 52.8%), whereas within Charlottesville, ‘Efforts of Control’ was coded much *less* often in high vs. low bonding groups (30.8% vs. 69.2%, see Figure 11, below). The overall difference in proportion of the code was driven by the Charlottesville setting results.

**Figure 11**

*'Efforts of Control' in High vs. Low Bonding Groups Across Settings*



### *Ruptures and Repairs in St. Louis*

In St. Louis groups, facilitators attempted to corral disruptive behavior close to the same number of times in high vs. low bonding groups (58 vs. 65 codes). However, a closer examination of the qualities of these exchanges highlights meaningful differences. When disruptive behavior was met with an effort of control by facilitators, high bonding groups were characterized by their ability to *almost immediately resync* into a more productive dynamic. Linking again to Theme 4, above, effective repairs were often done using humor.

**Vignette 24: St. Louis Group 25 Session 7 – High Bonding Group**

*Facilitators are asking students to transition into a new activity that involves sharing in pairs.*

Facilitator 1: Okay. So, I'm gonna have you guys get with a partner and we're gonna give you guys a couple of minutes to each sort of just share – you can just share sort of overall how your middle school experience was or if there's something that sticks out about it, you can share that, okay? Okay. **Um, I would do side by side, but I do not want you all pairing together** (*referring to a pair of students sitting near one another*) **and I don't want you all pairing together** (*referring to a second pair of students sitting near one another*).

*[Laughter]*

Student 1: (*Jokingly*) Thank god.

Facilitator 1: So, why don't we go like across the board. So, boom and boom, boom, and boom (*pointing to students to indicate pairs for the activity*). **You might not have a partner because his phone is so much more important to him than us today** (*talking to a student who had been paired with a group member on his phone*).

Student 2: Who?

Facilitator 2: [Student 4] (*name redacted*).

**Student 3: (To Student 4) She's talking about your phone being out.** (*Student 4 puts his phone away*)

**Facilitator 1: Okay. You all still end up being together.** (*referring to two students who ended up paired together who she had originally said should not be partners*). **Can you all handle that or do – Student 1: We got this.**

Facilitator 1: Okay. Okay. So, just take a few minutes...

In this example, the facilitators stated explicitly that some students could not work together because they struggled to remain on-task; she used a lighthearted tone to acknowledge this dynamic such that it elicited laughter from students. Students' behavior was thus addressed preemptively without a discouraging admonishment. When some of those students ended up still matched together, the facilitator asked them if they could work together productively, to which one answered, "We got this." Similarly, Facilitator 1 used humor to get a student's attention, Student 4, who had been on his phone, so that he would reengage with the group. This brief scene highlighted several aspects of high bonding groups in general: (1) facilitators could use humor and a more relaxed tone to redirect students, (2) students were generally very responsive to these attempts to redirect and corrected their behavior quickly, and (3) groups were able to

navigate these minor ruptures with little to no negative impact on the group's overall mood, and sometimes a *positive* impact – in other words, minor ruptures were most often followed by effective repairs.

This pattern in high bonding groups applied even when the ruptures were more significant. Of the two high bonding groups in St. Louis, one was generally a more difficult-to-control group with more disruptive behavior than the other. Again, this disruptive behavior was followed by effective, *group-level repairs*.

### Vignette 25: St. Louis Group 25 Session 2 – High Bonding Group

*The group has been establishing group guidelines, with students and facilitators contributing various rules that they agree are necessary for the group to feel safe for sharing. Throughout this activity, several students are disengaged and having distracting side conversations. The students are rebuked by a facilitator using humor; she notes the irony of some students sincerely putting forth guidelines about being an attentive listener, while other students are not paying attention (“Like when you’re making like group guidelines and then you’re having your own conversations off to the side kind of thing.”) The behavior does not change.*

Facilitator 1: So, it's all about safety. So, you all, your safety is super, super important to us... We hope that we will grow to be people that you guys feel like you can trust, you can come to. We're super open-minded people, even though there's an age difference. Like, we do our best to be open. We do our best to be good listening ears and sounding boards. Um, but we do have an obligation to share that information if you guys share that (*referring to safety concerns, e.g., suicidality*). And we just want to make sure that people know and that people are clear about that, um, up front. **So, if we have a concern, if we think that one of those could be a risk, we'd have to share that out. Do you understand me? Do ya'll hear me?**

Student 1: Yes, ma'am.

Facilitator 1: Are you sure? Because ya'll are talking while I'm talking and it hasn't really stopped.

Facilitator 2: Distracting.

Facilitator 1: Yeah. And I'm – I don't know. **I'm offended, honestly. I'm kind of bitter by it. Because I'm serious. So, clearly, what I'm feeling is that we've been talking too much and y'all are done listening to us.** Um, so if you guys could just take a quick second, read over this list, and, make sure that you're clear on what's here... **I'll give you all a second to like read it. Because I know not everyone was checked in.** And then after you're done, can you – do you all feel like you all can agree to all of these? Is there anything on here that just is like nah, this is not gonna work for me?

Who...upholds these expectations? Who holds you all accountable to these?

Student 2: Yourself.

Facilitator 1: Mm-hm. Who else?

Student 3: Jesus.

Facilitator 1: So, each other, right?

Student 2: Yeah.



Facilitator 1: So, like as an individual, I should be doing my best to meet these. But then **we also encourage you all to hold each other accountable. So, as a member of the group, if you feel like someone is, um, I don't know, not giving you respect, we encourage you all to address that in a respectful way, right. Not in like a screaming, yelling way. But we do want you all to know that it's not just us. Like we're not here to be enforcers.** Okay, great.

*Students are quiet for a moment, presumably reading the guidelines handout. They are then instructed to sign their names to indicate their agreement.*

...

Facilitator 1: All right. So, go ahead and sign. Put your markers down, and then join us right over here.

*While students are returning to the group from having signed their names:*

**Student 4: Nice dancing skills. Nice dancing skills.**

**Student 5: Who?**

**Student 4: You.**

**Student 5: Where?**

**Student 4: At homecoming.**

Student 5: You were there?

**Facilitator 1: Come make a circle.**

**Student 3: Ooh, a circle.**

**Facilitator 1: All right. Come on now. This isn't a circle. Fix it. Fix it.**

**Student 2: It's like a wanna be trapezoid.**

...

Facilitator 1: Um, all right. So really quickly, because our time is short and I wanna give you all as much time as you – as we have to do this activity. Um, this is called group juggle...

Several things are illustrated in this example. First, unlike the earlier excerpt, facilitators' gentle use of humor to redirect students' disruptive behavior failed to achieve the desired result. The facilitator grew increasingly frustrated and escalated the effort of control, naming her feelings aloud to the group ("offended" and "bitter"). This effectively stopped the off-task talking and got the group's attention. She then offered them a question to re-engage, and gave the responsibility of moderating the group's behavior *back to the group*, empowering them to ask one another to uphold their agreement. These several moments of dialogue were rather tense; the facilitator's voice had a notable edge, and the students clearly recognized the shift in tenor of the group dynamic. While they shuffled around the room to sign the group agreement, a student

broke the tension by complimenting a fellow group member on his dancing skills that had been on display at Homecoming. This comment was a positive tonal shift; the group lightened back up and by the time Facilitator 1 was asking the students to fix the circle, her tone was playful again. The group then transitioned into the next activity, group juggle, which was used as *the* example of a high bonding group in the first part of the Results section. Despite experiencing a moderate rupture, the group was able to effectively repair such that connection was ultimately unharmed.

In St. Louis low connection groups, group conflict played out differently. Facilitators' efforts to control were generally not responded to as quickly by students, leading to escalation by facilitators, leading to a larger rupture and a resultantly more difficult repair task. This pattern meant that St. Louis low bonding groups were more likely to have more significant ruptures and less successful rupture and repair cycles. The example below demonstrates this process.

### **Vignette 26: St. Louis Group 11 Session 5 – Low Bonding Group**

*The group is completing an activity called, 'If You Really Knew Me,' in which students anonymously answer a series of prompts on flashcards which are then read aloud. Throughout the session, the facilitators have had to address off-task side conversations repeatedly. Prior to the discussion below, the facilitator has just explained in detail the expectation that students should explicitly offer support after each card, explaining what kinds of things they could say and why it was so important.*

Facilitator 1: You guys ready? "If you really knew me, you would know... **I would feel supported, safe, and comfortable in this group if people still like me, even knowing that I was homeless for a part of my life.**" I'm sorry that you went through that. Because that is extremely tough. **You guys don't have anything to say to this person?**

...

*(Silence)*

Student 1: Sometimes it's hard to respond to stuff like that.

...

Facilitator 1: "If you really knew me, you would know the thing I find hardest in my life/at school is friends and family." Don't we all.

Facilitator 2: Mm, me too.

Facilitator 1: Yeah. Friends and family can be a great support system, or they can be a pain in the butt.

Facilitator 2: And they can be both at the same time

**... (Facilitators are the only ones to speak as two more cards are read aloud).**

**Facilitator 1: You guys ready? Let's stay focused. Let's stay focused.**

*[Students talking in background]*

**Facilitator 1: I'm gettin' frustrated. I'm gonna be honest. I'm bein' – I'm gettin' frustrated.**

Student 1: Why?

**Facilitator 1: Because people are sharing things about their lives, and you guys are talking.** Not all of you, but you're talking about talent shows – **someone just said they were homeless. You talkin' about talent shows. You guys are havin' your own little conversation, and people are sharing things that maybe they haven't told anybody else. And that bothers me, because that defeats the entire point of why we're doin' this.**

**Facilitator 2: Like, what – what would make me feel comfortable sharing things about myself if I feel like people don't care and aren't listening? And maybe you don't care.**

Student 1: I feel like – I feel like people don't really have – people don't really have, like, uh – like, strong feelings about the situation because they –

Student 2: Because they never been in it.

Student 1: Yeah, they've never really been in the predicament.

Facilitator 2: Yeah.

Student 1: And then they just, like, nonchalant about it.

**Facilitator 2: Mm-hm. And that's what I'm sayin', like, I wouldn't be surprised if some of you guys *don't* care about the things that are being shared. Um, that is why we're doing this program.**

Because...we haven't all experienced the same things, but that's part of, like, connecting – recognizing that we may have lived different lives or experienced different things, but it doesn't mean that we don't still have stuff in common.

*Facilitators talk for several minutes about the importance of connection and the goals of the group.*

Facilitator 1: I'm gonna go ahead and move on, because I want everyone's card to be read. I want everyone to have a chance to have what they wrote down shared.

*[Facilitators continue to read cards aloud and they are **the only ones who speak for several minutes. Student 1 comments occasionally, and notes that, "This group is very quiet...unlike the one I used to be in."**]*

What is notable in the excerpt above is the intensity with which the facilitators felt they had to address the students' disengagement. Repeated attempts by the facilitators to gently redirect the behavior was disregarded by the students. The facilitators had attempted to preempt this situation by forewarning students that they were expected to be engaged, to respond, and to show support given the vulnerability required for the activity. Perhaps as self-protective reaction due to this vulnerability, students continued to have side conversations and generally failed to respond after each card was read. Facilitator 1 lost her temper, abruptly halting the activity and voicing her

frustration. It is important to note that Student 1 remained engaged throughout most of this exchange, but the *group* as a whole never recovered. The facilitators moved on after several minutes of lecturing them about the purpose and goals of the program, but *the students do not reengage* before the session ultimately ends.

### *Ruptures and Repairs in Charlottesville*

The process of ruptures and repairs functioned very differently in Charlottesville groups. In Charlottesville high bonding groups, there were very few (7 total) instances of ‘Disruptive Behavior’ and of ‘Efforts of Control’ (9 total instances). Each of these instances were extremely minor disruptions and gentle redirections – for example, in Group 7 Session 5, when there was a brief side conversation during a discussion about what trust means to them, the facilitator said, “Girls, anything about trust?” This effectively invited the students to reengage without further intervention. All 9 ‘Efforts of Control’ could be characterized similarly as brief and mild attempts to bring students’ focus back to the discussion content.

There were more instances of ‘Disruptive Behavior’ and instances of ‘Efforts of Control’ in Charlottesville low bonding groups. These efforts were more explicit and direct, in response to behavior that was more distracting and disruptive than in high bonding groups (e.g., “Okay, we got to focus,” “Okay, great, beautiful, moving on...we’re moving on,” “Are you guys doing the activity?” “Okay, pause, stop writing on whoever’s card,”). However, outright ruptures in which the activity was stopped and the dynamic was explicitly addressed *never occurred*; instead, conflict was covert and most often conveyed through humor, as described in detail in Theme 4. Accordingly, these ruptures were less ripe for an authentic repair because the rupture was not easily addressed. Examining again the final example presented in Theme 4, facilitators asked students to reframe and reminded them to remain positive, but made the choice to maintain the

flow and pace of the session rather than address the ruptures. The veiled humor perhaps made it less likely for the facilitators to step back and identify the negative group dynamic, which made a real repair unlikely.

**Theme 5 Summary: Rupture and repair processes related to group-level bonding.**

- Ruptures are a normal part of developing close relationships. In *TCP*, one type of rupture and repair process was captured via ‘Disruptive Behavior’ and facilitators’ ‘Efforts of Control.’
- There were more ‘Efforts of Control’ coded in St. Louis groups than in Charlottesville groups.
- In St. Louis:
  - High bonding groups had ruptures that were quickly repaired, often using humor, leaving group-level connection unharmed or even strengthened.
  - Low bonding groups had ruptures that were more likely to escalate and less likely to be effectively repaired.
- In Charlottesville:
  - High bonding groups had very few ruptures and few examples of a very gentle rupture and repair process.
  - Low bonding groups had ruptures characterized by covert, negative humor that were not confronted by facilitators and therefore not easily repaired.

## Discussion

This study sought to explore the group-level processes that distinguished *TCP* groups that did and did not result in its members feeling more open and comfortable with one another after its completion. Results revealed several key processes that differentiated high and low bonding groups, and their patterns across two different implementation settings. Importantly, the groups investigated in this study were selected based on analyses that ranked every *TCP* group in terms of *change in bonding level* as reported by students from the start to the end of the intervention, accounting for changes in bonding among matched control groups of students from the same classrooms who did not participate in *TCP*. This means that the two high bonding groups that were analyzed qualitatively in each setting were not just ‘good’ groups, but groups in which

students reported the *greatest gains* in their sense of connection to one another over time, after accounting for where they began, and that two low bonding groups in each setting were not just ‘bad’ groups, but the groups in which students reported the *least gains* in their sense of connection to one another over time. As such, the five themes detailed herein revealed not just how ‘good’ and ‘bad’ groups differed, but the specific, iterative processes associated with greater (or lesser) changes in students’ reported sense of connection with one another by the end of the intervention.

These five themes were the most significant in differentiating groups, and operated in sometimes unexpected and nonobvious ways, particularly when examining how patterns differed across settings. In fact, important setting differences emerged in *every* theme, often in significant ways, such that findings point to a complex picture of not just ‘what works’ but ‘what works where and for whom’ to help youth build deeper relationships with their peers (Walton & Yeager, 2020). Also, these themes were distinct but not discrete; they overlapped and built on one another meaningfully. Following, I briefly review the findings of each theme and discuss their implications independently, then present an overarching discussion with recommended steps towards building high bonding groups in *TCP* and in other group-based teen interventions moving forward.

### **Theme 1: Role of facilitators beyond simply administering the curriculum**

When looking across settings, facilitators of high bonding *TCP* groups engaged in more spontaneous, non-curriculum-related discussions with their students than facilitators in low bonding groups. This often occurred via facilitators asking questions about students’ likes, dislikes, interests, and personal lives, and building on these responses to engage in organic conversation about *whatever* students seemed interested in discussing. Further, while *TCP* is

comprised of many evidence-based activities carefully designed to enhance student connection, there was *no* meaningful difference in the distribution of facilitator speech pertaining to curriculum elements among high and low bonding groups, suggesting that there was something important happening in these unstructured conversations. Facilitators' willingness and ability to go 'off-script' to talk with students about whatever was on their minds – *and* students' willingness to participate in these discussions – was overall a marker of a well-functioning group resulting in positive relational growth among group members.

There were also important differences across settings in how facilitators used themselves to engage with their groups. In Charlottesville, facilitators spoke roughly as many times as students in both high and low bonding groups, whereas in St. Louis, facilitators spoke more than *twice as often* as students in low bonding groups and only slightly more often than students in high bonding groups. Further, facilitators in Charlottesville used more humor and self-disclosure in high than low bonding groups, but in St. Louis, facilitators used more humor and self-disclosure in *low* than high bonding groups, working harder when group connection was weak. What explains such different patterns in facilitator behavior across settings?

First, there were differences in the training and experience of the facilitators in St. Louis and in Charlottesville. The St. Louis facilitators had many years of experience working with adolescents in group settings, and running *TCP* groups was their full-time job for two years. Charlottesville facilitators were primarily researchers with a variety of levels of experience and expertise working with adolescents. This came through in several ways: (1) when Charlottesville facilitators were struggling with a low bonding group, they used less of themselves (i.e., less self-disclosure) and instead (2) positioned themselves more in the role of 'adult facilitating relationships between youth using a program,' rather than focusing on building relationships

between themselves and the group members. A member of the coding team for the current study commented that the facilitators in Charlottesville low bonding groups “seemed more like researchers conducting a study.” As a member of the research development team *and* one of the facilitators of a Charlottesville low bonding group, I can attest that our focus tended to be on what elements of the curriculum were or were not working, and on the students’ connections with one another rather than our relationships with the students. In high bonding Charlottesville groups, these relationships happened naturally and easily – facilitators were engaged, open, and humorous because it was easy to be so, which served to deepen the group connection, which made it easy for everyone to be engaged, open, and humorous.

St. Louis facilitators rather seemed to lean into their use of humor and self-disclosure in low bonding groups in an attempt to get the same from students in return. St. Louis low bonding groups were either difficult-to-engage or difficult-to-control; the difficult-to-engage group pulled for the facilitators to speak far more often and self-disclose more in an effort to have students participate and disclose, and the difficult-to-control group pulled for facilitators to be more active to redirect off-task behavior, which they often tried to do using humor (see Theme 5). This finding – that the same facilitators engaged differently in groups with different needs – is in line with literature on child development and parenting that posits a transactional model between adult and child interactions (Bugental, Shennum, & Shaver, 1984). This model suggests that adult behavior does not exist in a vacuum; rather, youth are likewise agents in the adult-child interactions, contributing to recursive cycles that ultimately affect development (e.g., Bell & Chapman, 1986; Belsky & Jaffee, 2006). In this vein, different types of groups demanded different types of engagement, to which the more experienced St. Louis facilitators were able to respond. In general, St. Louis facilitators used humor and self-disclosure more often when



groups were struggling to connect, and while this did not result in group-level connection, it did seem to help build stronger connections between facilitators and individual group members, an idea that will be explored further below. Hence, while facilitator effort and self-disclosure might be generally seen as a good thing, in this case, it was a *marker* of groups that were not functioning as well.

While St. Louis low bonding groups were either difficult-to-control or difficult-to-engage, neither Charlottesville low bonding group was difficult-to-engage; the students in both Charlottesville low bonding groups were engaged, answering questions and speaking often, but not necessarily engaged *authentically* (e.g., responding to facilitators with off-task commentary, undermining activity goals with negative sarcasm). Context is likely relevant to this setting difference. In Charlottesville, a population of mostly affluent youth, high expectations for academic achievement and a highly resourced academic setting likely worked to create achievement pressures that shaped behavior (Ansary & Luthar, 2009). The cultural norm of their academic environment was to participate actively, and they did so even in low bonding groups, albeit less genuinely. In St. Louis, a population of mostly students of color with less access to economic and educational resources, it was more likely for students to have had negative academic experiences that made school feel like an unsafe place to share or engage (Dotterer et al., 2009). Students experiencing significant stressors and/or who had learned to disappear during school as an adaptive coping mechanism would accordingly find it difficult to actively engage in a small group requiring vulnerability. In short, the broader context of students in each setting may help explain the differences in how facilitator behavior was linked to high vs. low bonding groups.

**Theme 2. Relation of group-level trust to group bonding, and students' baseline openness.**

Students bring into the group their experiences from outside of it; their past traumas and triumphs manifest in the group dynamic. This was very evident in how trust functioned within high and low bonding groups. Individual group members' baseline levels of openness were correlated with the *group's* change in bonding score even after accounting for initial levels of bonding, such that groups comprised of less open individuals at the start of the intervention did not build as much group-level trust and were not as connected at its end. In other words, the openness of individuals at the start of the intervention was associated with how much connection the group ultimately built – *who* was in the group affected how the group progressed.

While trust was the *default* for students in high bonding groups, students in low bonding groups were mistrustful of others and felt that trust was a relational disadvantage. These generally mistrustful attitudes were amplified by influential students with sufficient social status. This finding is in line with the concept of groupthink and group polarization, or the strengthening of individual opinions in the context of more extreme group opinions (Janis, 1971; Whyte, 1998). It also points to the relevance of broader 'status contexts' of group members with relation to group functioning (Hollander, 2004). Status context "refers to the relative positions of the participants in local or societal status hierarchies, such as workplace authority, gender, race, age, sexual identity, or social class" (Hollander p.616, 2004). In the current study, *social influence* was a relevant status context. An example presented in the Results section was that of a male group member with high social standing declaring confidently that trust was worthless. In this context, other group members 'bandwagon-ed' on the sentiment and an activity intended to inspire self-reflection about (and ultimately greater openness towards) trust, turned into the group identifying that *not* trusting others was a *core value*. In short, a group's overall level of

initial openness may not matter as much as the openness of the most influential, high-status members, and their behavior towards the intervention.

If less trusting students inhibit the group's ability to bond, and can even unduly and negatively influence other members, are these groups condemned from their start? Not necessarily. The quantitative ranking of the groups in the current study controlled for baseline levels of reported student bonding, or the average depth of relationships between members at the start of the intervention, meaning that the processes of building bonds detailed herein are significant even after accounting for the level of openness with which they began. In short, group connection *can* grow above and beyond the real constraints presented by students' early lack of trust, but it is easier for this growth to occur when group members begin with more openness. This finding suggests that group *composition* is one element that helps makes a group bond such that individual group members report greater (or lesser) growth in their depth of relationships with their group members. Previous literature has demonstrated mixed findings in terms of how group members' baseline functioning in a given domain relates to outcomes (e.g., Dishion & Tipsord, 2011; Ang & Hughes, 2001). In *TCP*, it appears that, at least with regards to group-level processes, the 'rich get richer;' more open and trusting groups of students are able to engage more quickly and deeply in group processes that facilitate the development of group-level trust. Further, there was also evidence that even when less trusting students *did* self-disclose, they did not receive *support* from fellow students in low bonding groups, therefore helping students develop support processes may be key.

One important reason that more open students could progress quickly to group trust may have been because they implicitly trusted their group leaders from the very early stages of the intervention. Thus, for students who entered *TCP* less open and trusting, a key first step towards

creating group-level trust might be creating *individual* relationships between facilitators and students. This interpretation is supported by literature on youth programming that has found that the relationships between program leaders and youth are essential to successful outcomes (Vandell, Larson, Mahooney, & Watts, 2015); youth must trust their leaders in order for a program to have positive effects. More than that, trust has also been found to affect the way that youth engage with a program; Griffith and Larson (2015) found that youths' trust in program leaders increased the youths' motivation to *actively engage* with the program – to work harder, care more, and buy-in to the program's goals. It further allowed youth to feel more confident in their ability to contribute to the program, and buffered against the negative feelings that can be associated with vulnerability. Importantly, researchers also found that youth's trust in their program leaders increased their experience of *group cohesion*; trust in the adult leaders paved the way for trust at the group-level, creating a “trusting program climate that made it easier for [youth] to integrate themselves into the group and experience a sense of belongingness” (Griffith & Larson, p. 799, 2015).

In *TCP* high bonding groups, facilitators more easily built individual connections with students; throughout many of the high bonding group examples presented in the Results section, facilitators asked students about their lives outside of group (e.g., looking at photos from Homecoming), referenced a joke with a student from a previous session, remembered details that a student shared about their likes or dislikes, etc. This easy, individual-level connection appeared to be the foundation that allowed the group to progress to building group-level trust more quickly. But students who were less trusting at the outset appeared to need an anchor to steady them; students needed to trust their program leaders *first* in order to authentically engage in the curriculum and be vulnerable (Griffith & Larson, 2015). This is exemplified in Vignette 10

presented in Theme 2 of the Results section, in which a student who had declined to share his personal narrative with the group left it intentionally for the facilitators to read privately. In this act, he implicitly communicated that, although he was not ready to trust the whole group with his most formative struggle, he was ready to trust the facilitators. This was at Session 10 of 12, when the intervention was nearly over. If trust in group leaders is indeed a prerequisite for building group-level trust, this left little time for group cohesion to begin to take form.

This is consistent with a dual trajectory explanation: baseline openness has a nonlinear effect on group bonding, such that low bonding groups begin less open and trusting and must progress to trust in their facilitators before they can presumably learn to trust an entire group, whereas high bonding groups begin more open, trust their facilitators almost immediately, and thus advance to group-level trust more rapidly and ultimately bond more deeply. This explanation would suggest that low bonding groups might benefit from *time*; increasing the dose or duration of programming for low connection groups may result in their achieving a minimum level of trust in adult program leaders that may be necessary for group-level connection. Future research might test this explanation empirically.

**Theme 3: The role of discussions of group members' most salient identity stressors across contexts.**

In high bonding groups, deep discussions about students' and facilitators' marginalized identities were an important way in which groups engaged in trust-building and ultimately, in the deepening of their relationships. In high bonding groups, these discussions achieved a kind of gravity and vulnerable self-disclosure not found in low bonding groups. Again, in high bonding groups, these disclosures were met with student *support*, unlike in low bonding groups where discussions were less deep, unlikely to elicit supportive statements, and were often the product of

anonymous sharing or the topic being explicitly introduced by the curriculum. However, differences in how these discussions emerged across settings – their frequency and their content – are the key focus here.

Marginalized identities were discussed more in St. Louis high bonding groups than low bonding groups, but roughly equally across Charlottesville groups. Further, in addition to deep conversations surrounding identity issues, St. Louis high bonding groups used casual conversation and humor to embed identity into all aspects of their sessions. Last, St. Louis discussions of marginalized identities were much more likely to be centered around race and/or ethnicity, whereas Charlottesville discussions of marginalized identities were much more likely to be centered around mental health issues.

Underlying these differences is the role of visible versus invisible identities. Invisible identities are aspects of the self than cannot be seen by an outside observer (e.g., sexuality, mental health, some physical disabilities), whereas visible identities are readily observable (e.g., race, ethnicity, gender presentation; Hays, 2001). In Charlottesville groups, students were most likely to talk about mental health when discussing marginalized identities. Research on affluent youth suggests that this population may experience particular vulnerabilities to internalizing (and hence largely invisible) mental health challenges due to achievement pressures, physical and emotional isolation from parents, a competitive social atmosphere, and perfectionistic tendencies (e.g., Luthar & Barkin, 2012; Luthar & Becker, 2002; Luthar & Latendresse, 2005). Each of these dynamics were discussed within Charlottesville groups, and students more generally shared about how anxiety, depression, and self-harm touched their lives personally or through someone with whom they were close. This was likely the most salient marginalized identity for this population of mostly middle- and upper-class White students, and was discussed more than any

other type of identity. Because internalizing mental health struggles are also invisible, it allowed students to wait longer to discuss it and ultimately discuss it far less often than groups in St.

Louis.

St. Louis groups were mostly comprised of students who identified as belonging to a racial/ethnic minority group, thereby holding a visible marginalized identity. Marginalized racial and ethnic identities impact *every way* in which a youth moves through the world, making them subject to racial discrimination that permeates nearly every facet of their lives, and which has the long-term potential of causing debilitating mental and physical health outcomes (Anderson & Stevenson, 2019). Further, this particular community had been witness to a high profile case of an unarmed Black person being killed by police, which may have also served to increase the salience of this issue for Black youth.

One buffer for youth against the persistent harm of discrimination is racial socialization, or “specific verbal and non-verbal messages transmitted to younger generations for the development of values, attitudes, behaviors, and beliefs regarding the meaning and significance of race and racial stratification, intergroup and intragroup interactions, and personal and group identity” (Lesane-Brown, p.1, 2006). Research on racial-ethnic socialization has primarily focused on what happens in the home between parents and their children, and has been found to be associated with myriad positive outcomes for youth (Lesane-Brown, 2006). More recently, research has considered the impact of *peers* in racial socialization as agents who shape and reinforce racial/ethnic concepts (Hughes, McGill, Ford, & Tubbs, 2011).

In St. Louis high bonding *TCP* groups, peers and facilitators engaged in a kind of racial socialization process, opening up about their experiences with racial discrimination and the shared impact of those experiences among group members, using humor to play with and

connect about racial constructs and stereotypes of their own racial/ethnic group, and casually communicating attitudes about race and its position in politics and society. These discussions included implicit messages that mirrored aspects of racial socialization; for example, facilitators' stories of racial traumas and how they ultimately grew from them included elements of how they *coped* with racism, an important component of 'preparation for bias,' one of four types of racial socialization (Loyd & Williams, 2017). As in Charlottesville, students in St. Louis were likely focusing on their most salient marginalized identity, but here this identity was *visible* to the group from the outset and therefore discussed earlier and more often. In high bonding groups, where trust was established more quickly, groups bonded first through more lighthearted sharing and joking about race and ethnicity early in the course of the intervention, with deeper, more connecting disclosures in later sessions. In this way, it is possible that the groups 'tested the water' in early sessions, seeing how their facilitators and the group at large handled racial humor and comments. Since these early tests were *connecting* experiences, it encouraged more and deeper sharing as the curriculum progressed. This is in contrast to low bonding groups, where a lack of student engagement and support kept groups from advancing to deeper identity discussions.

Potentially important also were the racial/ethnic identities of the St. Louis facilitators, both women of color (a Black woman and a bi-racial woman). There is some evidence to suggest that for Black youth, having Black staff and facilitators might serve as an indirect form of racial socialization, and that racial/ethnic matching between youth and adults may support racial identity development (Loyd & Williams, 2017). However, other research on youth programming has suggested that race/ethnicity matching in mentorship dyads was *not* associated with stronger program effects (e.g., Sanchez & Colon, 2005). In *TCP*, it is possible that students of color in St.



Louis identified more strongly with their facilitators who were able to introduce issues of racism and discrimination using their personal experiences. However, in line with research indicating that a match in visible identities is not the whole story, the St. Louis facilitators were the same in high and low bonding groups. What seemed to matter above and beyond race/ethnicity matching was having discussions of marginalized identities early on, in both light and deep ways, and within a context of trust that was built through this and other processes.

A final but important consideration in interpreting the difference in content of identity discussions across settings is the *intersectionality* of various identities. Students in each setting seemed to most often discuss the marginalized or stigmatized identity that felt most salient to the majority of the group members. However, it is important to note that it is *very* unlikely that students in St. Louis *did not also* experience mental health challenges. In fact, there is an abundance of research suggesting that racial discrimination erodes mental health in the short and long term (Anderson & Stevenson, 2019), and poverty stressors only serve to exacerbate mental health challenges. For students in Charlottesville, the salience of mental health issues may have actually been a reflection of *privilege*; these students were less likely to have experienced stigma around seeking mental health support as compared to students of color (DuPont-Reyes, Villatoro, Phelan, Painter, & Link, 2019), had sufficient resources within their school and home settings to have issues identified, and were given language to describe and understand the concerns. It is likely that students in St. Louis did not have access to these same supports. Thus, the finding that students in different settings prioritized different identities should be understood within the greater context of systems of support and oppression that give identities meaning.

In sum, addressing identity issues and having students provide support was important in all high bonding groups. Across settings, different identities mattered to different groups, and

discussions of identity were more central to group-level connection among groups of youth for whom the majority held a visible marginalized identity.

**Theme 4: The role of humor and the significance of *type* of humor.**

Humor was a significant part of all *TCP* groups, but was generally used by students more often in high bonding groups than low bonding groups. In high bonding groups, humor was used to build on positive comments, enhance stories, playfully tease, and balance the intensity of authentic compliments. It was also used as a means to modulate the group's affect during moments of deep disclosure and vulnerability (i.e., group-level emotion regulation), and often shaped the repair process following a rupture in the group (more on this below). These findings are in line with the somewhat limited research on the role of humor in various settings. Humor has been found to enhance student learning in an educational context, increase trust in a therapy setting, and within a group, to *increase cohesion* and advance goal achievement (Dziegielewski, 2003). Humor is an essential communication tool and may be particularly important for young people as a way to alleviate stress, navigate tense moments, and reduce the need for self-protection in an emotionally vulnerable setting (Berg, Parr, Bradley, & Berry, 2009).

However, humor also had a darker side in *TCP*; among low bonding groups, humor was more likely to be part of a *disconnecting* group experience, although this functioned differently across settings. In St. Louis, students used humor less in low bonding groups than in high bonding groups, and humor was more likely to be disruptive to the group's goals and/or not received well by the group. In Charlottesville, students used humor *more* in low bonding groups than in high, *but* humor was more likely to be biting, sarcastic, or critical. Humor in Charlottesville low connection groups was often thinly veiled insults or negative sarcasm, highlighting and reinforcing disconnection among the group members. This finding mirrors that

of Deutsch and colleagues' (2013) group-process analysis in which they found that 'fun' appeared more often in groups with lower relational satisfaction, but that these instances co-occurred with disconnection and were a distraction away from the group experience rather than an opportunity to enhance the group experience. In short, humor could either build or erode bonding depending on how it was wielded.

**Theme 5: Rupture and repair processes related to group-level bonding.**

Ruptures and repairs in a clinical setting are generally considered valuable aspects of relationship building, and are associated with positive therapeutic outcomes (Safran et al., 2011). In the current study, disruptive behavior and facilitators' efforts of control captured just one type of rupture and repair cycle, those that were spurred by behavior that required redirection. Overall, there were more 'Efforts of Control' coded in low than high bonding groups, and also more in St. Louis groups than in Charlottesville groups.

One key finding is that it was not so much the *occurrence* of ruptures that mattered, but whether and how they were *repaired*. High bonding groups generally experienced ruptures that were quickly repaired, leaving group-level connection unharmed or even strengthened. Recall examples from St. Louis high connection groups in which facilitators used a light touch to identify and correct disruptive dynamics early on – for example, naming that certain pairs of students could not work well together, *using humor* to tell a distracted student to re-engage and put away her phone. These small corrections demonstrated that facilitators were paying attention and made explicit the implicit processes that could have (if left unattended) served to undermine connection. It is possible that, through these small ruptures and repairs, students in high bonding groups received messages of being wanted in the group, and were given opportunities to reengage via *humor* that served to minimize the need for self-protection (Berg et al., 2009).

In low bonding groups, some differences in settings emerged. In St. Louis low bonding groups, students were less likely to respond to earlier-stage efforts of control, leading the facilitators to escalate and eventually lose patience with the students. Navigating more significant tension in the absence of strong group-level connection meant that repairs were insufficient; the group moved on, but could not do so in a way that restored a positive dynamic. In Charlottesville low bonding groups, humor was often actually masking a rupture at the group-level, yet facilitators almost never addressed it as such, thereby completely missing opportunities for authentic rupture and repair cycles. Repair might have been possible, but simply was not attempted. Across settings, facilitators of low bonding groups generally tried to push past disruptive behavior for as long as possible (in St. Louis, until the situation became untenable and a more significant redirect was required; in Charlottesville, for the entirety of sessions). This is similar to Deutsch and colleagues' (2013) finding that conflict following student disengagement was more likely to be ignored or addressed only passively by the adults in groups with low relational satisfaction. The tendency of facilitators in low bonding groups to pacify rather than address a rupture outright likely both reflected a lack of group-level bonding *and prevented the potential bonding* that could have come from a successful rupture and repair process.

### **Overall Discussion and Future Directions**

Adolescence is a time of striving to understand oneself in the context of relationships with important others (Allen et al., 2015). Connecting with peers is a fundamental need during this developmental period, and in the absence of real connection, youth are at risk for myriad negative outcomes (e.g., Brackney & Karabenick, 1995; King & Merchant, 2008; Birkett et al., 2009). Prior work has demonstrated the effectiveness of a novel intervention for adolescents – *The Connection Project* – to promote connection among groups of teens in a school-based

setting, thereby reducing these risks and enhancing youth's functioning across several domains (Narr, 2019; Allen et al., 2019). The current study built on these findings, illuminating the *specific processes* that unfolded in groups of students who reported feeling significantly closer – or *not* closer – to their group members at the end of the intervention. Further, it explored how the same intervention functioned in two different ecological settings: St. Louis, Missouri with a study population comprised mostly of racial/ethnic minority students from low-income families, and Charlottesville, Virginia with a study population comprised mostly of White, middle- or upper-class students.

Findings point to two main takeaways with implications for youth programming. First, there were group-level processes that strengthened and/or were markers of group-level bonding that helped youth form deeper relationships with their peers, *regardless of context*. This suggests that there may be some 'universal' ingredients of *TCP*, and perhaps of adolescent group-based interventions more broadly, that are related to creating positive change in youth's relationships. In the current study, these included: more spontaneous discussions between facilitators and students outside of curriculum elements, students demonstrating more immediate trust in their facilitators, groups engaging more deeply on identity issues, practicing a more effective rupture and repair processes, and most importantly, demonstrating more student vulnerability that is met with *more student support* following instances of self-disclosure.

This final point, student support, was relevant across several themes and was a key difference between discussions that did and did not serve to further group connection. Teaching students *how* to respond to and support one another might be an important element of group-based youth programming, and a necessary addition when groups are not naturally providing support to one another. Further, youth programs led by adult leaders may benefit from flexible

planning around program dose and/or duration in response to emerging group-level connection; groups that are slow to bond as indicated by the absence of the markers identified above may simply need more time to establish trust with their program leaders as a building block towards connecting with their group. Overall, similarities in high bonding groups across settings suggest that the same program can meet many of the same and different needs of youth in different settings.

However, settings *did* matter, which is the second main conclusion; there were important differences in how high vs. low bonding groups presented across settings which suggests that there was tailoring of the program to the specific needs and strengths of students based on their ecological context. These differences were related to several things – the experience levels of the facilitators, the socialization of the students around behavioral expectations of engagement at school, whether the majority of group members held a visible vs. invisible marginalized identity – that shaped the way group-level processes unfolded differently across settings. As the program is implemented in more places with different student characteristics, program sites may benefit from adopting a '*both/and*' attitude rather than an '*either/or*' approach, using tools and looking for markers generally associated with high bonding groups while also being attuned to how students' broader contexts may call for adaptations.

For example, given the chronic stress caused by systemic and systematic racism, it is at a minimum prudent and, more likely, essential that groups provide the space for students of color to discuss their experiences with racism. This emerged in the context of St. Louis groups, where it can be assumed that the majority of students had experienced discrimination and it was therefore a salient identity stressor. However, the relative lack of discussions about race in Charlottesville likely does not mean that they were unnecessary in that ecological context, but

rather than the majority of students in that setting had instead experienced mental health issues as their most salient identity stressor. Extending this concept more broadly, youth programming aiming to be responsive to their students' needs may benefit from understanding the most likely identity stressors of their population *and* introducing various types of identity issues into their curriculum to support the majority of their students as well as those who hold minority identities within the group context.

Following is a list of potential recommendations for building high bonding *TCP* groups *and* high bonding youth groups more generally. These recommendations are derived from the current study, but each represents a possible avenue for future directions to test the impact of these factors on youth outcomes.

*Recommendations:*

- Facilitators should lean into their authentic personalities to engage and connect with adolescents, as opposed to rigidly following a set curriculum.
- Self-disclosure begets self-disclosure; when groups are not connecting, facilitators should use their own stories and experiences to encourage sharing.
- If group members come into the group with low openness/trust, facilitators should focus on building *individual connections* between themselves and the group members.
  - If possible, groups that are slow to demonstrate the development of trust at the group-level might benefit from additional sessions (for example, an alternative curriculum that meets more frequently within a semester, or extends to the following semester).

- Facilitators should introduce issues around and experiences with marginalized identities, and make space in the group for students to share about their experiences with both their visible and invisible identities.
  - Diverse representations of both visible and invisible identities among facilitators may be of benefit to group members.
- When students are disruptive or disengaged, facilitators should intervene *early* and address the issue directly – interventions should be as ‘light handed’ as is effective, using humor whenever possible to repair potential ruptures.
- Facilitators should strive to foster a group culture that includes prosocial humor and laughter.
  - If humor becomes mean spirited, this should be identified and addressed directly.

### *Limitations*

There were several limitations to the current study. First, all findings were correlational in nature and therefore no causal inferences can be made. Second, comparisons between contexts should be interpreted cautiously, as there were two important differences between the settings: (1) There were only 9 Charlottesville groups but 40 St. Louis groups, so the range in the outcome measure was greater among St. Louis groups. In other words, ‘high’ and ‘low’ bonding groups in St. Louis were more disparate from one another than ‘high’ and ‘low’ bonding groups in Charlottesville. (2) Charlottesville students all knew one another in advance of *TCP*, some for many years, while students in St. Louis had fewer significant preexisting relationships; this likely affected group trajectories in unknowable ways given the constraints of the current study (e.g., Charlottesville students with a longstanding dislike of one another in the same group, clique dynamics, etc.).



The coding and analytical approach also had limitations. Only five sessions from each group were analyzed, and it is possible that there were important discussions or group experiences within the unexamined sessions that impacted a given group's connection. Further, while a coding team double-coded and reconciled the transcripts, the analysis of the resulting coded data was largely my own and it is therefore possible that I did not capture other ways of parsing or understanding the data.

Finally, although the focus and interest of this work is on group processes more generally, these results apply to one specific program, at one point in time, in two very specific contexts. Hence, generalizations should be made with caution.

## **Conclusion**

*The Connection Project* has been demonstrated to be effective at deepening relationships among groups of youth – but how? For whom? Under what circumstances? While there is more work yet to be done to fully address these questions, this dissertation explored a deeper understanding of what was happening at the group-level when youth felt as though they had really grown in their relationships with their fellow group members. For group-based interventions, knowing the processes that lead to authentic, meaningful connections with others is key. While every group may not have the capacity to bond at equal levels, interventions that are sensitive to the unique needs of their youth and celebrate and build on their unique strengths can engender engaging, trusting, and safe group environments in which youth form *real* bonds.

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**Tables**

Table 2

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Rank Order of Group Change in Connection Score in St. Louis				
Ranking (Least to Most Connected)	Group #	Control Group Change in Comfort Pre to Post	TCP Group Change in Comfort Pre to Post	Group Change in Connection Score
1	11	-0.27	-1.97	-1.95
2	30	0.21	-1.44	-1.46
3	35	0.28	-1.42	-1.44
4	33	1.02	-1.09	-1.17
5	36	-0.46	-1.05	-1.02
6	29	-0.05	-0.93	-0.92
7	17	-0.11	-0.90	-0.89
8	9	-0.21	-0.74	-0.73
9	39	0.61	-0.38	-0.42
10	7	0.48	-0.34	-0.38
11	22	0.57	-0.29	-0.34
12	31	-0.29	-0.30	-0.28
13	18	-0.45	-0.27	-0.24
14	15	-0.68	-0.28	-0.23
15	34	0.02	-0.20	-0.20
16	8	-0.73	-0.23	-0.18
17	19	0.51	-0.12	-0.16
18	40	0.05	-0.12	-0.12
19	21	-0.56	-0.08	-0.04
20	12	-0.59	-0.04	0.00
21	38	0.52	0.10	0.06
22	32	-0.24	0.08	0.09
23	23	-0.18	0.09	0.11

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Rank Order of Group Change in Connection Score in St. Louis

Ranking (Least to Most Connected)	Group #	Control Group Change in Comfort Pre to Post	TCP Group Change in Comfort Pre to Post	Group Change in Connection Score
24	13	0.33	0.40	0.38
25	16	-0.07	0.45	0.45
26	10	-0.46	0.42	0.46
27	14	0.27	0.52	0.50
28	20	-0.41	0.55	0.58
29	37	-0.67	0.54	0.59
30	5	-0.058	0.63	0.63
31	4	-0.33	0.62	0.65
32	24	-0.78	0.60	0.66
33	2	0.43	0.72	0.69
34	6	1.45	0.81	0.69
35	26	-0.39	0.67	0.70
36	27	0.22	0.75	0.73
37	28	0.03	0.75	0.75
38	3	0.46	1.03	0.99
39	1	0.66	1.19	1.14
40	25	-0.14	1.29	1.30

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Table 3

Rank Order of Group Change in Connection Score in Charlottesville				
Ranking (Least to Most Connected)	Group #	Control Group Change in Comfort Pre to Post	TCP Group Change in Comfort Pre to Post	Group Change in Connection Score
1	8	0.01	-0.61	-0.61
2	2	0.38	-0.52	-0.38
3	4	-0.30	-0.27	-0.38
4	3	-0.14	-0.20	-0.25
5	5	0.08	0.04	0.06
6	6	-0.08	0.41	0.38
7	1	0.04	0.45	0.46
8	7	0.01	0.71	0.71

**Table 4***Demographics of St. Louis Groups Selected for Qualitative Analysis*

St. Louis Group #	Connection Level	N	Mean Age in Years (SD)	Mean Parent Education (SD)*	Gender (N)	Grade (N)	Minority Group Membership (N)	Ethnicity (N)
Group 1	High	7	15.92 (0.47)	3.14 (0.90)	28.6 M (2), 71.4% F (5)	71.4% 10 <sup>th</sup> (5), 28.6% 11 <sup>th</sup> (2)	14.3% No (1), 85.7% Yes (6)	85.7% Black (6), 14.3% White (1)
Group 25	High	9	15.15 (1.36)	2.11 (1.05)	66.7% M (6), 33.3% F (3)	77.8% 9 <sup>th</sup> (7), 22.2% 11 <sup>th</sup> (2)	11.1% No (1), 88.9% Yes (8)	22.2% Black (2), 11.1% White (1), 44.4% Hispanic/Latinx (4), 22.2% Multiethnic (2)
Group 11	Low	9	15.61 (1.48)	3.5 (0.84)	55.6% M (5), 44.4% F (4)	66.7% 9 <sup>th</sup> (6), 22.2% 10 <sup>th</sup> (2), 11.1% 11 <sup>th</sup> (1)	100.0% Yes (9), 0.0% No (0)	66.7% Black (6), 22.2% Hispanic/Latino (3), 11.1% Other (1)
Group 30	Low	10	15.28 (0.46)	2.63 (1.06)	60.0% M (6), 40.0% F (4)	66.7% 9 <sup>th</sup> (6), 33.3% 10 <sup>th</sup> (3)	30.0% No (3), 70.0% Yes (7)	40.0% Black (4), 30.0% White (3), 30.0% Multiethnic (3)

\*Note: 1= Less than HS; 2= HS grad; 3= Some college; 4= College grad +

**Table 5***Demographics of Charlottesville Groups Selected for Qualitative Analysis*

C'ville Group #	Connection Level	N	Mean Age in Years (SD)	Mean Parent Education (SD)*	Gender (N)	Grade (N)	Minority Group Membership (N)	Ethnicity (N)	International Student Status
Group 1	High	7	NC**	3.67 (0.82)	16.7% M (1), 83.3% F (5)	100.0% 9 <sup>th</sup> (7)	66.67% No (4), 33.34% Yes (2)	16.7% Black (1), 66.7% White (4), 16.7% Multiethnic (1)	100.0% No
Group 7	High	7	15.47 (0.69)	4.00 (0.00)	57.1% M (4), 42.9% F (3)	100.0% 9 <sup>th</sup> (7)	71.43% No (5), 28.57% Yes (2)	71.4% White (5), 14.3% Asian/PI (1), 14.3% Multiethnic (1)	85.7% No (6), 14.3% Yes (1)
Group 8	Low	6	14.97 (0.33)	4.00 (0.00)	33.3% M (2), 50.0% F (3), 16.7% Trans (1)	100.0% 9 <sup>th</sup> (6)	83.33% No (5), 16.67% Yes (1)	83.3% White (5), 16.7% Multiethnic (1)	100.0% No (6)
Group 2	Low	6	15.30 (0.88)	4.00 (0.00)	50.0% M (3), 50.0% F (3)	66.7% 9 <sup>th</sup> (4), 33.3% 10 <sup>th</sup> (2)	40% No (2), 60% Yes (3)	40.0% White (2), 40.0% Asian/PI (2), 20.0% Multiethnic (1)	66.7% No (4), 33.3% Yes (2)

\*Note: 1= Less than HS; 2= HS grad; 3= Some college; 4= College grad +

\*\*Data on participant age were not collected for Group 1.

**Appendix: A Sample Memo**

Coder Name: [Redacted]

Date Completed: 2/4/20

Transcript Name: St. Louis Group 1 Session 11

Please compare the transcript to the relevant session curriculum:

How much of the curriculum was used? (add X to indicate your answer)

1	None	
2	A little	
3	Most	X
4	All	

**Which parts were adapted or excluded and in what way(s)?**

I'm not sure if parts have been necessarily excluded, however there was *a lot* of spontaneous talk this session. This is a positive thing, they spent almost the first half talking about Donald Trump because he had just won the election. This was weighing on people's minds, and I think it was a good experience for everyone. They would move on at various times and do the curriculum activities, but would usually get distracted and keep going on tangents. It always felt like a natural flow, though.

**Why? (If the reason was evident, e.g., ran out of time, group members requested to talk about other things, refusal to engage with activity, etc.)**

Mostly group members wanting to talk about other things. This group has a very strong bond and the curriculum almost seems less necessary.

**What is your general impression of the session? Include things like: how well you felt the session went, how connected the students seemed to one another and to the facilitator, anything that stood out to you about the session (e.g., a particularly tense moment, a lot of misbehavior, a great example of connection/a heartwarming moment)**

Loved this session. You can tell they are close. They make jokes with each other (student to student, student to facilitator, facilitator to student) throughout the entire session. At the end, the facilitators are asking for feedback and the students (including a girl who I've only heard say about 1 positive thing in 4 sessions) said they really liked it, they learned a lot, they felt more connected, they love the relatable conversations, and the program should never replace Heather and Crystal.

Please *count* the following:

# of comments from Male Students:	214
# of comments from Female Students:	226
# of comments from Facilitators:	363

**Please note any areas of confusion or questions that you had for the team while coding this transcript. Include direct quotes when necessary. Use this section to organize your thoughts in preparation for reliability meetings.**

No questions for the team from this session.