Classroom Impression Management in Early Adolescence: Exploring Students' Academic Self-Presentation Strategies with Peers

by

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ABSTRACT

The current study expands prior work on early adolescents' impression management in the classroom by developing a self-report measure that was used to explore students' endorsement of four academic self-presentation strategies (i.e., exaggerate, downplay, honest, and avoid) depending on peer type (i.e., best friend and most popular classmate), academic performance condition (i.e., strong and poor performance), and whether gender differences emerged, when discussing one's level of effort on a class project. Specifically, data were collected from 475 eighth-grade students (253 boys, 222 girls) within a high-performing educational context. Preliminary psychometric evidence is provided indicating that the measurement tool developed for the present study shows promise. Additionally, findings from the current study extend existing work in which eighth-grade students perceive that high-status youth are less academically engaged than one's close friends, and students are reluctant to appear industrious to one's peers; however, given the novelty of the measure and educational context in which data were collected, alternative interpretations and corresponding implications of study results are discussed. The current study also extends theoretical conceptualizations of how transactional processes among early adolescents' perceptions of academic norms among classmates, concerns over one's public image, and students' use of academic self-presentation strategies with peers may have lasting effects on students' educational identity and commitment.

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INTRODUCTION

Academic engagement, which broadly refers to the quality of students' connection and involvement with school, classroom activities, and learning, is a construct that has garnered the interest of scholars and practitioners for two prominent and interrelated reasons, including its robust contribution to students' school success both in the short- and long-term (e.g., grades, attendance, retention), as well as its pattern across students' academic trajectories (see Wigfield, Eccles, Schiefele, Roeser, & Davis-Kean, 2006 for a review). Unfortunately, students experience a steady decline in engagement throughout the duration of their schooling with notable and ubiquitous decrements during the transitions to middle and high school. Importantly, even youth who continue exhibiting high achievement report declining enthusiasm for school over time (Conner & Pope, 2013; Pope, 2001). Many factors have been implicated in these trends, including how well the classroom structure and social context are aligned with the developmental needs of early adolescents (e.g., Eccles et al., 1993). Much of this work has understandably focused on the beginning of middle school when individual and school transitions initially converge; however, it is important to expand our inquiries to include the latter part of middle school given that engagement continues declining over time and youth are on the precipice of another school transition. Accordingly, exploration of *impression management*, which is a pervasive psychosocial process that aims to facilitate social approval, may illuminate a critical mechanism contributing to declines in early adolescents' engagement, and importantly, appears acutely relevant to eighth-grade students' classroom experiences (e.g., Juvonen & Murdock, 1995; Zook & Russotti, 2012).

The intersection between scholastic and interpersonal demands becomes increasingly complex for early adolescents who attempt to balance the educational expectations of parents and teachers with social aspirations among peers. Students pursue academic and social goals that blend in everyday classroom settings making them difficult to separate (e.g., Wentzel, 2011), and as early adolescents develop more sophisticated social cognitive capabilities, they experience heightened sensitivity to social comparison and evaluation (Blakemore & Choudhury, 2006). Consequently, behavioral, and thus observable, manifestations of engagement, such as active classroom participation and effort on schoolwork, pose a difficult tension for youth – these practices are concurrently critical to learning and educational success while also leaving students vulnerable to scrutiny during a time when youth are increasingly self-conscious (Harter, 1990; Wigfield et al., 2006). Many middle school students are concerned about social repercussions associated with their academic dispositions (i.e., the extent to which social status systems in the peer culture reward or penalize academic success and hard work) as well as belief systems pervasive among early adolescents that effortful behavior signifies low ability (Hamm, Schmid, Farmer, & Locke, 2011; Juvonen & Cadigan, 2002). Because of intensified concerns over one's public image during this developmental stage, early adolescents – and eighth-grade students especially – are disinclined to appear industrious to one's peers (Juvonen & Murdock, 1993, 1995; Zook & Russotti, 2012). Despite its developmental salience or implications for students' academic adjustment, impression management has remained underexplored as a potential mechanism contributing to early adolescents' patterns of classroom engagement; thus, the primary

goal of the current investigation was to explore features of eighth-grade students' approaches to impression management with peers.

Impression Management

Impression management, also commonly referred to as *self-presentation*[1], is the mechanism through which people seek approval and avoid disapproval, and is channeled by one's perceptions of others' values and behaviors as a guide for one's own conduct (Leary & Allen, 2011). Specifically, individuals endeavor to control others' perceptions and evaluations of oneself through the use of deliberate behavioral attempts (i.e., self-presentation strategies) to manage the presentation of a public self that makes a positive impression on people that facilitates social approval (Baumeister, 1982a; Goffman, 1959; Leary & Kowalski, 1990; Schlenker & Leary, 1982). Another motivation for engaging in impression management includes validating one's positive sense of self by attempting to make one's "public self" congruent with one's "ideal self" (Baumeister, 1982b, 1986). Formation of an identity that is both personally meaningful and validated by others constitutes a key developmental task of adolescence (Erikson, 1968, 1980; Sullivan, 1953). Peer relationships and the contexts in which they are experienced become central to this process; identification with a particular peer group during early adolescence contributes to youths' developing sense of identity and self-perceptions (Baumeister & Leary, 1995; Brown, 2004; Eccles & Barber, 1999). Accordingly, early adolescents are strongly attuned to and motivated by positive peer regard and belongingness, and among

[1] Although the terms impression management and self-presentation are commonly used interchangeably in the literature, to improve conceptual clarity in this dissertation, impression management will refer to the broader social-cognitive process and self-presentation will refer to behaviors used to facilitate impression management.

students' social-evaluative concerns include their heightened emphasis on the opinions and expectations of their peers (Brechwald & Prinstein, 2011; Brown & Larson, 2009). Similarly, youth become increasingly invested in one's position in the status hierarchy, although not all middle school students strive for social prominence (Juvonen & Cadigan, 2002; Kiefer & Ryan, 2008; LaFontana & Cillessen, 2002, 2010; Ryan & Shim, 2008). In some instances, avoiding negative outcomes (e.g., social disapproval, rejection, or harassment) is more powerful than the desire to enhance social status or acceptance (Leary & Kowalski, 1990). Impression management facilitates both of these goals: through the use of self-presentation strategies, individuals are able to present themselves in ways that serve to enhance approval (i.e., active impression management) and/or avoid disapproval (i.e., defensive impression management).

Although self-presentations are strategic, they are not necessarily deceitful; because people are multifaceted, with varied and sometimes contradictory attributes and interests, they tend to present whatever characteristics are most relevant to their immediate self-presentational goals (Leary & Allen, 2011; Schlenker, 2012). However, early adolescents exhibit the highest level of self-conscious thoughts and greatest instability in self-image compared to younger and older youth (Harter, 1990, 1998). In the absence of a well-defined and stable self-concept or cohesive identity, early adolescents' impression construction may be most strongly influenced by their perception of what will maximize likability and/or minimize disapproval among their peers. As individuals determine what image they want to construct, they select a corresponding strategy or strategies to achieve their desired impression (Leary & Kowalski, 1990). In doing so, one must consider a range of issues including their current self-concept (i.e.,

how one sees themselves), desired and undesired identity images (i.e., how one would like, or not like, to be viewed by others), current social image (i.e., how one is currently perceived by others), potential social image (i.e., how one wishes to be perceived by others in the future), role constraints (e.g., social expectations and norms), situation constraints (i.e., parameters under which one can reasonably present), and audience values (e.g., the preferences of those with whom one is interacting). Further, for self-presentations to be effective, behaviors must be tailored to the specific social context and characteristics of the target individuals whose impressions one is hoping to influence (Leary, 2014). Strategies that would accomplish an individual's goals in one situation or audience may have no effect, or worse, negative results, when used in another situation or with other people. Thus, an individual must be aware of what their particular audience values or expects and present themselves in a manner that is consistent in order to achieve the desired outcome and reap corresponding benefits (Leary & Allen, 2011). Throughout middle school, youth are progressively able to differentiate the social value associated with certain presentations, as well as portray themselves in ways they believe will facilitate social approval based on these perceptions (Banerjee, 2002; Juvonen & Murdock, 1993, 1995).

Peer Normative Influence on Academic Engagement

Peers play a prominent role in students' motivation and engagement (see Juvonen, Espinoza, & Knifsend, 2012, and Ladd, Herald-Brown, & Kochel, 2009 for reviews), and the heightened importance of peer influence is a critical feature of adolescent psychosocial functioning (Brown, 2004). Compared to other developmental stages, susceptibility to peer influence peaks in early adolescence (Steinberg & Monahan, 2007).

Although there are several mechanisms through which peer influence operates, establishment and reinforcement of social norms (i.e., group consensus regarding the prevalence or expected acceptability of behaviors for a given setting) account for a variety of students' behaviors in classrooms (Borsari & Carey, 2003; Galván, Spatzier, & Juvonen, 2011; Hamm et al., 2011; Lapinski & Rimal, 2005; Prinstein & Dodge, 2008). Concomitant with the desire for peer approval is conformity with peer norms; by knowing how others typically act and what others approve of, students can effectively determine how to behave (Brechwald & Prinstein, 2011; Juvonen & Cadigan, 2002). There are two related but distinct types of norms that are useful for understanding classroom behavior; *descriptive norms* refer to the values or behaviors that characterize a group as a collective whereas *injunctive norms* denote perceptions about what values and behaviors the group expects its members to maintain (Borsari & Carey, 2003). Much of the literature examining peer group contexts for academic norms utilize measures of descriptive norms; however, descriptive and injunctive norms do not necessarily describe equivalent social phenomena (Hamm et al., 2011). Norm theory suggests that the extent to which individuals perceive that their violation of group norms will result in social admonishment is likely more meaningful (Lapinski & Rimal, 2005), and this may be especially true during early adolescence (Masten, Juvonen, Spatzier, 2009).

For instance, the acceptability of certain academic behaviors, such as participating in class and expending effort on schoolwork, cannot necessarily be inferred from descriptive norms yet likely remain salient within peer culture. It is quite often the case that numerical prevalence (i.e., descriptive norm) and perceived acceptability (i.e., injunctive norm) of particular norms are congruent; there are some situations, however,

when the two do not align, such as when people approve of, but do not practice, particular behaviors (Cialdini, Reno, & Kallgren, 1990; Lapinski & Rimal, 2005). Following the previous example, it is unlikely that the majority of middle school students will skip class, yet the injunctive norm may be in favor of missing class if students perceive that this behavior, albeit uncommon, is socially accepted or indicative of high social status (Borsari & Carey, 2003). In this case, the descriptive norm would indicate that class attendance is normative, but the injunctive norm implies that skipping class is permissible, or even a signal of popularity. Unsurprisingly, injunctive norms that discourage effort and engagement undermine students' educational commitment even when the actual behaviors of group members as a whole (i.e., descriptive norms) are more moderate (Hamm et al., 2011).

Salient sources of peer influence. Although prevailing values and behaviors individuals perceive among peers, along with the corresponding consequences that one expects for compliance or noncompliance, have implications for early adolescents' classroom behavior, this encompasses a complex set of phenomena. Importantly, "peers" do not comprise one monolithic group with uniform impact; rather, *certain types of peers* within the broader group are more salient sources of influence, including early adolescents' close friends and highly visible (i.e., popular) peers (Berger, 2008; Brechwald & Prinstein, 2011; Rodkin & Ryan, 2012). Much of the research examining the role that peers play in students' academic adjustment emphasizes either close friends or high-status youth as the primary reference group that serve as influential socializers for students' behavior at school; however, rarely are multiple types of social ties examined simultaneously (see Malloy, Gest, & Rulison, 2011 for an exception), including close

friends and high-status peers as specific reference groups examined in contrast to one another.

Understandably, the importance of close friends as a major source of influence for early adolescents' academic adjustment has received a lot of empirical attention; because of the intimate nature of these relationships, friends' academic characteristics have unique and long lasting effects on students' classroom behavior (e.g., Kindermann, 2007; Kindermann & Gest, 2009; Ryan, 2000, 2001). For example, early adolescents' perceptions of their best friend's academic values (e.g., "My best friend believes that school is more important than most people think") are related to increased motivation for learning (e.g., "I do the work in this class because I like to understand what I am learning") among middle school students (Nelson & DeBacker, 2008). Additionally, Berndt and Keefe (1995) showed that when early adolescents perceived that their three closest friends were highly involved in classroom activities in the beginning of the school year, they themselves reported increases in classroom involvement throughout the academic year. Conversely, students who reported that their friends showed signs of disaffection (e.g., disrupting class) in the beginning of the year became more disruptive themselves by the end of the school year. Veronneau and Dishion (2011) found that having friends who modeled behaviors conducive to engagement (e.g., completing schoolwork, cooperating with other people in the school setting) were found to be more important than having friends who achieved high grades. Thus, it is not merely that having high-achieving friends promotes academic success, but that perceptions of friends' academic norms is a significant predictor of students' *own effort* and valuing of school.

Even in the absence of significant interpersonal contact, another prominent source of influence for early adolescents' behavior at school are classmates at the top of the status hierarchy (Brechwald & Prinstein 2011). Youth are more likely to be influenced by a popular peer than a classmate with lower status (Choukas-Bradley, Giletta, Cohen, & Prinstein, 2015). Further, high-status students are decidedly influential in establishing class norms because they hold high prestige and authority, are often the center of attention, and their opinions matter most to classmates (Cillessen & Rose, 2005; Cohen & Prinstein, 2006; Sandstrom, 2011). That is, popular classmates may serve as an indirect, yet critical, reference group for youth. This is thought to be especially pronounced among youth who seek to achieve social prominence given that they would be strongly motivated to conform to the norms associated with high-status peers (Brechwald & Prinstein 2011). Adopting norms among high-status peers is perceived as a way to align oneself with these peers to receive social rewards, including increases in one's own status. Reputational status grows in importance during the middle school years and, unfortunately, early adolescents increasingly prioritize popularity over academic achievement and adherence to rules (LaFontana & Cillessen, 2010).

Association between social status and academic diligence. Although not all popular students are dismissive of academic engagement, a tenuous relationship exists between popularity and effortful dispositions. Overall, peer culture in early adolescence is thought to undermine scholastic diligence, primarily stemming from the attitudes and behavior believed to be associated with social prominence. Juvonen and colleagues (Juvonen & Cadigan, 2002; Juvonen & Murdock, 1993, 1995) found that attraction to well-behaved peers declines in middle school and some students who frequently act up in

class and who are not effortful in their schoolwork are regarded as popular by their peers. This is consistent with findings from an ethnographic study demonstrating that early adolescent girls who were extremely popular exhibited strong negative feelings toward school (Merten, 1997). These girls demonstrated poor academic success and were frequently in trouble with their teachers for "goofing off," talking back, and not paying attention in class. As work expanded to disentangle social behavior associated with popularity, it became better understood that high-status youth comprise two primary subgroups – those who behaved in socially agreeable ways and those who maintained high-status despite behaving in socially unacceptable ways (Cillessen, 2011).

To learn more about scholastic dispositions among popular students, de Bruyn and Cillessen (2006) investigated the academic profiles of popular girls and found evidence supporting two distinct subgroups that paralleled the nature of social behavior among high-status youth. Specifically, one group exhibited a positive attitude towards academic achievement (i.e., Popular Studious), while the other group, in contrast, was characterized by poor academic achievement and a negative attitude towards school (i.e., Popular Disengaged). Despite peer ratings denoting similar levels of status (i.e., perceived popularity) *and* liking (i.e., sociometric popularity) in both groups, girls from their respective subgroup displayed nearly opposite academic repertoires. Popular Studious girls were low in work avoidance and attentive in class, according to both teachers and peers. Conversely, Popular Disengaged girls were disruptive, uninterested in school, and avoided difficult class assignments. The authors speculated that perhaps by openly challenging academic norms, this latter group became more visible among the peer group, which is one defining feature of popularity and status. Thus, it appears that

disaffection may enhance some popular students' reputation of "coolness". Accordingly, students may perceive multiple, and at times conflicting, norms for classroom engagement that increases the complexity and integration of one's academic and social goals in the classroom.

Benefits of Exhibiting Diminished Academic Effort During Early Adolescence

Despite the importance of effort for students' academic success, there are, unfortunately, several advantages to minimizing the appearance or endorsement of a highly-engaged student during early adolescence. For instance, youth are inclined to minimize or avoid peer difficulties associated with appearing overly studious, expecting that it can lead to damaging social reputations or depreciatory labels such as "nerd" (Jackson, 2003; Jackson & Nystrom, 2014; Rentsch, Schutz, Schroder-Abe, 2011). A six-year longitudinal study by Prinstein and LaGreca (2002) showed that students who were pejoratively called "brains" by their peers exhibited increases in anxiety and loneliness and decreases in self-esteem over time. Peer relationships and students' reputations among peers have reciprocal influences among the psychological, social, and academic health of youth, and thus are related to students' adjustment in school in major ways (e.g., Ladd, Kochenderfer-Ladd, & Sechler, 2013; Ladd & Ryan, 2012). Another reason that effort may be devalued among adolescents is rooted in practical concerns; the more time students spend studying, the less they have for social activities, which are important for peer approval, especially popularity (e.g., Sandstrom, 2011). Finally, a third source of motivation for downplaying or distancing oneself from a reputation of diligence lies in two inter-related processes regarding beliefs about effort and intelligence. That is, there

exists a paradoxical set of effects for academic effort that enhance its perceived and real risk for students' adjustment in complex ways.

Based on classic work by Nichols (1976, 1978), effort has been recognized for its capricious association with other indicators of scholastic adjustment. Among such negative effects include the toll on students' sense of self-worth and academic self-concept when effort is high but performance is low (see Urdan & Midgley, 2001 for a review). Although effort enhances achievement, it also plays a role in perceptions of students' ability by undermining academic self-concept, which is itself vital for students' long-term academic success (e.g., Marsh & O'Mara, 2008). Relatedly, effort has the potential to impact others' interpretations about one's aptitude. Intelligence is often conceptualized as an innate ability one possesses whereas effort is then seen as important for those who do not have this internal ability (Dweck, 1999, 2006). A vast body of work explicates two (personal) theories of intelligence that demonstrate common differences in beliefs about how effort and aptitude are related, and offers insight into contrasting attributions for competence. Overall, these personal theories delineate the degree to which individuals think their intelligence is fixed (i.e., entity theory of intelligence, or a "fixed" mindset) or malleable (i.e., incremental theory of intelligence, or a "growth" mindset). Those with fixed mindsets believe that being smart is something you are born with, an essential and finite quality that people either have or not. Alternatively, those with growth mindsets believe that intelligence is something you can acquire through effort and learning – a malleable quality that one can develop. Unsurprisingly, this effort-intelligence belief system has implications for how students approach learning and respond to failure in educational contexts; these contrasting conceptions about

competence – fixed versus growth – are differentially associated with learning goals and, as a result, motivational patterns in challenging learning situations (Dweck, 2002, 2006).

This belief that the relation between effort and ability is compensatory (i.e., the more one must study, the less smart one is) appears to be particularly salient during early- to middle-adolescence (Juvonen, 2006; Juvonen & Murdock, 1993, 1995). Students strive to maintain a sense of self-worth in academic settings, particularly following instances of failure, by protecting their academic self-concept (Covington, 1992; Covington & Omelich, 1979). Similarly, youth do not want others to misinterpret one's competence. It appears that, at the crux of this tension, early adolescents do not want to be perceived as overly studious, but they also do not want others to question their intelligence. Guided by a desire to protect against classmates' (and their own) perceptions of diminished competence, students may choose to minimize or avoid effortful behavior – or at least the presentation of such – because of the anticipated social and/or psychological costs, particularly in the face of poor academic performance (Juvonen & Murdock, 1993, 1995). Therefore, effort may be devalued among middle school students because of its potential to increase opportunities for peer difficulties and compromise interpretations about ability, both to oneself and among one's peers. This, again, reflects the inseparability of certain social and academic goals that eighth-grade students struggle with as they determine how to best navigate their level of classroom engagement and peer interactions.

Academic Self-Presentation Strategies

Academic self-presentation (ASP) strategies provide students with a means for presenting themselves in a particular way based on students' perceptions of group norms.

Once an individual has interpreted the social cues they perceive regarding others' academic values, students can then choose which strategies they believe will present themselves most favorably. Depending on contextual factors such as with whom one is interacting and the broader expectations for behavior in a particular setting, there could be any number of specific ASP strategies that students could utilize to facilitate social approval. Ultimately, from an adolescent's perspective, there are several advantages to presenting oneself as an "effortless" or "laid back" student. Visibly displaying hard work is increasingly associated with pejorative reputations such as being a "nerd" or "uncool" and may contribute to or perpetuate peer difficulties. Further, effort poses a difficult paradox among students, especially early adolescents who believe that someone who works hard must possess diminished intellectual capacity. It is not surprising that it becomes more normative and salient to associate scholastic diligence with social risk as youth progress through middle school, and findings culminate to highlight the relevance among early adolescents to engage in impression management processes in classroom interactions to facilitate peer approval (e.g., Galván et al., 2011; Juvonen & Murdock, 1995; Zook & Russotti, 2012). Accordingly, the concern remains that youth may disproportionately favor strategies that minimize their level of diligence, and that this would exacerbate declines in students' engagement trajectories.

Hypothesized cycle and implications for presentations of academic indifference. The correspondence among developmental processes characteristic of early adolescence converge in a way that undermines more visible forms of classroom engagement that has the potential for lasting effects on students' academic dispositions. In addition to students' self-consciousness more broadly, early adolescents' intense desire

for peer approval, perceived pressure for conformity, and preoccupation with one's public image collectively prompt youth to behave in ways that one *thinks* will confer social benefits (i.e., active impression management) and/or will not draw negative attention to oneself (i.e., defensive impression management). Thus, a peer ecology that *appears* more or less dismissive of engagement is sustained; however, this dynamic may actually be a reflection of the collective concerns over peer scrutiny rather than a dismissal of the value in working hard. This notion that students may misperceive group values by making erroneous inferences on the basis of group behavior is a common bias among adolescents that is thought to contribute to "peer contagion" effects (e.g., Prinstein & Wang, 2005). More specifically, *pluralistic ignorance* is the process by which people act in opposition to their privately held beliefs in order to avoid social discomfort, while simultaneously assuming that the behavior of everyone else is a direct reflection of their privately held beliefs (Miller & McFarland, 1991). An example of this phenomenon among youth has recently been used to understand why many children remain passive bystanders when observing instances of bullying, even when they themselves do not condone such behavior (Juvonen & Galván, 2009). Youth fear social repercussions for standing up for someone who is being victimized, as well as notice that others are not intervening in defense of the person being harassed, so often times instances of bullying continue.

A similar phenomenon might apply to early adolescents' perceptions of how their classmates feel about academic effort. It is possible that many students appear to undervalue engagement because they are concerned about negative social evaluations, yet they privately value effort and want to succeed academically. Pluralistic ignorance would

suggest that students value academic engagement but are afraid to be more open about this in part because they erroneously conclude that their classmates hold less supportive attitudes, and as a result, youth perceive their own private (pro-academic) values to be inconsistent with those of their peers. Further, adolescents also commonly overestimate the extent to which high-status peers engage in maladaptive behavior (Helms et al., 2014). Although deviant and health risk behaviors have received more attention, Helms and colleagues (2014) also found that adolescents tended to underestimate the amount of time high-status peers spent studying. This has potentially amplifying effects given how influential high-status youth are in shaping class norms; this miscalculation about group consensus may lead students to perpetuate the assumption that others devalue effort, reinforcing an image of academic indifference more broadly. That is, it is possible that the *projection* of academic indifference is more common than the actual beliefs held by students about the importance of conscientiousness, and early adolescents interpret alignment between descriptive and injunctive norms for nonchalance or diminished engagement.

Thus, the intersection between two pervasive psychosocial processes, *impression management* and *pluralistic ignorance,* during early adolescence may contribute to observed trends in middle school students' declining engagement and performance. However, this is problematic given that youth are actively constructing their academic identities during this time that are expected to crystalize over time. When an individual presents oneself a certain way (i.e., publicly committing), they may feel obligated to behave consistently with that identity; public behaviors are more committing than private thoughts because they constrain individuals within a reputation by which they are known

and treated (Juvonen, 2006). Further, public images that one presents can have a powerful influence on private self-appraisals, which in turn, impact subsequent behavior (Bandura & Walters, 1963; Bem, 1972), and wherein transactions are repeated, patterns are reinforced over time (Tseng & Seidman, 2007).

Because identity structure and social interactions are inherently intertwined, early adolescents may conform to peers' expectations – or one's perceptions of peers' expectations – as a way to make an optimal impression, which in turn, becomes integrated with their self-concept (Erikson, 1968; Goffman, 1959). Accordingly, early adolescents' social-evaluative concerns may limit the extent to which they publicly engage in or endorse effortful behavior even if they personally value academic success, and this may have cascading effects for classroom norms and students' own developing academic identity. Thus, the social desirability of an academically indifferent presentation style may produce a cycle of decreased engagement that gets reinforced over time and that has implications for one's own and others' classroom behavior and educational commitment. For example, slacking off in class in hopes of obtaining peer approval or improving one's social prominence may inadvertently compromise students' educational opportunities given the dynamic transactions among how an individual is perceived, valued, and treated by others, and one's own self-views. Continued self-presentation as academically indifferent may lead teachers and even some peers to perceive those students as unintelligent, or at the very least disinterested (Juvonen & Murdock, 1993). Consequently, these perceptions could negatively affect a range of academic experiences or even worse, create a self-fulfilling prophecy among students that contribute to ongoing academic challenges. Youth may begin internalizing the academic

indifference that they believe will facilitate social approval, and have thus been presenting, amplifying a downward trajectory of disaffection over time.

Self-presentational processes may play a meaningful role as early adolescents construct their social and academic identities, which in turn, could strengthen or weaken their educational commitment. That is, self-presentations may contribute to motivational dynamics (i.e., internal and external causal feedback loops) of classroom engagement or disaffection, serving to promote or undermine the quality of students' commitment over time (Skinner, Furrer, Marchand, Kindermann, 2008). Although there are compelling reasons for students to self-present in ways that distance oneself from an appearance of diligence, heterogeneity in academic values and norms, and various social ties exist among youth. For instance, there is a range of values and interests among youth resulting in significant differentiation among peer crowds (e.g., populars, jocks, brains), each with their own set of shared beliefs regarding the group's expectations for students' behavior at school (Brown, 1993, 2004; Eccles & Barber, 1999; Hamm et al., 2011). Similarly, interconnectedness between students' social and academic goals in the classroom provide different opportunities for youth to utilize a range of ASP strategies depending on the situation and interaction partner. However, there remains a gap in the literature about *how* early adolescents may approach this with their peers.

Gender differences in ASP use. Contributing additional complexity to early adolescents' peer and educational contexts is the gendered nature of broader social and academic norms, as well as concerns over gendered norm violations (Blakemore, 2003; Leaper & Smith, 2004). Differential socialization patterns between boys and girls contribute to observed gender differences in peer interactions and experiences, as well as

academic behaviors and outcomes (e.g., Jackson & Dempster, 2009). Gender-typed attitudes and behavior have been observed for students' interpersonal and academic experiences that, on average, result in differences in the ways girls and boys approach and engage in their peer relationships and scholastic endeavors, and youth who exhibit gender atypical behavior tend to experience greater peer and academic difficulties (Blakemore, 2003). Interpersonally, adolescent females frequently report higher levels of self-disclosure within their friendships than do males, which is presumed to reflect a stronger orientation among girls for social support, intimacy, and emotional closeness (Bauminger, Finzi-Dottan, Chason, & Har-Even, 2008). Academically, girls commonly outperform boys on several indicators of scholastic success, including engagement, school liking, and grades (Buchmann, DiPrete, & McDaniel, 2008; Lam et al., 2012; Voyer & Voyer, 2014). Although traditional stereotypes favor male competence, particularly in certain domains such as math or science, more recent investigations have shown that boys tend to underachieve across multiple academic subjects compared to girls (Hartley & Sutton, 2013; Nosek et al., 2009). Further, boys, more so than girls, seem to believe that schoolwork is "uncool" (Jackson, 2003; Jackson & Dempster, 2009). Masculine gender role expectations are thought to create dissonance between one's perceptions that school is feminine and one's masculine self-concept, which then contributes to lower class engagement and performance among boys (Czopp et al., 1998; Heyder & Kessels, 2013; Jackson & Dempster, 2009; Lasane et al., 1999).

Consequently, these gendered dynamics further modify early adolescents' perceptions of normative expectations for classroom behavior that also seems to affect students' decisions about ASP strategy use. Zook and Russotti (2012) explored the extent

to which early adolescent boys and girls differed in their beliefs about ASP use and found that boys were more likely than girls to endorse a strategy that minimized one's grade and/or extent to which one studied, whereas girls were more likely to believe that students should be truthful about their high grade and effort. Some research among college students suggests that gender schemas mediate self-presentation strategies, and males, in particular, were more likely to endorse strategies that portray a less conscientious and academically successful demeanor (Lasane et al., 1999). Thus, interpersonal and academic norms appear to represent gendered effects that likely have corresponding implications for classroom peer interactions and interpretations regarding the acceptability of effortful behavior.

Measurement of ASP use. Some progress has been made in elucidating students' use of ASP strategies; however, there remain important areas for additional research. Most prominently lacking in our understanding of students' ASP use is a more nuanced examination of early adolescents' presentations of academic effort in specific peer archetypes (i.e., close friends and high-status youth) that may indicate diverse norms for classroom engagement. *Effort*, more so than achievement, is perceived as particularly risky among eighth-grade students (Juvonen & Murdock, 1993, 1995; Zook & Russoti, 2012). Thus, although researchers recognize variation among peers' academic values, and students' interpretations of the values espoused by different reference groups, no existing measure of academic self-presentation tactics explore these potential distinctions *within* the peer group. Previous research has examined differences in strategy use between adults (e.g., teacher) and peers and has found that students utilize tactics that they think will portray themselves in ways that are consistent with their perceptions of adult versus

peer values (Juvonen & Murdock, 1993, 1995). Previous work has also investigated beliefs about strategy use among peers; however, comparisons across peers were not explored (Zook & Russotti, 2012). Given that early adolescents (a) are able to modify their self-presentations based on their audience, (b) students contemporaneously perceive varying levels of endorsement for academic effort, and that (c) there are different relational norms across different peer types, it is reasonable to expect variation in students' ASP use that reflect this type of multidimensionality. For example, early adolescents who perceive popular students as devaluing effort may be most likely to self-present in ways that undermine academic effort when interacting with high-status classmates. Alternatively, students may feel more comfortable disclosing their level of effort honestly with a close friend, given their likely similarity in academic values and behavior (e.g., Kindermann, 2007; Ryan, 2000, 2001). Existing measures of ASP use do not account for these potential differences in strategy use with different peers, as "peers" have previously only been measured as one collective unit, or with particular emphasis on promoting popularity as the desired outcome of ASP use (e.g., Zook & Russotti, 2012).

Additional opportunities to improve ecological validity of ASP measurement also exist. Although existing attempts to measure ASP use have contributed to our understanding of variability in students' strategy use (e.g., Juvonen & Murdock, 1993, 1995; Zook & Russotti, 2012), it is advantageous to determine how early adolescents expect to present oneself when measures are more tailored to students' own classroom experiences. The research approaches that have been used and the findings that have been generated, although quite valuable, fall short of capturing the complexities of real-world ASP use in two important ways. First, existing measures tend to rely on a hypothetical

protagonist to examine students' ASP use. Although middle school students are capable of more abstract thinking and the corresponding capability to conceive of perspectives other than their own, adolescents tend to focus mostly on their own perceptions (e.g., Martin & Sokol, 2011). Accordingly, early adolescents are, theoretically, more likely to think more carefully and thereby respond more "accurately" about ASP use when they are responding on their own behalf. That is, youth may be more invested in their responses if they are imagining themselves in the situation posed by the vignette rather than a fictitious student with whom they may be unable to relate or simply disinterested in how they fare. Although Zook and Russotti (2012) included both hypothetical and self-report elements in their measure, students may have been primed by the fictitious character that affected their self-report responses. Similarly, specifying the peer referents with whom participants are interacting should help increase precision in reporting, especially when making contrasts within the peer group. The second way in which ecological validity may be improved concerns the authentic motivations among youth to endorse certain strategies. Self-presentational goals have been explicitly imposed on research participants, thus eliminating their ability to choose the impressions they wish to make. For instance, participants have been instructed to appear modest (Tice, Butler, Muraven, & Stillwell, 1995) and to promote likability and popularity (Zook & Russoti, 2012). When self-presentational goals are explicitly assigned, participants think consciously about the impressions they are instructed to make and try to influence others' judgments of them accordingly. In everyday life, however, self-presentational motivations are likely subtler, and there are individual differences in active and defensive impression management goals and behavior (e.g., Leary & Kowalski, 1990).

The Present Study

Given these findings and opportunities for extending measurement of early adolescents' ASP use, the overarching goal of this research was to better understand students' approach to classroom impression management with their peers. Specifically, variability in peer norms for academic attitudes and behaviors, as well as the situational dependence of impression management processes, suggests that early adolescents may self-present differently to different types of peers. Accordingly, it was of interest to explore eighth-grade students' anticipated ASP use with two specific peer referents who are largely influential for early adolescents' interpersonal and academic behavior (i.e., close friends and popular classmates). Further, given the tenuous relations among academic effort, performance, and evaluation of one's social and/or intellectual reputation, emphasizing the role of effort was of interest. Toward this end, there were four investigative aims for the present study. Aim 1 was to determine the extent to which students perceived a difference in norms for academic effort among two salient peer reference groups (i.e., close friends and popular classmates). It was expected that students would generally perceive popular classmates as less effortful than one's close friends. Additionally, given that ASP use is guided by one's perception of their audience's values and behavior, and that people are motivated to present themselves in ways that they think will be interpreted most favorably by the person with whom they are interacting, establishing students' perceptions of norms for these two peer referents was expected to contextualize students' anticipated ASP use. Further, given gender differences in social and academic norms, it was also of interest to explore if girls and boys demonstrated differences in their perceptions of friends' and popular classmates' effortful engagement

in class (as part of Aim 1). It was expected that girls would be more likely than boys to indicate that their close friends valued positive academic dispositions.

Based on a lack of existing tools to explore comparisons in students' anticipated ASP use regarding academic effort with specific peer referents, Aim 2 was to develop a measure that would fill these gaps. Specifically, the goal for measurement design was to allow for precise distinctions between two prominent peer referents (i.e., utilizing participant nominations of one's best friend and most popular classmate). Similarly, it was also of interest to develop a measure that provided more flexibility in students' self-presentational goals by *not* specifying an outcome, but rather inquiring about how students anticipated discussing one's level of effort expenditure with their best friend and their most popular classmate. Accordingly, Aim 2 involved designing a self-report measure utilizing vignette methodology that could be used to assess how early adolescents expected to present their diligence on a class presentation using various ASP strategies (i.e., exaggerate, downplay, honest, avoid) when discussing their work with their best friend and a popular student in their class, respectively. Although it was not the primary focus, in order to contextualize students' anticipated strategy use, it was important to account for academic performance condition (i.e., whether one did poorly or well) because of students' potential concerns regarding interpretations about one's ability relative to effort expenditure. Building on Aim 2, Aim 3 was to examine the psychometric properties of the newly developed measure; it was expected that empirical support would be found for the hypothesized measurement model, indicating preliminary evidence of the measure's validity, and thus, utility. It was anticipated that there would be at least four distinct ASP strategies that could be measured: exaggerating, downplaying,

honesty, and avoidance. Finally, the fourth research aim was to examine the extent to which participants expected to adjust their ASP use depending on peer type (i.e., best friend versus popular classmate), academic performance condition (i.e., strong versus poor performance), and whether gender differences emerged.

Hypotheses for students' projected ASP use by strategy. Given the novelty of the measure, an initial step was to examine how eighth-grade students would self-present with two distinct peer referents as a function of academic performance condition and whether this varied by gender for each ASP strategy individually. Hypotheses were largely exploratory; however, related work was drawn upon as much as possible to guide initial hypotheses for students' ASP use.

Exaggerate. One possible strategy is exaggeration. Exaggeration is thought to be a relevant ASP strategy within an academic context generally, and parallels a strategy specified by previous measurement (i.e., Zook & Russotti, 2012). However, given the current study's focus on academic effort, as opposed to performance, it was expected that students would not overestimate the extent to which they worked on a class project. Because academic diligence is considered riskier than strong academic performance, it was expected that students would exhibit low endorsement of this strategy overall (i.e., students' endorsement of this strategy was expected to remain low across all experimental conditions, and informally, remain lowest among the four strategies expected to emerge in the measure).

Downplay. A second strategy, downplaying, refers to the extent to which a student minimizes the amount of effort they invested in a class project. Due to perceptions that presenting oneself as academically effortful is associated with social

risks as well as possible concerns over one's ability, it was expected that participants would indicate strong support for this strategy, especially when reporting for the poor academic performance condition (compared to the strong performance condition). Similarly, it was expected that students would be more likely to downplay when interacting with their popular classmate compared to their best friend. Additionally, boys were expected to endorse this strategy more strongly than girls given that effort is perceived as more normative among girls and, as such, also perceived as more feminine.

Honest and Avoid. Guided by Zook and Russotti's (2012) research, it was expected that students would exhibit relatively strong endorsement of these strategies Specifically, it was expected that students would report moderately high levels of honesty (i.e., accurately disclosing the amount of effort invested in the class project) when reporting for the strong academic performance condition given that congruence between effort and achievement is less precarious under these circumstances. Further, an interaction between peer type and gender was expected such that girls would present more honestly with their best friends compared to popular classmates. Girls were also expected to present more honestly than boys overall.

The final expected strategy, avoidance, is defined as remaining evasive about disclosing one's level of effort on the class project. It was expected that students would be likely to endorse the avoidance strategy given that Zook and Russotti (2012) found such strong support among students for being vague with classmates. Accordingly, several effects were expected for the avoid strategy, including that students would endorse avoidance more strongly in the poor performance condition and when interacting with the popular classmate. Although it was expected that boys would be inclined to

endorse the downplay strategy, it was also expected that they would indicate high endorsement of avoidance, especially relative to girls' anticipated use of this strategy.

Method

Participants

Students participating in this study were part of a larger research project in collaboration with a junior high school in one of the fastest growing school districts in the greater Phoenix metropolitan area. Participants were recruited from 25 eighth grade classrooms (and 7 teachers) using passive parental consent procedures. The study and consent procedures were approved by the university's institutional review board. Information about the research study and opt-out forms were sent home with students one week prior to data collection. If parents did not want their child to participate in the study, they were instructed to complete the opt-out form and return to their child's Language Arts teacher or to the school's front office. Less than 1% of those invited to participate declined (i.e., parents withheld consent for their child to participate in the study or student refused assent).

Among the 592 youth who participated, data from 117 students were excluded from analyses due to non-independent or incomplete peer nomination data: 61 students nominated the same classmate as both the most popular peer and as their best friend; and 56 students did not provide one or both peer nominations (discussed in more detail in the Results section). The final sample consisted of 475 eighth grade students (80% of students who initially completed the survey). Among participants, there was a slightly larger proportion of boys than girls; additionally, student reports indicated that participants represented relative racial and ethnic diversity, but were largely from

advantaged backgrounds (i.e., the majority of participants' parents were married and had at least some college education) (see Table 1 for a breakdown of demographic characteristics comparing the final sample to cases that were dropped, respectively). Further, the participating school represents the broader upper middle-SES community in which this school was embedded, with only 11% of students (school-wide) eligible to participate in the free or reduced school lunch program compared to the statewide average of 58% (Arizona Department of Education, National School Lunch Program, 2016). State standardized test scores and participation rate in advanced STEM courses for this school were also far above the state average (e.g., 56% passing rate for English and Math compared to 38%; 95% passing rate for Geometry compared to a state average of 34%; 84% passing rate for Science compared to a state average of 53%) (GreatSchools.org).

Procedure

Surveys were group-administered during students' regularly scheduled Language Arts class period during one 45-minute session in December 2015. After an introduction to the study by one of three research team members, students for whom parental consent was provided were given the option to participate in the study or to complete an alternate activity that their teacher assigned. Students provided assent and were reminded on several occasions that their participation was completely voluntary and they could stop answering or skip any questions at any point without penalty.

Participating students completed electronic assessments using a computer in one of the three school computer labs. Prior to and at various points during the study, students were given directions regarding how to log into the electronic survey, as well as

information about the response scales for measures. One research representative was present at all times and was available to answer any questions. Students completed surveys at their own pace; all participants completed their survey within the allotted 45-minute time period.

Measures

Perceived peer norms for academic effort. Seven items taken from Hamm et al.'s (2011) *The Peer Norms for Effort and Achievement* scale were slightly adapted to assess students' perceptions of academic injunctive norms among peers. The scale measures perceptions of the acceptability of effort among students' closest friends and popular students, respectively. Students responded to the prompt, "[My closest friends/The popular kids in class] think it is good to…" (e.g., "volunteer to answer questions or participate in class", "really like learning", "fool around in class" [reverse coded]). Items were rated on a scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*) and responses were averaged, with higher scores signifying norms more supportive of effort and engagement. This scale has been used reliably in diverse samples (Hamm et al., 2006; 2010; 2011). Cronbach's alphas were calculated for each group of peers within the current sample and was .77 for friends and .81 for popular kids.

Academic self-presentation strategy use. To assess students' projected use of academic self-presentation (ASP) strategies, participants were presented with a series of vignettes depicting a common classroom scenario in which students were assigned a large project that they would complete at home and after two weeks would present to their class, followed by peer discussion. Specifically, two conditions (i.e., students' academic performance [strong versus poor] and peer type [best friend versus most popular

classmate]) were modified throughout the vignettes, resulting in four vignettes in which participants rated how likely they would be to use each of the four ASP strategies (i.e., exaggerate, downplay, honesty, and avoid) using a 5-point Likert-scale ranging from 1 (*very unlikely*) to 5 (*very likely*). When prompted to imagine their best friend and popular classmate across the vignettes, participants were instructed to answer based on the classmate whom they considered their best friend and the most popular student in their Language Arts class, respectively. Thus, these peer types referred to a specific peer referent of the participant's designation.

Demographic characteristics. Students reported on their gender, which was coded as 1 = *female* and 2 = *male*. Students also reported on the highest level of education that their mothers and fathers completed. Response options were as follows: 1= *less than high school*; 2 = *finished high school*; 3 = *finished vocational school* (e.g., computer training); 4 = *took/is taking some college courses*; 5 = *finished college*; 6 = *went to school after finished college* (e.g., law school, medical school); and 7 = *I don't know* (which was recoded as missing for analyses). Finally, classrooms were coded as *regular*, *honors* (i.e., one year advanced placement in subject), or *gifted* (i.e., students who scored in the 97th percentile and above on a cognitive abilities test). Because gifted courses included a small number of students (n = 33), an accelerated category was created for analyses combining gifted and honors students.

Results

An overarching goal of this study was to explore ways in which eighth-grade students anticipated using academic self-presentation (ASP) strategies with two prominent peer referents (i.e., best friend versus popular classmate). To accomplish this

goal, the current study investigated four research aims. The first aim was to determine whether participants perceived a difference in academic engagement norms between their close friends and popular classmates, overall, and if perceptions varied by gender, as a way to contextualize students' anticipated ASP use. The second aim was to develop a self-report measure utilizing vignette methodology that assessed how students expected to self-present their level of effort on a class project when discussing their work with their best friend compared to the most popular student in their class, and how academic performance (i.e., strong or poor) and gender might modify students' endorsement of particular strategies. Next, Aim 3 was to explore the instrument's psychometric properties to determine its utility as a viable measurement tool through the assessment and comparison of two measurement models. Finally, mean-level differences were examined comparing the extent to which participants expected to adjust their ASP use (i.e., downplay, exaggerate, honest, avoid) as a function of peer type (i.e., best friend versus popular classmate), academic performance condition (i.e., strong versus poor performance), and gender.

Data Analytic Strategy and Preliminary Analyses

As an initial step, data were examined to ensure this study's inclusion criteria had been met for the peer nominations included in ASP vignettes. Specifically, participants who (1) nominated the same peer as both their best friend and the most popular classmate, (2) only made a best friend or popular classmate nomination (but did not nominate a classmate for the other peer type), or (3) did not nominate any peers were excluded from analyses. In doing so, only participants who had independent nominations for both peer types asked about in the ASP vignettes were retained. Next, preliminary

analyses were conducted to examine variable distributions, relations among study variables, missing data, and other properties of the data and, overall, were found to conform to the assumptions underlying parametric statistics. Presence of missing data among the dependent variables ranged from 1.1-1.9%, suggesting very little item-level missingness across variables. In the present data, Little's MCAR test was conducted and was not significant, χ^2 (112), = 83.93, p = .98, suggesting that data were missing completely at random and listwise deletion was acceptable (Garson, 2015). Data screening, preliminary analyses, including descriptive statistics, correlations among study variables, and assessment of missing data, as well as a paired-samples *t*-test, multivariate analysis of covariance (MANCOVA), and mixed-model analyses of covariance (ANCOVAs) were conducted using SPSS version 24. All analyses of covariance included covariates to control for the effects of accelerated status (i.e., students in honors and gifted versus regular classes) and mothers' and fathers' level of education, given that youth and family demographic characteristics are often associated with students' academic attitudes and behavior (e.g., Davis-Kean, 2005) (see Table 2 for correlations among covariates and ASP items). Additionally, confirmatory factor analyses (CFAs) were estimated in *Mplus* version 7.4 (Muthén & Muthén, 1998-2017).

Descriptive Statistics

Descriptive statistics (i.e., means, standard deviations, skew, kurtosis) for the dependent study variables (i.e., students' perceptions of academic norms for close friends and popular classmates, respectively, and ASP strategies across several experimental manipulations resulting in 16 items) are presented in Table 3. As shown, skew and kurtosis were low and did not indicate deviations from normality (Tabachnick & Fidell,

2012). Generally, across conditions, students reported being more likely to endorse the honest strategy with little variability across contexts. Additionally, students were least likely to endorse the exaggerate strategy overall. The means and standard deviations for the 16 ASP items for girls and boys, respectively, are presented for the four strategies (i.e., exaggerate, downplay, honest, and avoid) as a function of academic performance condition (strong versus poor) and peer type (best friend versus popular classmate) in Table 4. Further, bivariate correlations among all ASP strategies and covariates are presented in Table 2, and are split by gender in Table 5 (girls above the main diagonal and boys below). Overall, bivariate correlations remained in the small to moderate range, and reveal some interesting patterns. For instance, the exaggeration and downplay items are positively and moderately correlated. Among the strongest inter-item associations include the downplay and avoidance items. Conversely, avoidance items appear to have a small but negative association with many honesty items, whereas the honesty items have a small but positive association with most of the exaggeration items.

Aim 1: Students' Perceptions of Peer Norms for Academic Effort (Close Friends and Popular Classmates)

The expectation that students would perceive that norms for classroom engagement would be lower among the most popular students in class compared to one's close group of friends was supported by results from a paired samples *t*-test, $t\ (439) = 11.92$, $p < .001$ (see Table 3 for means and standard deviations). To examine whether gender differences emerged for students' perceptions of academic norms among classmates, a multivariate analysis of covariance (MANCOVA) was conducted with perceived norms for friends' and popular classmates' effortful behavior, respectively.

Covariates included students' accelerated classroom status (i.e., students in honors and gifted versus regular classes) and parents' education (i.e., mothers' and fathers' highest level of education, respectively). Again, results were consistent with expectations; girls and boys significantly differed in their perceptions of classmates' academic norms, F (2, 363) = 6.27, $p < .01$, $\eta_p^2 = .03$. Bonferonni-corrected post hoc tests revealed that girls (M = 3.65, SE = .05) were more likely than boys (M = 3.43, SE = .05) to perceive that their close friends exhibited effortful behavior, F (1, 364) = 12.51, $p < .001$, $\eta_p^2 = .03$. However, no gender differences were found for students' perceptions of popular students' effort, F (1, 364) = 0.97, $p > .05$ (M_{girls} = 3.09, SE_{girls} = .05; M_{boys} = 3.02, SE_{boys} = .05). None of the covariates were significant.

Aim 2: Measure Development for Assessing Students' Anticipated Academic Self-Presentation Strategy Use

The goal of Aim 2 was to develop a measure that addressed gaps in our understanding of early adolescents' academic self-presentation use with peers. Toward this end, an instrument was developed and pilot tested prior to its use in the current investigation.

Instrument construction. The steps taken in this initial stage of instrument construction are described below as a linear and sequential process, but some of these steps were completed in tandem with others during various stages of completion. That said, the first step towards constructing a self-report measure that assessed middle school students' ASP use with peers was to identify which of the existing measurement approaches were most applicable given the specific goals of the current study. Hypothetical vignette methodology is the most commonly used approach to examine

academic self-presentation strategy use among adolescents. A series of experiments conducted by Juvonen and Murdock (1993; 1995) have been especially influential in this area, and more recently, Zook and Russotti (2012) built on this work. Accordingly, these studies were heavily drawn upon to inform the measurement development process for the current investigation. After the conceptual groundwork for this study had been established, Jaana Juvonen also served as a consultant because of her content expertise in this area. This served to promote face and content validity. These sources provided a guiding framework for the current instrument in two ways beyond establishing the use of vignette methodology, including (1) changing key elements of the academic context and audience to determine the impact on adolescents' ASP use, and (2) providing a set of relevant academic self-presentation strategies from which to build.

Knowing that self-presentation use is situationally dependent on multiple factors, the next step was to determine how to construct the vignettes with enough sensitivity to capture nuances in how students would modify their presentation of effort across the two distinct peer types determined to be most influential for ASP use (i.e., best friend and popular classmate). In addition to specifying distinct peer types, it was also of interest to further enhance clarity with regard to these referents. Accordingly, it was decided that students would be instructed to complete peer nominations identifying who among their classmates were their best friend and who the student perceived to be the most popular. Although it is common to assess middle school students' peer experiences at the school-level, it was decided that limiting the measure to students' immediate classmates would promote more precise and meaningful responses when students imagined how they would self-present their level of effort on a class project.

In addition to the audience affecting how one might communicate their level of effort expenditure, the association between effort and performance was also thought to be an important contextual detail. Although students' performance was not of substantive interest, it has direct implications for how one might self-present. That is, depending on whether an individual performed well or poorly would alter interpretations about one's aptitude with regard to how much effort they invested. Thus, two experimental conditions, each with two contrasts, were specified. An academic performance condition (i.e., strong versus poor performance) and peer type (i.e., best friend versus popular classmate) comprised the 2 x 2 design, resulting in four distinct contexts for the vignettes. These contexts included (1) strong academic performance, conversing with a best friend in the class, (2) strong academic performance, conversing with the most popular student in the class, (3) poor academic performance, conversing with a best friend in the class, and (4) poor academic performance, conversing with the most popular student in the class.

The next step was to construct a common scenario around which these four vignettes would be based. An introductory prompt used to prime students for the vignettes was drafted. The premise was that students would imagine their teacher had assigned a project that was worth a lot of points and needed to be completed at home over the course of two weeks, at which point they would present their work to the class and then engage in peer discussion. Additionally, this prompt was deliberately open to interpretation in how students would rate the likelihood that they would endorse each of the ASP strategies (described next) so that a specific goal for the interactions was not imposed on participants.

Next, specific ASP strategies that students could use within the context of each vignette were identified. At this stage, five strategies were selected from Zook and Russotti's (2012) measure of nine ASP strategies. The strategies that Zook and Russotti used in their assessments included (1) hiding one's test grade from classmates, (2) keeping one's grades a secret from classmates, (3) providing a vague response when classmates ask about one's grade, (4) claiming one received a lower grade than they actually did, (5) claiming one received a higher grade than they actually did, (6) claiming one studied harder than they actually did, (7) claiming one studied less hard than they actually did, (8) claiming a lower grade and lower investment of effort, and (9) responding honestly about a high grade that one worked hard to obtain (indicating high effort). Among these strategies, four distinct themes emerged that were consistent with relevant literature, and were particularly applicable to and could be easily adapted to meet the goals of the current study (i.e., emphasizing effort rather than grades for ASP strategy use). These themes provided a basis for the current measure, and detailed how students could (1) exaggerate their level of effort (i.e., claim that they worked harder on the project than they actually did), (2) downplay their effort expenditure (i.e., claim that they did not work as hard on the project as they actually did), (3) be honest about their level of effort on the project, and (4) avoid discussing details about the project by remaining evasive and changing the subject. Again, given the situational dependence between effort and performance, the theme of "honesty" did not seem sufficient on its own to determine the "directionality" of the association between effort and performance. Accordingly, two strategies for honesty were specified, one that indicated the student worked hard and the other suggesting that the student did not work very hard on the project, resulting in a total

of five strategies. All four vignettes included the same set of five ASP strategies, for which participants were instructed to rate the likelihood they would use each strategy on a 5-point Likert scale spanning low to high endorsement. Thus, the measure approximated a repeated measures design for strategy use so that comparisons could be made based on the performance and peer configurations.

Pilot test. Once the prompt, design, and strategies were established, all elements were integrated into a paper and pencil survey instrument for pilot testing (see Appendix A for measure). Pilot testing was conducted among 14 seventh and eighth grade students attending an afterschool program (8 girls, 6 boys; *M*age = 12.54 years; *SD* = 0.52). After participants completed the measure, their responses were quickly reviewed to identify preliminary patterns and potential sources of confusion. Next, participants verbally responded to open-ended questions about their thoughts regarding the measure. It was of particular interest to identify how participants were interpreting the ASP strategies and the extent to which they expected to present themselves similarly or differently when interacting with the different peer types. Thus, the purpose of this informal focus group was to hear directly from middle school students about what they thought the differences were among the strategies presented, as well as to determine the clarity of instructions so that revisions could be made to better capture adolescents' projected use of ASP strategies across different contexts (i.e., academic performance conditions and peer types).

Based on this discussion, it was discovered that several of the participants struggled discerning the difference between the two honesty items – "tell them how hard you worked on the project" (intended to indicate higher investment of effort) and "tell

them you did not work very hard on the project" (intended to indicate minimal effort). Participants explained that these two options were confusing overall – students seemed to interpret the first honesty item as neutral, not necessarily to indicate that they indeed worked hard. This led to a discussion about what the researcher noticed based on patterns of responses for these two items, as well as another source of confusion (that was only explored further upon the researcher's examination of response patterns), which, again, involved one of the honesty items (i.e., "tell them you did not work very hard on the project"; indicating minimal effort) and the downplay item (i.e., "tell them you did not work as hard as you actually did"). Based on the discussion, it seemed as though students were not differentiating these as separate constructs, and as such, the interpretability of these items as separable was diminished. As the discussion continued, participants described how common (they perceive) it is for students to downplay their level of effort on schoolwork. Participants also indicated that they themselves behave differently when interacting with their best friend in class as opposed to popular classmates. After participants had an opportunity to share their feedback, more specific details were provided about the research goals, both in terms of the pilot session that had just concluded as well as disclosing that a revised version of the questions they had just answered were going to be used with "other kids like them to learn more about how those kids would talk to their classmates about their study habits and projects."

Instrument refinement. Based on the pattern of responses and the discussion regarding participants' interpretation of the self-presentation strategies, adaptations were made to address a common source of confusion in the original measure, which included two separate strategies for "honesty" that represented different levels of effort. It was

decided that a set of preliminary questions assessing how much effort students would expect to devote to this project was added before the series of vignettes were presented, and a line was added to the scenario prompt stating, "For all questions, assume that your level of work on this project is what you typically put into your schoolwork" to better contextualize the nature of students' responses. Additionally, the two separate honest strategies were collapsed into one neutral/general honest item. These modifications removed the need for two separate honesty strategies and allowed for increased interpretability for all strategies. Thus, the final measure consisted of four academic self-presentation strategies; otherwise, the 2 x 2 design worked well, resulting in 16 response opportunities (see Appendix B for the final measure).

Aim 3: Measure Validation

Although vignette methodologies similar to the one constructed for the present study are commonly used to assess self-presentational use, empirical tests evaluating validity of these measures are lacking. Thus, Aim 3 was to test the tenability of the newly developed ASP measure. Specifically, two measurement models (i.e., confirmatory factor analyses [CFAs]) were examined to test the fit of observed data to the hypothesized structure of the measure as it was designed for the current study. Measurement models were estimated using a maximum likelihood estimator in *Mplus*. Determination of model-data fit was assessed using multiple indices including the chi-square statistic, the comparative fit index (CFI), and the Root-Mean-Square Error of Approximation (RMSEA), for absolute, incremental, and parsimony-corrected fit, respectively. Given that the chi-square statistic is sensitive to sample size (Browne, MacCallum, Kim, Anderson, & Glaser, 2002), additional indices are commonly reported. CFI values greater

than .95 indicate good fit and values greater than .90 are considered acceptable (Hu & Bentler, 1998). RMSEA values less than .05 indicate good fit and values between .05 and .08 are considered acceptable (Brown & Cudek, 1993). Additionally, nested model comparisons were evaluated using a chi-square difference test.

Both CFAs specified four factors based on the ASP strategies (i.e., exaggerate, downplay, honest, avoid). Each factor included four indicators representing items that specified the combination of academic performance condition and peer type contexts built into the measure design (i.e., strong performance/best friend [S_BF], strong performance/popular classmate [S_PC], poor performance/best friend [P_BF], poor performance/popular classmate [P_PC]). In both models, latent factors were allowed to correlate based on expectations that ASP strategies would emerge as separable yet related dimensions. The initial model (i.e., Model 1) did not include any additional specifications. However, overlap between the academic performance conditions and peer type contexts spanning strategies was thought to result in additional systematic variation in measurement; accordingly, the second model (i.e., Model 2) allowed for correlated errors among items of shared context (i.e., S_BF, S_PC, P_BF, P_PC) across strategies. Thus, Model 1 was considered the baseline model and Model 2 was the hypothesized model.

Based on the goodness-of-fit indices, Model 1 had poor model-data fit; however, the hypothesized model (Model 2) demonstrated adequate fit (see Table 6 for fit index values for both models). Consistent with expectations, Model 2 had better model-data fit than Model 1, as indicated by a significant chi-square difference test and improvement across fit indices. Additionally, items loaded as expected and all were statistically

significant (see Figure 1). Standardized estimates ranged from .708 to .855, with the exception of two items (i.e., D_S_BF and E_S_BF) that ranged from .655 to .686, respectively. To ease interpretation of the model figure, residual covariances and variances for Model 2 are presented in Table 7. Further, the pattern of correlations among factors was consistent with expectations, and lends additional support for four related, but distinct dimensions of ASP strategies (see Figure 1 for coefficients). Although global fit for Model 2 could be improved, local fit (i.e., pattern of parameter estimates for factor loadings) appears good and overall, preliminary evidence of the measure's validity is provided.

Aim 4: Mean-level Differences in Students' Anticipated Academic Self-Presentation Strategy Use

The fourth aim was to test whether students differed in their ASP use as a function of their level of academic performance, peer type, and gender. It was of specific interest to examine how adolescents modified their use of each of the four ASP strategies based on the contextual factors around which the vignettes were designed. A series of 2 (academic performance condition: strong versus poor) x 2 (peer type: best friend versus popular classmate) x 2 (gender) mixed-model analyses of covariance (ANCOVAs) were conducted, one for each academic self-presentation strategy (i.e., exaggerate, downplay, honest, and avoid). These analyses tested the main effects of academic performance condition, peer type, and gender, as well as the interactions among these factors, while controlling for the effects of students' accelerated classroom status and their parents' highest level of education. Significant main effects and interactions among performance condition, peer type, and gender are described for each strategy below.

Exaggerate. Results indicated a two-way interaction between academic performance condition and peer type was marginally significant, F (1, 384) = 3.71, p = .055, η_p^2 = .01; however, follow-up tests for performance condition and peer type were not significant, Fs (1, 384) = 0.88 to 1.52, ps > .05. No other main effects or two-way interactions involving performance condition, peer type, or gender were significant, Fs (1, 384) = 0.01 to 2.86, ps > .05. Accelerated status was a significant covariate, F (1, 384) = 5.44, p < .05, η_p^2 = .01, but parents' education was not.

Downplay. A significant main effect was found for academic performance condition, F (1, 334) = 4.19, p < .05, η_p^2 = .01. Follow-up tests comparing academic performance conditions indicated that students were more likely to endorse the downplay strategy in the poor performance condition compared to when they expected to have performed well, regardless of peer type or gender, F (1, 384) = 12.27, p < .05, η_p^2 = .03 (see Table 3 for means and standard deviations). No other main effects for peer type or participant gender, nor were any two- or three-way interactions significant, Fs (1, 384) = 0.06 to 2.25, ps > .05. None of the covariates were significant.

Honesty. There were no significant effects for the honesty strategy, indicating that students did not significantly differ from one another across contexts in their endorsement of this strategy, Fs (1, 383) = 0.03 to 2.91, ps > .05. Covariates were also non-significant.

Avoid. A significant main effect was found for academic performance condition, F (1, 384) = 7.11, p < .01, η_p^2 = .02; however, this effect was qualified by an interaction between academic performance condition and gender that approached significance, F (1, 384) = 4.48, p =.05, η_p^2 = .01. This two-way interaction was further subsumed by a

significant three-way interaction among academic performance condition, peer type, and gender, F (1, 384) = 4.76, p <.05, η_p^2 = .01. To understand this interaction, a series of follow-up tests were conducted in which avoidance items were examined across academic performance conditions separately. Specifically, a 2 (peer type [best friend, popular classmate] x 2 (gender) mixed-model ANCOVA was conducted to examine the extent to which students modified their use of the avoidance strategy within the strong academic performance condition.

Results revealed a significant interaction between peer type and gender, F (1, 385) = 4.09, p < .05, η_p^2 = .01. Results from pairwise comparisons revealed that within the strong academic performance condition, boys were more likely to avoid when interacting with their best friend compared to the most popular classmate, F (1, 385) = 4.21, p < .05, η_p^2 = .01 (see Table 4 for marginal means and standard deviations). Girls in the strong academic performance condition, in contrast, did not significantly differ in their likelihood to endorse the avoidance strategy between peer types, F (1, 385) = 0.73, p > .05. The same follow-up approach was used for the poor academic performance condition. The 2 (peer type) x 2 (gender) mixed-model ANCOVA revealed only a significant main effect for gender, F (1, 385) = 4.73, p < .05, η_p^2 = .01. Follow-up tests revealed that girls were more likely than boys to endorse the avoidance strategy within the poor academic performance condition (see Table 4 for marginal means and standard deviations). None of the covariates were significant.

Discussion

Despite its developmental and educational salience, impression management has not received much theoretical or empirical attention, especially within a more nuanced

examination of students' perceptions of the peer culture. The findings from the current study provide insight into the extent to which eighth-grade students perceived differences in academic engagement norms across two prominent peer reference groups (i.e., close friends and popular students), and relatedly, expected to self-present one's own level of diligence with their best friend and most popular classmate, respectively, and how this varied by gender. Additionally, a self-report measure was developed for this study and was designed to advance research on academic self-presentation strategy use in three key ways, including (a) emphasizing academic *effort* rather than achievement; (b) delineating and specifying two influential peer referents (i.e., best friend and most popular classmate); and (c) promoting ecological validity to more closely approximate students' everyday classroom experiences. Specifically, participant nomination was used to enhance clarity among peer archetypes, and an *a priori* goal for peer interactions was not specified so that a more realistic assessment of eighth-grade students' anticipated ASP strategy use could be captured. Further, measurement models were evaluated and based on preliminary evidence of the instrument's psychometric properties, it provides a promising measurement tool for additional exploration. Finally, the guiding premise for the current study also extends theoretical work that helps to contextualize multiple inter-related processes (and reputed implications for convergence between impression management and pluralistic ignorance) that may shape students' engagement trajectories, particularly among youth who are on the precipice of another school transition.

Although unplanned, the sample characteristics for the present investigation also provided opportunities to explore students' perceptions of academic engagement norms and self-presentational behavior that may be underrepresented in educational research.

Although the sample shares demographic characteristics that are common for convenience sampling more generally and developmental research specifically (i.e., middle- and upper middle-SES), it is possible that the comparatively high-performing school context (relative to average state performance for public middle schools) and student composition (i.e., accelerated academic status comprised nearly half of the sample) may present a distinct context in which academic norms and ASP use operate and are interpreted. That is, it is possible that mechanisms beyond SES (and corresponding resources and academic socialization practices) could contribute to a school culture and particular expectations for academic excellence that broadly affect individual, student-peer, and student-teacher processes. Accordingly, results and initial interpretations are discussed within this context of high performance (i.e., collectively across the school- and student-levels) that may reflect a distinct school culture of high academic expectations for students that affect classroom processes and student norms. Given that accelerated status and parents' education level were included as covariates in analyses, the relative differences within participants in this study are minimized. Although some of the current study findings can be situated within patterns found in extant literature, the high performing context implores exploration of multiple, and at times competing, interpretations and implications.

Consistent with expectations, results revealed that, overall, students perceived differences in academic engagement norms among their classmates; specifically, popular classmates were perceived to espouse less academically effortful norms than participants' close friends. Additionally, girls were more likely than boys to perceive that their close friends were more effortful, but girls and boys similarly perceived that popular

classmates were less effortful than one's friends. Although the primary purpose of Aim 1 was to empirically establish a central guiding premise germane to subsequent study aims (i.e., students perceive a diminished effortful orientation among high-status peers as compared to close friends), these results are independently noteworthy given the sample characteristics of the current study and further serve to contextualize interpretations of students' anticipated ASP use. When considering the implications that, even among students in a high-achieving context, there is the perception that popularity and effortful orientations may be inversely related, multiple possible interpretations emerge. First, these findings may corroborate the premise that high-status youth are not particularly invested in classroom engagement, and the sample characteristics have no bearing on how students perceive the social value associated with certain academic norms among their classmates. That is, students from various educational contexts may perceive similar social risks associated with an effortful demeanor and one's appearance as overly studious generally has a pejorative connotation among eighth-grade students. It is also possible that this finding indicates that students misperceive the extent to which their high-status peers are academically oriented, presuming that popular peers are not inclined to work hard (e.g., Helms et al., 2014). Finally, an alternative interpretation is that status is awarded to those who appear capable of effortlessly outperforming others, and this may be exacerbated in a high-achieving context. Given that adolescents believe effort and ability are compensatory, students who are perceived as "naturally" brightest may be glorified among high-achieving youth as "effortless achievers" (e.g., Jackson & Nystrom, 2014).

Results from Aims 2 and 3 suggest that the self-report measure used to explore Aim 4 shows promise as a valid measurement tool and empirical support was found for four distinct ASP strategies (i.e., exaggerate, downplay, honest, avoid) as expected. Accordingly, Aim 4 provides insight into students' anticipated ASP use as a function of students' gender, peer referent (i.e., best friend or most popular classmate), and academic performance condition (i.e., strong compared to poor performance). Overall, it appears that academic performance condition posed the largest effect on students' expected ASP use; however, there were contexts in which participants indicated that the peer with whom they were interacting further warranted a modified approach when disclosing their level of effort, and that these decisions varied by gender. Although the analytic framework for the current study precludes the ability to make direct statistical comparisons when describing students' ASP projections (i.e., ASP strategies were analyzed separately rather than simultaneously via MANCOVA), comparisons based on the overall pattern of means provide an opportunity to make some preliminary assessments regarding students' ASP strategies.

With the exception of honesty, eighth-grade students provided the strongest level of endorsement for avoidance among the ASP strategies tested (i.e., exaggerate, downplay, honest, and avoid), and based on the pattern of results, may indicate that avoidance is a preferred and highly strategic tactic when navigating social dynamics in the classroom. Based on Zook and Russotti's (2012) findings that middle school students prefer being vague with classmates when asked about one's grades on classwork, it was expected that both girls and boys would endorse the use of the avoidant ASP strategy, especially in the poor academic performance condition. Results revealed that this was

only the case for girls. Alternatively, when participants expected to have performed well, boys were more likely than girls to vary their use of the avoidance strategy between peers, and avoided more with the most popular classmate than with their best friend. Contrary to expectations, girls did not differentiate between peer types. Although these findings deviate somewhat from the hypotheses initially advanced, this pattern of results may integrate the role of social dynamics that were also considered more broadly, highlighting gender effects slightly differently than in the way hypotheses were framed (i.e., norms for girls' increased engagement). These findings may also indicate that the measure is capturing nuances in the interconnectedness between social and academic dynamics expected to both influence, and emerge, in students' ASP use.

Accordingly, the tendency for boys to avoid more with the popular peer is consistent with work suggesting that adolescent boys are particularly motivated by concerns over enhancing one's social status, and that exhibiting diminished engagement appears to carry more social value for boys than for girls (Geven, Jonsson, & van Tubergen, 2017). For instance, LaFontana and Cillessen (2010) found that boys were especially likely to prioritize status over other relational and personal goals, such as friendship, prosocial behavior, following rules, and personal achievement. Taken together, the finding that boys are likely to avoid disclosing one's level of effort with the popular peer when expected to have performed well may imply that boys feel particularly compelled to distance oneself from an effortful orientation as defensive impression management (i.e., circumventing negative attention); however, it is still unclear whether this process indicates negative attitudes about engagement, and/or if boys may be more likely to possess a fixed mindset of intelligence (e.g., Dweck, 2006). Perhaps consistent

with the alternative interpretation regarding peer reward systems in a high-performing context, it is possible that boys wanted to remain evasive with popular classmates to insinuate that when one performed well, it was likely the result of "natural" intelligence. For girls, it is possible that there is less perceived pressure surrounding interpretations about one's level of engagement given that this behavior is more normative for girls. Accordingly, perhaps girls do not expect to avoid disclosing that one was effortful regardless of peer type; however, when expected to have performed poorly, girls may simply want to avoid drawing attention to their work habits.

Overall, these findings may suggest that when students do not want to disclose their level of effort with classmates, avoidance is a carefully selected ASP strategy and is indicative of defensive impression management (Leary & Kowalski, 1990). Being evasive about one's effort expenditure could be considered a way to diminish drawing (negative) attention to oneself, which may be a diplomatic way of eschewing direct social-evaluative situations that adolescents find uncomfortable. Rather than being unequivocally deceitful, which is how students may interpret the downplay strategy, avoidance provides opportunities for youth to conceal their academic work habits and ability ascriptions while seemingly adhering to other normative behavior for self-disclosure with peers in a classroom context, such as self-effacement (Watling & Banerjee, 2007). When framed as such, using an avoidant presentation style could be considered a socially adept method of navigating potentially awkward encounters, and may even serve to promote boys' social status.

Although the relative pattern of means and more numerous findings that emerged for avoidance may suggest that participants prefer to avoid discussing their diligence

rather than overtly deceiving one's peers, results for the downplay strategy indicate that when expected to perform poorly, students will protect an image of competence. If given the option, perhaps students would ideally be evasive when discussing their work habits with peers but are not necessarily opposed to misrepresenting their level of effort in the event that they performed poorly. This suggests that adolescents' concerns over evaluations of one's aptitude may be particularly salient among students in high-performing settings. That is, these students may be more motivated to distance themselves from a publicly effortful orientation when there is a threat to interpretations about their underlying ability or intelligence. This interpretation is consistent with the premise that early adolescents think that effort and ability are compensatory (e.g., Juvonen & Cadigan, 2002); however, this maladaptive belief may be exacerbated among high-performing youth because these students would be particularly incentivized to downplay one's level of effort after it is publicly known that they did not perform well. Thus, downplaying provides youth with an opportunity to "save face" with their peers so that students' concerns over classmates' interpretations of one's ability are minimized (Juvonen, 2006).

Results for the remaining ASP strategies (i.e., exaggeration and honesty) also provide partial support for hypotheses. Overall, participants did not significantly differ from one another in their endorsement of exaggeration or honest ASP strategies, regardless of academic performance condition and peer type, nor were gender differences found. It is important to note that from a data standpoint, these two strategies may be subject to floor and ceiling effects, respectively, minimizing opportunities to detect comparative differences. Although no substantive conclusions can be drawn from null

findings, making any interpretation merely speculative, some observations warrant additional consideration. Given evidence that eighth-grade students, in particular, perceive an effortful orientation as riskier than high achievement (e.g., Juvonen & Murdock, 1993, 1995; Zook & Russotti, 2012), it is unlikely that students would want to emphasize, under any circumstance, that they invest a lot of effort (i.e., exaggerate). This strategy was included in the current study as primarily exploratory to examine in relation to other strategies, as well as to remain consistent with the ASP strategies culled from Zook and Russotti's work that guided measurement development. Thus, the lack of significant effects and pattern of low means for exaggerate among current participants aligns with theoretical ideas about this strategy, and may provide additional support for the measure's validity (i.e., its ability to capture divergence in students' endorsement relative to other strategies).

Further, when combined with the findings for downplay (i.e., students do not want any misconceptions to arise about their aptitude), it is possible that the low endorsement of exaggerate is more meaningful than it initially appears. It may be the case that the uniformly low endorsement of exaggerate reveals an additional emphasis of distancing oneself from perceptions as someone who invests a great deal of effort, further implying that youth in a high-performing context feel more compelled to project and/or desire a reputation as an "effortless achiever", and thereby more strongly ascribe to an implicit entity belief of intelligence (i.e., fixed mindset) (Dweck, 2006). This complements the alternative interpretation presented previously regarding students' reports of engagement norms and would similarly contribute to perceptions that popular students exhibit a lack of effort among high-performing students; however, not because norms among these

youth intentionally undermine academics but rather they perpetuate a maladaptive belief that effort is not required for those with "natural" intelligence, and this may be more strongly internalized among boys.

Although no significant differences emerged for honesty, the pattern of means denote that participants indicated higher endorsement in the strong academic performance condition compared to the poor performance condition, when interacting with their best friend compared to the most popular classmate, and that girls were more likely than boys to endorse this strategy, which is consistent with expectations. That said, participants uniformly endorsed honesty most strongly relative to all ASP strategies – and across all experimental conditions – which presents an interesting juxtaposition relative to the emerging insights for the current investigation thus far. Perhaps students' strong endorsement of honesty indicates that among students for whom performance is relatively high, conceivably so too is effort and this congruence presents the least amount of risk for students. This interpretation also complements Zook and Russotti's (2012) findings that girls (although not boys) reported that being truthful is the best strategy to achieve popularity when work and achievement are aligned and high. Given that participants in the current study are relatively high-achieving irrespective of gender, thereby resembling the fictitious protagonist used by Zook and Russotti, it is reasonable that students may similarly think that honesty is ultimately best because it is also "safe".

Collectively, when examined as a set, findings from the present study can be interpreted in multiple ways, each with unique implications. Although findings generally appear consistent with extant work, additional speculation about potential implications are advanced, and while useful, it is important to note that these are tentative and should

be considered with caution until additional research can build on the exploratory nature of the current investigation (and, in doing so, also disentangle the extent to which effects reflect the high-performing context in which participants were situated from their advantaged backgrounds). That said, in the absence of well-documented educational and developmental risk factors for academic adjustment (e.g., low achievement, low SES), students from comparatively high-performing districts, schools, and classrooms and, further, those enrolled in academically accelerated courses (i.e., honors, gifted and talented program) receive considerably less investigative attention and educational support than their "at-risk" counterparts. Though understandable, this reflects a potentially misguided presumption that high-achieving and economically advantaged students are without academic risks of their own. Recent work by Luthar and colleagues (Luthar & Barkin, 2012; Lyman & Luthar, 2014) has found that affluent adolescent girls, in particular, struggle with pronounced levels of diminished self-esteem and psychological distress despite the fact that these students tend to outperform their peers. Similarly, although limited, research on adolescents in high-performing contexts suggests that despite students' high GPAs, these youth evidence greater instances of internalizing and externalizing symptoms, as well as high rates of academic cheating (Conner & Pope, 2013; Pope, 2001). Accordingly, some of the findings from the current study could be interpreted that students from advantaged backgrounds in high-achieving contexts may be decidedly driven by ability-related motives and thus may be more likely to ascribe to a fixed mindset of intelligence. This is problematic because these beliefs undermine students' adaptive academic coping (Dweck, 2006). That is, these students may be preoccupied by concerns about classmates misattributing one's effort as an indicator of

diminished aptitude, and if so, may serve to perpetuate maladaptive beliefs about effort-ability relations and undermine deeper learning and academic resilience. Additionally, these concerns may contribute to heightened psychological distress or students may even resort to cheating to maintain both an image of competence and record of academic excellence without more genuine engagement.

Alternatively, there is a more optimistic interpretation of the findings. It may be that students in the current study demonstrate adaptive interpersonal and academic beliefs and competencies reflective of a robust learning orientation among the broader peer culture. Participants were generally willing to disclose their diligence truthfully, which may indicate a peer culture that is largely supportive of effort, especially when it is congruent with strong performance and, ultimately, no threat that one's aptitude will be questioned. Positive dispositions are enhanced, and thus adaptive academic outcomes are more likely, when students perceive that engaged behaviors are more acceptable among the peer collective (Hamm, et al., 2011; Hamm et al., 2014; Juvonen, 2006). Perhaps findings indicate that descriptive and injunctive norms are positively aligned in the current sample. Accordingly, under these circumstances, there are limited psychological or social drawbacks to being honest about and/or being perceived as an effortful student. Perhaps participants' reports that high-status youth espouse norms less supportive of classroom engagement could instead be reframed and interpreted as students believing that their close friends are highly academically oriented. That is, it is possible that students' perceptions of comparative norms between reference groups simply indicates that youth have more opportunities to assess their friends' academic dispositions and/or report more positive habits among their friends, rather than implying that status and

engagement are inversely related or that high-status youth perpetuate maladaptive beliefs about the importance of effort.

This latter interpretation accounts for the fact that students reported the highest level of endorsement for honesty, followed by avoidance, and although rare, perhaps indicating only when it is most necessary, students will downplay when effort and ability are unfavorably aligned. Under this interpretation, the pattern of findings from the current study may indicate a school climate that encourages academic excellence as a shared opportunity for active engagement rather than one that emphasizes competition, and as such, these values are supported broadly within peer culture. Hamm and colleagues (2014) found that aspects of the school context can be structured to enhance peer cultures to be more supportive of adaptive academic values and behavior; when teachers participate in professional development opportunities that deepen their understanding of how to create classroom and school environments that support early adolescent social, behavioral, and academic adjustment, there is greater alignment among these values within the peer ecology.

Although findings from the current study provide interesting insight into early adolescents' perceptions of peer norms for engagement and students' anticipated impression management efforts, it was surprising that fewer peer effects emerged than expected; however, there are a few reasons why this may be the case. Generally, the nature of the vignette design may have elicited demand effects that explain the relative lack of findings for peer effects in the current study. For instance, the measure's design may have made academic performance condition a more salient feature than peer referents given the disparity in contrast between these manipulations. That is, thinking

about anticipated interactions between one's best friend and most popular classmate is less polarizing than whether this interaction occurred under strong versus poor academic performance, and this distinction may be further exacerbated by the high-performing context featured in the current study. Another possibility is that using specific peer referents (i.e., participants' nomination of their actual classmates occupying the role of each peer archetype), rather than remaining general or using hypothetical protagonists, as is typically the case with impression management measurement, the measure developed for this study more accurately captured the natural complexity of ongoing interpersonal interactions within a classroom setting. Measures that rely on hypothetical protagonists may elicit more stereotyped social-cognitive representations of high-status youth whereas real-life classmates and peer interactions are more diverse and nuanced, which the current measure may be detecting. Previous research suggests that when more individuating information is available, a person's judgment will be based on stereotypes to a smaller extent (Fiske & Neuberg, 1990). Accordingly, it is unclear whether academic performance condition or use of student's peer nomination may have had a stronger effect on participants' social schemas for their best friend and most popular classmate when thinking about ASP use. It is also possible that in a context in which all students are reasonably high performing, academic-related behavior and representations are less salient across peer types unless it is an extreme departure from the norm (e.g., strong disengagement may be considered inappropriate, but moderate to higher effortful orientations are normative among *all* classmates).

Ultimately, this represents a familiar trade-off that researchers face regarding the balance between internal and external validity, especially when utilizing vignette

methodology. On one hand, it should be considered a strength that steps were taken to enhance the measure's ecological validity, such as using students' peer nominations rather than a hypothetical protagonist and not specifying a standardized goal or outcome for participants' ASP use (e.g., "to be popular") because adolescents' typical classroom experiences were more closely approximated by allowing for natural variability in students' objectives for and responses about their anticipated interactions with classmates. On the other hand, however, the interpretability of students' responses for their projected ASP use is diminished as a result. That said, this level of ambiguity is present in adolescents' day-to-day classroom experiences and the current measure may be capturing this complexity and sometimes seemingly inconsistent patterns and implications of students' decisions about navigating the balance between myriad social and academic goals.

Limitations and Future Directions

Despite the merits of the current study, it is subject to limitations that should be considered when evaluating the findings. Overall, interpretability and generalizability of findings are restricted given the unique context in which this research was conducted, as well as elements of the study's design and features of the ASP measure. Although it is useful to explore academic processes in high-performing samples given the relative paucity of information regarding these types of students, the interpretability of study findings is complicated by the combination of sample characteristics and specific study goals (i.e., measurement development that purposely sought to expand work on early adolescents' ASP use with regard to academic effort and between distinct peer referents as contrasting audience members). This poses challenges when attempting to situate

findings from the current study within the already limited body of work on students' approaches to impression management in the classroom. Taken together, we are reminded of the exploratory nature of the current investigation and that caution is warranted in applying study findings to other academic contexts. Thus, additional research is needed in a range of educational settings to confirm eighth-grade students' perceptions of effortful norms and the extent to which early adolescents modify their use of ASP strategies across a more nuanced assessment of the peer ecology, and how the underlying mechanisms contributing to students' perceptions and behavior with peers may further differ depending on additional intersections of participants' social locations.

First, the distribution of race and ethnicity among participants did not allow for group comparisons in study analyses. Although multiple racial and ethnic backgrounds were represented, sample sizes across these groups precluded more direct group comparisons. The potential effects of ethnic minority group membership can differentiate students' experience of the peer context for effort and achievement (e.g., Graham, Taylor, & Hudley, 1998), as well as have bearing on students' social cognitions that are presumed to be a proximal influence on ASP use. For instance, race and ethnicity may affect others' *interpretations* of student behavior and/or ability. Tenenbaum and Ruck (2007) conducted four meta-analyses revealing that teachers' expectations for students differed across ethnic minority groups compared to European American students. Specifically, teachers were found to hold the highest expectations for Asian American students, and held more positive expectations for European American students than for Latino/a or African American youth. It is possible that teachers' differential expectations may shape students' cognitions about their own and/or classmates' effort, ability, and

broader engagement and performance that have bearing on early adolescents' ASP use and interpretations of academic values and norms. Additionally, cultural background (which is typically measured by pan-ethnic classifications like the ones used in the current study) also shapes constructions of masculinity and femininity (e.g., Abreu, Goodyear, Campos, & Newcomb, 2000). An important area for future work is to examine the extent to which any potential differences that race, ethnicity, and cultural backgrounds may have for students' perceptions of peer norms for classroom engagement and ASP use.

Second, the cross-sectional design of the current study precludes interpretations of any causal mechanisms or directions of influence among key constructs. Future research should also utilize longitudinal designs that would allow the bi-directional and transactional nature of effects that are presumed in the current study to be tested directly (e.g., how social cognitions of peers' reputed academic attitudes and behavior guide students' ASP use, and the related impact of the reciprocal nature of peer influence effects for classroom descriptive norms). Accordingly, longitudinal and cross-panel designs would provide opportunities for future research to test the premise for the current study that impression management may be particularly powerful in shaping early adolescents' cognitive and behavioral processes that, in turn, could affect students' emerging academic identities and social contextual influences on their engagement trajectories.

Third, limitations related specifically to measurement require closer examination. All measures in the current study were based on students' self-reports and thus raises the possibility that findings reflect inflated relations resulting from shared-method variance.

That said, given the focus on students' *perceptions* of peer norms and their own anticipated ASP use, self-report measures are likely the most valid assessment tools even if external observers (e.g., teacher-report or naturalistic observations) indicate diverging perspectives. Overall, this remains a challenge for researchers interested in social-cognitive processes that may or may not fall within participants' conscious awareness. Further, continued assessment of model-data fit is needed to strengthen confidence in the extent to which the ASP measure developed for this study is a psychometrically viable tool for students' ASP projections when communicating their level of academic effort with different peer referents, or if elements of the measure design require additional refinement before it can be used more broadly and in different academic contexts.

Results from CFAs indicated that the hypothesized measurement model had strong local fit but only adequate global fit indicating the measure's promise; however, it remains unclear if empirical improvement is possible that would further increase confidence in the measure's utility. Thus, an immediate next step is to continue examining the psychometric properties of the current measure by comparing additional measurement models allowing for an examination of shared sources of error variance that are currently unaccounted for by the hypothesized model tested in this study. For instance, it is possible that the broader contextual factors (i.e., peer type and performance) also share systematic variation that may improve fit when additional residual covariances are specified. If one or more of these measurement models does not yield improved model-data fit, then an additional step includes examining software generated modification indices (that also make theoretical sense). Future research should also determine whether results from these measurement models are replicated with other

data sources before either revising the measure's design or concluding that eighth-grade students do not differentiate between peer types in their projected ASP use. Until additional research is conducted, it is unclear whether study findings reflect an artifact of measurement, sample characteristics, or that students do not make many distinctions in their ASP use between peer types as expected, or perhaps some combination of these factors.

Something that remains unclear from measurement with self-presentation more generally are interpretations regarding high endorsement of an honesty strategy. Although honesty is a legitimate response and an opportunity for individuals to align their public and ideal selves, which is another motivation and potential benefit underlying impression management (e.g., Baumeister, 1986), it is difficult to disentangle varied sources of this response, particularly among early adolescents who are still actively constructing their synthesized sense of identity. Perhaps these measures capture students' efforts to alleviate cognitive dissonance if they believe that "honesty is the best policy" while also remaining motivated, even if subconsciously, to behave in ways that facilitate peer approval. That is, the nature of including an honesty item, especially when contrasted with other strategies, may enhance additional demand effects among participants. Although efforts were taken to minimize the likelihood that the honesty item would elicit socially desirable responses, youth may perceive these items as an issue of morality when reading about them and not make the conscious connection to their everyday classroom behavior with peers. This is one of the primary drawbacks to using a vignette methodology. Despite the limitations of the current study, however, there remain several opportunities to leverage the findings to direct future research.

Finally, future research that could further delineate the extent to which and salience of perceptions about student's effortful dispositions relative to how peer status is rewarded, especially among high-performing students, would strengthen our understanding of students' ASP use. This work could also illuminate ways in which boys seek opportunities to enhance their social status, and how integral one's level of academic diligence is to both their approaches to impression management and reputation among peers. For instance, to what extent are boys from high-performing contexts concerned that an effortful disposition may undermine one's image of high aptitude, and is a reputation as an "effortless achiever" more highly valued, and thus rewarded? Alternatively, are boys particularly cautious about classmates thinking one is effortful because this type of engagement is typically conceptualized as a more feminine expression of academic investment? Clarifying the association between students' perceptions of academic norms across influential peer reference groups (i.e., close friends compared to popular students) and the extent to which one's effortful disposition contributes to peer status would provide useful insight into the myriad factors contributing to students' attempts at impression management in the classroom.

Conclusions

Adolescents navigate a complex set of interpersonal and scholastic demands during middle school that affect students' sources of motivation and classroom engagement, which is a robust predictor of academic success both in the short- and long-term (e.g., Wigfield et al., 2006). An important element of academic effort, specifically, is that it serves to promote persistence and opportunities for curious interest in academics among students spanning ability and achievement levels, especially when framed within a

growth-mindset (e.g., Dweck, 2006). Early adolescents are more likely to adopt adaptive attitudes and behavior when they perceive the peer culture is supportive of these values (Hamm et al., 2011, 2014). The framing and results from the current study can contribute to ongoing theoretical integration explicating how individuals' social cognitions about their educational context (e.g., perceived peer norms for academic engagement, and extent to which these beliefs are thought to associate with peer approval) and individual characteristics (e.g., gender) are related to early adolescents' ASP strategy use, and how ASP use, in turn, may be associated with students' academic effort and broader classroom engagement, emerging scholastic identity, and the corresponding effects on classroom norms, both descriptive and injunctive. Given that one's subjective interpretations of their surroundings are the filter between their social world and individual thought, meaning, and behavior (e.g., Bandura, 1986), students' perceptions and cognitive constructions of academic norms among classmates has important implications for students' engagement trajectories, work habits, and adaptive beliefs about the individual and social value of an effortful disposition. Thus, not only is the social context in which students' learning occurs important in shaping engagement patterns and students' educational commitment, but so too are the ways in which early adolescents perceive and construct meaning from their environment as they determine how to balance social and academic goals, which may be especially relevant for those who interpret these as competing priorities (e.g., LaFontana & Cillessen, 2010) or that effort and aptitude are inversely related. Accordingly, findings from the present study have potentially valuable contributions to offer research and educational practice by providing preliminary insight into high-performing eighth-grade students' perceptions of

effortful orientation norms among their close friends and popular classmates, students' anticipated academic self-presentation strategy use with two influential peer referents, and a corresponding measurement tool that shows promise for continued investigation. Taken together, this work can help extend our understanding of these complex associations that may serve to disrupt the pervasive and concerning trend in students' declining interest and enthusiasm in school throughout their academic trajectories.

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Table 1
Demographic Characteristics for Final Sample and Dropped Cases

	Final (N = 475)		Dropped (N = 117)	
	n	%	*n*	%
Gender				
Girls	222	46.7	57	48.7
Boys	253	53.3	54	46.2
Missing	0	0	6	5.1
Race/ethnicity				
White	307	64.6	64	54.7
Latino/Hispanic	56	11.8	11	9.4
Asian	27	5.7	4	3.4
African American	18	3.8	8	6.8
Native American	4	0.8	0	0
Bi- or Multi-ethnic	60	12.6	23	19.7
Missing	3	0.6	7	6
Academic Track				
Regular	277	58.3	63	53.8
Honors	165	34.7	30	25.6
Gifted	33	6.9	14	12
Missing	0	0	10	8.5
Parents' Marital Status				
Married	353	74.3	72	61.5
Missing	1	0.2	9	7.7
Mothers' Education				
At Least Some College	328	69	73	62.3
Don't Know/Missing	328	69.1	66	56.4
Fathers' Education				
At Least Some College	55	11.6	25	21.4
Don't Know/Missing	63	13.3	30	25.6

Table 2
Bivariate Correlations for Academic Self-Presentation Strategies and Covariates

Variable	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.
1.Accelerated status	--	.14**	.12*	-.07	-.14**	-.08	-.14**	-.04	.01	-.03	-.06	.04	.03	-.01	.05	.13*	.02	.03	.03
2.Mother's Education		--	.46**	-.10*	-.06	-.07	-.07	-.04	.01	-.02	-.06	-.04	-.03	.00	-.03	.07	.04	.03	.01
3.Father's Education			--	-.06	.03	-.01	-.03	.02	.06	-.01	.00	-.06	-.06	.02	-.05	.06	.07	.02	.04
4.Exaggerate_S_BF				--	.55**	.59**	.43**	.31**	.26**	.31**	.26**	.13**	.13*	.10	.21**	.25**	.27**	.20**	.15**
5.Exaggerate_S_PC					--	.47**	.56**	.27**	.31**	.29**	.35**	.12*	.12*	.08	.20**	.20**	.27**	.24**	.19**
6.Exaggerate_P_BF						--	.61**	.33**	.24**	.28**	.19**	.08	.11*	.11*	.16**	.25**	.23**	.27**	.21**
7.Exaggerate_P_PC							--	.20**	.27**	.19**	.33**	.10*	.14**	.11*	.21**	.14**	.14**	.18**	.25**
8.Downplay_S_BF								--	.57**	.54**	.39**	-.05	-.01	.00	.05	.24**	.16**	.18**	.12*
9.Downplay_S_PC									--	.43**	.59**	.05	-.04	.00	.04	.27**	.30**	.24**	.22**
10.Downplay_P_BF										--	.62**	.06	-.02	.02	-.01	.28**	.27**	.36**	.23**
11.Downplay_P_PC											--	.12*	.03	.01	.04	.22**	.27**	.31**	.36**
12.Honest_S_BF												--	.64**	.61**	.53**	-.10*	-.02	.01	.07
13.Honest_S_PC													--	.53**	.65**	-.07	-.13**	-.02	-.06
14.Honest_P_BF														--	.69**	-.07	-.02	-.11*	-.08
15.Honest_P_PC															--	-.08	-.08	-.11*	-.14**
16.Avoid_S_BF																--	.69**	.63**	.55**
17.Avoid_S_PC																	--	.61**	.64**
18.Avoid_P_BF																		--	.77**
19.Avoid_P_PC																			--

Note. The item name represents the strategy, academic performance condition (S = strong, P = poor), peer type (BF = best friend, PC = popular classmate). * $p < .05$. ** $p < .01$.

Table 3
Descriptive Statistics for Dependent Variables

	N	M	SD	Skew	Kurtosis
Perceived Norms for Academic Effort Among Close Friends	453	3.51	0.64	-0.34	0.69
Perceived Norms for Academic Effort Among Popular Students	443	3.03	0.72	-0.25	0.01
Exaggerate_S_BF	470	2.07	1.06	0.86	0.08
Exaggerate_S_PC	467	2.00	1.11	1.09	0.49
Exaggerate_P_BF	466	2.01	1.14	1.03	0.25
Exaggerate_P_PC	467	2.03	1.15	1.03	0.29
Downplay_S_BF	470	1.97	1.03	0.88	0.08
Downplay_S_PC	467	2.01	1.12	0.92	-0.05
Downplay_P_BF	466	2.12	1.19	0.83	-0.31
Downplay_P_PC	467	2.11	1.74	0.90	-0.07
Honest_S_BF	468	3.51	1.23	-0.53	-0.62
Honest_S_PC	467	3.29	1.29	-0.35	-0.92
Honest_P_BF	466	3.34	1.32	-0.33	-1.00
Honest_P_PC	467	3.17	1.37	-0.16	-1.12
Avoid_S_BF	469	2.09	1.16	0.84	-0.25
Avoid_S_PC	467	2.15	1.25	0.79	-0.47
Avoid_P_BF	466	2.37	1.39	0.63	-0.92
Avoid_P_PC	467	2.45	1.42	0.56	-1.01

Note. The item name abbreviation represents the academic performance condition (S = strong, P = poor) and peer type (BF = best friend, PC = popular classmate) for the academic self-presentation strategies.

Table 4

Means and Standard Deviations for Academic Self-Presentation Strategy by Academic Performance Condition, Peer Type, and Gender

	Girls				Boys			
	Strong Performance		Poor Performance		Strong Performance		Poor Performance	
	Best Friend	Popular Classmate	Best Friend	Popular Classmate	Best Friend	Popular Classmate	Best Friend	Popular Classmate
Exaggerate	1.96 (0.99)	1.95 (1.09)	1.97 (1.12)	2.00 (1.11)	2.17 (1.12)	2.04 (1.12)	2.04 (1.16)	2.05 (1.18)
Downplay	1.95 (1.03)	1.98 (1.14)	2.14 (1.19)	2.14 (1.18)	1.98 (1.03)	2.03 (1.10)	2.11 (1.18)	2.09 (1.17)
Honest	3.63 (1.17)	3.35 (1.28)	3.47 (1.31)	3.25 (1.39)	3.40 (1.28)	3.23 (1.31)	3.23 (1.33)	3.11 (1.35)
Avoid	2.22 (1.19)	2.22 (1.27)	2.55 (1.42)	2.71 (1.46)	1.98 (1.20)	2.09 (1.23)	2.20 (1.36)	2.21 (1.35)

Table 5

Bivariate Correlations for Academic Self-Presentation Strategies and Covariates (girls above the main diagonal, boys below the main diagonal)

Variable	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.
1.Accelerated status	--	.19**	.11	.03	-.11	-.08	-.13	.00	.00	.06	-.01	.07	.12	.11	.17*	.09	-.01	.01	-.01
2.Mother's Education	.07	--	.52**	-.10	-.06	-.04	-.07	.03	.11	-.05	-.01	.02	-.01	.03	-.01	.11	.08	.11	.06
3.Father's Education	.09	.39**	--	-.08	.08	.00	-.03	.03	.08	-.09	.02	-.01	.03	.11	-.04	.11	.09	-.03	.00
4.Exaggerate_S_BF	-.16*	-.07	-.01	--	.49**	.54**	.40**	.33**	.23**	.27**	.20**	.05	.11	.05	.22**	.30**	.24**	.16*	.11
5.Exaggerate_S_PC	-.15*	-.08	-.02	.58**	--	.40**	.59**	.22**	.23**	.26**	.30**	.09	.08	.10	.18**	.20**	.23**	.21**	.17*
6.Exaggerate_P_BF	-.10	-.10	-.03	.62**	.54**	--	.62**	.32**	.30**	.25**	.17**	.00	.16*	.09	.17*	.21**	.20**	.23**	.13*
7.Exaggerate_P_PC	-.13*	-.09	-.06	.47**	.55**	.63**	--	.20**	.27**	.19**	.30**	.06	.14*	.13	.23**	.06	.07	.13	.15*
8.Downplay_S_BF	-.11	-.04	.06	.34**	.33**	.28**	.20**	--	.48**	.41**	.28**	-.06	.04	-.01	.09	.23**	.06	.12	.02
9.Downplay_S_PC	-.05	-.04	.04	.30**	.37**	.19**	.28**	.69**	--	.35**	.53**	.11	-.02	.07	.06	.21**	.32**	.21**	.20**
10.Downplay_P_BF	-.13*	.06	.04	.29**	.29**	.29**	.21**	.64**	.56**	--	.64**	.05	.06	-.05	.04	.20**	.17*	.35**	.22**
11.Downplay_P_PC	-.14*	-.05	-.02	.30**	.33**	.20**	.34**	.52**	.66**	.64**	--	.13	.06	.02	.02	.18**	.24**	.38**	.36**
12.Honest_S_BF	.00	-.06	-.13	.23**	.14*	.15*	.14*	-.02	.00	.04	.12	--	.57**	.61**	.49**	-.07	.04	.08	.16*
13.Honest_S_PC	-.05	-.04	-.15*	.14*	.18**	.09	.20**	-.03	-.02	-.07	.04	.69**	--	.47**	.63**	-.01	-.10	.03	-.09
14.Honest_P_BF	-.09	-.01	-.09	.15*	.09	.15*	.14*	.03	-.04	.05	.00	.62**	.64**	--	.66**	.01	.08	-.12	-.06
15.Honest_P_PC	-.04	-.05	-.09	.18**	.21**	.16*	.22**	.01	.07	-.07	.07	.60**	.71**	.75**	--	-.04	-.04	-.11	-.15*
16.Avoid_S_BF	.08	.02	.03	.27**	.27**	.28**	.24**	.35**	.34**	.36**	.25**	-.14*	-.14*	-.13*	-.14*	--	.64**	.58**	.46**
17.Avoid_S_PC	.03	.05	.05	.33**	.34**	.30**	.24**	.30**	.35**	.38**	.31**	-.08	-.16*	-.07	-.10	.70**	--	.52**	.62**
18.Avoid_P_BF	-.01	.02	.04	.23**	.31**	.31**	.23**	.25**	.30**	.42**	.28**	-.04	-.08	-.10	-.11	.59**	.63**	--	.77**
19.Avoid_P_PC	.01	.02	.04	.23**	.27**	.27**	.33**	.23**	.30**	.28**	.38**	.00	-.04	-.06	-.09	.57**	.67**	.76**	--

Note. The item name represents the strategy, academic performance condition (S = strong, P = poor), peer type (BF = best friend, PC = popular classmate). * $p < .05$. ** $p < .01$.

Table 6
Comparison of Goodness-of-Fit Indices for Measurement Models

Measurement Model	χ^2	*df*	CFI	RMSEA [90% CI]	χ^2 diff	Δdf
Model 1 (baseline)	663.47*	98	0.85	.112 [.10, .12]	--	--
Model 2 (hypothesized)	439.21*	74	0.90	.103 [.09, .11]	224.26**	24

Note: *p <.05, **p <.01

Table 7
Residual Covariances and Variances of ASP items for Hypothesized Measurement Model

	1	2	3	4
Strong_Best Friend				
1 Exaggerate	*.59*			
2 Downplay	.07 (.12)	*.62*		
3 Honest	.05 (.08)	-.14 (-.21)	*.72*	
4 Avoid	.10 (.15)	.13 (.20)	-.19 (-.26)	*.70*
Strong_Popular Classmate				
1 Exaggerate	*.61*			
2 Downplay	.00 (.00)	*.59*		
3 Honest	-.01 (-.02)	-.10 (-.16)	*.67*	
4 Avoid	.06 (.09)	.12 (.19)	-.16 (-.24)	*.69*
Poor_Best Friend				
1 Exaggerate	*.54*			
2 Downplay	.07 (.13)	*.61*		
3 Honest	.04 (.07)	.06 (.09)	*.62*	
4 Avoid	.07 (.13)	.15 (.26)	-.10 (-.17)	*.51*
Poor_Popular Classmate				
1 Exaggerate	*.56*			
2 Downplay	.12 (.23)	*.51*		
3 Honest	.04 (.07)	-.01 (-.01)	*.56*	
4 Avoid	.15 (.26)	.18 (.33)	-.05 (-.09)	*.57*

Note. Unstandardized estimates are followed by standardized estimates. Residual variances for ASP items are italicized on the diagonal.

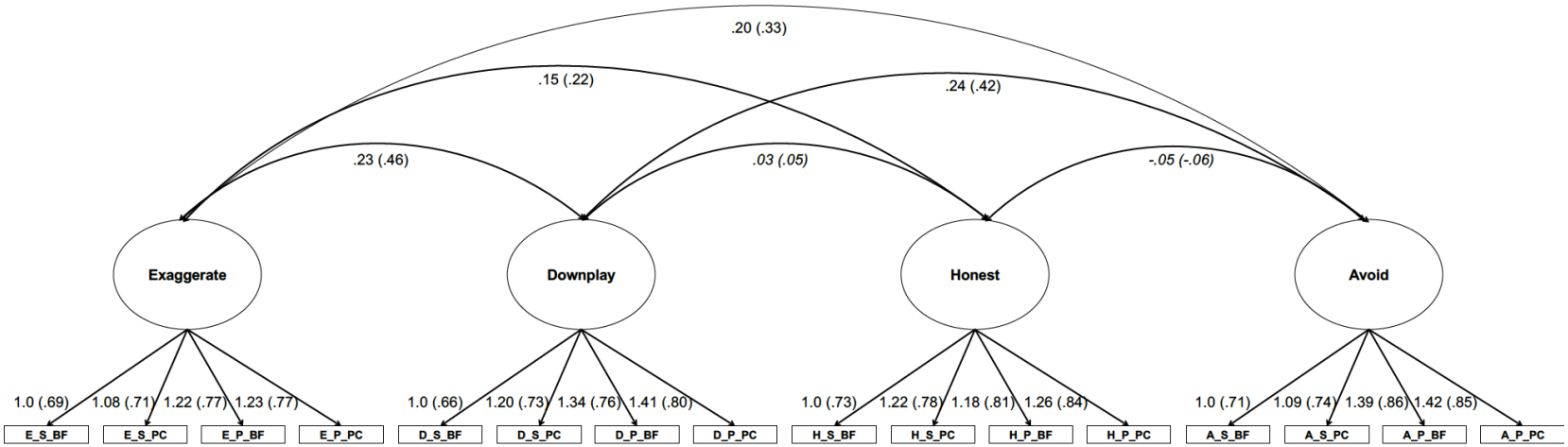


Figure 1. Hypothesized measurement model for ASP strategies. Unstandardized estimates are followed by standardized estimates in parentheses, $n = 464$. All factor loadings with the exception of two were significant at $p < .01$; non-significant estimates are italicized.

APPENDIX A

PILOT ACADEMIC SELF-PRESENTATION STRATEGY USE MEASURE ITEMS

Imagine your teacher has assigned a big project that you have to complete at home then present to the whole class. You will have two weeks to work on it before it is due. This project is worth a lot of points and is a big part of your overall grade for this class.

Please continue reading on the next page.

Today is the day you will present your project to the class. Your teacher tells everyone that after presentations are finished, you will need to give feedback to the other presenters about their work.

As you watch your classmates present their projects, you realize your project is much <u>better</u> than most others'.

Think about the person you listed earlier as your <u>best friend</u> (*) in this class and answer the following questions:

[Friend] comes over to talk about your project and acknowledges how good yours is. How likely would you be to …	**Definitely No!**	**No**	**Sort of**	**Yes**	**Definitely Yes!**
	0	**1**	**2**	**3**	**4**
1. Tell them how hard you worked on the project	⓪	①	②	③	④
2. Tell them you did not work very hard on the project	⓪	①	②	③	④
3. Tell them you worked harder than you actually did	⓪	①	②	③	④
4. Tell them you did not work as hard as you actually did	⓪	①	②	③	④
5. Try to change the subject and start talking about something else	⓪	①	②	③	④

Now think about the person you listed earlier as the <u>most popular person</u> in this class. Answer the same questions as above, but think about how likely you would be to do each of the following with them:

[Popular classmate] comes over to talk about your project and acknowledges how good yours is. How likely would you be to …	**Definitely No!**	**No**	**Sort of**	**Yes**	**Definitely Yes!**
	0	**1**	**2**	**3**	**4**
1. Tell them how hard you worked on the project	⓪	①	②	③	④
2. Tell them you did not work very hard on the project	⓪	①	②	③	④
3. Tell them you worked harder than you actually did	⓪	①	②	③	④
4. Tell them you did not work as hard as you actually did	⓪	①	②	③	④
5. Try to change the subject and start talking about something else	⓪	①	②	③	④

In the last set of questions, you were asked to think about what you would do if your project was among the best in the class. Now imagine that you arrive to class and you realize that your project is actually much worse than others'.

Think again about the person you listed earlier as your best friend (*) in this class and answer the following questions:

As you talk about your project, how likely would you be to	Definitely No!	No	Sort of	Yes	Definitely Yes!
	0	1	2	3	4
1. Tell them how hard you worked on the project	⓪	①	②	③	④
2. Tell them you did not work very hard on the project	⓪	①	②	③	④
3. Tell them you worked harder than you actually did	⓪	①	②	③	④
4. Tell them you did not work as hard as you actually did	⓪	①	②	③	④
5. Try to change the subject and start talking about something else	⓪	①	②	③	④

Now think about the person you listed earlier as the most popular person in this class. Answer the same questions as above, but think about how likely you would be to do each of the following with them:

As you talk about your project, how likely would you be to	Definitely No!	No	Sort of	Yes	Definitely Yes!
	0	1	2	3	4
1. Tell them how hard you worked on the project	⓪	①	②	③	④
2. Tell them you did not work very hard on the project	⓪	①	②	③	④
3. Tell them you worked harder than you actually did	⓪	①	②	③	④
4. Tell them you did not work as hard as you actually did	⓪	①	②	③	④
5. Try to change the subject and start talking about something else	⓪	①	②	③	④

APPENDIX B

FINAL ACADEMIC SELF-PRESENTATION STRATEGY USE MEASURE ITEMS

Imagine your teacher has assigned a big project that you have to complete at home then present to the whole class. You will have 2 weeks to work on it before it's due, and it is worth a lot of points. For all questions, assume that your level of work on this project is what you typically put into your schoolwork.

We know that junior high school students work on homework and projects in different ways and we want to learn about YOUR style. Fill in the bubble that best represents your style.

(Remember to answer honestly; no one will know how you respond. Just like in the last set of questions, some of the questions may sound alike, but they are all unique.)

How much effort would you put into this project?

- ❍ None or Almost None
- ❍ A Little
- ❍ A Lot

How important is it to you that you do well on this project?

- ❍ Not at all important
- ❍ Sort of important
- ❍ Very important

What grade do you expect to earn on this project?

- ❍ A
- ❍ B
- ❍ C
- ❍ D
- ❍ F

Today is the day you will present your project to the class. Your teacher tells everyone that after presentations are finished, you will need to give feedback to your classmates about their work.

As you watch your classmates present their projects, you realize that your project is much *better* than most others'. Remember, answer the following questions based on what you would do in this situation.

Think about the person you listed earlier as your best friend in this class. This person comes over to talk to you about your project and acknowledges how good yours is. How likely would you be to....

	Very Unlikely (1)	Unlikely (2)	Sort Of Likely (3)	Likely (4)	Very Likely (5)
Tell them you worked harder than you actually did	❍	❍	❍	❍	❍
Tell them you did not work as hard as you actually did	❍	❍	❍	❍	❍
Tell them how hard you actually worked on the project	❍	❍	❍	❍	❍
Try to change the subject and start talking about something else	❍	❍	❍	❍	❍

Now think about the person you listed earlier as the most popular person in this class. Answer the same set of questions, but think about how likely you would be to do each of the following with them (instead of your best friend).

Remember, they come to talk to you about your project and acknowledges how good yours is. How likely would you be to....

	Very Unlikely (1)	Unlikely (2)	Sort Of Likely (3)	Likely (4)	Very Likely (5)
Tell them you worked harder than you actually did	❍	❍	❍	❍	❍
Tell them you did not work as hard as you actually did	❍	❍	❍	❍	❍
Tell them how hard you actually worked on the project	❍	❍	❍	❍	❍
Try to change the subject and start talking about something else	❍	❍	❍	❍	❍

In the last set of questions, you were asked to think about what you would do if your project was among the best in the class. Now imagine that you arrive to class and you realize that your project is actually much *worse* than other kids' projects.

Think again about the person you listed earlier as your best friend in this class and answer the following questions:

As you talk about your project, how likely would you be to...

	Very Unlikely (1)	Unlikely (2)	Sort Of Likely (3)	Likely (4)	Very Likely (5)
Tell them you worked harder than you actually did	❍	❍	❍	❍	❍
Tell them you did not work as hard as you actually did	❍	❍	❍	❍	❍
Tell them how hard you actually worked on the project	❍	❍	❍	❍	❍
Try to change the subject and start talking about something else	❍	❍	❍	❍	❍

Now think about the person you listed earlier as the most popular person in this class and answer the same set of questions, but think about what you would do in this situation (rather than what you would do with your best friend).

As you talk about your project, how likely would you be to...

	Very Unlikely (1)	Unlikely (2)	Sort Of Likely (3)	Likely (4)	Very Likely (5)
Tell them you worked harder than you actually did	❍	❍	❍	❍	❍
Tell them you did not work as hard as you actually did	❍	❍	❍	❍	❍
Tell them how hard you actually worked on the project	❍	❍	❍	❍	❍
Try to change the subject and start talking about something else	❍	❍	❍	❍	❍