PERSONALITY HOMOPHILY AMONG THIRD THROUGH FIFTH GRADE STUDENTS: RELATIONS WITH SOCIAL IDENTITY AND CONFORMITY

by

MARY E. LUTZ

(Under the Direction of A. Michele Lease)

ABSTRACT

When a child's personality is poorly matched with the demands and expectations exercised by members of the child's friendship group, stress and maladjustment might occur. Typically, children tend to associate with others similar to themselves across a variety of domains (e.g., demographics, cognitive ability, behavior), a phenomenon known as homophily. However, discord caused by discrepant personality characteristics may impact a child's feelings regarding group identification as well as their intentions to conform to normative group behaviors. The current study aimed to investigate the relationship among personality homophily, social identity, and conformity among third through fifth grade students. Results of hierarchical regression analyses indicated that the degree of personality similarity with the friendship group was a significant predictor of children's self-reported social identity and intention to conform, even after controlling for individual personality characteristics. Interestingly, perceived similarity and actual similarity with friends had differential impacts on outcome variables.

INDEX WORDS: Homophily, Conformity, Social Identification, Personality, Goodness-of-fit

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MARY E. LUTZ

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MARY E. LUTZ

Major Professor:	A. Michele Lease
Committee:	Roy P. Martin Deborah Bandalos

Electronic Version Approved:

Maureen Grasso
Dean of the Graduate School
The University of Georgia
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CHAPTER 1

Introduction

Middle childhood is a significant period of development in children's personal identities and sense of self (Harter, 2006). From an ecological standpoint, developmental changes in children's self perceptions might be related to individual changes in cognitive development together with changes in the broader social context in which the child is embedded. During this time, maturation of cognitive processes allows children the capability to make judgments about increasingly abstract characteristics (e.g., ability, personality, likability), leading to more advanced social comparisons and self-evaluations (Harter, 2006). Additionally, increased access to a larger number and more diverse population of peers during the elementary years provides children with a broader sample of characteristics with which to compare their own. Furthermore, as children reach the later elementary grades, the majority of their social interactions take place within smaller friendship-based groups and most children report being a member of such a group (Chen, Chang, & He, 2003; Gest, Farmer, Cairns, & Xie, 2003; Ryan, 2001). These friendship groups serve as an important point of reference for social comparisons among children.

Investigations of the interaction patterns of friendship groups in middle childhood demonstrate that children tend to associate with similar peers, a phenomenon termed homophily (Lazarzfeld & Merton, 1954). The majority of children's social interactions take place with others sharing similar demographic characteristics (Kandel, 1978; Kupersmidt, DeRosier, & Patterson, 1995; Sagar, Schofield Snyder, 1983) and a variety of other observable characteristics, such as behavioral style (e.g., aggressive, prosocial, etc.; Haselager, Hartup, van Lieshout, &

Riksen-Walraven, 1998; Kupersmidt et al., 1995; Nangle, Erdley, Zeff, Stanchfield, & Gold, 2004; Poulin et al., 1997; Rubin, Lynch, Coplan, Rose-Krasnor, & Booth, 1994) and academic achievement motivation (Altermatt & Pomerantz, 2003; Kindermann, 1993, 2007). Two processes, selection and socialization, appear to contribute to the homophilous nature of friendship groups (Kandel, 1978). Children tend to select friends who resemble themselves across a variety of characteristics (Hogue & Steinberg, 1995; Kupersmidt, et al., 1995). However, even controlling for the initial selection, they tend to become increasingly similar to their friends over time (Kindermann, 1993; Ryan, 2001).

Although evidence that friends are similar with regard to observable behavioral characteristics is well documented, less attention has been focused on dispositional attributes, such as personality. As children age, the principal basis of friendship concordance shifts from shared play activities to psychologically based characteristics, such as mutual values and interests (Bigelow, 1977). Given children's increasing cognitive ability to evaluate abstract characteristics of others, it is likely that children in the middle childhood period begin to consider personality characteristics in their selection of friends. Personality is considered to be relatively stable over time (Kagan, Reznick, & Snidman, 1988; Shiner, Masten, & Roberts, 2003), which creates unique considerations when investigating its place within the process of homophily. According to the tripartite model of conformity, discrepant individuals are motivated to adapt their behavior to fit with group norms by the need for accuracy, social approval, and self approval (Cialdini & Goldstein, 2004). Individuals with divergent personality characteristics might feel driven to conform their characteristics to those of the group. However, given the relatively stable nature of this internal property, children may instead try to conform to behavioral norms to mask or minimize the impact of their personality discrepancy.

The purpose of the current study is to investigate homophily of personality in children's peer groups and intent to conform to group norms among 3rd, 4th, and 5th grade students. Specifically, this study will examine if children's self-reported desire to conform to their friendship group's norms varies according to the degree of discrepancy between their personality traits and those of their group members. Additionally, associations between personality concordance and group identification will be investigated to determine, at an exploratory level, whether the degree of similarity between an individual and their friends is related to how strongly tied they feel to that group.

Development of Self-Understanding

Middle to late childhood marks a significant period of growth in children's understanding of their personal identity (Harter, 2006). Maturational changes in self-understanding result from changes in the child's social situation and changes in various internal properties of the child, such as cognitive processing (see Ruble, Higgins, & Hartup, 1983). Although impact of the social situation and cognitive development will be discussed separately in the following paragraphs, it is important to note that these processes are reciprocally influential, making it difficult to detect which comes first (e.g., Do elementary aged children become more conscientious due to the situational demands of formal schooling, or does formal schooling commence at an age when children are first capable of responsibility?).

'Social situation' refers to any aspect of the environment that is influential in human behavior. Changes in social situations facilitate changes in behavior as individuals learn to adapt to the new conditions of their environment (Ruble, et al., 1983). Systematic changes in social situations, as prescribed by culture, are typically age-related (Higgins and Parsons, 1983). For example, in many Western societies, individuals are expected to attend primary and secondary

schools as children, attend college and/or begin work as an early adult, then marry and raise children throughout adulthood. These distinct life periods are referred to as "social life phases" by Higgins and Parsons (1983), and each phase is characterized by novel social parameters that help to shape development.

Middle childhood begins a new "social life phase" for most children. As children reach elementary school, access to peer interaction becomes progressively less constrained as the social structure of the school environment affords children increasingly unsupervised access to a wider variety of peers (Higgins & Parsons, 1983; Rubin et al., 2006). Prior to entering a school or daycare setting, the majority of children's social interactions take place with family members. Interactions that take place outside of the family unit must be coordinated and supervised by the child's caregiver, resulting in relatively limited interactions with peers. Once children enter daycare or preschool, their social contacts broaden with the addition of teachers and classmates; however, access to peers is still limited by small classroom size and close teacher supervision.

Grade school becomes an important time for the development of social competencies and personal identity because, for the first time, children are able to play with a greater number and more diverse group of peers under less adult supervision. In fact, fifth grade students report spending approximately 25% of waking hours (excluding class time) with peers (Larson & Richards, 1991). Furthermore, in grade school, children have access to many of the same peers year after year, providing an opportunity for enduring friendships.

Changes in children's interaction patterns during middle childhood also coincide with changes in friendship function during this new "social life phase." In early childhood, play is the primary function of friendships, thus friendship selection is primarily based on behavioral styles (Kandel, 1978). However, as children reach later elementary grades, they develop a need for self-

disclosure and intimacy. Not surprisingly, this need for relational closeness appears to be more pronounced among female children (Rubin et al., 2006). These shifts in the function of friendships facilitate the formation of small friendship groups. By 4th and 5th grade, children become more selective in their peer associations and begin primarily to interact with a small group of friends (Rubin et al., 2006). As associations with friendship groups increase, the need to belong becomes increasingly important (Sullivan, 1953) and children engage in constant social comparisons (Ruble, 1983) to assess their standing within the peer group (Parker & Gottman, 1989).

In addition to changes in social situation, middle childhood also signifies a time of developmental growth in cognitive capacity (see Damon & Hart, 1982 for a review).
As children's cognitive capabilities become increasingly advanced, they begin to think about themselves and those around them in new ways. For example, when describing the self and others, children begin to incorporate psychological traits in their descriptions. They also are able to integrate multiple characteristics into an impression of a person that is increasingly realistic. Finally, they begin using social comparison to define and evaluate the self and others.

As children age, they begin to conceptualize themselves in terms of psychological characteristics, compared to earlier descriptions based mainly in physicality. In a sense, young children believe that what you see is what you are (e.g., red hair, tall, fast). It is not until around the age of eight that children begin to recognize mental properties as important characteristics that define the self and others (Broughton, 1978; Guardo & Bohan, 1971). In a Piagetian sense, this shift from the physical to the psychological may be linked to corresponding changes in children's cognitive capacity to think and understand the world abstractly.

As children begin to consider traits that are more abstract in nature, they also begin to conceive of the self and others as possessing a complex, but unified set of traits. During middle childhood, children develop the cognitive capacity to integrate multiple, sometimes conflicting, ideas (Damon & Hart, 1982; Harter, 2006). With age, children are able to shift from describing themselves in terms of many specific qualities to describing broader, more abstract generalizations about the selves (Secord & Peevers, 1974). For example, a young boy's description of himself may sound something like, "I am good at basketball, I like to ride my bike, and I run faster than my older brother." Whereas, he may simply describe himself as "athletic" as he approaches middle childhood. Children also have an increasing ability to reconcile opposing ideas, feelings, and characteristics and begin to view their traits in a more realistic light. For example, a young child might report always being kind and friendly to everyone, even though parental reports indicate that they frequently bully their siblings. With time, children's self-characterizations begin to incorporate both positive and negative characteristics, and shift away from the overly positive view of self from their earlier childhood years (Harter, 2006).

Children may develop a more realistic perspective of their personal characteristics due, in part, to the increased use of social comparisons. Social comparisons are an essential component driving the development of self-understanding; it is by contrasting our characteristics with the traits of others that we begin to understand the qualities that make us distinct individuals. Between the ages of six to eight, children begin making social comparisons in order to judge their own performance (Guardo & Bohan, 1971; Ruble, 1983). The increasing use of comparison in conjunction with more advanced cognitive skills promotes more accurate self-evaluations that are no longer rooted in absolute standards, but are instead based on relative standings within a group of peers.

From the perspectives of William James (1985) and Carl Rogers (1961), individuals maintain a mental representation of the "real" self and the "ideal" self, based upon social comparisons with others and internalized cultural ideals. In other words, for most individuals, there is a difference between the set of actual characteristics possessed (physical and psychological) and the desired characteristics that the individual strives towards. As children age, they begin to understand the discrepancy between the real and ideal selves, thus promoting a more negative, but realistic conceptualization of the self (Harter, 2006). In fact, researchers have found the discrepancy between the "real" and "ideal" self to increase with age (Oosterwegel & Oppenheimer, 1993). This is because when children are younger, they cannot easily differentiate between their desired characteristics and the traits they actually possess.

With these newly developed cognitive skills and the increasing use of social comparisons, children's self descriptions transform from overly positive, concrete descriptions of observable characteristics (e.g., "I have blonde hair. I like to ride my bike. I am the fastest kid in the 1st grade. I have a dog named Jack.") to descriptions of abstract characteristics that integrate a variety of positive and negative attributes (e.g., "I am pretty athletic and get along with most people, although there are a few people in my grade that really get on my nerves. I am better than most of my friends when it comes to math, but language arts is not so easy for me."). The ability to reflect upon and evaluate complex characteristics of the self is also extended to the evaluation of peers during this time. Newly acquired cognitive tools allow children to consider a more sophisticated set of characteristics in friends, thus potentially shifting the basis of homophily to more abstract dimensions.

Homophily

The statement "birds of a feather flock together" has shown to be a relatively accurate description of friendships in middle childhood. The majority of children's social interactions occur with similar others, a phenomenon termed homophily (Lazarsfeld & Merton, 1954). In addition to predicting affiliation, similarity predicts friendship stability and termination. That is, over time, friends who are more similar tend to remain friends; whereas, friends who are dissimilar are more likely to dissolve their friendship (Aboud, Mendelson, Purdy, 2003; Cohen, 1977; Ellis & Zarbantany, 2007). The relationship between friendship stability and similarity might be due to children's general fondness for similar children and disliking for children unlike themselves (Nangle et. al., 1996; Nangle, Erdley, Zeff, Stanchfield, & Gold, 2004). Friendship similarity has been documented among friend pairs and larger groups of friends, sometimes referred to as cliques (Rubin, Bukowski, & Parker, 2006). In general, reciprocated friendship dyads (pairs in which both individuals nominate the other as a friend) share a greater degree of similarity than non-reciprocated dyads (Kandel, 1978).

According to homophily literature, during middle childhood, friends, compared to non-friends, demonstrate homogeneity across various domains such as demographic characteristics (Kandel, 1978; Kupersmidt et al., 1995; Sagar et. al., 1983), behavioral interaction styles (Haselager et al., 1998; Kupersmidt et al., 1995; Nangle et al., 2004; Rubin et al., 1994), and achievement related variables (Altermatt & Pomerantz, 2003; Kindermann, 1993). Regarding demographic characteristics, research has consistently demonstrated that children's friendship groups and dyads are typically homogenous in terms of gender, race (Kandel, 1978; Sagar, et al., 1983; Aboud, et al., 2003), socioeconomic status (Kupersmidt et al., 1995), age, and grade (Kandel, 1978).

Some hypothesize that demographic homophily is merely a function of availability, especially for race and economic status (Hallinan & Teixeira, 1987). That is, families with similar demographic profiles tend to inhabit similar geographical areas, resulting in neighborhoods, schools, and churches that are relatively segregated in terms of economic status and race. Thus, children might maintain more same-race and same-SES friendships due to restricted opportunities. However, after controlling for availability, Aboud and colleagues (2003) demonstrated that children maintained significantly more same-race friendships than cross-race friendships, suggesting that demographic similarity might be due to more than just convenience. Rather, interactions among individuals with similar backgrounds and characteristics might be more rewarding than interactions among dissimilar others (Byrne, 1971).

A great deal of research has also investigated concordance across behavioral and academic achievement variables. Behaviorally, children tend to affiliate with others who demonstrate similar levels of antisocial behavior (aggression, bullying) and prosocial behavior (Ellis & Zarbantany, 2007; Guroglu, van Lieshout, Haselager, & Scholte, 2007; Haselager, & Scholte, 2007; Nangle et al., 2004; Poulin et al., 1997). Children also tend to be drawn to others with similar levels of achievement and other academic attributes. Specifically, friends tend to share comparable grade point averages, self-perceptions of academic competence, achievement motivation, and engagement (Altermatt & Pomerantz, 2003, 2005; Kindermann, 1993; Henrich, 2000).

Why do children tend to affiliate with demographically, behaviorally, and academically similar friends? For one, these variables are easily observable making them easier characteristics by which to organize. Additionally, behavioral and academic competences are salient domains within school settings; therefore, children might consider these characteristics when affiliating

with peers. There is some evidence that suggests that children in the later elementary grades consider personality characteristics in their friendships (Haselager et al., 1998). However, some have argued that children prefer to associate with others who possess "ideal personalities" rather than with children share a personality similar to their own (Aboud & Mendelson, 1996). Even so, many have demonstrated evidence of homogeneity within reciprocated friend dyads across various personality variables such as sociability, shyness, conscientiousness, agreeableness, and withdrawal (Haselager et al., 1998; Kupersmidt et al., 1995; Poulin et al., 1997; Rubin, Wojslawowicz, Rose-Krasnor, Booth-LaForce, & Burgess, 2006). Furthermore, Erwin (1985) found that friend dyads placed similar emphasis on the desirability of personality traits found in their companions.

Although many studies support the possibility that children's friendship groups are homogenous regarding personality characteristics, most of these studies have investigated an assortment of lower order, behavioral responses related to personality (e.g., cooperates, gets in fights, has many friends) rather than utilizing the full hierarchical structure of personality proposed in various theoretical models, such as the Five Factor Model or the Big Five (see Costa & McCrae, 1985 and Goldberg, 1990 for a review). Studies of adolescents and adults, however, implicate personality homogeneity as an important criterion for attraction and affiliation among friends and married couples (Izard, 1960; Byrne, Griffitt, & Stefaniak, 1967; Botwin, Buss, & Shackelford, 1997). Given that adolescents selectively affiliate based on personality, when do children begin sorting based upon these traits? Since children are becoming increasingly advanced in thinking abstractly and increasingly sophisticated in their social comparisons during middle childhood (Guardo & Bohan, 1971; Ruble, 1983), it is conceivable that personality becomes a salient domain in friendship affiliation during this time. However, children are still

mastering these requisite cognitive skills and, therefore, may experience difficulty when sorting based upon dispositional traits.

Another reason that well-established models of personality (e.g., Big-Five) have not been utilized within studies of homophily among children is that these models of personality have only recently been considered to be valid frameworks for the evaluation of children's characteristics. Historically, researchers have applied temperament theory when describing individual differences in elementary aged children; however, current research, suggests that personality theory, which is usually set aside for the description of adults, can be used relatively accurately to explain the structural nature children's dispositional qualities (Goldberg, 2001; Mervielde et al., 1995). Given that personality theory has only recently entered the childhood domain, it is no surprise that there is a lack of research specifically investigating personality homophily among this group.

Mechanisms of homophily. As children become more aware of their personal characteristics through increasingly sophisticated social comparisons, friendship similarity, once rooted in play behaviors (Rubin et al., 1994), begins to incorporate more complex psychological characteristics. How, then, do individuals end up affiliating with similar others? Research suggests that homogeneity in friendships results from two main processes, selection and socialization. Selection, also called "assortative pairing" (Kandel, 1978), refers to the process whereby individuals selectively choose friends who are similar to themselves across various characteristics. According to the reputational salience theory (Hartup, 1996), all characteristics are not equally influential in friendship selection. Rather, similarity among characteristics central to a group's reputation will determine the types of friends chosen for the group. For example, it is unlikely that a friendship group comprised of deviant children will consider a peer's

athleticism when selecting a new group member; rather, they will likely focus on deviant behaviors such as rule breaking or aggressive interpersonal style.

Evidence of selection processes exists for children throughout the elementary years. Rubin and colleagues (1994) found that when introduced into a play group with three unfamiliar peers, seven year old children showed preference for other children whose play style matched their own; however, this difference only emerged when children showed a clear preference for one child over another in the play group. In a study with older elementary children (Kupersmidt et al., 1995), formation of new friendships in third and forth grade children was significantly predicted by similarity in gender, race, economic background, withdrawal, aggression, and academic achievement.

Not only do children selectively affiliate with similar friends, they also become more like their friends over time, a process known as socialization. Socialization occurs through explicit and implicit influence and conformity. That is, individuals may explicitly, or deliberately, pressure group members to change some aspect of their behavior; however, this influence may also occur unintentionally. Conformity, the process of changing some aspect of oneself to become more like another (Cialdini & Goldstein, 2004), occurs as the result of influence, and like influence, can occur either mindfully or without conscious awareness (Chartrand & Bargh, 1999).

Socialization processes have been noted as early as preschool and kindergarten (Snyder, Horsch, & Childs, 1997; Snyder et al., 2005). For example, young children with high levels of aggression and conduct problems are more likely to selectively affiliate with other deviant peers. Over the course of the year, Snyder and colleagues (2005) found that time spent interacting with deviant others produced an increase in aggression and deviancy. This socialization of antisocial

behaviors continues to occur among peers in middle childhood (Boxer, Guerra, Huesmann, & Morales, 2005). Additionally, socialization of achievement related behaviors begins to facilitate friendship similarity during this time. For example, over the course of the school year, friends become significantly more similar regarding report card grades, attributions of academic success (Altermatt & Pomerantz, 2003; 2005), and academic engagement (Kinderman, 1993).

If homogeneity among friends tends to be the norm during middle childhood, what are the consequences of associating with dissimilar peers? It is possible that children who are reasonably different from members of their friendship group feel as if they 'don't quite fit' with their friends. In order to ameliorate feelings associated with this lack of fit, the individual may leave the group (i.e., tie dissolution), conform to group norms (i.e., socialization), or stay in the group and endure negative feelings regarding group membership. It is also possible that some children might not experience discomfort associated with their poor fit, because unlike more sophisticated children, they may not recognize that they are discrepant from others. Since most children have not mastered sorting based on abstract characteristics, yet they likely experience discomfort when they feel different from others, personality discrepancies might be particularly problematic for children of this age. Children might, therefore, attempt to adapt their behavior to appear more like their friends, particularly as behavioral responses are easier to alter than personality characteristics, per se.

Individual Differences in Childhood Disposition

As mentioned earlier, much of the literature regarding friendship similarity includes observable characteristics and behaviors, with fewer studies of friendship homophily based on characteristics such as personality, during middle childhood. Although some have argued that children cannot evaluate psychological characteristics until adolescence (Coie & Pennington,

1976), others have found that children can reliably rate their own psychological traits as early as 8 years old (Reynolds & Kamphaus, 2004). Given the shifting focus of friendship function from proximity and activity-based to a context of mutual disclosure and loyalty, it is likely that personality characteristics become salient features in friend selection during the later elementary school years (Berndt, 1981).

Individual differences in children's dispositions are present from birth. Some newborns are quiet and content while others never quit fussing. Some quickly develop an eating, sleeping, and elimination schedule while others never develop a predictable routine. As children age, individual differences in dispositions become increasingly complex and differentiated. The developmental maturation of motor skills, language, cognition, and emotionality allows children to interact with others and with their environments in new, more sophisticated ways (Shiner, 1998). Additionally, changes in environmental demands, expectations, and opportunities as children age promote the growing complexity of individual traits. For example, it is difficult to conceptualize a conscientious infant or toddler, but as children are expected to demonstrate independence and responsibility at home and school, the trait of conscientiousness begins to emerge.

Historically, individual differences in infants' and young children's dispositions have been referred to as 'temperament;' whereas, differences in dispositions of adults have been termed 'personality.' Typically, temperament refers to a set of traits that predispose individuals to display certain behavioral consistencies across the lifespan. These traits are presumed to have biological underpinnings (Bouchard & Loehlin, 2001; Braungart, 1992) and have shown to be relatively stable across time (Goldsmith et al., 1987; Kagan et al., 1988; Pedlow, Sanson, Prior, & Oberklaid, 1993), particularly for individuals demonstrating temperament traits on the extreme

ends of the continuum (Goldsmith et al., 1987; Prior, Smart, Sanson, Oberklaid, 2001). Expression of temperament is most easily observed in infancy, as life experiences and acquisition of new skills (i.e., language) impact how temperament is expressed across development (Shiner, 1998).

As children age, the distinction between temperament and other aspects of behavior (e.g. personality) becomes more difficult to make. Many researchers agree that temperament influences the development of personality (Martin et al., 1994); however, personality is a much broader entity that reflects additional characteristics of an individual, such as intellect, beliefs, values, and perceptions (Strelau, 1987). Personality researchers have consistently indentified five robust dimensions of adult personality, called the Five Factor Model (Costa & McCrae, 1985) or the Big-Five (Goldberg, 1990). Basically, the five factors included in these models are Extraversion (i.e., sociability, talkativeness, activity level; sometimes called Surgency), Agreeableness (i.e., respectful, kind, sympathetic) Conscientiousness (i.e., planful, thorough, organized), Neuroticism (i.e., emotionally labile, fearful, nervous; sometimes called Emotional Stability), and Openness to Experience (i.e., inquisitive, imaginative, thoughtful; sometimes called Intellect). Although these personality models are remarkably similar, there are slight divergences. For one, Goldberg's Big-Five emerges from the lexical tradition, which posits that important facets of personality are encoded as words into the human language. The Five Factor Model of personality is theoretically based and operationalized in the well known NEO Personality Inventory (NEO-PI; Costa & McCrae, 1985). Though both models purport five factors, there are minor variations in the composition of the Extraversion and Openness to Experience factors (Goldberg, 1993).

Recently, personality research has been extended to children, and some have hypothesized that childhood temperament traits are developmental predecessors to the Big Five traits in adulthood (Martin et al., 1994). In fact, the Big-Five factors have been replicated in numerous studies of elementary aged children (Goldberg, 2001; Halverson, Kohnstamm, & Martin, 1994; Halverson et al., 2003). Like temperament, personality traits have demonstrated moderate stability over time (Caspi, Roberts & Shiner, 2005; Kagan et al., 1988; Roberts & DelVecchio, 2000; Roberts, Walton, & Viechtbauer, 2006; Terracciano, Costa & McCrae, 2006) and this consistency increases with age. At its peak, trait stability among adults is approximately .70 (Roberts & DelVecchio, 2000; Terraciano, et al., 2006). In fact, some have argued that as much of three-fifths to four-fifths of the variance in personality is stable across adulthood (Costa & McCrae, 1992; Terracciano et al., 2006).

Recent meta-analyses have helped to elucidate the stable nature of personality across the lifespan. In a study of mean-level changes in traits over time, Roberts and colleagues (2006) found that changes in personality traits appear to be developmental in nature, particularly during young adulthood. Mean-level analyses are concerned with average changes in personality present across the population, reflecting normative maturational processes. Investigating each of the Big Five traits separately, researchers have found that Social Vitality (i.e., sociable, outgoing), one aspect of Extraversion, demonstrates a gradual decrease with age; whereas, Social Dominance (i.e., assertive, independent), another aspect of Extraversion, as well as Conscientiousness and Emotional Stability increase with age, particularly during young adulthood. Openness to Experience demonstrated a curvilinear trend, increasing during young adulthood then decreasing with age. Roberts and colleagues suggest that changing experiences across the lifespan, such as starting a career, getting married, having children, and retiring necessitate accompanying

changes in personality characteristics in order for the individual to cope successfully with the novel social roles and expectations brought about by such experiences.

Although the general population might experience normative increases or decreases in personality characteristics during certain age periods, the rank-order consistency of personality traits remains relatively stable (Roberts & DelVecchio, 2000). Specifically, rank-order consistency measures the ordinal positioning of individuals relative to one another across one or more trait dimensions over time. According to a meta-analytic review by Roberts and DelVecchio (2000), rank-order stability increases with age, stabilizing to approximately .75 by age 50, as measured by test-retest correlation coefficients. Across all ages (six to seventy years of age), stability estimates for each of the Big Five ranged from .55 to .46. However, the overall estimates of rank-stability in middle childhood (ages six to twelve) is in the moderate range (r=.43). Although these estimates do not reflect perfect stability, they demonstrate higher consistency than most psychological constructs (Caspi, Roberts, Shiner, 2005). However, despite its well established continuity, stability estimates never reach unity, indicating that although personality demonstrates relative constancy over time, it is not a fixed entity.

Researchers also have found that the length of the test-retest interval can impact stability estimates. Longer intervals between assessments tend to produce lower stability estimates compared to shorter intervals (Roberts, et al., 2006). This indicates that changes in personality do not happen quickly; rather, change in personality might be a slow cumulative process. Although researchers consistently report that individuals experience the greatest instability in personality during childhood (Caspi, Roberts, & Shiner, 2005; Roberts & DelVecchio, 2000), changes in disposition during this time might still be rather modest.

In support of this view, researchers have found that temperamental dispositions, even in children as young as three, demonstrate continuity and predictive utility into adulthood (Newman, Caspi, Moffitt, & Silva, 1997; Shiner, Masten, & Roberts, 2003). For example, findings from a longitudinal study suggest that the social effects of inhibited temperaments follow children into adulthood (Newman et al., 1997). The authors of this study found that children who were inhibited (defined by researchers as being shy and fearful of novelty) at three years of age had fewer friends and nurturing social relationships at twenty-one. Adults who were both inhibited and undercontrolled (defined by researchers as being irritable, impulsive, and non-persistent) during childhood subsequently reported that their relationships endured more conflict. Furthermore, they also were described by their adult peers as socially incompetent (Newman et al., 1997). Findings from another longitudinal study by Shiner, Masten, and Roberts (2003) suggest that childhood personality at age ten is a significant predictor of adaptation at age 30, such as academic attainment (educational level), rule abiding behavior (including breaking societal norms and illegal behavior), success in romantic relationships (having maintained at least one constructive long term romantic relationship) and success in close friendships.

The relatively stable nature of personality, even in childhood, could function as a barrier for some students as they attempt to fit in with their peer group. In the context of homophily, it is reasonable to infer that personality is relatively resistant to the effects of socialization, making it difficult for student's whose traits deviate substantially from their friendship group to alter the presentation of their dispositions to align with group expectations.

Goodness-of-fit. When individuals self-select into a group of friends with personality profiles considerably discrepant from their own, it is likely those individuals will experience what the temperament literature refers to as a "poor-fit." The goodness-of-fit theory, introduced

by Thomas and Chess (1977), provides a useful framework for understanding children's adaptive and maladaptive functioning. According to this theory, even when presented in extremes, dimensions of temperament are not considered abnormal, as they only cause maladaptive behaviors when mismatched with the current environment (Carey, 1998). This match with the environment describes the compatibility between a child's temperament, abilities, and motivations with the current environmental demands and expectations. Good fits occur when children's individual characteristics are well-suited to environmental demands, leading to positive child outcomes. In contrast, stress and maladaptive behaviors might result from poor fits (Chess & Thomas, 1996).

For example, imagine a highly sociable and active child placed in two qualitatively different classroom environments. In one classroom, the teacher incorporates many motor activities throughout the day, does not require the children to be seated for long periods of time, and includes group work whenever possible. This environment provides a good fit for a child who is highly active and social; consequently, the child exhibits behaviors appropriate for the situation. In another classroom, the teacher's instructional style does not allow for much physical movement or social interaction throughout the day. In this situation, the child may experience a poor fit, leading to possible stress and disruptive behaviors in the classroom.

Goodness-of-fit has been primarily operationalized in two ways. The first approach models fit as an interaction between dimensions of temperament and facets of the environment, such as parenting style or peer acceptance (for examples see Maziade et al., 1985; Paterson & Sanson, 1999). The second method operationalizes fit as the degree of match between the child's characteristics and the expectations and demands of significant others. More specifically, this approach utilizes the discrepancy between those temperament qualities rated as ideal (or

undesirable) by others (i.e., parents, teachers, peers), and the degree to which the subject possesses those traits (Lerner & Lerner, 1983). For example, if a parent rates high levels of agreeableness as ideal, but indicates that their child possesses low levels of this trait, a poor fit would exist. According to Lerner and Lerner (1983), when children do not possess ideal characteristics or exhibit characteristics that are rated as bothersome by parents, teachers, or peers, interactions are more likely to become difficult and stressful.

Research using these two methodological approaches appears to measure somewhat different constructs, thus leading to differing results. As Patterson and Sanson (1999) point out, this may be due to the insensitivity of interaction terms; in regression the variance accounted for by interaction terms might be underestimated or overlooked all together (Zimmerman & Arunkumar, 1994). However, it is also likely that these methods yield dissimilar results because the approaches often measure distinct aspects of the environment: The discrepancy method attempts to draw on the idealness of the child's characteristics as perceived by others, whereas the interaction method assesses the interplay between the child's temperament and more objective facets of the environment, such as parenting style, intervention technique, and peer acceptance.

Although difficult temperaments can predispose children to problematic behavior (Rutter, 1977), factors in the home environment, such as family functioning, parenting styles, and parental expectations of behavior, can either worsen the course or protect against such behaviors. For example, children rated by parents as highly inflexible (characterized by high negative emotionality and low adaptability) or temperamentally difficult (characterized by low adaptability, low regularity, high withdrawal, high intensity, and negative affect; Thomas, Chess, & Birch, 1968) experience more externalizing behavior problems when paired with parents whose parenting style is harsh, punitive, and inconsistent (Maziade et al., 1985; Miner & Clarke-Stewart, 2008;

Paterson & Sanson, 1999). However, difficult children exhibit fewer externalizing behaviors when parents implement clear and consistent rules and consequences, and are less harsh in their interactions (Maziade et al., 1985; Miner & Clarke-Stewart, 2008). Additionally, children whose actual temperament characteristics are congruent with behavioral expectations held by parents experience more positive academic, social, and behavioral functioning, compared to students who do not fit with parental expectations (Talwar, Nitz, & Lerner, 1990; Feagans et al., 1991).

Although fit within the home is an important construct to consider when evaluating child functioning, as children begin to spend more time at school, fit within the educational environment becomes important as well. For example, Lerner (1983) demonstrated that children who meet teacher expectations of temperament and behavior experience better academic and social competence compared to students who fail to meet teacher expectations. Fit also appears to have implications for treatment effectiveness among children with academic and behavioral problems within the school setting. In a meta-analysis investigating the interaction between treatment components and child temperament among children in grades three through six, Barclay (1983) concluded that the "search for treatments which will effect all children equally is useless (p. 436)." Although the interventions included in this study varied widely (e.g., therapy, consultation, school curriculums, instructional approaches), results indicated that intervention efficacy appears to be mediated by temperament characteristics. For example, findings have demonstrated that children characterized by high scores on traits related to achievement (e.g., task orientation, adaptation, persistence, decision making), impulse control, sociability, and activity level, function well and thrive socially within open and less-structured school settings; whereas, children with lower levels of academic orientation, activity levels, and behavioral control tend to become less assertive, sociable, and task oriented within this same setting.

Goodness-of-fit is often studied within the context of interactions with parents and teachers; however, 'fit' can also be conceptualized within the context of peer relationships. In fact, it appears that congruence with peers' expectations for behavior might be more predictive of child functioning than meeting behavioral demands of teachers (Lerner, 1983). In addition to peer expectations, peer acceptance might also function as a factor influencing fit for children. For example, Berdan, Keane, and Calkins (2008) found that highly active and outgoing female students were less likely to demonstrate externalizing behavior problems in kindergarten when they received high ratings of social preference by their peers; conversely, students with similar temperament traits who lacked peer acceptance demonstrated higher rates of externalizing behaviors. It appears, in this case, that peers who are accepting of other children's high activity levels actually serve to create positive fits for those children, resulting in reduced disruptive behaviors.

Although fit with parents, teachers, and peers might lead to differential functioning within those contexts, it also important to consider how fit in one environment can impact functioning in another. For example, Feagans and colleagues (1991) demonstrated that good fit in the home environment is predictive of successful school achievement, specifically performance on standardized reading assessments. Further results of this study indicated that poor fits at home may have a cumulative effect on school functioning; the mean difference in reading achievement between the children experiencing good fits with parents and those experiencing poor fits became larger each year. The results from Fegans et al., (1991) demonstrate that children's various environmental settings cannot be viewed as isolated spheres of influence; rather, one must keep in mind the ways in which various environments interact to promote child functioning. For example, Churchill (2003) concluded that not only do good fits within an environment promote positive

outcomes for children, but good fits across environments have demonstrated an additional impact on children's wellbeing. In her investigation of goodness-of-fit with families and teachers from three Head Start centers, Churchill collected data on children's temperaments and developmental abilities, parenting behaviors, the teachers' views of "good" parenting behaviors, and both parents' and teachers' expectations of the children. Findings suggested that children who encountered good fits with their teachers' expectations also experienced positive cognitive and social outcomes. Interestingly, a good fit between teachers' and parents' expectations about parenting and child temperament was also positively correlated with child social competence. This finding suggests that it is easier for children to make positive transitions into classrooms where teachers hold the same expectations for the children as do their parents. In contrast, children whose teachers hold different expectations than parents experience difficulty transitioning to school because they have to learn to adapt their behavior differently between home and school (Churchill, 2003).

When a child's temperament does not fit with classroom or home demands, teachers and parents are advised to do three things to improve the child's emotional and behavioral functioning: a) suppress negative feelings regarding the child's challenging traits, b) modify environmental expectations and demands (e.g., discipline style), and c) teach the child skills and coping strategies to overcome difficult aspects of temperament (Pullis, 1989). However, it is often unrealistic, and perhaps inappropriate, to expect the children's peers to do the same. Therefore, when children experience a poor fit with the demands and expectations of their friendship group, it is unlikely that the group will alter their expectations to accommodate the "problematic" aspect of the child's temperament. It could also be difficult for peers to regulate their negative reactions to the bothersome behaviors of a classmate. In this case, the child might choose to adapt some aspect of their behavioral style to improve their fit among peers.

The current study conceptualizes fit within the framework of homophily. Therefore, children who demonstrate personality characteristics that are discrepant from the characteristics of their friends are characterized as experiencing a poor fit. Additionally, although self reported data is often not used with elementary school students, perceived fit (i.e., how a student thinks they fit with the expectations and demands of others) is sometimes more predictive of adaptation than actual fit (i.e., as rated by significant others) (Lerner, 1983).

Identity, Personality, and Conformity

One way of adapting behavior to improve group fit is by conforming to the social norms of the group. Conformity refers to the process of changing one's attitudes or behaviors to align more closely with others (Cialdini & Goldstein, 2004). According to the tripartite model, individuals are motivated to conform to social norms by the need for accuracy, social approval, and self approval (Cialdini & Goldstein, 2004).

Ambiguity and uncertainty enhance an individual's motivation to increase behavioral or attitudinal certainty. When situational demands are ambiguous or individuals feel unsure about their judgments, attitudes, or behaviors, people tend to look to others for information, as famously demonstrated in the Asch paradigm (1956). According to Festinger's (1954) social comparison theory, we compare ourselves to others, in part, to determine the accuracy of our attitudes and beliefs. Feelings of uncertainty might drive individuals to conform to other group members, particularly when the group already shares similar attitudes (Smith, Hogg, Martin, & Terry, 2007).

Individuals also conform to social norms in a desire to gain or maintain social approval. Individuals tend to demonstrate more fondness towards individuals that mimic their attitudes and behaviors (Chartrand & Bargh, 1999). Peers communicate approval through positive

reinforcement, such as attention and laughter. Behavior that is socially reinforced by peers is more likely to be repeated (Dishion, Spracklen, & Andrews, 1996; Lamb, Easterbrooks, & Holden, 1980; Snyder et al., 2005). For example, Dishion and colleagues (1996) established a linear relationship between deviant talk and subsequent reinforcement (i.e., laughter) by peers. Results indicated that peer reinforcement accounted for 84% of the variance in the frequency of deviant talk. A two year follow up revealed that the reinforcing cycle of deviant discourse with peers was predictive of greater growth in self-reported delinquent activities. Although conformity to group expectations can lead to peer acceptance and reinforcement, non-conformity can lead to punishing results such as teasing, strained relationships, and/or ostracism from the group. Conformity provides an opportunity to escape such negative consequences and gain access to rewards of approval, feelings of belongingness, and relational closeness.

The final conformity motive is maintaining positive feelings towards the self (Cialdini & Goldstein, 2004). According to Christensen and colleagues (2004), conforming to group norms leads to positive self-evaluations and feelings about oneself. This finding may be particularly true when the social group determining the norms is important to the individual (Pool, Wood, & Leck, 1998). Findings by Pool et al. (1998) suggest that individuals might experience a decrease in self-esteem when they become aware that the attitude they hold differs from the attitude maintained by a group with which the individual identifies. A similar decrease in self-esteem also occurs if the individual maintains the same attitude as a minority group that they do not identify with. If given the opportunity, individuals will reinterpret the position of the group to fit more or less closely to their own, depending on the reference group, effectively enabling the individual to maintain a higher level of self-esteem.

The current study aims to answer two primary questions. First, are the friendship groups of third through fifth grade students homogeneous regarding personality traits? Second, does the degree of personality similarity between an individual and their friends, conceptualized as goodness-of-fit, systematically relate to self-reported social identity and intent to conform? It is expected that children who demonstrate disparate personality characteristics from their group will report an increased desire to conform to group norms such as academic expectations, fashion trends, misbehavior, etc. as a means of improving the goodness-of-fit. Additionally, it is expected that children possessing personalities comparable to their friends will report stronger social identification with their friendship group.

CHAPTER 2

Method

Participants

To obtain participants for the current study, parent permission was solicited for all of the third, fourth, and fifth grade children at four rural elementary schools in the southeastern region of the United States. Study inclusion was determined by class-wide participation rates; to be included in the study, parent consent and child assent had to be obtained for at least 70% of students in the grade level. Rates of participation ranged from 74.6% to 85.7% across grade levels. The final sample consisted of 455 students from six third grade, nine fourth grade, and eleven fifth grade classrooms. With regard to the demographic composition of the sample, 52% of the participants were female. Additionally, 76% of the sample was comprised of White students, 13% Black students, and 11% students from other backgrounds. Children ranged in age from 9 to 13 years.

Predictor Variables

Self-reported friendship group. Each student was asked to nominate "a group of friends with whom you spend time and do a lot of things together." Children were permitted to nominate up to ten study-participating students in their grade level. Students were asked to refer to this *friendship group* as they answered subsequent questions pertaining to this group of individuals throughout the questionnaire, namely on measures of group personality, social identification and conformity (described below).

Inventory of Children's Individual Differences, Teacher-report form (ICID-T). The Inventory of Child Individual Differences (ICID; Halverson et al., 2003) is a cross-cultural, lexical measure of children's personality traits. The items on this instrument were created using a bottom up method, based on free descriptors given by parents in seven countries: Belgium, Netherlands, Germany, Greece, China, Poland, and the United States. This opposes the traditional top down test construction, whereby researchers create test questions based on theoretical considerations. The top down lexical approach is founded on the assumption that cultures encode descriptors of salient personality characteristics as words in their respective languages (see Goldberg, 1993 for historical review). According to the lexical hypothesis, words or phrases that parents frequently use to describe their children's traits represent personality constructs that are important to that particular culture.

The first version of the ICID had 144 Likert-scale questions that were normed on a sample of 2557 children ages 3-13 in the U.S., China, and Greece. When factor analyzed, the ICID yielded each of the Big-Five personality traits: Neuroticism, Extraversion, Intellect, Agreeableness, and Conscientiousness. The five factors were composed of the following 15 midlevel scales: Achievement Orientation, Activity Level, Antagonism, Compliance, Considerate, Distractible, Fearful/Insecure, Intelligent, Negative Affect, Openness to Experience, Organized, Positive Emotions, Shy, Sociable, and Strong Willed. Internal consistency estimates for each of the midlevel scales ranged from .72 to .90. Stability coefficients from a one-month test-retest interval ranged from .73 to .95. Furthermore, correlations with other relevant measures of temperament and behavior were significantly related to ICID subscales in the expected directions, demonstrating construct validity for the scale. For example, when correlated with the

NEO Five Factor Index, the ICID exhibited adequate convergent validity with coefficients ranging from .51-.87 (Halverson et al., 2003).

To reduce the number of items, while still retaining the reliability and validity of the measure, the authors created a shorter, 108 item version, and, more recently, a 51 item version of the scale (ICID-S; Deal, Halverson, Martin, Victor, & Baker, 2007). The ICID-S was not yet available for the current study; therefore, a 61 item interim measure was used. The properties of the 15 midlevel scales for the 61 item version of the ICID are unknown; therefore, the item groupings for the midlevel scales of the 108 and 51 item scales were considered in creating the new midlevel scales. Table 1 contains the item wordings and scale compositions for used in the current study. Internal consistency estimates for the current sample are also reported in Table 1. Although, the current midlevel scales do not perfectly replicate the 108 or 51 version ICID, they are a close match and demonstrate adequate levels of reliability. The midlevel scales Fearful/Insecure and Shy have the lowest internal consistencies (.804 and .771, respectively); however, these reliability scores are consistent with reliabilities derived from parent ratings of children of the same age group (Halverson et al., 2003).

Table 1
Teacher-Rated ICID midlevel scale items and internal consistency

Midlevel Scale	α	Midlevel Scale	α
Achievement Orientation	0.915	**Negative Affect**	0.924
Is self-disciplined		Is irritable	
Is a hard worker		Is quick-tempered	
Has a drive to do better		Gets angry easily	
Activity Level	0.874	Is moody	
Is energetic		**Openness to Experience**	0.877
Is always on the move		Is interested in new things	
Is active physically		Is curious	
Is lively and enthusiastic		Shows interest in everything	
Antagonism	0.866	**Organized**	0.905
Is mean		Is organized	

Is uncooperative		Keeps things neat and tidy	
Is selfish		Does things carefully and with thought	
Compliance	0.942	**Positive Emotions**	0.912
Is obedient		Is happy	
Is dependable and trustworthy		Is cheerful	
Is cooperative		Is sweet	
Is uncooperative (reverse scored)		Is a joy to be with	
Self-disciplined		Is friendly	
Considerate	0.836	**Shy**	0.771
Is sensitive to others' feelings		Is withdrawn	
Is selfish (reverse scored)		Is slow to warm up to new people/situations	
Is loving		Has difficulty making friends	
Is affectionate		Is shy	
Distractible:	0.794	**Sociable**	0.905
Has a short attention span		Is sociable	
Is easily distracted		Is outgoing	
Forgets things easily		Loves to be with other people	
Does things carefully and with thought (reverse scored)		Makes friends easily	
		Has a lot of friends	
Fearful/Insecure	0.804	Is lively and enthusiastic	
Is afraid of a lot of things		**Strong-Willed**	0.902
Is fearful		Is strong-willed	
Lacks confidence		Is stubborn	
Is insecure		Is hard-headed	
Intelligent	0.953	Wants things his/her own way	
Is quick to learn		Manipulates to get his/her own way	
Has a good memory			
Has good thinking abilities			

Inventory of Children's Individual Differences, Self-report form (ICID-SR). The Inventory of Child Individual Differences-Self-Report Form (ICID-SR) is an instrument designed for the current study to measure children's self-reported personality characteristics. The ICID-SR was derived from the parent-rated Inventory of Child Individual Differences (ICID; Halvaerson, et. al., 2003). To create the ICID-SR, items from the ICID were translated to first person voice and reworded using child-friendly language to facilitate understanding among elementary-age students. To keep the scale length more manageable for the child reporters, items that were considered highly similar to another item were eliminated, which resulted in a final

scale consisting of 46 items. The original response options were changed from a seven-point Likert scale to a five-point Likert scale (not like me at all, a little bit like me, somewhat like me, quite a bit like me, and a lot like me). Each item read as a statement about the child (e.g., I am kind and caring), and the child was instructed to think about how much that statement was like him or her.

Fifteen midlevel scales were created, based upon the original ICID, and can be found in Table 2. Using the current data, internal consistency estimates for the 15 midlevel scales are relatively low. Alpha levels ranged from .453 to .701; most alphas hovered around .5-.6. Low scale reliability might indicate that the children had difficulty understanding and accurately responding to some items. Skewness and kurtosis estimates indicate normal distribution among each of the 15 midlevel scales for the ICID-SR. Skewness values ranged from -1.063 to .907 and kurtosis ranged from -.819 to .687.

To assess the relation between the self-ratings and teacher-ratings on the ICID, correlations between the midlevel scales on the ICID-SR and ICID-T were investigated. The correlations ranged from .036 to .317, with most correlations remaining around .200. Although these correlation values are low, most values were significant and in the expected direction, indicating some agreement between teacher and self ratings of personality characteristics for students in the current sample. Furthermore, correlation magnitudes are comparable to estimates of agreement found by Achenbach and colleagues (1987). According to Achenbach and colleagues' findings, the average relationship between teacher and self-reports of behavioral and emotional characteristics for children aged one to nineteen was .20.

Inventory of Children's Individual Differences, Self-report of group form (ICID-G).

The Inventory of Children's Individual Differences-Self-report of Group Form (ICID-G), was created to assess each child's perception of their friendship group's characteristics. Items on this measure mirrored self-report items on the ICID-SR, except that they read as statements about the child's friendship group (e.g., My group of friends is kind and caring). Items from the ICID-SR and ICID-G were presented in tandem to facilitate easier responding for children and to force comparisons between the self and group on each item. For example the student would answer the item, "I am afraid of a lot of things" followed by the item, "The kids in my group are afraid of a lot of things." Like the ICID-SR, response options were presented in a 5 point Likert scale (not at all like them, a little bit like them, somewhat like them, quite a bit like them, and a lot like them). As with the self-report form, fifteen midlevel scales were created by averaging the item groupings used in the original ICID (Halverson et al., 2003). Skewness and kurtosis estimates indicate that each of the 15 midlevel scales for the ICID-G were normally distributed. Skewness values range from -.806 to .853 and kurtosis ranges from -.702 to .090. Internal consistency estimates were relatively low, ranging from .452-.682.

Table 2
*Self-Rated ICID-SR midlevel scale items and internal consistency**

Midlevel Scale	Self α	Group α	Midlevel Scale	Self α	Group α
Achievement Orientation	.520	.473	**Negative Affect**	.701	.682
I do my schoolwork and follow the rules without being told			I am easily bothered by people and things; I am moody		
I am a hard worker			I get mad easily		
No matter how good I am at something, I always want to get better			I find myself in a bad mood a lot		
			Openness to Experience	.528	.495
			I am interested in new things		
Activity Level	.584	.515	I am curious		
I have a lot of energy; I am lively			I am interested in a lot of different kinds of things		
I am always on the move					

I am active; I like to run, jump, or climb a lot		
Antagonism	.538	.574
I am mean		
I do not cooperate or work together with others very well		
I am selfish		
Compliance	.600	.673
I do what teachers, parents, and friends tell me to do; I follow the rules		
Other people can trust me		
I am cooperative; I work well together with others		
Considerate	.666	.667
I am kind and caring		
Before doing something, I think about how it will make others feel		
Distractible:	.453	.452
I cannot pay attention		
I am easily distracted		
I forget things easily		
Fearful/Insecure	.473	.448
I am afraid of a lot of things		
I am fearful		
I lack self confidence; I do not feel very good about myself		
Intelligent	.622	.587
I am a quick learner		
I remember things easily		
I have good thinking abilities		
Organized	.656	.634
I keep my things in an orderly, neat way		
My desk is neat and tidy		
I think about things carefully before I do them		
Positive Emotions	.656	.561
I am happy		
I am cheerful		
I am fun to be with		
Shy	.652	.492
I feel shy when I first meet new people, but once I get to know those people I don't feel so shy		
I am shy		
Sociable	.625	.545
I am friendly and outgoing		
I love to be with other people		
I make friends easily		
I do not make friends easily (reverse scored)		
Strong-Willed	.503	.487
I don't like being told what to do or what to think		
I am "hard-headed;" I like to do things my own way		
I like to be in charge		

Note. Wordings of items taken from ICID-SR form.

Goodness-of-fit. In the current study, goodness-of-fit was operationalized as the similarity of personality between the self and the friendship group. Utilizing self- and peer-reported data, personality similarity was conceptualized both as *perceived* similarity and *actual* similarity. *Perceived* similarity reflects how similar a student perceives themselves to be to their group of friends, whereas, *actual* similarity reflects the correspondence between the target child's self-perceptions and the self-perceptions of his or her friends.

To calculate the degree of p*erceived* and *actual* similarity between a child and their group of friends, discrepancy scores were calculated by subtracting the overall group score from the score of the target child. Specifically, *perceived* similarity was calculated by subtracting the target child's self report of group personality (ICID-G) score from their self-reported personality (ICID-SR) score. To calculate *actual* similarity, self-reported personality scores (ICID-SR) of each member in the child's friendship group were averaged to create a group mean. Then, this group mean was compared to the target child's self-reported personality score. Low discrepancy scores reflect close correspondence between a child's personality and that of their group. Whereas, large discrepancy scores, either positive or negative, reflect a large difference between a child's personality and the personality characteristics of their friendship group. Mean scores and standard deviations of perceived and actual personality discrepancy are presented in Appendix A.

Outcome Variables

Social Identification Scale. The Social Identification Scale (SIS) was adapted from Cameron and Lalonde's (2001) Social Identity Scale. The original 28 item scale was created to measure adults' feelings related to being members of specific groups. Research with the scale indicates a three factor structure of social identity: Centrality, Ingroup Affect, and Ingroup Ties (Cameron & Lalonde, 2001; Cameron, 2004). *Cognitive Centrality* refers to the importance and salience associated with group membership. In other words, how often does a member think about being part of a particular group? *Ingroup Affect* refers to an individual's emotions associated with group membership. Individuals may feel a range of emotions regarding group membership, from joy and pride to sadness and regret. Finally, *Ingroup Ties* refers to how closely connected an individual feels to other members of the group. Individuals who feel

strongly tied to their group will experience feelings of belonging and fitting in with others in the group. Prior work with the Social Identity Scale suggests acceptable scale internal consistency among college aged respondents (α =.85). Reliabilities among the three subscales were also acceptable, ranging from .76-.78 (Cameron, 2004). Relationships with related constructs such as personality and other measures of feelings towards group membership were in the expected directions, demonstrating evidence of construct validity.

Twelve items from the original 28 were selected for use in the current study, with four items representing each dimension of social identity. The items were reworded to facilitate easier comprehension among the third through fifth grade students. Internal consistency was acceptable for Ingroup Ties (alpha=.707) and Ingroup Affect (alpha=.734); however, low interitem correlations among items measuring Centrality resulted in an internal consistency estimate of .402 for this scale. The subjects' inconsistent responding on Centrality items may indicate that students had a difficult time understanding item wordings. It may also mean that group centrality is not a meaningful construct to children in middle childhood. Mean scores and standard deviations of each factor is presented in Appendix A.

Norm-Based Conformity Scale. The Norm-Based Conformity Scale (NBCS) is a twelve item scale assessing students' projected intent to conform across six norms: studying behavior, sports, trends, pretend play, and misbehavior attitudes (see Appendix B). Six short vignettes were created that presented the students with a hypothetical norm-based conformity decision. For example, to assess the likelihood of future conformity to group studying norms, students were presented with the following vignette: *Imagine that your class will soon be taking a big test. Most of the kids in your group have been talking about studying for the test. Some kids in your group have already started studying hard for it.* Students were then asked, "How likely would

you be to start studying hard for it too?" Response options were presented in a 5 point Likert scale (not at all likely, a little likely, somewhat likely, a lot likely, and very likely). To assess the student's intent to conform, while facing the choice between adopting the new behavior and the expense of an old, desired behavior, students were then asked if they would choose the new behavior at the "expense" of the current behavior. For example, "Imagine that you usually spend a lot of time after school playing or going to activities. How likely would you be to study hard for the test instead?" Mean scores and standard deviations of conformity domains are presented in Appendix A.

CHAPTER 3

Results

Analysis Plan

The current study aimed to investigate the relations among personality homophily and various social outcomes among third through fifth graders' friendship groups. Specifically, this study aimed to answer two primary questions. First, are the friendship groups of third through fifth grade students homogeneous regarding personality traits? To answer this question, intraclass correlations were utilized. It was expected that correlations between the traits of the target child and the traits of their friendship group would be significantly positive, reflecting similarity across personality domains.

The second research question, aimed to examine whether the degree of personality similarity between an individual and their friends, conceptualized as goodness-of-fit, systematically relate to self-reported social identity and intent to conform. To answer this question, a series of hierarchical regression analyses were run using the factors of social identity (i.e., Ingroup Ties, Ingroup Affect, and Centrality) and the domains of conformity (i.e., Academic, Sports, Trends, Pretend Play, and Misbehavior) as dependent variables. For each hierarchical regression model, gender was entered in step one, followed by teacher rated personality in step two, and goodness-of-fit (i.e., perceived personality discrepancy) in step three. Perceived personality discrepancy reflected the difference between a target student's self-rated personality traits and the general traits possessed by their friendship group (as rated by the

target student). For example, this variable indicates how similar (or dissimilar) a child feels regarding their level of Extraversion compared to friends.

Preliminary Analyses

Factor structure of ICID-T. Prior to answering the research questions outlined above, preliminary analyses were necessary to identify the underlying factor structure of the personality measures used in the study. The ICID was designed for use with parent informants and has not been used with teachers; therefore, the current data were analyzed using confirmatory factor analysis to determine if the Big-Five could be recovered among teachers' reports. The measurement model tested in the current CFA analysis is taken from the reported factor structure of ICID among parent informants (see Halverson et al., 2003). The hypothesized factor model is as follows: Considerate, Positive Emotionality, Negative Emotionality (reversed), Antagonism (reversed), and Strong Willed (reversed) load on the *Agreeableness* factor; Organized, Achievement Orientation, and Distractibility (reversed) load on the *Conscientiousness* factor; Positive Emotionality, Sociability, Considerate, Activity Level, Openness, and Strong Willed load on the *Extraversion* factor; Fearful/Insecure, Negative Emotionality, Shy, Strong Willed, and Distractible load on the *Neuroticism* factor; and Intellect, Achievement Orientation, and Openness load on the *Openness to Experience* factor.

According to Hu and Bentler's (1995, 1999) suggested criteria for the evaluation of fit indices, the proposed measurement model did not fit the data. The current data set has a small sample size (455) and data are normally distributed (multivariate normality=1.231); therefore, the Root Mean Squared Error of Approximation (RMSEA), Non-Normed Fit Index (NNFI), and Comparative Fit Index (CFI) were evaluated in conjunction with the Standardized Root Mean Squared Residual (SRMR), as recommended by Hu & Bentler (1995, 1999). All indices failed to

meet Hu & Bentler's criteria for good fit (Chi Square = 595.92, SRMR=0.085, RMSEA= 0.14, NNFI=0.91, CFI= 0.94). Furthermore, 73.6% of the standardized residuals exceeded |2.0|. Overall, results indicate that the Big Five Factor structure used with parent report may not be appropriate to apply to teacher report.

To determine a more appropriate factor structure for the data, an Exploratory Factor Analysis, namely principal-axis factoring, was conducted using the 15 midlevel scales as the unit of analysis. A Varimax rotation was utilized in the current analysis as personality factors are assumed to be orthogonal in nature. Multiple criteria were considered in determining the appropriate number of factors to extract, including the Kaiser eigenvalue 'greater than one rule,' the total percentage of variance explained, scree plot analysis (Cattell, 1966), parallel analysis (Horn, 1965), and most importantly, factor interpretability. Scree plot analysis is an extraction method whereby a chart of eigenvalues for the maximum number of factors is visually analyzed to determine where, in the plot, an 'elbow' occurs. The 'elbow' marks the point at which the size of the eigenvalues, and therefore the percentage of variance accounted for by each factor, declines markedly. Parallel analysis is a procedure whereby the eigenvalues computed from the current data are compared eigenvalues computed from random data. In this procedure, a factor is extracted when it accounts for more variance than a factor derived at random. Results from the eigenvalue 'greater than one rule' and scree plot analysis suggested retaining three factors, whereas parallel analysis suggested retaining five factors. Given the conflicting outcomes of the above analyses, the theoretical interpretability of the factors was considered. The five factor EFA solution yielded factors that resembled Agreeableness, Extraversion, Conscientiousness, and Openness; however, the fifth factor had very low loadings (only one was above .300), suggesting overfactoring.

Three and four factor solutions were also analyzed. The four factor solution accounted for 80.57% of the total variance in the midlevel scales and yielded factors that closely aligned with the Big Five. Factor 1 resembled Agreeableness and accounted for 47.36% of the variance. Factor 2 combined Extraversion and components of Neuroticism, namely shyness and fearfulness, and accounted for 18.77% of the variance in the model. Factor 3 resembled Conscientiousness and accounted for 11.56% of the variance, and factor 4 resembled Openness and accounted for 2.88% of the variance.

The factors extracted in the three factor solution were similar to those in the four factor solution; however, the scales that are intended to reflect the factors Openness and Conscientiousness loaded together on one factor. These results may indicate that teachers perceive Openness and Conscientiousness a unitary construct when rating students' personalities. Although it is unclear whether Openness and Conscientiousness are distinct constructs in the minds of teachers, the four factor solution was chosen for use in further analyses due to its closer alignment with the well established factors in the Big Five theory of personality (Goldberg, 1990). The factor loadings and internal consistencies for each of the four factors are presented in Table 3. Mean scores and standard deviations for midlevel scales and factors are presented in Appendix A.

Table 3
Four Factor Solution of ICID-T

Midlevel Scale	Agreeable Loading	Extraversion Loading	Conscien-tiousness Loading	Openness Loading
Antagonism	-.904			
Strong Willed	-.861			
Negative Affect	-.837			
Considerate	.808			
Compliance	.730		.585	

Positive Emotions	.698	.562		
Sociable		.929		
Shy		-.847		
Activity Level		.780		
Fearful/Insecure		-.511		
Organized			.835	
Achievement Orientation			.736	.404
Distractibility			-.735	
Intelligence			.429	.870
Openness to Experience				.719
Internal Consistency	.930	.834	.846	.841

Note: Principle Axis Factoring with a Varimax rotation. All loadings above .400 reported. Values over .500 used in calculating factor scores

Factor Structure of the ICDI-S and the ICID-G. The ICID-S and the ICID-G have not been administered to participants before; therefore, the properties of these scales are unknown. Furthermore, given the young age of the participants in this study, it was likely that the Big-Five would not be fully recovered in the children's self-reports. Therefore, scale-level exploratory factor analyses with Varimax rotations were conducted separately for the two scales. Multiple criteria, including analysis of eigenvalues, percentage of explained variance, scree plots, and parallel analysis, were considered in determining the appropriate number of factors to extract. As expected, results of the factor analyses yielded slight variations between the structure of the ICID-S and ICID-G. However, because subsequent analyses required the direct comparison of the two scales, retaining identical factor structures was ideal. Therefore, items that did not load on both scales were dropped. The final factor model had four factors: Extraversion, Disagreeable (reverse of Agreeable), Neuroticism, and Intellect. Students with high scores on the Extraverted factor characterized themselves as cheerful, sociable, active, and hardworking. High levels of Disagreeableness (reverse of Agreeableness) reflected students who were often moody, quick tempered, stubborn, and non-compliant. Students whose self-ratings reflected high scores on

Neuroticism tended to be shy and fearful. Finally, high scores on Intellect reflected superior thinking abilities, organizational skills, and focus. The four factor solution accounted for 52.9% of the variance in self-rated personality and 50.3% of the variance in perceived group personality (ICID-G). The Extraversion and Disagreeable factors demonstrated adequate levels of internal consistency (alpha values ranged from .706-.878 among ICID-SR and ICID-G); however, reliability estimates for the dimensions of Neuroticism and Intellect were relatively low (alpha values ranged from .469-.679). Although two, three, and five factor solutions were also evaluated, the four factor solution aligned most closely with Five Factor models of personality. Factor loadings and alpha values for these factors are presented in Table 4. Mean scores and standard deviations for midlevel scales and factors are presented in Appendix A.

Table 4
Four Factor Solution of ICID-SR and ICID-G

	Extraversion Loading		Disagreeable Loading		Neuroticism Loading		Intellect Loading	
Midlevel Scale	Self	Group	Self	Group	Self	Group	Self	Group
Sociable	.815	.742						
Positive Emotions	.705	.686						
Openness to Experience	.599	.517						
Compliance	.594	.649	-.491	-.487				
Considerate	.588	.613	-.403	-.418				
Achievement Orientation	.573	.597						
Activity Level	.542	.562						
Antagonism			.710	.643				
Negative Affect			.669	.601	.407	.493		
Strong Willed			.547	.469				
Shy					.616	.464		
Fearful/Insecure					.591	.598		
Intelligence	.424	.552					.650	.655
Distractibility			.488	.520			-.519	-.214
Organized							.389	.372
Internal Consistency	.870	.878	.768	.807	.520	.469	.629	.679

Homophily

Using self, peer, and teacher informants, friendship group similarity was conceptualized in various ways for the current study. *Perceived similarity* was assessed by comparing a target child's self-reported personality characteristics (ICID-SR) to their perception of their group's characteristics, as measured by the ICID-G. To calculate *actual similarity (self-rated)*, the self-reported personality scores (ICID-SR) of each of the target child's friends were averaged to create a mean score for the group. The group mean was then compared to the target child's self-reported characteristics (ICID-SR). *Actual similarity (teacher-rated)* was formulated similarly to *actual similarity (self-rated)*. To calculate this score, the teacher rated personality scores (ICID-T) of each of the target child's friends were averaged to create a teacher-rated mean for the group. This group mean was then compared to the teacher's rating of the target child's individual characteristics (ICID-T).

Intraclass Correlations (ICC) were used to measure the degree of actual and perceived similarity between individuals and their friendship groups. Although ICCs are typically used to measure rater agreement in the context of reliability analyses, they can also be used to assess homogeneity among groups of people. ICCs were used rather than Pearson Correlations because members of a friendship group mutually influence one another; therefore, it cannot be assumed that the units of analysis are independent (Kashy & Kenny, 2000). The ICC can be interpreted as the proportion of variance in the dependent variable that is due to group membership (Kashy & Kenny, 2000). ICCs have been used in past analyses of homophily (Cairns et al., 1988); however, it has been reported that ICCs have low power, making them a modest test of similarity (Kenny, Kashy, & Bolger, 1998).

As can be seen in Table 5, children perceive themselves to be highly similar to their group of friends. Intraclass Correlations between a target child's self-rated individual personality (ICID-SR) and the target child's ratings of his/her friendship group's characteristics (ICID-G) ranged from .453 to .774 across the 15 midlevel scales. Although the self-reported data of third grade children was considered unreliable, intraclass correlations for third grade students were included for descriptive purposes.

Table 5
Perceived Similarity: Intraclass Correlations between ICID-SR and ICID-G

	Grade		
	3rd	4th	5th
Achievement	.622	.596	.624
Activity Level	.518	.534	.549
Antagonism	.728	.595	.687
Compliance	.584	.443	.572
Considerate	.594	.560	.591
Distractible	.597	.612	.656
Fearful/Insecure	.617	.681	.670
Intellect	.491	.453	.554
Negative Emotions	.497	.628	.690
Openness to Experience	.557	.642	.766
Organized	.461	.468	.569
Positive Emotions	.704	.586	.725
Shy	.598	.541	.655
Sociable	.774	.615	.694
Strong Willed	.638	.682	.680

Note. All correlations are significant ($p < .001$)

Actual (self-rated) similarity between individuals and their group of friends was also assessed by calculating ICCs between a target child's self-ratings of personality and the self-report ratings personality completed by the members of a target child's friendship group. That is, each child reported the members in their group of friends; therefore, it was possible to calculate a mean of the members' self-reported personalities (ICID-SR). This mean is thought to reflect the

characteristics of the friendship group as a whole. Therefore, Intraclass Correlations were calculated between an individual's self-ratings of personality (ICID-SR) and the mean of their reported friends' self-ratings of personality. Results, presented in Table 6, demonstrate an interesting developmental trend, indicating increased homophily as children progress from third to fifth grade. By fifth grade, there is a significant, but weak relationship between the self and the group for thirteen of the fifteen personality dimensions, compared to a significant relation for three of fifteen dimensions in fourth grade and no significant relations in third grade.

Table 6
Actual Similarity: Intraclass Correlation between ICID-SR and ICID-SR friendship group average

	Grade		
	3rd	4th	5th
Achievement	-.025	.198*	.258*
Activity Level	.050	.018	.167*
Antagonism	.061	.064	.320*
Compliance	.073	.200*	.294*
Considerate	.005	.113	.199*
Distractible	.101	.056	.036
Fearful/Insecure	-.015	.053	.151*
Intellect	.072	.102	.193*
Negative Emotions	.060	.056	.202*
Openness to Experience	-.051	.036	.299*
Organized	-.031	.105	.166*
Positive Emotions	.057	.120	.263*
Shy	-.062	.085	.162*
Sociable	-.009	.185*	.254*
Strong Willed	-.042	.081	.047

Note. *$p < 0.05$

Teacher ratings of personality, of the target child and the members of the target child's friendship group, also were utilized to investigate the degree of personality similarity between individuals and their friends. ICCs between teacher ratings of a target child and the mean teacher

rating of the individuals within the target child's friendship group indicated moderate homophily among children and their group of friends across many dimensions of personality (see Table 7). Specifically, similarity regarding Achievement, Compliance, Distractibility, and Organization remained moderately stable from third to fifth grade; however, similarity regarding Activity Level decreased. Significant similarity in terms of Intellect and Strong Willed failed to demonstrate a predictable pattern across grades. A slight developmental trend in similarity was noted among teacher reports; nine out of fifteen ICCs were significant in third and fourth grade, whereas, thirteen out of fifteen correlations were significant in fifth grade.

Table 7
Intraclass Correlation between ICID-T (individual) and ICID-T (group average)

	Grade		
	3rd	4th	5th
Achievement	.355*	.298*	.328*
Activity Level	.301*	.215*	.172*
Antagonism	-.034	.101	.164*
Compliance	.211*	.267*	.289*
Considerate	.004	.066	.156*
Distractible	.293*	.223*	.243*
Fearful/Insecure	.162	.080	.184*
Intellect	.354*	.178*	.262*
Negative Emotions	-.051	.125	.191*
Openness to Experience	.300*	.127	.240*
Organized	.282*	.281*	.250*
Positive Emotions	.101	.195*	.202*
Shy	.263*	.300*	.060
Sociable	.300*	.311*	.199*
Strong Willed	-.047	.002	.040

Note. *$p < 0.05$

Overall results of the intraclass correlations indicate that *perceived similarity* is greater (e.g. greater magnitude of correlations and greater number of significant correlations) than *actual similarity* as rated by self and teachers. Although the magnitude of correlations among self and

teacher rated *actual similarity* were low, there appears to be a slight developmental trend in self-reports of *actual similarity.* The number of significant correlations increases each year from third to fifth grade. Furthermore, by fifth grade, intraclass correlations of self-reported and teacher reported *actual similarity* correspond closely, with the exception of Distractibility (non-significant for self-reported similarity) and Shyness (non-significant for teacher reports).

Goodness-of-fit

To determine if a child's *perceived* and *actual* fit with their friendship group was predictive of their feelings of social identity and intent to conform, over and above the variability associated with personality alone, a series of hierarchical regression analyses were conducted on each outcome variable. Due to low estimates of perceived homophily, and the unstable reliability of self-reports among third grade students, only the scores of fourth and fifth grade students were analyzed within the regression analyses. Hierarchical regression models were similar in each analysis. Gender was entered in step one, followed by teacher-rated personality (ICID-T) of the target child in step two. Degree of goodness-of-fit, either *actual* or *perceived*, was entered in step three.

For the following analyses, the four self-rated personality factors, Extraversion, Agreeableness, Neuroticism, and Intellect, were utilized in order to increase parsimony and decrease the total number of analyses. To calculate the degree of 'fit' for students, a discrepancy score was calculated for each of the four self-rated personality factors. As stated previously, *perceived* fit, or similarity, was calculated by subtracting the target child's self report of group personality (ICID-G) score from their self-reported personality (ICID-SR) score. *Actual* similarity was calculated by, first, averaging the self-reported personality scores (ICID-SR) of each member in the child's friendship group to create a group mean. Then, this group mean was

subtracted from the target child's self-reported personality (ICID-SR) score. *Perceived* and *actual* discrepancy scores were relatively normally distributed, with means close to zero. Values for skewness were all less than |1.0|; however, discrepancy scores for Extraversion and Agreeableness were slightly leptokurtic (kurtosis values were 3.8 and 5.2, respectively). Subjects were assigned to one of three groups based on their discrepancy scores. Students with discrepancy scores above the 70th percentile or below the 30th percentile were considered discrepant from their friends. Scores above the 70th percentile indicated that the child possessed more of a given characteristic compared to their friends (e.g., more Extroverted than their friendship group). Conversely, scores below the 30th percentile indicated that the child possessed less of a characteristic compared to friends. Children with scores between the 70th and 30th percentile were considered to be non-discrepant. In sum, discrepancy scores for *perceived similarity* and *actual similarity* were calculated and used as indicators of goodness-of-fit in the following sets of hierarchical regressions.

Social Identification with the Friendship Group. Using hierarchical regression to predict Social Identification, gender was entered in step one, followed by teacher-rated personality in step two, and goodness-of-fit (*perceived* and *actual* similarity were entered as predictors in separate analyses) in step three. In step one of the regression analyses, gender significantly predicted students' Affect regarding their friendship group (β = -.110, p = .044) and significantly accounted for 1.2% of the variance in students' ratings of Affect (see Appendix C). Specifically, compared to males, females reported less positive feelings of Affect. Gender did not significantly predict ratings of Ties or Centrality.

After controlling for gender, teacher-rated personality explained a significant amount of variance in students' self-reported Ties, Affect, and Centrality (R^2 Δ = .057, .038, .044,

respectively). Specifically, teacher-rated Agreeableness significantly predicted students' ratings on Ties (β = -.245, p = .004) and Centrality (β = -.204, p = .015). Additionally, Agreeableness neared significance in predicting student-rated Affect (β = -.161, p = .056). In general, students who were more Agreeable, as rated by teachers, were less likely to report strong feelings of Ties, Affect, and Centrality. Teacher rated Openness to Experience also significantly predicted students' ratings of Affect (β = .179, p = .033). That is, students possessing higher ratings of Openness also reported higher feelings of Affect towards their group.

Degree of *perceived* discrepancy (i.e., higher than group, lower than group, same as group) was entered during step three of the analyses. Overall, the degree of discrepancy between the students' characteristics and the characteristics of the group (i.e., the target's perceptions of his/her group's characteristics minus target's self-reported characteristics) explained a significant amount of variance in self-reported Affect and Centrality (R^2 Δ = .075, .053, respectively) after controlling for gender and personality. Results indicated that students who rated themselves as less Disagreeable than their group reported significantly lower feelings of group Ties (β = -.170, p = .014) and marginally significantly lower feelings of Affect (β = -.132, p = .052) and Centrality (β = -.124, p = .072) compared to students with similar levels of Disagreeableness. Additionally, students who rate themselves as more Disagreeable than friends tend to report higher feelings of group Centrality (β = -.120, p = .064), although this relationship is only marginally significant. Furthermore, students who perceived themselves as more Extraverted than their group of friends reported significantly lower feelings of Affect compared to non-discrepant peers (β = -.160, p = .018).

To explore the impact of *actual* discrepancy on subjects' Social Identities, step one and step two of the hierarchical regression equation were repeated; therefore, r-square and beta

coefficients are the same values in the *Actual* models as they were in the *Perceived* models. *Actual* discrepancy scores, entered in step three (calculated by subtracting the target student's self-rated personality score from the mean of self-rated scores obtained from each member in their friendship group), did not predict a significant amount of variance in Ties, Affect, or Conformity.

Intent to conform to group norms. Using hierarchical regression to predict Conformity, gender was entered in step one, followed by teacher-rated personality in step two, and goodness-of-fit (*perceived* and *actual* similarity were entered as predictors in separate analyses) in step three. In step one of the hierarchical regression analyses, gender accounted for a significant amount of variance in intent to conform to Academic, Trend, and Misbehavior group norms (R^2 Δ = .095, .066, and .032, respectively; see Appendix C). Females were more likely to report intent to conform to Academic (β = .309, p < .001) and Trend (β = .257, p < .001) norms, whereas males were more likely to report intended conformity to Misbehavior norms (β = -.178, p = .001) within the friendship group.

When controlling for gender in step one, teacher rated personality explained a significant amount of variation in the students' intent to conform to Academic, Trend, and Misbehavior norms (R^2 Δ = .036, .044, and .098, respectively). Regarding Academic conformity, higher teacher ratings of Conscientiousness (β = .314, p < .001) and Openness to Experience (β = -.172, p = .031) were positively related to intent to conform to Academic norms. Agreeableness (β = -.299, p = .005) and Openness to Experience (β = -.216., p = .008) were significantly and negatively related to intended Trend conformity. Finally, higher self-endorsement of the intent to conform to Misbehavior was significantly predicted by low levels of Conscientiousness (β = -

.260, $p = .011$). Conformity to Sports and Make Believe Games was not significantly predicted by teacher-rated personality in step two of the regression analyses.

Perceived goodness-of-fit was entered in the third step of the hierarchical regression analyses. Overall, goodness-of-fit did not explain significant variance in intent to conform, after controlling for gender and personality, with the exception of Make Believe Games ($R^2 \Delta = .054$). Specifically, children who perceived themselves as less Extraverted ($\beta = .145$, $p = .034$), more Agreeable ($\beta = .193$, $p = .003$), and more Intellectual ($\beta = .148$, $p = .033$) than their friends, were more likely to report conformity to Make Believe Game norms than non-discrepant students.

To determine the predictive power of *actual* goodness of fit, actual discrepancy scores were entered as step three in a new set of hierarchical regression equations. Steps one and two remained the same; therefore, the r-square and beta values do not change in these steps. Results indicated that after controlling for the effects of gender and teacher-rated personality, actual discrepancy in personality significantly predicted intent to conform to Academic and Misbehavior group norms ($R^2 \Delta = .146$ and .105, respectively; see Appendix C). Specifically, children possessing lower levels of intellect than friends reported lower conformity to Academic norms ($\beta = -.211$, $p < .001$) and higher conformity to Misbehavior norms ($\beta = .250$, $p < .001$) than students who were matched with friends on this trait. Additionally, children possessing higher levels of Intellect than their friends reported significantly higher conformity to Academic norms ($\beta = .257$, $p < .001$) and significantly lower conformity to Misbehavior norms ($\beta = -.110$, $p = .043$) compared to non-discrepant children. Lastly, children possessing high levels of Disagreeableness compared to friends were less likely to report conformity to Misbehavior norms ($\beta = -.136$, $p = .033$).

CHAPTER 4

Discussion

Friendships serve a host of important functions during middle childhood and adolescence. Maintaining at least one close friend during childhood leads to more successful school adjustment (Ladd, 1990), psychological adjustment (Klima & Repetti, 2008), and social adjustment (Rubin et al., 2006). During middle childhood, friendship groups provide a context for social influence and conformity; therefore, it is important to explore conditions that make conformity more likely to occur. The current study utilized a goodness-of-fit framework for understanding and interpreting the potential impact to personality homophily on children's feelings of Social Identification with their friendship group and Intent to Conform to their group's norms.

Homophily

Intraclass correlations (ICC) indicated that children *perceive* themselves to be quite similar to their groups of friends, with ICCs ranging from medium to large in magnitude. However, estimates of *actual* similarity, as measured by self- and peer- rated personality, were much lower, with significant relationships ranging in magnitude from small to medium. As Aboud and Mendelson (1996) pointed out, children may perceive friends as more similar to themselves than in reality, a phenomenon known as the false-consensus effect. Supporting this view, Hymel and Woody (1991) found that children (4^{th} and 5^{th} graders) rate friends as being more similar to self than nonfriends, even after controlling for actual similarity as rated by teachers and peers. However, individual perception of reality, rather than reality itself, appears to

be more important in predicting child outcomes. For example, an investigation of the goodness-of-fit between students' temperament characteristics and the behavioral expectations of their peers and teachers revealed that eighth grade students tend to be more academically and socially competent when their temperament profile more closely matches expectations held by peers and teachers (Lerner, 1983). In that study, perception of fit (measured by what the student thought was expected of them) was more predictive of social and academic outcomes than actual fit (measured by what teachers and peers reported that they expected of students).

In addition to the overall correlation coefficients being much lower in the actual compared to perceived similarity analyses, there also appears to be a slight developmental trend within the *actual* similarity results. Among third grade respondents, no significant relationships were detected, whereas, twenty percent of correlations were significant among fourth graders, and eighty-six percent of correlations were significant among 5th grade respondents. Additionally, by fifth grade, self and teacher reports of *actual* similarity began to align quite closely. These results may reflect a developmental increase in ability to reliably and accurately rate the self and others. As children age, advances in cognitive processing and social comparisons may help their perceptions to increasingly reflect reality. Not only can children more accurately reflect upon their own characteristics with age, but they can also reflect upon the characteristics of others with increased accuracy. Therefore, if similarity among friends does, in fact, exist, older children should be more capable of reporting this phenomenon. It should be noted, however, that developmental differences in attention span, reading ability, and comprehension skills may have impacted third and fourth graders' abilities to respond to items on the scale.

Relations Among Personality, Social identity, and Conformity

Results of the hierarchical regression analyses indicated that, as expected, children's personalities significantly impact their feelings of Social Identity with the friendship group as well as their self-reported intent to conform. Interestingly, children who were rated by teachers as possessing higher levels of Agreeableness (i.e., high levels of compliance, positive emotions, considerate) were more likely to report lower feelings of Ingroup Ties, Ingroup Affect, and Cognitive Centrality regarding friendship group membership. Although, in general, children rated as Agreeable should experience more positive interactions with peers (Jensen-Campbell, Adams, Perry, Workman, Furdella, & Egan, 2002), which may predict stronger identification with that group, this relationship may not be so straightforward. As pointed out by Graziano (1994), various social contexts may require different personality characteristics for successful adaptation. For example, Agreeableness as a factor, or specific dimensions of Agreeableness (e.g., compliance, positive emotions), may be differentially valued by teachers and peers. Whereas teachers tend to prefer students who are compliant, prosocial, and who demonstrate few antisocial behaviors (Wentzel & Asher, 1995; Taylor & Trickett, 1989), peers may not view these characteristics similarly. Children who demonstrate high levels of agreeableness and compliance are more likely to be considered 'teacher's pets' in classrooms (Tal & Babad, 1990), which may result in more negative evaluations by peers.

Teacher-rated personality also was predictive of intent to conform across various normative domains. Overall results indicate that children rated as having higher levels of Conscientiousness and lower levels of Openness to Experience are more likely to report conforming to academic norms. The teacher rated ICID asks informants to rate a student's characteristics compared to the "average child;" therefore, it is a reasonable assumption that

children with low scores on a given domain possess less of that characteristic compared to most students in the broader peer group. Children with lower than average scores on Openness, a personality trait related to academic performance (Laidra, Pullmann, & Allik, 2007), may be more likely to look to others for information regarding successful academic behavior and model their behavior accordingly. Children with high levels of Conscientiousness, another trait related to academic success (Laidra, et al., 2007), may be more attuned to the positive academic behaviors of others and follow suit.

Teacher-rated personality was also predictive of self-reported intent to conform to Trend norms. Specifically, students who received higher ratings of Extraversion and lower ratings of Agreeableness and Openness were more likely to report that they would conform to trends. Children possessing these personality traits may represent a group of children who are perceived as being popular by their peers. A subgroup of perceived popular children rated as 'popular' but not well-liked by peers, tend to demonstrate higher levels of aggression (particularly relational aggression), social dominance, social influence, and lower levels of academic success (deBruyn & Cillessen, 2006; Lease, Kennedy, & Axelrod, 2002; Parkhurst & Hopmeyer, 1998; Rose, Swenson, & Waller, 2004). Perceived popular children are often considered 'cool' and fashionable by classmates (deBruyn & Cillessen, 2006; Lease et al., 2002). This group of children may, therefore, be more sensitive to and willing to conform to trends in music and fashion.

Relations Among Goodness-of-fit, Social identity, and Conformity

When controlling for the effects of gender and teacher-rated personality characteristics, goodness-of-fit, conceptualized as the similarity between a student's characteristics and the characteristics of their group of friends, explained additional variance in children's self-rated

social identification and intentions to conform. The investigation of *perceived* similarity and *actual* similarity revealed differential relationships with the outcome variables of interest. Regarding social identity, perceived similarity explained a significant amount of variance in Ingroup Affect and a marginally significant amount of variance in Cognitive Centrality. Specifically, results indicated that children who perceive their friendship groups as more Disagreeable than themselves endorse significantly lower ratings of social identification across all three dimensions (e.g., ties, affect, and centrality) compared to students possessing similar levels of Disagreeableness as peers. Interestingly, this relationship remains even after controlling for individual levels of Agreeableness. That is, even if a child possesses characteristics indicative of Disagreeableness (e.g., antagonistic, negative affect, noncompliant), they might only experience weak social identification if their friendship group is more Disagreeable compared to themselves. Additionally, children reported more positive affect regarding group membership when their friends were more Extraverted compared to the self.

Although perceived similarity appears to provide useful information regarding social identification, the inclusion of actual similarity did not contribute additional explanatory power in social identity above and beyond that already accounted for by gender and teacher-rated personality. This finding provides more support for the contention that perceived fit is more influential than actual fit in predicting social outcomes (Lerner, 1983).

As with Social Identification, *perceived* and *actual* similarity demonstrated differing relationship patterns with Conformity. In this case, however, results indicate that actual similarity may be slightly more predictive of intent to conform to Academic and Misbehavior norms compared to perceived similarity. Specifically, discrepancy in intellect is predictive of intent to conform to these norms. When compared to students who are similar to friends

regarding degree of intellect, children report more conformity to misbehavior when they are less intellectual than friends and less conformity when they are more intellectual compared to friends. Interestingly, this trend is reversed for Academic Conformity. Compared to intellectually homogenous student-friendship group pairs, children possessing more intellect compared to friends report higher conformity to academic norms; whereas, children reporting lower intellect report lower academic conformity. This finding appears to be partially incongruent with findings that academic behaviors are socialized by the group over time (Altermatt & Pomerantz, 2003; 2005; Kinderman, 1993). If children are influenced to become more similar to friends regarding academic achievement and motivation, it is reasonable to expect that children possessing lower levels of intellect compared to friends would be motivated to conform to academic norms to reduce this discrepancy.

Limitations

Overall, the current results are partially supportive of the hypothesis that the goodness-of-fit between a child's dispositional traits and the traits of those within his or her friendship group is predictive of social outcomes. However, this study has several limitations. First, participants in the study were younger than participants typically used with self-report data. This may have been a contributing factor to the poor internal consistency of several scales used in the current study, such as self rated Cognitive Centrality, Neuroticism, and Intellect.

Methodologically speaking, a further flaw of the current study is the arbitrary grouping of individuals based on cut scores determined by percentile rankings. Grouping individuals on a continuous characteristic reduces power to detect significant results. In this regard, the current tests of significance can be considered conservative estimates. Furthermore, perceived and actual fit were calculated by comparing an individuals self ratings (e.g., I am kind and caring) to an

individual's ratings of their friends (e.g., The people in my group are kind and caring) or to the aggregate of their friends' self-ratings. This method indirectly assesses degree of perceived and actual similarity, rather than directly asking how similar a person feels on a given domain (e.g., how similar to your friends are you regarding level of kindness). Results are, therefore, interpreted under the assumption that this indirect method of assessing similarity actually reflects an individual's true perception; however, this may not be the case. A strength of this approach is that it reduces the potential impact of social desirability bias. If presented with questions directly assessing perceived similarity as outlined above, children may be more likely to overestimate their similarity to friends, as similarity may be perceived as desirable.

Finally, the current study failed to take into account the influence of reputational salience (Hartup, 1996). The impact of personality similarity on conformity is likely moderated by the salience or importance of the norm in question. For example, a student who is less Conscientious compared to friends may feel more compelled to conform to academic norms if academic competence is a central facet of that group's identity, whereas, the student may feel less compelled to conform if this domain is not emphasized as important within their group of friends. Additionally, items used to assess intent to conform to various norms were unidirectional in nature. Academic norms may exist in multiple groups, but may look very different. For example, it may be a salient group norm among some circles of friends to 'snuff' your academic responsibilities and appear disengaged in academic tasks. This aspect of academic conformity was not directly assessed in the current study.

Overall, results indicate that degree of personality homophily may impact children's feelings towards group membership and intentions to conform to various social norms. These effects remain after controlling for the main effects of individual personality characteristics,

suggesting that similarity with friends may contribute to a child's goodness-of-fit within the peer group. In order to understand this process better, future studies should investigate the potential moderating effect that salience of norms may have on the relationship among personality homophily, social identity, and conformity. Furthermore, it might be useful to incorporate more direct methods of assessing perceived similarity in addition to or in place of the current methodological approach. Future studies should also aim to include older children, since an older sample might provide self-reports that are more psychometrically sound.

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APPENDIX A

Means and Standard Deviations of Independent and Dependent Variables

Table 8

Descriptive statistics for Actual (self-rated) discrepancy scores

Scale	M	SD
Extraversion	-.021	.518
Agreeableness	.040	.525
Neuroticism	.045	.464
Intellect	-.020	.567

Table 9

Descriptive statistics for perceived discrepancy scores

Scale	M	SD
Extraversion	.014	.432
Agreeableness	-.007	.426
Neuroticism	.006	.421
Intellect	.008	.545

Table 10

Descriptive statistics for the Social Identification Scale

Scale	M	SD
Ingroup Ties	4.16	.681
Ingroup Affect	4.35	.645
Cognitive Centrality	3.49	.711

Table 11

Descriptive statistics for Norm Based Conformity Scales

Scale	M	SD
Academic	3.19	1.12
Sport	2.95	1.00
Trend	3.01	1.31
Make Believe Games	2.33	1.09
Misbehavior	1.70	1.15

APPENDIX B

Norm-Based Conformity Scale

Instructions: For the next set of questions, think about the **FRIENDSHIP GROUP** that you listed earlier.

1. Imagine that your class will soon be taking a big test. Most of the kids in your group have been talking about studying for the test. Some kids in your group have already started studying hard for it.

A. How likely would you be to start studying hard for it, too?	*Not at all likely* ☐	*A little* ☐	*Somewhat likely* ☐	*A lot* ☐	*Very likely* ☐
B. Imagine that you usually spend a lot of time after school playing or going to activities. How likely would you be to study hard for the test instead?	*Not at all likely* ☐	*A little* ☐	*Somewhat likely* ☐	*A lot* ☐	*Very likely* ☐

2. Imagine that some kids started to play a new sport, for example, soccer/basketball or tennis/swimming. Most of the kids in your group have been talking about how much fun the new sport sounds. Some of the kids in your group also have started playing it.

A. How likely would you be to start playing it, too?	*Not at all likely* ☐	*A little* ☐	*Somewhat likely* ☐	*A lot* ☐	*Very likely* ☐
B. Imagine that you have been playing a different sport that you really like. How likely would you be to start playing the new sport instead?	*Not at all likely* ☐	*A little* ☐	*Somewhat likely* ☐	*A lot* ☐	*Very likely* ☐

3. Imagine that some kids started wearing something really trendy or listening to some cool new music. Most of the kids in your group have been talking about how cool it is. Some kids in your group also have started wearing it or listening to it.

A. How likely would you be to start wearing it or listening to it, too?	*Not at all likely* ☐	*A little* ☐	*Somewhat likely* ☐	*A lot* ☐	*Very likely* ☐

B. Imagine that you wear other kinds of clothes or listen to other kinds of music. How likely would you be to switch to the new style or the new music instead?	*Not at all likely* ☐	*A little* ☐	*Somewhat likely* ☐	*A lot* ☐	*Very likely* ☐

4. Imagine that some kids came up with a new make-believe or made-up game. Most of the kids in your group have been talking about how fun it seems. Some of the kids in your group also have started playing it.

A. How likely would you be to take part in playing the make-believe game, too?	*Not at all likely* ☐	*A little* ☐	*Somewhat likely* ☐	*A lot* ☐	*Very likely* ☐
B. Imagine that you spend your free time in doing other things. How likely would you be to start playing the new game instead?	*Not at all likely* ☐	*A little* ☐	*Somewhat likely* ☐	*A lot* ☐	*Very likely* ☐

5. Imagine that some kids started causing trouble when teachers are not around. Most of the kids in your group think it's really funny. Someone in your group also has started to cause trouble.

A. How likely would you be to join it, too?	*Not at all likely* ☐	*A little* ☐	*Somewhat likely* ☐	*A lot* ☐	*Very likely* ☐
B. You know that if you get caught you're going to be in trouble. How likely would you be to join in and cause trouble anyway?	*Not at all likely* ☐	*A little* ☐	*Somewhat likely* ☐	*A lot* ☐	*Very likely* ☐

6. Imagine that some kids have started getting boyfriends/girlfriends. Most of the kids in your group have been talking about getting one. Some of the kids in your group also have started trying to get one.

A. How likely would you be to try to get a boyfriend/girlfriend, too?	*Not at all likely* ☐	*A little* ☐	*Somewhat likely* ☐	*A lot* ☐	*Very likely* ☐
B. If you're worried that you might *not* get one, how likely would you be to try anyway?	*Not at all likely* ☐	*A little* ☐	*Somewhat likely* ☐	*A lot* ☐	*Very likely* ☐

APPENDIX C

Hierarchical Regression Results using *Perceived* Discrepancy Variables

Table 12
Summary of Hierarchical Regression Analysis for Variables Predicting Social Identification using Perceived Discrepancy Variables

	Ties		Affect		Centrality	
Variable	ΔR^2	β	ΔR^2	β	ΔR^2	β
Step 1	.002		.012*		.008	
Gender		-.049		-.110**		-.088
Step 2	.057*		.038*		.044*	
TICID Extraversion		.120*		.026		-.025
TICID Agreeable		-.245**		-.161*		-.204**
TICID Conscientious		.071		.019		-.011
TICID Openness		.127		.179**		.159*
Step 3	.042		.075*		.053*	
Extraversion Lower*		-.016		.013		.013
Extraversion Higher*		-.110		-.160**		-.017
Disagreeable Lower		-.170**		-.132*		-.124*
Disagreeable Higher		.023		-.027		.120*
Neurotic Lower		.022		-.102		-.080
Neurotic Higher		-.033		-.108*		-.111*
Intellect Lower		-.057		-.021		.015
Intellect Higher		.054		.025		.063

Note. *p < .05. **p < .001

Table 13

Summary of Hierarchical Regression Analysis for Variables Predicting Social Identification using Perceived Discrepancy Variables

Variable	Academic		Sports		Trends		Make believe games		Misbehavior	
	ΔR^2	β	ΔR^2	β	ΔR^2	β	ΔR^2	β	ΔR^2	β
Step 1	.095**		.001		.066**		.008		.032**	
Gender		.309**		.037		.290**		.089		-.178**
Step 2	.036*		.013		.044**		.014		.098**	
TICID Extraversion		.016		.033		.119		-.126*		.112*
TICID Agreeable		-.058		.048		-.229*		.040		-.117
TICID Conscientious		.314**		-.039		.160		-.084		-.260*
TICID Openness		-.172*		-.107		-.216*		.086		.003
Step 3	.039		.045		.024		.054*		.025	
Extraversion Lower*		.066		.064		.039		.145**		.033
Extraversion Higher*		.027		.028		.070		.034		.001
Disagreeable Lower		-.015		-.114		-.017		-.002		.001
Disagreeable Higher		-.092		-.045		-.131**		-.193**		.022
Neurotic Lower		.085		-.017		-.107*		.084		-.106*
Neurotic Higher		-.099*		-.078		-.040		.009		.034
Intellect Lower		-.066		.011		.027		-.058		-.036
Intellect Higher		-.053		-.122*		-.004		-.148**		-.074

Note. *p < .05. **p < .001

APPENDIX D

Hierarchical Regression Results using *Actual* Discrepancy Variables

Table 14
Summary of Hierarchical Regression Analysis for Variables Predicting Social Identification using Actual Discrepancy Variables

	Ties		Affect		Centrality	
Variable	ΔR^2	β	ΔR^2	β	ΔR^2	β
Step 1	.002		.012*		.008	
Gender		-.049		-.110*		-.088
Step 2	.057*		.038*		.044*	
TICID Extraversion		.120		.026		-.025
TICID Agreeable		-.245*		-.161*		-.204*
TICID Conscientious		.071		.019		-.011
TICID Openness		.127		.179*		.159*
Step 3	.040		.039		.040	
Extraversion Lower*		-.012		-.069		.043
Extraversion Higher*		-.071		-.104		.024
Agreeable Lower		-.009		-.008		-.075
Agreeable Higher		.095		.106		.061
Neurotic Lower		-.065		-.113		.025
Neurotic Higher		.011		-.033		.051
Intellect Lower		-.002		.043		.071
Intellect Higher		.150*		.072		.161*

Note. *p < .05. **p < .001

Table 15

Summary of Hierarchical Regression Analysis for Variables Predicting Social Identification using Actual Discrepancy Variables

Variable	Academic		Sports		Trends		Make believe games		Misbehavior	
	ΔR^2	β	ΔR^2	β	ΔR^2	β	ΔR^2	β	ΔR^2	β
Step 1	.095**		.011		.066**		.008		.032**	
Gender		.309**		.037		.257**		.089		-.178**
Step 2	.036*		.013		.044**		.014		.098**	
TICID Extraversion		.016		.033		.119		-.126*		.112*
TICID Agreeable		-.058		.048		-.229*		.040		-.117
TICID Conscientious		.314**		-.039		.160		-.084		-.260*
TICID Openness		-.172*		-.107		-.216*		.086		.003
Step 3	.146**		.025		.010		.039		.105**	
Extraversion Lower*		.066		.000		.052		.129*		-.039
Extraversion Higher*		-.067		-.061		-.007		-.017		-.051
Agreeable Lower		-.050		-.112*		.032		-.032		.023
Agreeable Higher		-.009		-.011		-.069		-.116		-.136*
Neurotic Lower		.044		.014		-.018		.071		-.040
Neurotic Higher		-.052		-.013		.052		-.026		.036
Intellect Lower		-.211**		-.092		-.043		-.157*		.250**
Intellect Higher		.257**		-.058		.034		-.016		-.110*

Note. *p < .05. **p < .001