Risk and Protective Factors of Peer Victimization:

The Role of Preschoolers' Affiliations with Peers.

by

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#### ABSTRACT

Studies of peer victimization typically focus on behavioral characteristics of the victims, and frequently overlook the role that peers may play. The current study extended previous research by examining how time spent with two types of peers (externalizing and socially competent) can serve as a risk or protective factor for preschoolers' victimization, and how victimization may differ for boys and girls. In addition, the study explored how affiliating with same-sex and othersex externalizing and socially competent peers may differentially relate to victimization. Results showed that girls who affiliated with externalizing female peers were significantly more at risk for victimization. In addition, boys and girls who spent time with socially competent male peers (but not female peers) negatively predicted victimization. The results indicate that children's peers, in certain circumstances, may play an important role in victimization. These findings also highlight the importance of considering children's and peers' gender when studying peer processes.

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For most children, preschool affords the first opportunity to interact with a large number of peers (Pellegrini & Blatchford, 2000). In addition, the primary focus of the preschool classroom is on learning through play activities, resulting in children spending most of their time in unstructured activities with their peers. This focus on social play increases the likelihood of both positive and negative (i.e., victimization) interactions with peers. Not only are preschool children victimized by their peers (Alasker & Valkanover, 2001; Crick, Casas, & Ku, 1999; Stormshak et al., 1998), but they tend to be victimized more frequently than older children (Boulton & Underwood, 1992; Kochenderfer & Ladd, 1996; Whitney & Smith, 1993). Thus, there appears to be developmental progression in the prevalence of victimization, such that young children are at greater risk of victimization than older children.

Although young children are victimized more than older children, their victimization is likely to be more transient (Kochenderfer & Ladd, 1997; Hanish & Guerra, 2000; Hanish, Ryan, Martin, & Fabes, 2005). In other words, preschool children are less likely to experience targeted or chronic victimization. The instability of victimization at this age could suggest that, although individual characteristics of victimized children can influence their frequency of victimization (e.g., internalizing and externalizing behavior), individual characteristics are embedded within the context of children's social environments, which may also influence whether or not a child is victimized. The most proximal ecological context or social environment for peer victimization is the

peer context, so a logical next step is to explore how children's victimization may be related to their interactions with peers.

The goal of this study was to examine how preschoolers' peer affiliations are associated with their risk for victimization, particularly time spent with peers who exhibit externalizing and socially competent behaviors. There is evidence that children who exhibit aggressive and hyperactive behavior (i.e., externalizing) may put their peers at risk for victimization, such that the availability of externalizing peers is related to higher victimization among preschoolers (Hanish, Ryan, et al., 2005). Conversely, children who spend time with peers who make friends easily and demonstrate helping behavior towards other children (i.e., socially competent) may be less at risk for victimization. Previous research has not addressed the relation between peers' socially competent behavior and victimization, but studies have examined how friendship can serve as a buffer for experiencing victimization (Egan & Perry, 1998; Hodges, Boivin, Vitaro, & Bukowski, 1999; Hodges, Malone, & Perry, 1997; Owens, Shute, & Slee, 2000; Schwartz, Dodge, & Coie, 1993). Although having friends does not appear to be related to victimization in young children (Hanish, Ryan, et al., 2005), it is possible that spending time with socially competent peers may decrease the likelihood of being victimized. In addition, it is possible that spending time with socially competent children may also serve as a protective factor by buffering children from the effects of spending time with externalizing peers (i.e., victimization).

Studies of peer victimization have frequently overlooked the role of peers. Some work has examined the role of peer status or friendship on victimization (Hanish, Ryan, et al., 2005; Snyder, Horsch, & Childs, 1997). Although these studies examine how much time children spend with peers and the factors that are related to children's affiliation with certain types of peers, none of them explore both the risk and protective factors that peers can pose for children's victimization. This study extended previous research by examining how time spent with two types of peers (externalizing and socially competent) can negatively or positively influence children's victimization. Thus, this is one of the first studies of how children's affiliation patterns relate to their victimization.

One significant contribution of this study is that it examined the protective factors of victimization, in addition to the risk factors for victimization that have more frequently been studied. Past studies have examined factors that are related to decreased victimization, but not all factors are also a protective factor. For example, studies have found that elementary school-age children who have friends are less likely to be victimized than children who do not have friends (Boivin, Hymel, & Bukowski, 1995; Hodges & Perry, 1999), but having friends does not necessarily constitute a protective factor unless it also decreases the risk associated with a risk factor (Coie et al., 1993). This study improves on past research by directly testing the role of protective factors (i.e., time spent with socially competent children) for children who are at risk of victimization (i.e., by spending time with externalizing children).

This study also extended previous research by examining the role of gender on children's victimization. Previous research investigating the role of gender on children's peer victimization has focused on the subtypes of aggression associated with boys' or girls' victimization, as well as the differential consequences of peer victimization on boys and girls (Crick & Bigbee, 1998; Crick et al., 1999; Crick & Grotpeter, 1996; Furlong, Sharma, & Rhee; 2000; Pellegrini, Bartini, & Brooks, 1999; Perry, Kusel, & Perry, 1988). Although victimization rates may differ between boys and girls, this does not tell us much about why boys may experience victimization differently than girls. Because previous research has focused primarily on these gender differences, we should move beyond looking at individual and mean-level differences in victimization to examine the mechanisms by which children are victimized, and what contextual factors increase the differential likelihood of victimization for boys and girls. This is important because if victimization occurs differently for boys and girls this has important implications for interventions, which may target boys and girls differently. This study added to the literature on gender and victimization in two ways: 1) including children's gender as a moderator of the relation between time spent with externalizing and socially competent peers and victimization, and 2) exploring how affiliating with same-sex and other-sex externalizing and socially competent peers may differentially relate to victimization.

This study also extended previous research by using a sample of children from low-income, predominantly Mexican-American families. Victimization researchers typically focus on children that are from white, middle-income backgrounds. This is particularly true when studying victimization in preschool; to my knowledge there are no studies that examine low-income, Mexican-American preschoolers. It is important to extend victimization research along socioeconomic and sociocultural dimensions because children who are in socially and economically disadvantaged groups tend to be at greater social risk than their white, more economically advantaged peers (Dhami, Hoglund, Leadbeater, & Boone, 2005; Fabes, Martin, & Smith, 1994). The number of children who fall in this category is not negligible; there are over 13 million children living in poverty, and Mexican Americans are the fastest growing minority group in the United States (U.S. Census, 2007). Thus, it is important for researchers to understand their normative socialization experiences of a large group of children who are at risk for negative social experiences.

The goal of the study was to examine how time spent with externalizing and socially competent peers contributed to children's peer victimization. This study aimed to: (1) investigate children's patterns of affiliation with male and female peers who exhibit externalizing and socially competent behavior and the relation between affiliation patterns and victimization, (2) examine whether time spent with socially competent peers served as a protective factor for peer victimization for children who also spend time with externalizing peers, and (3) investigate whether time spent with externalizing and socially competent peers is differentially related to victimization for boys and girls.

#### **CONCEPTUALIZATION OF PEER VICTIMIZATION**

A cursory look at peer victimization research would suggest that researchers agree on an essential question: what is victimization? Researchers, however, do not define and measure peer victimization in the same way. In order to understand the strengths and weaknesses of multiple definitions of victimization, this section describes the development of the research literature on peer victimization and measurement issues that arise from these definitions, including methodological concerns and issues with the identity of reporters of victimization. From this review, I draw conclusions that support how victimization was conceptualized and measured in the study.

## **Historical Overview of Peer Victimization**

The study of peer victimization emerged from the biological sciences when scientists used the term "mobbing" to describe the behavior of animal packs attacking a single, unprotected animal, usually from a different species (Lorenz, 1963). A physician who worked in the public schools subsequently applied the construct to describe a group of children spontaneously forming to physically and verbally attack a targeted child. These descriptions of victimization in schools generated the first scholarly works about peer victimization (Olweus, 1978).

This early work triggered a line of research inquiry into the phenomenon of children's peer victimization (Olweus, 1978), and the term "mobbing" was

used to describe many children collectively attacking, verbally taunting, or harassing another child (Olweus, 1978). In addition, the term mobbing was used to describe a group of children who would spontaneously form to pick on the targeted child, although the child may have provided no provocation for the attack (Olweus, 1978). The child targeted by this "mob" was usually considered to be deviant from the group in some way, such as in appearance or behavior.

This early definition posed several challenges. It overemphasized the group dynamics over the actions of the individuals participating in the attack (Olweus, 2000), specifically focusing too much on the collective aggression of the group and overlooking the contribution of one or two highly aggressive children who might be the main perpetrators. Another concern with this definition was that the nature of these attacks were viewed as more of a temporary situation, as opposed to more stable, repeated interactions towards a certain child over time (Olweus, 2000). These challenges around the definition of mobbing served as a springboard for early research on peer victimization and led to two current conceptual perspectives--the bullying tradition and general victimization tradition (Schäfer, Werner, & Crick, 2002) -- each of which is discussed in the next section.

#### **Definitions of Peer Victimization**

The bullying research tradition (Schäfer et al., 2002), which has been heavily influenced by the work of Olweus (1978, 1991, 1993, 1994), identified three criteria of bullying. First, bullied children are defined as recipients of

unprovoked aggressive acts. In other words, children are victims of bullying only if they are targeted by aggressive peers without any provocation. Second, children are considered to be bullied if they are attacked repeatedly and over time. Underlying this assumption is that a child who occasionally is the recipient of physical or verbal taunting is experiencing a normal childhood that is occasionally marked by harassment from others, whereas those who are repeatedly attacked suffer above and beyond other children's typical experiences. Third, bullying occurs when a more powerful child (in either strength or social status) attacks a weaker child. In order for a bully-victim relationship to exist, the victim should be physically smaller and weaker that the aggressor, demonstrate difficulty defending himself or herself from aggressors, and not seek retaliation. Thus, for bullying to occur, an imbalance of power should exist between the aggressor and the targeted child. This idea is supported by previous research demonstrating that bullied children tend to exhibit behaviors such as anxiety, lack of self-confidence and self-esteem, submissiveness, and a lack of social skills with their peers (Olweus, 1978; Perry et al., 1988; Schwartz et al., 1993).

Since its inception thirty years ago, this definition has become more refined. Currently, there is less of a focus on children who are the targets of group attacks and more on children who are victimized by a single aggressor; however, the role of group dynamics is still a considered an important factor in the production and maintenance of victimization (Salmivalli & Voeten, 2004). This revised definition also includes indirect attacks, including social or relational bullying, and excludes children involved in rough and tumble play or playful teasing (Björkqvist, Lagerspetz, & Kaukiainen, 1992; Crick & Grotpeter, 1995). This definition of bullying, however, does not cover all cases of victimization, such as aggressive episodes between children of equal power. Therefore, bullying may be viewed as a subtype of aggression, so that victims of bullying are just one type of victim. For example, Schäfer and colleagues (2002) suggested that using the bullying approach to define victimization overlooks those children who are victimized by close friends, because those children are presumably of equal strength and/or status.

The general victimization approach (Schäfer et al., 2002) is similar to the bullying approach in that it defines a victim as a child who is the recipient or target of aggressive behaviors from peers, but several conceptual differences exist between the two approaches. Generalized victimization is different from the bullying approach because the general victimization tradition does not specify that victimization must occur repeatedly over time or that victimization must occur between children who differ in physical strength (e.g., Perry et al., 1998). In part, this means that the generalized victimization approach allows for children who are aggressive or externalizing to be identified as victims, and not just children who are passive or considered weak by the aggressor. In addition, this approach differs from the bullying tradition because victimization tends to be measured as the degree to which children occupy the role of a victim during aggressive encounters with peers, rather than measured in a categorical way (i.e., either as a

"victim" or a "nonvictim"). This is helpful because it allows for the examination of varying levels of victimization and associated outcomes. The generalized victimization approach also reflects a growing consensus among researchers that victimization should be viewed as a type of peer interaction, as opposed to an intrinsic characteristic of the child. For example, children's victimization is often the result of children's choice of peers, and the presence or absence of friendships, not just the behavior of the victimized child (e.g., Hanish, Ryan, et al., 2005).

These two perspectives exist, in part, because of differences in measurement approaches. The next section will explore these differences in detail by examining definitional issues, as well as the issues associated with the identification of victimized children (i.e., reporters of victimization).

#### **Measurement Issues**

Methodological challenges in defining peer victimization. The bullying framework discussed thus far has received extensive use in research on peer victimization (e.g., Atlas & Pepler, 1998; Boulton, 1999; Craig & Pepler, 2003; Mouttapa, Valente, Gallaher, Rohrbach, & Unger, 2004; Pellegrini & Bartini, 2000; Smith, 2004). However, this framework poses several methodological challenges. For instance, a bully's intent to harm is an essential criterion, but it is difficult to determine a bully's intentions, making the identification of victims problematic (Graham & Juvonen, 1998). In particular, it can be difficult to determine whether children bully others because they want to intentionally harm someone else, or if children are instead simply using aggressive strategies to achieve another goal (e.g., taking resources from others), and perhaps don't fully understand the consequences of their behavior for the other person. This is a particularly salient issue for young children, who are frequently unable to express their intended goals or consequences (Cummings, Iannotti, & Zahn-Waxler, 1989).

Requiring a power dynamic between the aggressor and the victim poses another challenge to the bullying approach. First, assessing the power dynamic between two children can be difficult because this requires a basis from which researchers can infer who is stronger or weaker, which is often hard to measure. Relatedly, it is unclear whether this should be measured from objective ratings or the perception of the bully or victim (Graham & Juvonen, 1998; Smith 2004). This is an issue because reports often vary depending on who is doing the reporting (see next section for further discussion of reporter issues). Second, because a power differential is required for bullying to exist, research has focused on victims that are physically or psychologically weaker than their bullies, which has resulted in the identification of children with primarily submissive, anxious, or passive behaviors (Olweus, 1993; Perry et al., 1998; Schwartz et al., 1993). However, although some victimized children demonstrate these behaviors, not all victimized children do so. Some victims who demonstrate aggressive behaviors are also victims of aggression (Hanish & Guerra, 2004; Perry et al., 1988; Schwartz, Dodge, Pettit, & Bates, 1997). In sum, requiring a power differential

between the bully and the victim poses several measurement challenges, some of which could lead to the under-identification of children who are victimized.

Identity of reporters of peer victimization. Multiple sources can report on the occurrence of victimization (e.g., peers, teachers, parents, schools, etc.). Researchers should take into account the strengths and weaknesses of using a specific reporter in order to choose their sources to measure victimization. In particular, it is important to review these strengths and weaknesses by considering which source(s) are most developmentally appropriate for the sample, and in what context victimization is measured.

One common method of identifying victims of peers' aggressive behavior is to use children's self-reports. Children may be the best reporters of their own victimization because they can presumably give the most valid report. That is, children should be the most accurate reporters of their own victimization across a wide range of settings (e.g., playground, neighborhood, extracurricular activities, etc.), which would be more difficult to obtain from other informants who may have access to children in some settings but not in others. However, there are issues associated with self-reports of victimization. Self-reports are a subjective interpretation of one's own experiences, not necessarily a literal snapshot of objective reality, which can lead to over- or under-reporting of victimization (Ladd & Kochenderfer-Ladd, 2002; Sharp & Smith, 1991). For example, children who are frequently victimized may demonstrate faulty information processing and may not accurately perceive their status as victims (Camodeca & Goossens, 2005; Coie & Dodge, 1998). Also, victimized children may under-report their victimization if they are hesitant or embarrassed to tell an adult that they are the targets of aggressive behavior (e.g., Perry et al., 1998). Conversely, children who are not victimized might perceive aggression where none exists. This can happen when aggressive children tend to over-interpret another's action as aggressive (e.g., accidentally knocking into someone is interpreted as purposeful), and therefore over-perceive themselves as being on the receiving end of aggressive behavior (Crick & Dodge, 1994). Some children also over report their victimization because they misinterpret the frequency or severity of their victimization (Ladd & Kochenderfer-Ladd, 2002).

To eliminate this problem, some researchers rely on children's peers to identify victims. Peers can serve as key informants because peer victimization typically occurs in the presence of other peers and, similar to self-reports, children's peers are also able to report on a wide variety of contexts in which peer victimization is likely to occur (e.g. playground; Atlas & Pepler, 1998). In addition, peers are not likely to have any hesitancy in reporting victimization of other children. Peer reports of victimization are frequently more reliable than self reports because victimization nominations can be aggregated across many peers, providing a more reliable estimate of victimization (Ladd & Kochenderfer-Ladd, 2002; Perry et al., 1988). However, children might be relying on the reputation of peers more than peers' actual behavior (Hymel, Wagner, & Butler, 1990). In addition, young children (i.e., preschool and kindergarten) may not have developed the cognitive skills to recall which peers are the recipients of aggressive behavior in a consistent manner (Ladd & Profilet, 1996). Finally, although peers can report on multiple contexts of victimization, unless researchers seek out and ask neighborhood peers (which is rarely done), peer reports are typically limited to school-based victimization, which may not accurately reflect a child's victimization. This is particularly salient for children living in more aggressive neighborhoods, who may experience much of their victimization outside of school.

Although peer nominations of victimization have demonstrated reliability and validity with older children (e.g., Graham & Juvonen, 1998), this is not necessarily indicative of the reliability and validity of these measures with young children (e.g., preschool; Ladd & Kochenderfer-Ladd, 2002). For instance, Ladd et al. (2002) demonstrated that the reliability and validity of peer reports are not strong in kindergarten and early elementary school, and show little stability in their identification of victims, whereas self-reports are more reliable and valid than peer reports. The reliability and validity of peer reports of victimization at this age could be compromised by young children's cognitive abilities. For example, even in elementary school, children's lack of cognitive complexity can lead to difficulty in deciphering other children's interactions (Ladd & Profilet, 1996). Thus, children might be more likely to be able to identify children who are aggressive perpetrators or aggressive victims, as opposed to those children who are withdrawn victims (Younger, Schwartzman, & Ledingham, 1986).

Given these issues with peer reports, parents and teachers may also be used to identify children who are recipients of aggressive behavior. Parents' and teachers' measures of children's victimization are easier to administer than child measures (Leff, Kupersmidt, Patterson, & Power, 1999), and adults do not demonstrate some of the cognitive biases that hamper children from accurately identifying victims (Coie & Dodge, 1998). However, adult reporting presents a number of other issues. For instance, frequently adults do not witness these incidents because victimization typically occurs out of the sight of teachers and parents, such as on the playground or the lunchroom (Atlas & Pepler, 1998). In fact, teachers can misidentify children as victims by identifying some victims who do not identify themselves (Cullerton-Sen & Crick, 2005). Conversely, adults may report children as victims only if the child has reported victimization or if an adult has witnessed the incident (Nordhagen, Neilsen, Stigum, & Köhler, 2005). Thus, adults' reports could provide a source of information about children's victimization, but they are not without their problems.

Although teachers' reports do pose some challenges, the problems associated with them are typically less problematic than parents' reports, particularly in early childhood (i.e. preschool). For this age group, children are rarely out of the sight of teachers, and many more teachers are typically present in a preschool classroom than other classrooms, because this age group requires more supervision. Thus, teachers are much more likely to be witness to incidents of victimization of preschools than in classrooms with older children. Preschool teachers are also more likely to focus on the social ecology of the classroom than teachers in older grades (Ladd, Herald, & Kochel, 2006). This makes it more likely that teachers will be aware of children's victimization, and will be more likely to report accurately who is victimized and who is not in the classroom. Also, most children at this age are victimized at school, so parents may not be able to witness victimization, whereas teachers would be witness to victimization.

## Conclusion

There is no decisive approach to studying peer victimization: each has its strengths and weaknesses. Because a clear path is not illuminated, one way to approach victimization research is to consider the goal of the research and tailor the approach to best suit the research questions. The goal of this study was to examine young children's peer victimization, focusing on the peer context. Previous research has demonstrated the strengths of the general victimization approach (definitional) and the benefits of using teacher ratings (measurement), particularly when documenting young children's school victimization. Thus, for this study, victimization was conceptualized as the degree to which a child is the target of physical, verbal, and relational aggression, as reported by teachers.

#### **THEORETICAL BACKGROUND**

Bronfenbrenner's bio-ecological theory (Bronfenbrenner, 1979; Bronfenbrenner & Morris, 1998; Bronfenbrenner, 2005) has greatly influenced developmental research over the last 30 years. The appeal of this approach lies in the main tenant of the bio-ecological theory: behavior develops from an interaction between the child and his or her context, with the role of proximal processes as the engine of development. This is a particularly appealing approach for developmentalists because it takes into account the multiple contexts: the child characteristics, the child's environment, and time. This next section will describe Bronfenbrenner's bio-ecological model generally, and then the application of this model to victimization.

### An Overview of Bio-Ecological Theory

Bronfenbrenner's bioecological theory provides a framework by which children's development is seen as the product of a series of interactions between children and their environments, such as the interactions between children and their family, peer, school, and neighborhood contexts (Bronfenbrenner & Morris, 1998). His most recent model describes children's development as influenced by interpersonal processes, which in turn are influenced by individual characteristics of the child, the events in children's lives and the lives of those around them, and the specific historical context that the child experiences. Bronfenbrenner and Morris refer to this as a *person-process-environment-time model* (PPCT model; 1998).

As mentioned above, the crux of Bronfenbrenner's most recent envisioning of his theory is captured by the concept of *proximal processes*. Proximal processes are the child's interactions with people in the child's environments. These interactions are reciprocal, progressively complex, and occur over extended periods of time. The child's active participation in these interactions explains the connection between the environment (culture, peer group, or family factors, for example), some aspect of the individual (e.g., gender), and an outcome (Bronfenbrenner, 1994). Bronfenbrenner called proximal processes the "engines of development" because the interactions between children and their environments serve to incorporate "their world and understand their place in it, and both play their part in changing the prevailing order while fitting into the existing one." Proximal processes are viewed as more powerful influences on development than simply the environmental contexts in which they occur.

Although earlier versions of Bronfenbrenner's theory downplayed the role of the individual child in their own development, Bronfenbrenner's later writings would remedy this by emphasizing the role of the child's characteristics in their context. As Bronfenbrenner himself said, his earlier writings criticized past research as describing development "out of context", whereas in later years, his primary critique of current research is that research is "context without development" (Bronfenbrenner, 1986). These characteristics include age, physical characteristics, temperament, gender, and biological and genetic aspects. Bronfenbrenner envisioned a person influencing his or her environment in two ways- passive change and active change. Passive change occurs when a child influences others in his/her environment simply by his/her presence. Others react to the child differently based on the child's individual characteristics such as age, gender, and skin color. Active change, on the other hand, occurs when the child influences his or her environment through interaction with others in the environment, whether the influence is purposeful or not.

The environmental component of the model is conceptualized as nested layers, with the child at the center. The closest environment to the child is called the microsystem, which consists of the actual interactions the child experiences, and includes the people with whom the child interacts- family, peers, teachers, etc. The mesosystem is the next closest layer to the child, and refers to the interactions or connections among the various parts of the environment that affect the child. Relationships among the settings of the microsystems, such as parents' relationship with the child's school or teachers' relationships with peers are examples of common relationships that compose the mesosystem. The next layer is the exosystem, which includes a parent's work, friends, or school. The macrosystem is the attitudes, culture, social class, and historical time in which the child is born. Those layers or systems that are closest to the child are considered to be the most proximal, or influential factors, with each system or layer becoming less influential in the child's development as one moves towards the outermost "layer". The final layer is the chronosystem, which consists of chronological change either in the child or the environment.

The last component of Bronfenbrenner's model is time. Like the differing layers of the environment (micro, meso, etc.), Bronfenbrenner and Morris conceptualized time as occurring on a micro-, meso-, or macro- level (1998). The micro-level of time is conceptualized as the time during a child's interaction with others or time spent in a specific activity. Meso-time is defined as activities and interactions that regularly occur. Macro-time is the specific historical events that are occurring as the child develops. Time is an important aspect of Bronfenbrenner's theory because without interactions over time, change or development would not occur. Therefore, research examining change over time should incorporate time into the model.

### **Application of Bio-Ecological Theory to Victimization**

Bronfenbrenner's bio-ecological framework is a helpful lens through which to view children's peer victimization. Unlike the study of other areas of children's development (e.g. children's aggressive behavior), peer victimization research is fairly atheoretical. Most research is not grounded in particular theory, or focuses primarily on only one aspect of the ecological system, primarily the personal characteristics of the child, and, less frequently, on one aspect of the context (e.g., home environment, neighborhood environment, etc.). Yet using the bioecological framework can help us examine the confluence of a child's characteristics and environment over time to result in peer victimization. In the coming sections I expand on these specifically, but first I give an overview of the role that each play in peer victimization.

Using Bronfenbrenner's model, the person characteristics of the child include the child's behaviors as well as the gender of the child. These characteristics can lead to an increased risk of victimization in two ways. First, children exhibit various behaviors that increase the likelihood of being victimized,

such as externalizing behavior (e.g., Perry et al., 1988). In addition, these behaviors lead children to associate with other children with similar characteristics, which can also increase the likelihood of victimization occurring (Estell, Cairns, Farmer, & Cairns, 2002; Hanish, Ryan, et al., 2005; Maccoby, 1998). For example, if a child displays externalizing behavior, he/she is more likely to interact with other externalizing children, which also puts that child at greater risk for victimization. In turn, children who exhibit socially competent behavior are at less risk for victimization. Socially competent children are more likely to associate with other children with socially competent behavior, which in turn leads to less risk for victimization. Similarly, children's gender can influence with whom children spend their time. For example, children at this age tend to associate with children of the same sex, leading them to spend most of their time with same-sex peers (Maccoby, 1995; Martin & Fabes, 2001). Since children spend more time with peers of their own sex, we can expect that children are more likely to be victimized by their same-sex peers. In these ways, children's personal characteristics lead them to associate with certain peers.

Once children are interacting with these peers, the most immediate context is the microsystem, or the interaction between the child and their peers. Children are not randomly exposed to peers' behaviors, but instead are attracted to and associate with peers who tend to display particular behaviors (e.g., externalizing and socially competent peers; Estell et al., 2002). If children spend more time with externalizing peers, they may be more likely to be victimized and if children spend more time with socially competent peers, they may be less likely to be exposed to victimization. Such interactions between children and their peers may be considered the proximal process by which victimization occurs.

## **Considering the Role of Two Cultures Theory**

For young children, it is possible that differences in boys' and girls' victimization are related to the gender-segregated nature of their play. Sex-segregation is a primary feature of young children's play patterns (Leaper, 1994; Maccoby, 1990; Maccoby 1998; Maccoby & Jacklin, 1987; Martin & Fabes, 2001). Children show a preference for interacting with peers of their own gender as early as pre-school age (Fabes, Martin, & 2003; Maccoby & Jacklin, 1987; Martin & Fabes, 2001). For example, Martin and Fabes (2001) found that preschoolers spent a majority of their time with same-sex peers (50-60%) and little time with other-sex peers (10-15%).

Sex-segregation is such a defining feature of children's play patterns, that it has been suggested that boys and girls grow up in "separate cultures" (Maccoby, 1995). Boys and girls certainly share many common experiences (Leaper, 1991; Thorne, 1993; Underwood, 2007); however, despite boys and girls growing up together in our society, the peer group experiences of boys and girls are so different that some researchers argue that these experiences amount to different cultural experiences for children (Maccoby, 1995, 1998). Boys' and girls' peer groups seem to differ in a number of important ways, including the play styles of each group and levels of aggressive behavior.

Two cultures theory would lead us to examine both the role of children's gender and the role of their peers' gender in victimization. Because boys and girls spend most of their time with same-sex peers, they are exposed to different play styles and levels of aggressive behavior. For instance, boys tend to engage in more rough and tumble play, unstructured activities, and aggressive behavior (Boulton, 1996), and girls tend to spend more time near adults and in activities organized and structured by adults, and are more focused on the relational aspects of play with peers (Carpenter & Huston, 1986; Fagot, 1978). These different play styles can lead to different victimization experiences for boys and girls. For example, it is possible that because boys are more generally aggressive in their play style they are indiscriminately victimizing their peers. Girls, on the other hand, tend to play in dyads, which may lead girls to target their play partner specifically. Thus, one consequence of same-sex play is that it may lead to differential rates of victimization for boys and girls, such that boys are more victimized than girls. For those children who do play with the opposite sex, they may be more likely to be victimized if they play with boys, and less if they play with girls

### THE SOCIAL CONTEXT OF PEER VICTIMIZATION

Children are not all equally at risk for victimization. Several factors contribute to the likelihood of being victimized, including the child's gender and social behavior (e.g., internalizing and externalizing behaviors) and their peers' gender and social behaviors (e.g., externalizing and socially competent peer behavior). In addition, protective factors can buffer children's risk of victimization. In this section, risk and protective factors associated with victimization are reviewed. First, I discuss risk factors in general and previous research on the risk factors that contribute to children's victimization, which focuses primarily on children's social behaviors. Second, I propose that peers' social behaviors can be viewed as risk or protective factor for victimization. Third, I discuss how children's and peers' gender can be a risk or protective factor for victimization. Finally, I discuss how children who are socially and economically disadvantaged are potentially more at risk for victimization.

## **Risk Factors That Contribute to Peer Victimization**

Risk factors are defined as characteristics related to a child's increased probability of developing negative outcomes (Coie et al., 1993). Protective factors, on the other hand, promote children's resistance to the influence of risk factors (Coie et al., 1993). Protective factors can operate in a number of ways, including buffering the negative effects of risk factors, decreasing the likelihood of direct effects, or preventing risk altogether (Dignam & West, 1988). Risk and protective factors can be found in many contexts, including individual, peer, family, neighborhood, and school settings (Coie et al., 1993). Risk and protective factors for peer victimization include individual characteristics of the victimized child (e.g., social behaviors; Perry et al., 1988), the child's peer context (e.g., lack of friendships; Hodges et al., 1999), the child's family (e.g., harsh parenting styles; Barker et al., 2008), their neighborhood (e.g., neighborhood norms about aggression; Card, Issac, & Hodges, 2008) and school settings (e.g., school approach towards victimization; Totura et al., 2009). Conversely, factors at the same levels may act as protective factors for experiencing victimization. For example, children who have at least one high-quality friendship may be less likely to be victimized, and may be protected from victimization (Hodges & Perry, 1999).

Of these contexts, most research has focused on children's social behaviors as risk factors related to peer victimization. Two particular forms of victims' social behavior have been shown to predict peer victimization: internalizing behaviors and externalizing behaviors. Internalizing behaviors include emotional and behavioral expressions of anxiety and depression, such as withdrawing from peers, displaying nonassertive behavior, and crying easily; these have all been associated with peer victimization in several studies (Bollmer, Milich, Harris, & Maras, 2005; Olweus, 1993; Perry et al., 1988; Perry, Williard, & Perry, 1990). Children who exhibit externalizing behaviors frequently engage in aggression and tend to demonstrate restlessness and impulsivity, and also display negative emotions such as anger and irritability, all of which are related to peer victimization (Hanish & Guerra, 2004; Perry, et al., 1998; Schwartz et al., 1993; Schwartz, McFadyen-Ketchum, Dodge, Pettit, & Bates, 1999).

Although both internalizing and externalizing behaviors predict victimization, a developmental relationship appears to exist between these behaviors and victimization, such that externalizing behavior appears to be a stronger predictor of young children's (e.g., preschool and kindergarten) victimization than does internalizing behavior; conversely, internalizing behavior is more strongly related to victimization in samples of preadolescents and adolescents (Alasker and Valkanover, 2001; Boivin, Hymel, & Hodges, 2001; Schwartz, et al., 1998; Garner & Lemerise, 2007). For example, Alasker and Valkanover (2001) reported that kindergartners who were victimized had higher rates of aggressive behavior than passive behaviors. In addition, Boivin and colleagues (2001) found that the relation between aggression and victimization decreased over the course of elementary school.

Despite the generally robust relations between individual children's internalizing and externalizing behaviors and peer victimization, it is doubtful these are the only factors contributing to victimization. First, individual characteristics do not account for much variance in the published research; the effect sizes of these studies usually are in the small to medium range (e.g., Perry et al., 1998). These effect sizes indicate that, although individual characteristics of victims are important to examine, children's individual characteristics are not solely responsible for children's victimization. Second, although individual traits of victimized children remain constant or moderately constant over time (e.g., aggressive behavior, gender), children's victimization is not particularly stable at a young age, though it does seem to become somewhat more stable among older children (Côte, Vaillancourt, Barker, Nagin, & Tremblay, 2007; Kochenderfer-Ladd & Wardrop, 2001). For instance, in one study, preschoolers experienced more transient and less stable forms of victimization than kindergarteners (Hanish, Ryan, et al., 2005). In another study, Hanish and Guerra (2000) found that for Latino-American and Anglo-American children, the stability of victimization in first grade was significantly lower than the stability of victimization in second or fourth grade. The instability of victimization could suggest that although individual characteristics of victimized children are relevant to their experiences of victimization, these characteristics are embedded within the context of children's social environments, which may also influence whether or not a child is victimized (as discussed previously with the bioecological model).

Using a bioecological approach, peer victimization can be thought of as a transactional process whereby a child's behavior is influenced by both his/her individual characteristics and social environment in a mutual and reciprocal cycle of interaction (Sameroff, 1975). For example, children's own propensities towards exhibiting externalizing and/or socially competent behaviors can lead to their choice of peers, and time spent with particular types of peers may then increase or decrease the likelihood of being victimized.

An example of this transactional process is the cycle of homophily and contagion. Preschool provides children with the opportunity to interact with a large number of peers. However, children do not spend equal amounts of time with all children indiscriminately; even as young as preschool, children choose which children they play with (Hanish, Martin, Fabes, Leonard, & Herzog, 2005). Children deliberately affiliate with specific peers, creating friendships and social networks (Snyder, West, Stockemer, & Gibbons, 1996). Children who are similar to each other on various characteristics (e.g., sex, race, behaviors) are more likely to gravitate towards, interact with, and become friends with each other (Estell et al., 2002; Fabes, et al., 2003; Hanish, Martin, et al., 2005; Kupersmidt, DeRosier, & Patterson; 1995; Rubin, Lynch, Coplan, & Rose-Krasnor, 1994). Thus, children tend to segregate themselves into peer groups based on certain characteristics, a phenomenon known as homophily. Once in these peer groups, children tend to influence or reinforce behaviors within the peer group, causing an increase in these behaviors (contagion).

The selection and influence of externalizing peers is one of the most widely studied examples of homophily and contagion. Children who demonstrate externalizing behaviors usually play more with children who also exhibit these behaviors (Espelage, Holt, & Henkel, 2003; Estell et al., 2002; Maccoby, 1998). Even as young as preschool, children who demonstrate externalizing behaviors tend to play with children who are similarly externalizing (Farver, 1996; Snyder et al., 1996). Thus, young children who exhibit externalizing behavior are exposed to relatively more externalizing peers and relatively fewer peers who act in more socially acceptable ways. Consistent with social learning and socialcognitive models of aggressive behavior, children are influenced by what they observe: greater observation of externalizing behaviors is related to increases in children's own externalizing behavior over time (Crick & Dodge, 1994; Eron, 1987; Huesmann, 1988, 1998).

#### The Peer Context as a Risk or Protective Factor for Victimization

The literature regarding homophily and contagion is important to the study of peer's influence on victimization. This literature, particularly the previous example of externalizing peers, would lead us to hypothesize that children who exhibit externalizing behaviors will be drawn to interactions with other externalizing peers, increasing the likelihood of being victimized. Conversely, children who exhibit socially competent behaviors are likely to interact with other children who are socially skilled, decreasing the likelihood of being victimized. The next section will explore specifically how peers may serve as a risk or protective factor for victimization.

**Previous research.** Children's peer context, or social ecology, may increase or decrease children's risk for victimization. For example, a body of research demonstrates that some aspects of children's relationships with peers increase the likelihood with which certain children are targeted for victimization. One of the primary risk factors that have been studied is children's social status among their peers, particularly peer rejection. Children who are rejected or disliked by their peers are likely to be victimized, particularly if they are also aggressive (Gazelle & Ladd, 2002; Perry, Hodges, & Egan, 2001; Perry et al., 1988). This relation works in both directions: many children who are rejected are victimized by peers, and many children who are victimized by peers are also rejected (Hodges & Perry, 1999). Further, peer rejection is one of the strongest indicators of whether a child will become more victimized over time (Hodges & Perry, 1999).

Another studied risk factor is the role of friendship. Many victimized children have few or no friends and spend more time in solitary play, further increasing the likelihood that they will be the target of peer aggression because they are more isolated and unprotected from attacks (Egan & Perry, 1998; Owens et al., 2000; Schwartz et al., 1993). Children who are victimized by their peers have been found to have fewer friendships than children who are not victimized, and these victimized children are more vulnerable to increased victimization over time (Hodges et al., 1999; Hodges et al., 1997). Conversely, children who have friends and frequently engage in play with other children are less likely to be victimized (Boivin et al., 1995; Hodges & Perry, 1999). Previous research with children in middle childhood through adolescence shows that children who can maintain friendships are less likely to be victimized.

The lack of friends can increase children's risk for victimization; conversely, friendships and positive play with other children can serve as a protective factor that buffers the effects of risk factors for victimization for elementary school-age children and adolescents (Bukowski, Hoza, & Boivin, 1994), although research findings are mixed on whether the number of friends children have is a protective factor for victimization for young children (Hanish, Ryan, et al., 2005). For example, Bollmer and colleagues (2005) found that friendship served as a protective factor for children who are at risk for victimization. In another study, children who had an overall high-quality best friendship were less likely to be targets of peer victimization than children without such a friendship (Hodges & Perry, 1999). Finally, social support from close friends also seems to buffer the effects of victimization of children's adjustment, such that peers who can provide emotional support and stand up for their friends can lessen the impact of victimization on target children (Prinstein, Boergers, & Vernberg, 2001).

What is it about friendships that may provide protection against victimization? Friendships can help children acquire social skills that provide a protective buffer against victimization (Bukowski et al., 1994). Also, the quality of these friendships may make a difference as to whether the friendship will serve in a protective capacity. If victimized children have friends who cannot provide the support necessary to thwart the bullies' attacks (e.g., because the friends also tend to be victimized), then friendship may not be protective (Bollmer et al., 2005; Hodges & Perry, 1999). Therefore, for friendships to be an effective buffer against victimization, the friend must possess certain qualities, such as being able and willing to stick up for the child (Hodges & Perry, 1999).

**Studying externalizing and socially competent peers.** Although previous research has focused on some aspects of the peer context, little research exists showing that time spent with particular peers serves as either a risk or protective factor for peer victimization. Peer victimization occurs through interactions with peers, who play an important role in the development and maintenance of the social environment in which victimization problems occur (Lagerspetz, Björkqvist, Berts, & King, 1982; Pepler & Craig, 1995; Salmivalli, 2001; Salmivalli, Huttunen, & Lagerspetz, 1997; Stevens, Van Oost, & de Bourdeaudhuij, 2000). Thus, whether or not a child is victimized may depend on whom they are spending their time with. For children in middle childhood and adolescence, victimization can frequently occur in one's peer group. For example, victims often report being friends with bullies or being victimized by peers that they consider to be friends (Crick & Nelson, 2002; Pellegrini & Long, 2004).

Previous research suggests that, for young children, playing with externalizing peers may be a risk factor for children's experiencing victimization (Andreou, Vlachou, & Didaskalou, 2005; Hanish, Ryan, et al., 2005). Hanish and colleagues (2005) examined the influence of time spent with peers who are aggressive on young children's (i.e., preschool and kindergarteners) victimization. In this study, classroom levels of aggression were significantly related to victimization, controlling for children's own levels of aggressive behavior. This indicates that when children spend time with aggressive or externalizing peers, they are likely to be the recipients of their peers' aggression.

Although little research has focused on the role of aggressive peers and victimization specifically, some research shows that children's affiliation to aggression can increase their own aggressive behavior (e.g., Boxer, Edwards–Leeper, Goldstein, Musher–Eizenman, & Dubow, 2003; Boxer, Guerra,

Huesmann, & Morales 2005; Guerra, Huesmann, & Spindler, 2003). In these studies, higher levels of peer's aggression were associated with increases in individual aggression over time. Goldstein, Arnold, Rosenberg, Stowe, and Ortiz (2001) showed that aggressive peers can increase aggression among preschoolage children. In addition, Espelage and colleagues (2003) found that for adolescents, individual aggression positively related to peer network aggression over time. High levels of negative behavior among the peer group (e.g., conflict, dislike for other peers, and negative affect) serves to increase the negative behavior of individual children (Dodge, Price, Coie, & Christopoulos, 1990). Taking these studies together, it is logical to conclude that children who spend time around externalizing peers are more likely to be on the receiving end of aggressive behavior, particularly if they are becoming increasingly aggressive themselves.

On the other hand, concentrated time spent with peers with positive behavior (i.e. socially competent peers) may serve as a protective factor against victimization. This could happen in two ways. First, spending time with socially competent peers increases children's exposure to more positive social learning (Bandura, 1977; Brendgen, Bowen, Rondeau, & Vitaro, 1999). Children who are affiliated with peers with prosocial behaviors may, in turn, learn more positive behaviors themselves. This could then lead to decreased victimization. For example, Hogland and Leadbeater (2004) found that classrooms with high levels of prosocial behaviors predicted increases in children's own social competence. Also in support of this, several studies have found that children's levels of social competence are negatively related to their victimization (Garner & Lemerise, 2007; Hodges et al., 1999). Second, children who exhibit socially competent behavior tend not exhibit externalizing behavior (Fabes et al., 2003). Thus, spending time with peers who demonstrate socially competent behavior is likely to lead to less victimization.

#### The Role of Child Gender and Peers' Gender on Victimization

Children's gender and the gender of their peers may play a role in their victimization, such that different mechanisms may be responsible for boys' and girls' victimization. In this section, I review research that identifies gender differences in children's victimization, and explore the possibility that gender may moderate the relation between time spent with externalizing and socially competent peers and victimization. In addition, I discuss the role that time spent with boy peers or girl peers may have on victimization.

**Previous research.** Most studies examining the role of peer victimization have focused on identifying differences in boys' and girls' prevalence of victimization. There has been much debate in the literature regarding possible gender differences in children's peer victimization. Some research reports differences in boys' and girls' prevalence of victimization, whereas other research does not find any differences. In support of gender differences, some studies show that peer victimization differs for boys and girls in childhood and adolescence, such that boys experience more overall victimization than girls (Furlong et al., 2000; Hanish & Guerra, 2002). In further support of this, some research shows that boys' and girls' victimization can also differ by the subtype of victimization (Crick & Bigbee, 1998; Crick et al., 1999, Crick & Grotpeter, 1996). For instance, Crick, Bigbee, and Howes (1996) found that boys are more likely to experience physical victimization and girls are more likely to experience relational victimization, and these differences become particularly salient as children grow into adolescence. However, these gender differences are by no means conclusive: other researchers have found no differences between boys' and girls' victimization in childhood and adolescence, regardless of type of victimization (Kochenderfer & Ladd, 1996; Pellegrini, et al., 1999; Perry et al., 1988). Although there have been conflicting studies, what is generally agreed on is that boys tend to be more victimized than girls, and they are also more physically victimized than girls

Although victimization rates differ between boys and girls, this does not tell us much about why boys may experience victimization differently than girls. However, little research has gone beyond looking at mean level differences in victimization, and there are no studies looking at gender differences in the predictors of victimization. The few studies that have examined gender as a moderator of children's victimization have focused on the differential outcomes of maladjustment for children who are victimized. For example, Paul and Cillessen (2003) found that while adolescents who are victimized tend to have greater negative outcomes than non-victims, this association was particularly strong for girls. Other studies, however, have found that boys tend to have more negative outcomes. Hanish and Guerra (2002) found that boys who were victimized were more likely than girls to experience distress, and for longer periods of time. In another study, Schmidt and Bagwell (2007) found that girls who received help from friends reported fewer negative outcomes, whereas boys showed the opposite relation: help from friends exacerbated the negative affects of victimization. These studies indicate that friends can influence victimization in different ways for boys and girls. Also, previous studies have primarily focused on gender as a main effect, and not a moderator. It's possible that previous studies have not examined gender as a moderator because interactions are much harder to detect in samples that are small (Aguinis, 2004). It is important to examine this question, because if there are gender differences in victimization, it is possible that these differences could be explained by the interaction of gender with time spent with externalizing or socially competent peers.

Gender as a moderator. For young children, it is possible that differences in boys' and girls' victimization are related to the gender-segregated nature of their play. Sex-segregation is a primary feature of young children's play patterns (Leaper, 1994; Maccoby, 1990; Maccoby 1998; Maccoby & Jacklin, 1987; Martin & Fabes, 2001). Children show a preference for interacting with peers of their own gender as early as pre-school age (Fabes et al., 2003; Maccoby & Jacklin, 1987; Martin & Fabes, 2001). Sex-segregation is such a defining feature of children's play patterns, that it has been suggested that boys and girls grow up in "separate cultures" (Maccoby, 1995). For example, Martin and Fabes (2001) found that preschoolers spent a majority of their time with same-sex peers (50-60%) and little time solely with other-sex peers (10-15%). If children spend the majority of their time in same-sex play, we can expect that they are more likely to be victimized by children of their own sex, than by children of the opposite sex. In other words, because most children play with same-sex peers, this would indicate that boys are more likely to victimize other boys, and girls are more likely to victimize other girls.

In spending most of their time with same-sex peers, boys and girls are also exposed more to the play style of same-sex peers. For instance, boys tend to engage in more rough and tumble play, unstructured activities, and aggressive behavior (i.e., externalizing behavior), which might lead to more victimization of boys than girls (Boulton, 1996). However, although boys are more likely to play with male, externalizing peers, there is some evidence shows that girls are more vulnerable in general to externalizing peers (Hanish, Ryan, et al., 2005). Girls who play with boys, particularly externalizing boys, may be more sensitive to their peers, and may experience more victimization. Although the evidence is unclear whether boys or girls will experience more victimization from externalizing peers, it is possible that there are differential consequences for boys and girls who play with externalizing peers.

Spending time with socially competent peers may have differential consequences on victimization for boys and girls. Girls tend to spend more time

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near adults and in activities organized and structured by adults, and are more focused on the relational aspects of play with peers (i.e., socially competent behavior), which may lead girls to target their play partner specifically (Carpenter & Huston, 1983; Fagot, 1978) and girls are more likely to play with socially competent peers (other girls). Thus, girls, even if they are socially competent, may target other girls more for victimization.

#### **Unique Aspects of the Sample**

This study adds to the literature by extending victimization research to preschool children who are non-white and live below the federal poverty line. Researchers have typically studied preschool children who are not Mexican-American (i.e., white or black) and from middle to high income backgrounds (e.g., Crick et al., 2006; Crick et al., 1999; Kochenderfer-Ladd & Wardrop, 2001; Kochenderfer & Ladd, 1996) The few exceptions that examine ethnic minority samples and low income samples and victimization only examine older children (i.e., later elementary school) and adolescents (e.g., Hanish & Guerra, 2000) No studies were found that examine young, Mexican-American, and low income children and their experiences of victimization.

It is important to extend victimization research to disadvantaged children because there is some evidence that low income, Latino children tend to experience worse outcomes than their white, middle and upper class counterparts. Research suggests that the impact of poverty on Latino children is function of the unique contextual circumstances under which they live. For example, the experience of poverty might be more frequent, longer in duration, and more extreme for Latino children and their families (Garcia-Coll & Vazquez Garcia, 1995).

There is some evidence that low-income, non-white children may experience more victimization, and that predictors of peer victimization may vary by ethnicity. Hanish and colleagues (2000) found that, depending on the school context, in comparison to White, European samples of children, Latino children were less likely to be victimized. However, those victimized Latino children were also more likely to be repeatedly victimized over time. This research suggests that children who are Mexican-American might experience victimization differently from other ethnic groups, so it is important to study the peer processes that may contribute to their victimization. Compared to their more advantaged peers, young children who grow up in disadvantaged households are more at risk for developing behavior problems, such as externalizing, and internalizing behavior (Dodge, Pettit, & Bates, 1994). Behavior problems are not only a potential negative outcome of victimization; they are also a predictor of other negative outcomes. Children who demonstrate high levels of behavioral problems (e.g., externalizing problems) are also at increased risk for peer victimization (e.g., Hawker & Boulton, 2000). Thus, children who are in poverty are not only at increased risk for behavior problems, but they could also be at a higher risk for peer victimization. In addition, Dhami and colleagues (2005) found that girls in high-poverty schools experienced more victimization than girls in low-poverty

schools, or boys (in either high-poverty or low-poverty schools). This may indicate that girls are more susceptible to stressors in general, particularly girls who are in high poverty settings. This is particularly relevant because the sample in this study is from Head Start schools. Thus, it is possible that girls may be more susceptible to victimization from their peers.

#### PURPOSE OF THE PRESENT STUDY

The overall goal of the study was to explore whether spending time with externalizing and socially competent male or female peers in preschool was associated with young children's likelihood of peer victimization. This goal led to three specific aims. First, I tested whether time spent with externalizing peers predicted more victimization in preschool. Second, I tested whether time spent with socially competent peers predicted less victimization in preschool. Third, I tested whether time spent with socially competent peers served as a protective factor when children spend time with externalizing peers. For each aim, I also examined gender as a moderator of risk for peer victimization, which tests whether the relation of children's peer involvement and peer victimization differs for boys and girls. In addition, I tested each aim separately for time spent with boy peers and girl peers to test whether children's victimization varies by peers' gender.

# Aim 1

The first aim assessed whether preschoolers who spend time with externalizing peers were at greater risk for peer victimization in the spring of the same preschool year (see Figure 1). Previous research suggests that, for young children, playing with externalizing peers may be a risk factor for children's experiencing victimization (Andreou et al., 2005; Hanish, Ryan, et al., 2005). Children who spend more time with externalizing peers expose themselves to aggressive children, increasing the likelihood that they will be aggressed against. I expected that spending time with externalizing peers will increase children's risk for victimization. I also explored the extent to which children's gender moderates this relation. Research is unclear whether boys or girls will experience more victimization from externalizing peers (whether same-sex or opposite-sex); thus, these analyses were exploratory.

## Aim 2

The second aim assessed whether preschoolers who spend time with socially competent peers in the fall of preschool are at less risk for peer victimization in the spring of preschool (see Figure 2). Children who demonstrate socially competent behavior are rarely aggressive, and therefore rarely victimize other children (Boivin et al., 1995; Fabes et al., 2003). I expected that spending time with socially competent peers will decrease children's risk for victimization. As with the hypothesized model for affiliation with externalizing peers, it is possible that children's sex may serve as a moderator, such that the relation between socially competent behavior and victimization may differ for boys and girls. Research is unclear whether there will be differences whether boys or girls experience more or less victimization from socially competent peers (whether same-sex or opposite-sex); thus, these analyses were exploratory.

# Aim 3

The third aim of the study assessed whether time spent with socially competent peers reduced the relation of victimization to time spent with externalizing peers. Previous research has shown that children who are well liked by peers are less likely to be victimized (Boivin et al., 1995; Hodges & Perry, 1999). It is possible that time spent with socially competent peers may serve as a protective factor to experiencing victimization (beyond children's own level of social competence), such that the effects of spending time with externalizing peers is dampened by time spent with socially competent peers. To test this hypothesis, a third model was tested in which time spent with socially competent peers served as a moderator of the relation between time spent with externalizing peers and victimization.

Again, it is possible that children's sex may moderate the relation between socially competent peers, such that the relation between externalizing peers, socially competent peers, and victimization may differ for boys and girls. Little research has explored this issue; therefore, this hypothesis remained exploratory.

# **METHODS**

# **Participants**

Participants were part of a longitudinal study designed to investigate gender development, peer relationships, and school readiness. Three cohorts of children were followed in preschool, kindergarten, and first grade. For this study, only the data collected during the preschool year were used because preschool was the only year that observational data of children's social behaviors were recorded. Children were recruited from 18 Head Start preschool classrooms in an urban, southwestern city (M class size = 16, range = 12-20). The recruitment strategy involved first obtaining the permission of the Head Start administration and lead teachers (100% permission rate). After permission was received from administration and teachers, parents in the participating classroom were informed of all aspects of the study and asked to provide permission to participate. Across all three years of the study, a total of 308 children had parental consent and participated (99% permission rate).

Of the 308 children, only those who had at least 25 observations during the fall of the academic year (September through December) were included in the analytic sample as target children. Fifty-one children did not meet that criterion (due to absences, classroom scheduling, or leaving the school), and were excluded from the subsequent analyses. Children were also excluded from analyses if they were missing teacher-rated questions about children's experience of peer victimization (n = 23). Using these criteria, the analytic sample consisted of 234 children. However, of the 74 children who were excluded from the study, 22 had observer ratings of social competence and externalizing behavior, and were included in the analyses as peers when calculating affiliation scores (see "Calculating affiliation scores", below). Missing data analyses were conducted using SPSS (v. 17; SPSS for Windows, 2008) to compare the characteristics of the total sample to children who were included in the analytic sample. There were no significant differences between the two groups on family demographic characteristics, such as income and parent's marital status, on child demographic characteristics, such as age and race, or on the study variables.

Of the 234 children in the analytic sample, 124 were boys and 110 were girls. At the start of the school year, children were, on average, 51 months (*range* = 37-60 months; *sd* = 5.30 months). The children were primarily Mexican American (72%). Twenty-four percent of the children represented the following racial/ethnic groups: 9% Anglo American, 8% African American, 3% Asian or Middle Eastern, 3% multiracial, and 1% Native American. The remaining 4% of participating children's racial/ethnic identity was unknown. Of the 234 children, 57% spoke primarily Spanish at home. The remainder of the participating families spoke English (39%), English and Spanish equally 1%, or a language other than Spanish or English (e.g. Arabic; 3%). Children predominantly resided in two-adult homes (i.e., married or cohabiting; 70%), with 28% of children residing in single parent homes. Two percent of parents did not report their marital status. Most of the families in the study lived below the federal poverty line, and 82% of families reported an annual income of \$30,000 or less.

#### **Scan Observation Procedures**

Observations were conducted approximately twice a week in each classroom during the fall semester of the preschool year. Children's naturally occurring behaviors (e.g., play activities, emotional display, peer group, etc.) were recorded during ten-second scan observations of children's structured (i.e., teacher directed), semi-structured (i.e., limited choice of activities and play partners), and free play (i.e., free choice of activities and play partners) activities both inside and outside of the classroom. Although children's behaviors were observed during structured play time (i.e., teacher-directed activities with no choice of activity or play partner), for the present study, we used only observations conducted during children's semi-structured play (kappa = .77) and free play (kappa = .97) because we were interested in children's social behaviors when they had free choice of play partners and activities (rather than assigned by the teacher). Undergraduate coders observed children using a randomly ordered list of all the children in the classroom. To control for order effects, the list was reversed midway through the semester.

The total number of observations for each child ranged from 31 to 176, with an average of 104 observations per child (sd = 31.60). During each interval, the identity of the child's play partners was recorded by the coders. Other codes were also obtained that are not relevant to the purpose of this study. Approximately 9% of the observations were simultaneously coded by two observers for reliability purposes. Coders agreed on the identity of the peers 90% of the time (average reliability across all three years of observation). These observational procedures have been used in previous studies and have demonstrated good reliability and validity (Hanish, et al., 2005; Martin & Fabes, 2001).

### **Observer-Rated Measures**

**Externalizing behavior.** Seventeen undergraduate observers rated children's behavior at two time points in the fall of the preschool year (once in October and once in December). The questionnaire included three questions that described children's externalizing behavior ("This child tends to be disruptive in class"; "This child acts with a lack of control"; "This child is intentionally physically or verbally hostile to peers"). Each item was rated on a 5-point scale (1 = "Not at all true"; 5 = "Very true"). First, these items were averaged within each time point to create an externalizing score for Time 1 and Time 2 separately. Then, a total fall externalizing behavior score was created by averaging the scores for Time 1 and Time 2 (*alpha* = .88). This was done to represent the child's level of externalizing behavior for the entire fall semester. For some children, only one rating was available and in that case, only one rating was used (*n* = 4). This measure was used to calculate affiliation with externalizing peers for each child (see "Calculating affiliation with peers", below).

**Socially competent behavior.** Undergraduate observers also rated children's socially competent behavior at the same two time points in the fall of the preschool year. Two items tapped behavior ("This child is skilled, capable, and effective in interactions with other children") and display of positive emotion ("This child tends to display positive emotion"). As with the externalizing measure each item was rated on a 5-point scale (1 = "Not at all true"; 5 = "Very true"). To create a social competence score for Time 1 and Time 2 separately, the

two items were averaged within each time point. Time 1 and Time 2 scores were averaged together (alpha = .82) to create a total fall social competence score that would represent the child's social competence for the entire fall semester. When only one rating was available, the social competence score was based on just the single rating (n = 4). This measure was used to calculate affiliation with socially competent peers for each child (see "Calculating affiliation with peers", below).

# **Teacher-rated Measures**

**Peer victimization.** Teachers completed a seven-item measure assessing children's frequency of peer victimization (items based on the Crick Victimization Scale; Crick et al., 1999) once in the spring of the academic year. The seven items consisted of two items ratings physical victimization (e.g., "This child gets pushed or shoved by peers"), two items assessing verbal victimization, (e.g., "This child gets teased or threatened by peers"), and three items assessing relational victimization (e.g., "This child gets left out of the group when someone is mad at them or wants to get back at them"). All three types of peer victimization were high correlated, *rs* (232) = .65-.85; ps < .001); thus, scores were averaged together to create a global victimization score for each child (alpha = .88). Items were scored on a five-point scale, where one is "never" and five is "always'.

#### **Calculating Affiliation with Peers**

Affiliation with peers was calculated using the scan observational data and the observer-rated data to produce a score representing time spent with peers, taking into account peers' propensity to display socially competent or externalizing behavior (Hanish et. al., 2005). Specifically, affiliation with peers was calculated by multiplying the number of times a target child was observed to interact with a particular peer by that peer's externalizing score or social competence score. For example, if the target child played with a peer 20 times and the target child had an externalizing score of 5, 20 was multiplied by 5 to obtain the target child's tendency to affiliate with that particular peer. This procedure was used for the target child's interactions with every boy and then every girl peer in the classroom to calculate affiliation scores separately for affiliation with male peers and affiliation with female peers. Each child's score was averaged across play partners, creating a mean affiliation score. In total, there were four affiliation scores created for each target child: affiliation to male peers (externalizing), affiliation to female peers (externalizing), affiliation to male peers (socially competent), and affiliation to female peers (socially competent). To control for individual differences in number of observations, the mean affiliation score was multiplied by the target child's total number of observations divided into 100. For example, if the target child had 150 observations, that number would be divided into 100, and then multiplied by the mean affiliation score. This resulted in a measure of the density of affiliation per 100 interactions. The procedure was repeated for all target children within each classroom, resulting in four affiliation scores for each child: affiliation to externalizing and socially competent boys and girls.

#### RESULTS

The overall goal of the study was to explore whether spending time with externalizing and socially competent male or female peers in preschool is associated with young children's likelihood of peer victimization. This goal led to three specific aims. First, I tested whether time spent with externalizing peers in the fall of preschool predicted more victimization in the spring of preschool. Second, I tested whether time spent with socially competent peers during the fall semester predicted less victimization during the spring semester. Third, I tested whether time spent with socially competent peers served as a protective factor for children who spend time with externalizing peers. For each aim, I also examined gender as a moderator of risk for peer victimization, which tests whether the relation of children's peer involvement and peer victimization differs for boys and girls. In addition, I tested each aim separately for time spent with male peers and female peers to test whether children's victimization varies by peers' gender.

## **Descriptive Analyses**

Before testing each hypothesis, the first step was to compute preliminary descriptive analyses on all variables (e.g., means and standard deviations). Means and standard deviations are reported in Table 1 (total sample) and Table 2 (by gender). Peer victimization, externalizing behavior, socially competent behavior, and affiliation scores were all normally distributed, (i.e., skew and kurtosis were in normal range of two standard errors; Tabachnick & Fidell, 2007). In Table 1, the mean score for peer victimization indicated that teachers reported that, overall, children in this sample were infrequently victimized by their peers. Means for observer ratings indicated that children displayed infrequent externalizing behavior and frequent socially competent behavior.

Differences between boys and girls on all measures were determined by computing independent samples *t*-tests to compare the means of both groups. As Table 2 shows, boys and girls differed significantly from each other on all variables. Effect sizes between boys' and girls' means ranged from .32 to .75, which is considered to be a medium effect (Cohen, Cohen, West, & Aiken, 2003). Boys experienced significantly more peer victimization, and they displayed significantly more externalizing behavior than girls,  $t_s(232) = 2.40$  and 3.62,  $p_s < 100$ .05 and .001, respectively. Girls were rated as significantly more socially competent than boys, t(232) = 3.67, p < .001. Children's affiliation scores varied depending on both the construct (i.e., externalizing and socially competent) and the gender of peer (i.e., boy or girl). Boys and girls showed significant differences in their affiliation scores: boys spent significantly more time than girls with externalizing and socially competent boys, ts(232) = 3.40 and 2.70, ps < .01, whereas girls spent significantly more time than boys with externalizing and socially competent girls, ts(232) = 5.21 and 5.73 ps <.001. For both boys and girls, paired *t*-tests showed that mean scores for affiliation with socially competent peers were significantly higher than the mean scores for affiliation with externalizing peers,  $t_s(232) = -15.40$  and -22.90,  $p_s < .001$ . This suggests that children are spending more time with socially competent peers than

externalizing peers.

#### **Preliminary Analyses.**

Zero-order correlations among the predictor (i.e., time spent with externalizing and socially competent peers) and criterion variables (e.g., victimization) are presented separately by gender because boys and girls may exhibit differential relations among the variables (see Table 3). In preschool, children's behaviors are likely to be related to their age due to the fast-paced development children experience during this time period; therefore, children's age was included among the variables when calculating correlations to explore how age related to the study variables. Age was positively related to peer victimization and social competence, but only for girls. For boys, age was unrelated to all variables.

Table 3 also shows correlations among children's externalizing and socially competent behavior and peer victimization. For boys, peer victimization was positively related to their own externalizing behavior, and negatively related to their own socially competent behavior. In addition, boys' externalizing behavior was negatively related to their socially competent behavior, such that the higher rating of externalizing behavior, the lower the rating of socially competent behavior. For girls, peer victimization was positively related to girls' own externalizing behavior.

Also shown in Table 3 are correlations among peer affiliation variables (i.e., externalizing and socially competent boys and girls) and the other study variables. Most of children's own behaviors were uncorrelated with affiliation with peers. For boys, victimization was negatively correlated with time spent with socially competent boys, whereas for girls, victimization was positively correlated with time spent with externalizing girls. Two other behaviors were correlated for girls: 1) girls' own externalizing behavior was positively correlated with affiliation with externalizing boys, and 2) girl's own socially competent behavior was positively correlated with affiliation with socially competent girls. For both boys and girls, affiliation with externalizing boys and girls, and socially competent boys and girls, were all positively intercorrelated. For boys, affiliation with externalizing boys was very highly correlated with affiliation with socially competent boys and affiliation with externalizing girls was very highly correlated with affiliation with socially competent girls.

# Aim 1

To address the first aim of the study (i.e., to examine the hypothesis that children who spend more time with peers who exhibit more externalizing behavior will be at increased risk for victimization), I computed a hierarchical multiple regression with peer victimization as the dependant variable. Since age was correlated with some of the study variables, age was controlled for in this and all future analyses. Thus, target children's age was entered in the first step as a control variable. The main effects of children's time spent with externalizing peers (boys or girls) and children's gender were entered in the second step. Because girls and boys would be expected to show differing levels of affiliation to boys and girls, I computed separate analyses for affiliation with male and female peers. To address the secondary goal (i.e., whether this relation is moderated by gender), the model was run with an added third step that included an interaction term of gender by affiliation with externalizing peers. All continuous variables were centered before entry into the model, as recommended by Aiken and West (1991). Child's gender was dummy coded with boys as the reference group (zero for boys, one for girls) to aid in interpretation of the model, as recommended by Cohen, Cohen, West, and Aiken (2003). Reported F-tests are for each step of the model; for coefficients and the significance of each coefficient, see Table 4.

The first step in the regression (predicting peer victimization from affiliation with externalizing boys), in which age was entered as a control variable, was not significant, although it was at trend level, F(1, 231) = 3.78, p = .05. In the second step, F(3, 229) = 2.48, p = .08, the main effect of child's gender was significant in predicting peer victimization, although the main effect for affiliation with externalizing boys was not significant. The negative coefficient for child's gender indicates that girls were less likely than boys to be rated as victimized by teachers. In the third step, the interaction of child's gender and affiliation with externalizing boys was not significant, F(4, 228) = 2.84, p = .09.

A second regression was computed using a similar structure, except that affiliation to externalizing girls (instead of affiliation to externalizing boys) was substituted as a main effect and in the interaction term. The first step again contained the control variable of child's age, which was close to significant, F(1, 231) = 3.78, p = .05. Similar to the previous model, there was a significant main effect of child's gender, F(3, 229) = 2.51, p = .08. However, this main effect was subsumed by a significant interaction of gender by affiliation to externalizing girls, F(4, 228) = 4.14, p < .05. To explore the interaction, a single predictor regression was run, controlling for age in the first step, and affiliation with externalizing girls in the second step. This regression was computed separately by gender of child, based on recommendation of Aiken and West (1991). For girls, affiliation with externalizing girls was positively related to victimization, such that higher affiliation with externalizing girls was related to higher victimization scores ( $\beta = .20$ , p < .05). For boys, there was no significant relation between affiliation to externalizing girls and victimization.

# Aim 2

Hierarchical multiple regressions were computed to address the second aim of the study (i.e., to examine the hypothesis that children who spend more time with peers who exhibit more socially competent behavior will be at decreased risk for victimization). Again, age was entered in the first step as a control, with the main effects of children's time spent with socially competent peers and children's gender entered in the second step, and an interaction term of gender by affiliation with socially competent peers added in the third step. Similar to the previous aim, I computed separate analyses for affiliation with male and female peers. As in the previous model, all continuous variables were centered before entry into the model and child gender was dummy coded (Aiken & West, 1991; Cohen, et. al., 2003). As in the previous aim, reported F-tests are for each step of the model. The results are shown in Table 5.

In the first regression, which predicted peer victimization from affiliation to socially competent boys, age (in the first step) showed the same result as the previous analyses F(1, 231) = 3.78, p = .05. The main effects of child's gender and affiliation with socially competent boys were both significant in predicting peer victimization, F(3, 229) = 7.20, p < .001. Boys were more likely than girls to be rated as victimized, and affiliation with socially competent male peers negatively predicted victimization. In the third step, the interaction of child's gender and affiliation with socially competent boys was not significant, F(4, 228)= .64, p = .42. A second regression, identical to the previous model (except affiliation to socially competent girls replaced affiliation to socially competent boys) again found that age almost significantly predict victimization, F(1, 231) =3.78, p = .05, but there was a main effect of child's gender, F(3, 229) = 2.59, p =.08. Similar to the previous regression, boys were more likely than girls to be rated as victimized. The interaction of child's gender and affiliation to socially competent girls was not significant, F(4, 228) = 2.33, p = .13.

#### Aim 3

Hierarchical multiple regression was again used to address the third aim of the study (i.e., to examine the hypothesis that time spent with socially competent peers will moderate the relation between time spent with externalizing peers and peer victimization). In this set of analyses, the predictors were correlated (rs = .40 to .84, p < .001), necessitating a test for multicollinearity to ensure that the predictors were sufficiently orthogonal to predict unique variance in the dependant variable. As multicollinearity increases, the regression model estimates of the coefficients become unstable and the standard errors for the coefficients can become inflated. If the level of multicollinearity is low, the values for tolerance (i.e., the unique variance accounted for by the predictor) will be above .10, and the values for the Variance Inflation Factor (i.e., 1/tolerance) will be below 10. In this case, the values for tolerance and the Variance Inflation Factor for these variables were in an acceptable range (range .12-.63 and 1.04-8.69 respectively; Tabachnick & Fidell, 1996); thus, the predictors were entered into the regression.

Again, age was entered in the first step, and the main effects for target child's gender and target children's affiliation (this time with externalizing peers and socially competent peers) were entered in step two. The two-way interactions between each of the main effects were computed and entered into step three (i.e., child's gender and affiliation with externalizing boys, child's gender and affiliation with socially competent boys, and affiliation with externalizing boys and affiliation with socially competent boys). To address the secondary goal (i.e., whether there is a three-way interaction between time spent with externalizing peers, time spent with socially competent peers, and gender of the target child), an additional step was added to the model with the three-way interaction term in the last step. Separate analyses were run for affiliation with male and female peers, and all variables were centered and dummy coded following the same procedures described in the previous paragraphs. As in the previous aims, reported F-tests are for each step of the model. The results are shown in Table 6.

Again, age was almost significant, F(1, 231) = 3.78, p = .05, but in this model there were significant main effects of affiliation to externalizing boys and affiliation to socially competent boys in predicting peer victimization in the second step, F(3, 229) = 9.34, p < .001. Affiliation with externalizing male peers positively predicted victimization, and affiliation with socially competent male peers negatively predicted peer victimization. None of the two-way interactions in the third step (i.e., child's gender and affiliation with externalizing boys, child's gender and affiliation with socially competent boys, and affiliation with externalizing boys and affiliation with socially competent boys) were significant, F(7, 225) = 9.34, p = .08. Also, the three-way interaction of child's gender with affiliation to externalizing boys and affiliation with socially competent boys (fourth step) was not significant, F(8, 224) = .04, p = .84.

A second regression predicting peer victimization from affiliation to externalizing girls and socially competent girls and child's gender was computed. Age (step one) was almost significant, F(1, 231) = 3.78, p = .05. Unlike the previous model, none of the main effects in the second step were significant in predicting victimization by peers, F(3, 229) = 1.72, p = .16. Similar to the previous model, none of the two-way interactions (i.e., child's gender and affiliation with externalizing girls, child's gender and affiliation with socially competent girls, and affiliation with externalizing girls and affiliation with socially competent girls) were significant, F(7, 225) = 1.53, p = .21. Also, the three-way interaction of child's gender with affiliation to externalizing girls and affiliation with socially competent girls was not significant, F(8, 224) = .92, p = .34.

#### DISCUSSION

This study examined how preschoolers' peer affiliations are associated with their risk for victimization. Of particular interest was how time spent with peers who exhibit externalizing and socially competent behaviors was associated with children's likelihood of being victimized by peers. The findings of the study provided mixed support for the hypothesis that children's victimization is related to the types of peers with whom they spend time. For girls, playing with externalizing girls increased risk of victimization, and for both boys and girls, playing with socially competent boys decreased risk of victimization. These findings emphasize the importance of examining both gender (target and peer) and peer characteristics in relation to victimization, particularly the interactions that girls and boys have with various types of other boys and girls. In the following section, I critically evaluate my hypotheses and consider the implications of the findings for future research.

#### Impact of Externalizing Peers on Children's Risk for Victimization

I hypothesized that more time spent with externalizing peers would

increase children's risk of victimization. Implicit in this hypothesis is the assumption that there is a direct link between affiliation with externalizing peers and victimization: children who spend more time with peers who are impulsive, aggressive, and hyperactive should be more at risk for victimization than children who spent less time with these peers. Overall, the results did not support this hypothesis. There was one exception to the lack of findings: girls who affiliated with externalizing female peers were significantly more at risk for victimization.

What is it about affiliation to externalizing girls that puts other girls at risk? Theory and research suggest that aggression among girls tends to occur primarily within the confines of the peer group, and not outside of the peer group (Hawley, 2002; Tattum, 1989). In this case, these aggressive girls tend to victimize predominantly other girls because of the high occurrence of same-sex friendships (Bollmer et al., 2005; Crick & Nelson, 2002; Boulton et al., 1999; Hodges et al., 1999). This is further substantiated by research showing that for girls aggressors and their victims were likely to belong to the same social networks or dyadic friendships (Crick & Grotpeter, 1996; Salmivalli et al., 1997). For example, girls tend to experience a high incidence of aggression and bullying from girls in their friendship networks (e.g., spreading rumors; Lagerspetz, Bjorkqvist, Berks, & King, 1982; Owens et al., 2000). When asked about why they are victimized, girls will often talk about their relationship with the bully as the reason for victimization (e.g., falling out with the bullying child in a friendship quarrel; Smith, Talamelli, Cowie, Naylor, & Chauhan, 2004). Thus, for girls, playing with externalizing girls may be a negative experience.

This was not the case for boys, however. Girls' and boys' affiliation with externalizing boys and boys' affiliation with externalizing girls were all unrelated to victimization. Thus, whenever boys were involved in the peer interactions, there was no evidence that spending time with externalizing peers was predictive of victimization. One possible explanation for this gender difference may have to do with the fact that externalizing behaviors are a relatively normative part of the culture of boy's play as compared to the culture of girls' play (Boulton, 1996). As such, they may reflect boys' greater tendency toward active, rough, energetic, and intense interactions and behavioral styles-styles that may be associated with positive interactions within boys' play groups, rather than negative interactions. For example, previous research of preschool boys' affiliation with externalizing peers found that displaying highly active play and positive emotion (e.g., happy rough housing) was associated with greater affiliation with externalizing peers (Hanish, Martin, et al., 2005). Thus, perhaps playing with externalizing boys is a fun experience and creates positive peer interactions (or at least neutral ones) more so than negative, victimizing peer interactions. To explore this further, it would be helpful for future studies to examine how externalizing boys' play differs from externalizing girls' play, specifically looking at the quality of play.

Furthermore, externalizing boys may not victimize the peers they play with most frequently, but instead victimize children they tend to play with infrequently. Studies of the social networks of externalizing and aggressive peers show that boys tend to belong to different social networks from their victims (Salmivalli et al., 1997). This would mean that playing with externalizing boys or being friends with an aggressive boy may not put children directly at risk for victimization (Pelligrini, et al., 1999). There are several possible explanations for this. First, we know that boys who play with externalizing children are likely to demonstrate externalizing behaviors themselves, and may provide support for their friends' aggressive behavior, possibly even escalating the behavior (Salmivalli et al., 1997; Dishion, Spracklin, Andrews, & Patterson, 1996). This may mean that boys who play with externalizing boys encourage them to aggress against other children outside the peer group, diminishing the likelihood that they are the peers that are being aggressed against. Second, boys with externalizing behavior may defend their playmates from other children who are attacking them, also decreasing the likelihood that they will be victimized against (Pelligrini et al., 1999). For boys, therefore, having friends who exhibit externalizing behaviors may actually help to protect children from becoming victimized (Hodges & Perry, 1999; Hodges et al., 1997).

#### **Impact of Socially Competent Peers on Risk for Victimization**

I also hypothesized that affiliation with socially competent peers would decrease children's risk for victimization. Again, this hypothesis assumes that there is a direct link between spending time with socially competent peers and victimization, such that children who spend more time with socially competent peers are at less risk for victimization. Children should be less at risk because the peers that they spend the most time with are not aggressive. In addition, because socially competent children tend to exhibit helping behavior, good social skills, and generally positive emotions towards peers, these behaviors may also contribute to less victimization by modeling positive social behaviors to their immediate peer group (e.g., Bandura, 1977). The results partially supported this hypothesis. For both boys and girls, affiliation with socially competent male peers (but not female peers) negatively predicted victimization.

These findings support the hypothesis that spending time with socially competent children decreases risk for victimization. But why did these findings occur only for time spent with male peers? Perhaps socially competent boys provide support or protection for children because they stand out as leaders to their peers (Hodges et al., 1997). In elementary school, boys who are viewed as nonaggressive, cooperative, and outgoing are often viewed as central figures in their classroom networks by their peers (Rodkin, Farmer, Pearl, & Van Acker, 2000). Thus, socially competent boys could provide a model for positive behavior with peers for the rest of the class because they occupy central positions in classroom networks. Although in these cited studies all children served as a model to peers, gender differences were not assessed. It is possible that boys were more responsible for modeling behaviors than girls. In future studies, it would be important to assess how network status and time spent with peers could influence peer's behaviors.

It is unclear why affiliation with socially competent boys leads to less

victimization, but affiliation with socially competent girls does not. Perhaps girls who are socially competent also have sophisticated communicative, cognitive, and social skills – skills which also make it possible for young girls to effectively use relational aggression. For example, girls who use relationally-aggressive behaviors within friendships tend to have more friends than girls who are not relationally aggressive (Sebanc, 2003). Thus, social competence among girls may have different implications in the preschool social world than social competence among boys. Alternatively, previous research has shown that boys are able to influence both boys' and girls' play behavior; conversely, girls are unable to influence boys' play (although they are able to influence other girls' play; Thorne, 1993). Perhaps socially competent boys in particular are able to influence their peers in a positive way that led to decreased victimization for both boys and girls.

# **Socially Competent Peers as a Protective Factor**

In addition to examining whether spending time with externalizing or socially competent peers put children at more or less risk for victimization, this study directly tested the role of protective factors for children who are at risk of victimization. Although spending time with socially competent boys decreased children's risk for victimization, this alone does not constitute a protective factor for victimization; if, however, children who are at risk for victimization (i.e., spent time with externalizing children) also spent time with socially competent children, and are shown to have decreased victimization (as hypothesized) then there is evidence that spending time with socially competent children serves as a protective factor. The assumption in this hypothesis is that for children who spend time with both externalizing and socially competent children, the presence of socially competent children will mitigate the risks that externalizing children pose.

The hypothesis was not supported by the findings of the study. Given that there was little relation between externalizing peers and victimization in the first place, it is not surprising that socially competent behavior did not moderate the relation between externalizing peers and victimization. For girls who spent time with externalizing girls, is possible that spending time with socially competent girls would not mitigate the influence of time spent with externalizing girls, becausse spending time with socially competent girls did not decrease victimization in the second set of analyses. As mentioned in the previous section, it is also possible that girls who are socially competent also may be using relational aggression, which would limit the protective function of social competence for victimization.

## Impact of Children at Risk

There has been little research documenting the various victimization experiences of young, Mexican American children who are in poverty. Most studies exploring victimization with a Latino population study older children and school-level measures of poverty, such as the percentage of school that is eligible for free lunch (Hanish & Guerra, 2000; Hoglund & Leadbeater, 2004; Leadbeater & Hoglund, 2003). The current study expands upon this research by using preschool children and family income as the measure of poverty. I hypothesized that girls may be more susceptible to victimization from their peers, based on the only study that looks at young children and the relation of poverty and victimization which showed that girls in poverty are more likely to be victimized than boys (Dhami et al., 2005). This hypothesis, however, was not borne out, as the results of the current study show that boys are more likely to be victimized, which is similar to the findings of research that utilizes more white, middle and upper-SES children.

These findings could be explained by our use of children from Head Start classrooms. In general, families who send their children to Head Start schools may be more likely to receive more support -- both financial and social -- than low income families who do not seek out Head Start for their children. In addition, while the high-poverty schools studied by Dhami and colleagues were most likely devoid of resources (i.e., teacher attention, larger classrooms) in comparison to the higher-income public schools of the study, Head Start preschools tend to have the resources and a better teacher to child ratio that matches preschools from higher-income public schools (Webster-Stratton, Reid, & Hammond, 2001). Thus, children in Head Start, while they certainly experiencing more disadvantages than their well-off peers, may not experience more difficultly given the advantages they do have compared to children in even worse settings.

#### **Strengths and Limitations of the Present Study**

This study highlighted the importance of examining the role of peers in victimization research, particularly the role of peer gender and how that interacts with children's own gender to impact victimization. Previous research has focused primarily on how victimization rates vary for boys and girls, but not what contextual factors (i.e., peer factors) increase the differential likelihood of victimization for boys and girls. Including peer gender lends a more nuanced view of how children's interactions may lead to victimization, particularly for those who are interacting with externalizing girls and socially competent boys.

Another strength of this study is the use of a relatively new method of calculating affiliation with peers. This method uses observational data -- a rare commodity with victimization research -- which contributes new information by providing us with which peers children are spending time with. Observational data offers a further benefit by providing information that is independent of the reporter biases common in peer relationship research (see "Identity of reporters" section for discussion of reporter biases).

A major limitation of this study is that I did not directly test the mechanism by which spending time impacts peer victimization. For example, it is possible that children who are spending time with externalizing peers are victimized directly by those peers, or, it is possible that the peers that children are playing with are directly providing protection from victimization. Alternatively, children may be victimizing those outside their peer group (as may be the case with externalizing boys), and peer characteristics only matter in that they impact the target child's behavior or reputation that, in turn, puts the child at risk for victimization. So although spending time with children is measured, it is unclear who is perpetrating victimization. In the future, it would be helpful to ask observers, teachers, or peers who victimizes children to see if children are victimizing their friends or outside their peer group.

#### **Conclusions and Directions for Future Research**

This study demonstrates that the relation between spending time with peers and victimization may not be straightforward. Previous research shows that children with friends may be less at risk for victimization (e.g., Hodges et al., 1999). However, this study shows that children who are friends or playmates with particular children may be more or less victimized, depending on peer behaviors as well as the gender of both peers and the children they are playing with. Also, as mentioned earlier, this is not a straightforward process because the gender of the target and peer and behavior of the target and peer may interact; specifically, girls may be more at risk for victimization within their friendships than boys.

Given that girl's friendships may be particularly vulnerable to victimization, future research should focus on how much influence friends may have on victimization. Most research focuses on the number and quality of friendships, but not specifically where the victimization happens. For example, we know that friendships can be protective against victimization, and that children with fewer friends are more likely to be victimized; however, it is also possible that children are also victimizing their friends. Although some studies have examined victimization among friends, future research could explore this relation more explicitly by investigating the friendships of girls with externalizing behaviors, and specifically looking at why these girls may be more likely to victimize their friends than other peers.

Overall, the focus of previous research on individual differences of victimization has neglected to uncover the nature of the relation between aggressive children and who they victimize (see Card, Isaacs, & Hodges, 2009). The characteristics of children who are victimized frequently, as well as the characteristics of their aggressors are well-known: what is still unclear is how these two interact to explain victimization (Card et al., 2009). One avenue for future research would be to explore further who exactly is victimized by whom in the classroom, and through what mechanism victimization occurs. This would help to expand the focus of friendship and victimization research from the relation of the number and quality of friendships and victimization to explore specifically how victimization can occur within friendships.

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Table 1

	Total				
	( <i>N</i> =	= 234)			
	Range	M (SD)			
Children's Own Behaviors					
Peer victimization	1.00-5.00	1.69 (.74)			
Externalizing	1.00-4.83	1.95 (.99)			
Social Competence	1.00-5.00	4.00 (.73)			
Peer Affiliation Score					
Externalizing Boys	2.01-40.77	12.60 (7.37)			
Externalizing Girls	1.75-31.29	10.23 (5.57)			
Socially Competent Boys	1.38-69.63	21.08 (12.13)			
Socially Competent Girls	2.17-79.10	23.65 (12.89)			

Means, Standard Deviations, and Range of Study Variables for the Total Sample

## Means, Standard Deviations, and T-Test Results Comparing Boys and Girls on Study Variables

	Boys	Girls	
	( <i>N</i> = 124)	( <i>N</i> =110)	
	M (SD)	M (SD)	Cohen's d
Children's Own Behaviors			
Peer victimization	1.79 (.84) <sub>a</sub>	1.56 (.57) <sub>a</sub>	.32
Externalizing	2.17 (1.09) <sub>c</sub>	1.71 (.79) <sub>c</sub>	.48
Social Competence	3.84 (.76) c	4.18 (.65) c	.48
Peer Affiliation Score			
Externalizing Boys	14.10 (7.74) <sub>b</sub>	10.89 (6.55) <sub>b</sub>	.45
Externalizing Girls	8.54 (4.89) <sub>b</sub>	12.15 (5.68) <sub>b</sub>	.68
Socially Competent Boys	23.06 (12.29) c	18.82 (11.59) <sub>c</sub>	.35
Socially Competent Girls	19.40 (11.61) c	28.49 (12.62) c	.75

Means that share the same subscript are significantly different at  $_{a}p < .05$ ,  $_{b}p < .01$ ,  $_{c}p < .001$ .

	1	2	3	4	5	6	7	8
1. Age		.06	.04	.10	03	16	.00	07
2. Peer Victimization <sup>1</sup>	.22*		.46***	25**	07	11	21*	06
3. Externalizing <sup>1</sup>	11	.30**		29**	.14	.06	.00	08
4. Social Competence <sup>1</sup>	.28**	.06	.07		.00	01	.01	03
5. Externalizing Boys <sup>2</sup>	.05	.18	.26**	.04		.55***	.75***	.46***
6. Externalizing Girls <sup>2</sup>	.00	.20*	.15	.15	.60***		.42***	.84***
<ol> <li>Socially Competent</li> <li>Boys<sup>2</sup></li> </ol>	06	18	.17	.08	.68***	.40***		.45***
8. Socially Competent Girls <sup>2</sup>	.03	.18	.00	.23*	.32**	.75***	.22**	

*Note.* Correlations for boys are on the top diagonal (df = 122) and girls are on the bottom

diagonal (*df*=108)

<sup>1</sup>Children's own behavior

<sup>2</sup>Peer affiliation scores

\* p < .05 \*\* p < .01 \*\*\*p < .001

# *Aim 1: Hierarchical Regressions Predicting Peer Victimization from Affiliation with Externalizing Peers (Boys and Girls) Moderated by Gender (df=228)*

Step	Predictors	$R^2$	$\Delta R^2$	β			
Panel A	Panel A: Model Testing Affiliation with Externalizing Boys						
1	Age		.02	.11			
2	Child's Gender		.02	13*			
	Affiliation with EXT peers (boys)			08			
3	Child's Gender x Affiliation with EXT	.05	.01	.14			
	peers (boys)						
Panel B: Model Testing Affiliation with Externalizing Girls							
1	Age		.02	.11			
2	Child's Gender		.02	15*			
	Affiliation with EXT peers (girls)			13			
3	Child's Gender x Affiliation with EXT	.06	.02	.20*			
	peers (girls)						

*Note.* Reported betas are from the last step in the regression. Child Gender is coded 0=

male and 1= female

\**p* < .05.

# *Aim 2: Hierarchical Regressions Predicting Peer Victimization from Affiliation with Socially Competent Peers (Boys and Girls) Moderated by Gender (df=228)*

Step	Predictors	$R^2$	$\Delta R^2$	β
Panel A	A: Model Testing Affiliation with Socially C	Competent Boys	S	
1	Age		.02	.11
2	Child's Gender		.06	18**
	Affiliation with SC boys			24**
3	Child's Gender x Affiliation with SC	.08	.00	.07
	boys			
Panel B	B: Model Testing Affiliation with Socially C	Competent Girls	6	
1	Age		.02	.11
2	Child's Gender		.02	16*
	Affiliation with SC girls			08
3	Child's Gender x Affiliation with SC	.05	.01	.15
	girls			

*Note.* Reported betas are from the last step in the regression. Child Gender is coded 0=

male and 1= female

\*p < .05. \*\*p < .01.

# Aim 3: Hierarchical Regressions Predicting Peer Victimization from Affiliation with Externalizing and Socially Competent Peers (Boys and Girls) Moderated by Gender (df=224)

Step	Predictors	$R^2$	$\Delta R^2$	β		
Panel A	Panel A: Model Testing Affiliation with Externalizing Boys and Socially Competent Boys					
1	Age		.01	.10		
2	Child's Gender		.11	13		
	Affiliation with EXT boys			.32*		
	Affiliation with SC boys			35**		
3	Child's Gender x Affiliation with EXT		.03	.11		
	boys					
	Child's Gender x Affiliation with SC boys			08		
	Affiliation with EXT boys x Affiliation			16		
	with SC boys					
4	Child's Gender x Affiliation with EXT	.15	.00	02		
	boys x Affiliation with SC boys					
Panel B: Model Testing Affiliation with Externalizing Girls and Socially Competent Girls						
1	Age		.02	.10		
2	Child's Gender		.02	12		
	Affiliation with EXT girls			24		

Affiliation with SC girls	.13
Anniauon with SC girls	.15

3	Child's Gender x Affiliation with EXT		.02	.30
	girls			
	Child's Gender x Affiliation with SC girls			02
	Affiliation with EXT girls x Affiliation			.05
	with SC girls			
	Child's Gender x Affiliation with EXT	.06	.00	14
	girls x Affiliation with SC girls			

*Note.* Reported betas are from the last step in the regression. Child Gender is coded 0=

male and 1= female

\*p < .05. \*\*p < .01.

Figure 1.

Hypothesized model for the association between boys' externalizing behavior and children's victimization, moderated by gender.

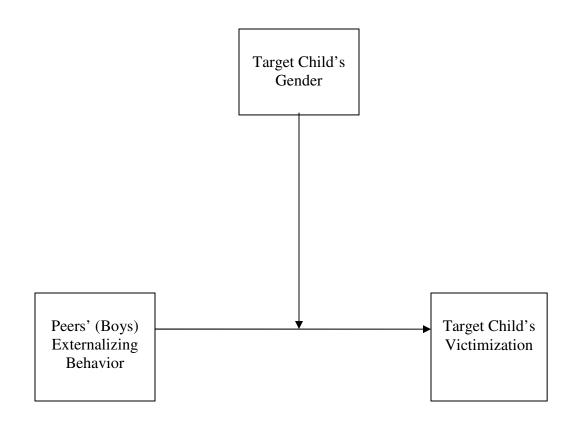


Figure 2.

Hypothesized model for the association between girls' externalizing behavior and children's victimization, moderated by gender.

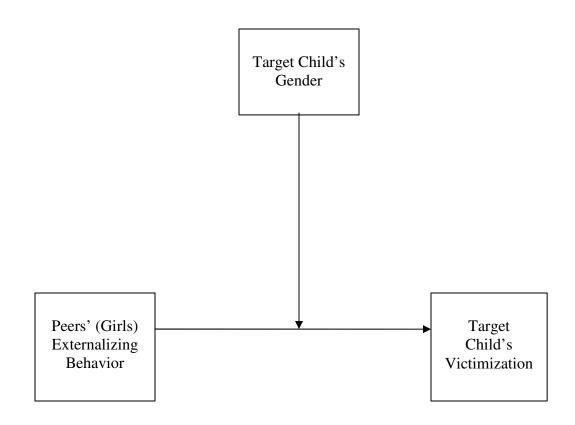


Figure 3.

Hypothesized model for the association between boys' socially competent behavior and children's victimization, moderated by gender.

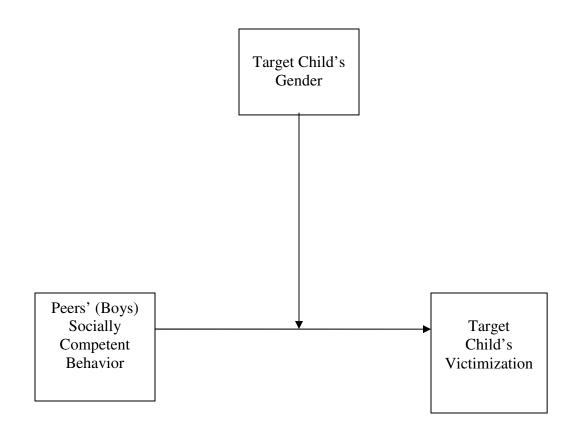


Figure 4.

Hypothesized model for the association between girls' socially competent behavior and children's victimization, moderated by gender.

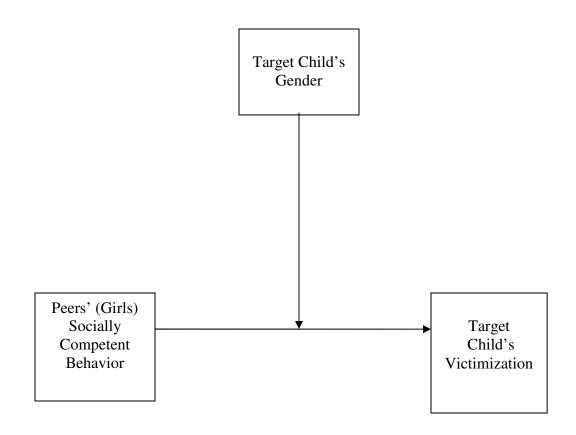


Figure 5.

Hypothesized model for the association between boys' externalizing behavior and children's victimization, moderated boys' socially competent behavior and children's gender .

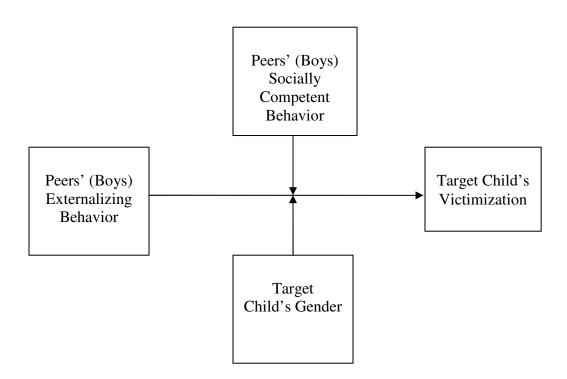
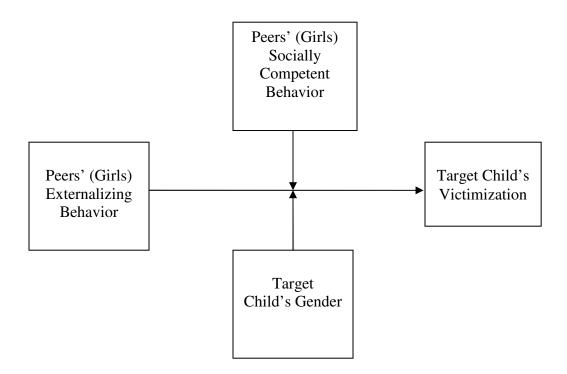


Figure 6.

Hypothesized model for the association between girls' externalizing behavior and children's victimization, moderated by girls' socially competent behavior and children's gender.



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