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Social withdrawal in early childhood: Shyness, Unsociability and Social Avoidance

Department of Developmental and Social Psychology
La Sapienza, University of Rome

Ph.D.
Social Psychology, Developmental Psychology and Educational Research

Candidate
Federica Zava

Tutor
Prof.ssa Emma Baumgartner

Co-tutors
Prof. Fiorenzo Laghi, Prof. Robert J. Coplan

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Chapter One

General Introduction

Theoretical and empirical literature extensively underline that both the quantity and the quality of peer social interactions and relationships are important components of human life and fundamental contributors to positive children's social, emotional, and cognitive development (Gazelle, & Ladd, 2003; Ladd, & Burgess, 1999). From early in childhood, establishing and being involved in positive social relationships influence long-term trajectories of well-being, health, and positive adjustment (Rubin, Bukowski, & Parker, 2006; Umberson & Montez, 2015). A lack in the quantity or in the quality of social interactions may negatively alter or impair children's socio-emotional development (Edwards, & Hans, 2015; Ladd, & Burgess, 1999). Accordingly, children who engage in comparatively infrequent social interactions may 'miss out' on these benefits, with potential implications for their long-term socio-emotional adjustment (Caspi, Harrington, Moffitt, Milne, & Poulton, 2006; Kopala-Sibley, & Klein, 2017; Rubin, Coplan, & Bowker, 2009). Nevertheless, some children tend to withdraw from the opportunity to play or socialize with others. The term used to define the process of removing oneself from opportunities for social interactions is *social withdrawal* (Coplan, & Rubin, 2010; Rubin, et al., 2009). In recent years, researchers have proposed increasingly complex models to describe social withdrawal, shifting from a unidimensional to a multidimensional approach that reflects a range of underlying emotional and motivational substrates (Coplan, Ooi, Xiao, & Rose-Krasnor, 2018). As a result, contemporary researchers now conceptualize *subtypes* of social withdrawal that

can be detected during childhood, that may have different psychological meanings, and appear to be related to different outcomes (e.g., Asendorpf, 1990; Coplan, Ooi & Nocita, 2015; Li et al., 2016).

Despite growing interest in the study of social withdrawal in recent years (see Coplan, Ooi, & Baldwin, 2019; Coplan et al., 2018; Sette, Baldwin, Zava, Baumgartner, & Coplan, 2019; Sette, Hipson, Zava, Baumgartner, & Coplan, 2018), to date it remains an underexplored aspect of children's development that still merits further empirical investigation. In this regard, the present dissertation aimed to investigate still unexplored facets of social withdrawal in preschool-aged children. In the first section of this dissertation, the theoretical aspects of social withdrawal will be discussed, with a main focus on definitions, functions, and implications for young children's emotional development and social adjustment.

1. Preschool age: The importance of peer interactions

Primary education has been defined by the United Nation's convention on the rights of the child as a fundamental right for all children (Quansah, 2016; UN, 1989). Each European country developed a specific education system, but overall early childhood education in Europe is considered as a school level, designed to support and promote children's early cognitive, physical and especially socio-emotional development. Early childhood education introduces, for the first time, young children into organized and structured context outside the family (European Commission, 2019; Quansah, 2016). In the present dissertation, the Italian system will be considered. Early childhood education in Italy is not mandatory, although it is freely guaranteed for children from 3 to 6 years old. Indeed, preschool was defined by the Italian Parliament (1971) as a social right of children and mothers (Corsaro & Molinari, 1990). In 2016/2017 (the year

of the data collection), 96% of Italian children's population attended the pre-elementary education called "Scuola dell'Infanzia" (Borrini & De Sanctis, 2017). Children aged 3 to 6 years old spend three years in this setting, before starting elementary educational program.

Is now widely recognized that preschool years represent a crucial developmental stage for children's growth and socio-emotional development (McCabe, & Altamura 2011). During these years, children acquire and hone important and unique socio-emotional skills that will forecast future, and shape different developmental sectors, as well as deviance and psychopathology (Denham et al., 2003; Parker, Mathis, & Kupersmidt, 2013; Sette, Spinrad, & Baumgartner, 2017; Rose- Krasnor & Denham, 2009; Rubin, Bukowski, & Parker, 2006). Therefore, the development of social and emotional competences is an important milestone for later success in academic and social areas (Landry & Smith, 2010; Odom, McConnell, & Brown, 2008; Rose-Krasnor & Denham, 2009).

When entering the early education context, children's social world (previously frequented by the almost exclusive presence of the family) extends through the experience of new forms of relationships (e.g., teachers, peers, peer groups). Therefore, children from 3 to 6 years in this new extra-family environment learn how to interact with a large group of peers, participate in school activities, respect turn-taking, offer help, share, and play with others (Herndon, Bailey, Shewark, Denham, & Bassett, 2013; Rubin, Bukowski, & Bowker, 2015). Through play and social interactions, children develop and refine new socio-emotional strategies and communication skills, as well as acquire beliefs and social norms of their cultural environment values (Kostelnik, Whiren, Soderman, & Gregory, 2009; McCabe, & Altamura 2011; Laghi et al., 2013; Smith, &

Pellegrini, 2008). Moreover, within the class, children learn to deal with interpersonal conflicts, cope with theirs and others emotion, increase self-awareness, self-regulate, as well as to develop problem-solving, emotional, and social skills essential for their growth (Bagnato, 2007; Colwell & Lindsey, 2003; McCabe, & Altamura 2011).

In this vein, children who have difficult to relate with peers during the preschool years may be at increased risk for longer term social and behavioral difficulties, negative peer experiences (e.g., rejection, dislike), and school maladjustment (e.g., early school dropout) during adolescence (Bornstein, Hahn, & Haynes, 2010; Gower, Lingras, Mathieson, Kawabata, & Crick, 2014; Mesman, Bongers, & Koot, 2001; Parker, & Asher, 1987). In support of these notions, preschool children with more harmonious peer relationships have also been shown to display prosocial behaviors, as well as to be more liked and accepted by their peers during kindergarten and elementary school (Eggum-Wilkens, Valiente, Swanson, & Lemery-Chalfant, 2014; Torres, Domitrovich, & Bierman, 2015). In contrast, children who remove themselves from opportunities for peer contact have been shown to be at greater risk for developing a wide range of later socio-emotional difficulties and negative peer experiences (Coplan et al. 2013; Liu et al. 2014; Rubin et al. 2009).

For these reasons, the study of early childhood must include empirical investigations imbedded in context of social-emotional development, aimed at understanding the early mechanisms of peer social relations. Identifying and intervening to assist children with socio-emotional and behavioral difficulties at this life stage allows for the promotion of social competence and emotional adaptation, which will serve to prevent future difficulties in older childhood and adolescence (Bornstein et al., 2010; Edwards & Hans, 2015; McCabe, & Altamura 2011; Rose-Krasnor & Denham, 2009).

For the purposes of this dissertation, the focus was on those children who lose opportunities for social contact due to their tendency to withdraw.

2. The study of social withdrawal: a historical overview

The study of social withdrawals stems from the study of children's peer relationships and interactions (Coplan, & Rubin, 2010; Rubin, et al., 2009). However, despite the recognition of the importance of peer interaction for children's subsequent socio-emotional functioning, socially withdrawn behaviors have been comparatively understudied, especially than others deviant social behavior typical in childhood, such as externalizing behaviors (Rubin, et al., 2009; Tandon, Cardeli, & Luby, 2009). In fact, social withdrawal in early childhood was historically considered less salient and less likely to be perceived negatively by peers (Cheah & Rubin, 2004; Mills & Rubin, 1990; Younger, Gentile, & Burgess, 1993). For instance, until the 1960's, clinical psychologists considered social withdrawal in childhood as a phenomenon of little developmental relevance, largely because existing empirical evidence suggested it was quite unstable and did not predict later psychological maladjustment (Kohlberg, LaCrosse & Ricks, 1972; Morris, Soroker, and Burruss, 1954; Robins, 1966; Rubin et al, 2009). Moreover, especially within the educational context, socially withdrawn children may appear as quiet, submissive, and easily manageable, and were even thought to represent veritable models of school adjustment (Rubin, 1982). Consequently, these children's internalizing difficulties were more likely to be undetected or ignored by caregivers or educators (Rubin & Coplan, 2004; Rimm-Kaufman & Kagan, 2005; Tandon, 2009).

A brief overview of the historical development of the interest of social withdrawal will be presented below, to contextualize the study of this phenomenon observable already in early childhood. Coplan and Rubin (2010) suggested that the

origins of the study of social withdrawal can be divided in three branches of historical research. The first branch of research emphasized the importance of peer contacts for children's development and introduced the notion that it might be important to study those children who do *not* often engage in social interactions. For instance, theorist such as Cooley (1902), Piaget (1926), Mead (1932) and Sullivan (1953) profoundly influenced later developmental research on peer interactions, proposing that positive peer relationships are an essential mechanism for the development of children's morality, reciprocity, socialization, and the concept of self. Especially, they underlined the importance of not missing out on opportunities for peer interactions (Rubin, Bukowski, & Parker, 2006).

A second branch of research emerged around the 1920's, from observational studies of children's social relationships with peers. From this branch stem the development of taxonomies of the different types of children's social interaction with peers (e.g., Bott, 1928; Lehman, 1926; Lehman & Anderson, 1928; Verry, 1923). These taxonomies were a first step for the later theorization of multiple forms of children's social withdrawal (e.g., Coplan, Rubin, Fox, Calkins, & Stewart, 1994; Rubin, 1982). For instance, an important contribution was given by Parten (1932), who differentiated between different types of nonsocial behaviors, such as engaging in solitary play despite the presence of peers or remaining unoccupied and watching others without interacting. A third branch of research also started in the early 1920's, in the field of education. Educational scholars showed interest in social withdrawal, suggesting that shy children might require extra attention in the school setting from educators and starting to delineate possible interventions (Dealy 1923; Craig, 1922; Lowenstein and Svendsen, 1938).

Finally, current theoretical perspectives on the study of social withdrawal were deeply influenced by the work conducted in the 1980's and 1990's by researchers such as Kagan (e.g. Coll, Kagan, & Reznick, 1984; Kagan, Reznick, Clarke, Snidman, & Garcia Coll, 1984; Kagan, Reznick, & Snidman, 1988), Rubin (e.g. Rubin, Hymel, & Mills, 1989; Rubin, Both, & Wilkinson, 1990; Rubin, Chen & Hymel, 1993) and Hinde (1987). These authors helped to establish social withdrawal as a stable and influential psychological characteristic. Indeed, by the early 1990's, social withdrawal was recognized as a stable trait related to concurrent and later socio-emotional maladjustment, especially regarding internalization (e.g., Bell-Dolan, Reaven, & Peterson, 1993; Biederman et al., 1990; Mullins, Peterson, Wonderlich & Reaven, 1986).

2.1 Social withdrawal relevant theory and definitions in childhood

Despite this long history of interest, social withdrawal has only recently been recognized as an important construct for social, emotional, moral and cognitive development (Rubin et al., 2009). Moreover, this research area has been hampered by the lack of both conceptual and definitional clarity. This confusion has been contributed by the adoption of a variety loosely differentiated terms (e.g., withdrawal, shyness, solitude, inhibition, isolation, reticence) that have been used interchangeably, with consequent inconsistencies in definitions and assessment (Coplan, & Rubin, 2010; Rubin, et al. 2009). Moreover, these terms have been used to refer to temperamental dispositions, internal motivational processes, observable play behaviors, and/or behavioral indices of the child's exclusion or rejection (Coplan, Prakash, O'Neil, & Armer, 2004; Gazelle & Ladd, 2003; Fox, Henderson, Marshall, Nichols, & Ghera, 2005; Vasa & Pine, 2006).

Rubin (1982) described a fundamental distinction that made it possible to take a step forward towards a theoretical clarification. He distinguished between two

different causal processes that may underline children's lack of peer participation: *active isolation* and *social withdrawal.* Whereas active isolation was described as a process whereby children are excluded or rejected by peers (i.e., external cause for the child spending time alone), social withdrawal was specified as the process whereby children choose (for different reasons) to remove themselves from opportunities for peer interaction (Rubin, Bukowski, & Parker, 2006). In this vein, social withdrawal is considered the behavioral manifestation of process and motivations internal to the child (Rubin, & Asendorpf, 1993). Currently, the most shared definition of social withdrawal describes it as an *umbrella term* referring to a voluntary self-isolation from social interaction and the displaying of solitary behavior, due to different internal reasons (Rubin & Coplan, 2004).

Moreover, it was subsequently determined that, as will be explained in detail below, there may be different underlying emotional and motivational *reasons* why children may choose to withdraw from social interactions. However, regardless of these different reasons, overall it is the case to be potentially concerned because social withdrawal may have a negative impact on young children socio-emotional adjustment (Coplan et al., 2013).

3. Socio-Emotional adjustment and related consequence of social withdrawal in childhood

Preschool period represents a crucial time for the acquisition and development of socio-emotional skills, largely acquired in the peer context and through social interaction. As such, it has been argued that because socially withdrawn children remove themselves from social opportunities, they may lose out on these age-related benefits (Coplan et al., 2015; Coplan, et al., 2018; Oh et al., 2008). Therefore, social

withdrawal in childhood is depicted behaviorally by the display of all forms of solitary behaviors, when interfacing with familiar and/or unfamiliar peers or adults, and across different situations (Rubin & Coplan 2004). Socially withdrawn children spent a comparatively high amount of time playing alone in the company of peers, and beyond the underlying reasons why they may remove themselves from social interaction this can have an impact on their development and adjustment (Coplan, et al., 2018). Therefore, has been suggested that the cost of solitude may be greater during childhood than in adolescence or adulthood, because at this early stage significant amount of positive peer contacts are necessary for the development of a healthy socio-emotional and social-cognitive adjustment and well-being (Coplan, & Bowker, 2013; Rubin, Bukowski, & Parker, 2006). In this vein, social withdrawal has been identified as a risk factor for psychosocial maladjustment and for the development of internalizing problems (Rubin, Hymel, Mills, & Rose-Krasnor, 1991; Rubin, Burgess, Kennedy, & Stewart, 2003). For instance, researchers have shown that social withdrawal during childhood may predict internalizing problems in early adolescence as depression, anxiety and loneliness (e.g., Boivin, Hymel, & Bukowski, 1995; Gazelle & Rudolph, 2004; Gazelle & Ladd, 2003; Rubin et al., 1995). Overall, social withdrawal is contemporaneously associated with intra-personal difficulties as low self-esteem, negative self-perceptions of social competence, and anxiety during middle and late childhood (e.g., Hymel et al. 1993). For example, in Rubin and colleagues' study (1993), exploring and comparing the psychological characteristics of withdrawn, aggressive, and average/normal 10 years old children, was found that withdrawal children perceived themselves as less physically skilled compared to average children. Moreover, in the same study, withdrawn children were viewed by their peers as less sociable and with less leadership's skills, and for these

reasons they were not considered popular. Finally, also teachers evaluated withdrawal children as anxious and not competently assertive. Other researchers reported that social withdrawal was also associated with negative self-perception of social competence. For instance, Hymel and colleagues (1990), considering the longitudinal relation between externalizing and internalizing behaviors and social difficulties from early childhood to middle childhood, reported that social withdrawal was related with social isolation, loneliness, social dissatisfaction and self-perception of social incompetence (i.e., cognitive, social and physical). In Stewart, and Rubin's longitudinal study (1995) on a sample of kindergarten, Grade 2 and Grade 4 children, social withdrawal was related with fewer social problem-solving initiation and assertive social strategies, also social withdrawal children, compared to average children, were less prone to reattempt after a failure.

Furthermore, socially withdrawn behaviors may evoke negative peer responses. Therefore, displaying less socially competent behaviors and lacking in social initiation, socially withdrawn children may appear as less attractive playmates for their peers (Coplan, Girardi, Findlay, & Frohlick, 2007). This may help to account for associations between social withdrawal and interpersonal difficulties such as loneliness, peer rejection, exclusion, and even victimization in preschool and kindergarten (Coplan et al., 2004; Coplan, Closson, & Arbeau, 2007; Gazelle & Ladd, 2003; Keiley, Lofthouse, Bates, Dodge, & Pettit, 2003; Perren & Alsaker, 2006). This may be especially problematic during preschool age, when learning how to play with others is considered one of children's primary developmental goals (Coplan & Ooi, 2014).

4. Social withdrawal subtypes: motivational theory and different association with socio-emotional adjustment

Historically, social withdrawal was defined using a conceptual model which described a process whereby some children tend to remove themselves from opportunities to interact with peers and spend more time in solitude. However, in more recent years, researchers have adopted a more complex conceptualization of social withdrawal, shifting from a unidimensional approach to a multidimensional approach. This multidimensional approach considers social withdrawal as arising from different underlying emotional and motivational substrates (Coplan et al., 2018). In other words, children may choose solitude for different reasons, and in turn, these different reasons yield different implications for their well-being (Coplan et al., 2015; Coplan et al., 2018).

This widely used models stems from Asendorpf's (1990) *social approach* and *avoidance motivational model*. Asendorpf underlined the importance of both inter-individual differences in social withdrawal and intra-individual differences in social involvement. Drawing on Gray's (1972) approach and avoidance theory, Asendorpf (1986, 1990) proposed a model postulating different socio-emotional outcomes for withdrawn children emerging from the combination of two different motivational tendencies: *social approach motivation* and *social avoidance motivation.* These two fundamental motivational dimensions differ in the cognitive representation of what should be approached or avoided. Social approach motivation refers to children's desire to socially interact and establish relationships, whereas social avoidance motivation refers to children's refrain for social interaction and preference to avoid peers (Elliot, Gable, & Mapes, 2006).

Approach and avoidance motivations are largely independent and differentiated, however, they can co-occur in different combination. Specifically, Aseendorpf (1990) described four different combinations of high vs. low social approach and social avoidance motivations: (a) *sociability,* from the combination of high social approach motivation and low social avoidance motivation*;* (b) *shyness,* from the combination of high social approach motivation and high social avoidance motivation; (c) *unsociability,* from the combination of low social approach motivation and low social avoidance motivation; and (d) *social avoidance,* from the combination of low social approach motivation and high social avoidance motivation. In this vein, the motivation to approach and/or to avoid social contact could be considered as a key factor to explain different subtypes of social withdrawal.

Three subtypes of socially withdrawn children were identified in this model, each conceptualized as removing themselves from opportunities of social interaction for different motivational and emotional internal "reasons". *Shy* children are described as refraining from social interaction because of fear and anxiety, despite a strong desire to affiliate; *Unsociable* children are characterized by a nonfearful preference for solitude; S*ocially avoidant* children are conceptualized as having a preference for solitude accompanied by a desire to avoid social contact (perhaps as the result of strong negative feelings of anxiety, e.g. see Coplan, Rose-Krasnor, Weeks, Kingsbury, Kingsbury, & Bullock, 2013).

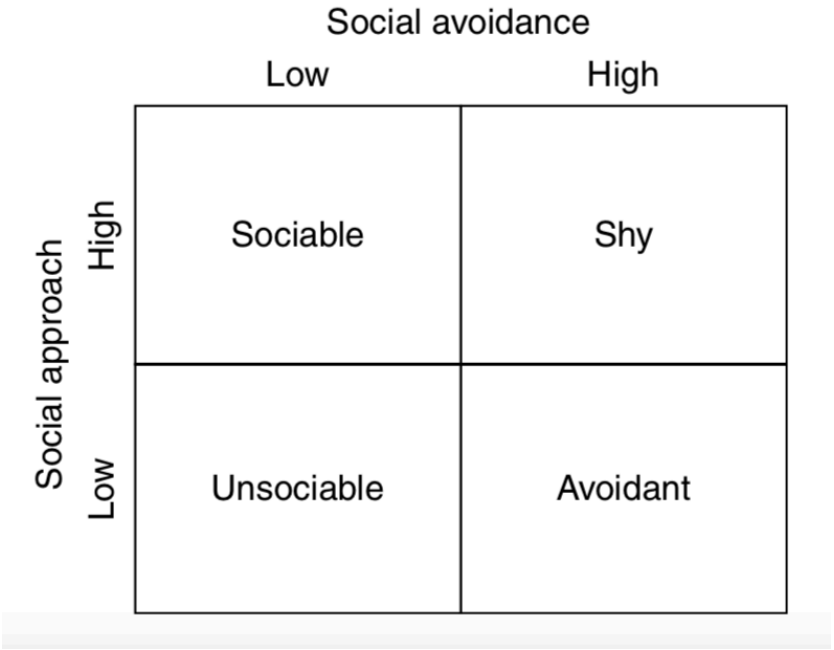


Figure 1.1 The interaction of social approach and social avoidance dimensions and resulting four social behaviors (Schmidt, & Miskovic, 2014 pag.54, in Coplan & Bowker, 2014)

Social withdrawal is thus recognized as a heterogeneous, multifaceted, and multidimensional construct that encompasses different emotions and motivations. Accordingly, it is important to study different pathways that may be related to the three subtypes of social withdrawal (i.e., shyness, unsociability, social avoidance) (Coplan et al., 2013). Different social and psychological consequences of social withdrawal, and different cognitive, moral and emotional outcomes have been observed for each motivational subgroup of social withdrawal children (Coplan & Bowker, 2013). Individual assessment of social withdrawal motivations could be useful to understand the complexity of the phenomena and to identify not only possible risk factors, but also differential protective factors for different subtypes of socially withdrawn children (Garcia & Ochotorena, 2016). For instance, Coplan and colleague (2018), in a study on kindergarten and Grade 1 children found that shyness, unsociability, and social avoidance displayed differential link with indices of children's socio-emotional adjustment. The

following sections briefly describe the conceptual and empirical literature regarding these three different subtypes of social withdrawal.

4.1 Shyness

Shyness is the more studied subtype of social withdrawal. Shyness has been defined as a temperamental trait characterized by excessive wariness, unease, and high self-consciousness in contexts of social novelty and perceived social evaluation (Crozier, 1995). Shyness has also been qualified as distrust, fear of rejection and anxious self-concern in response to real and/or imaginary social interaction (Kalutskaya, Archbell, Moritz Rudasill, & Coplan, 2015; Cheek & Melchior, 1990; Rubin et al., 2009). It should be noted that the term shyness shares conceptual overlap with a number of other similar constructs, including behavioral inhibition and anxious solitude (Gazelle & Ladd, 2003; Kagan, 1997). For the purposes of this dissertation, these terms will be used interchangeably.

From Asendorpf's (1990) motivational perspective, shyness results from the competition between social approach and avoidance motivations. Therefore, high social approach motivation and high social avoidance motivation co-occur in shy children, who remain trapped in this paradox. Particularly, shy children often desire to socially interact with others, but this desire is simultaneously inhibited by feelings of discomfort, fear of social judgment, embarrassment, negative self-opinion low self-esteem, anxiety, self-consciousness (Asendorpf, 1990; Coplan et al., 2004). In this regard, Coplan and colleagues (2004) defined this subtype of social withdrawal as "conflicted shyness", to emphasize this conflict between these two opposing inclinations. The internal motivational conflict experienced by shy children is often manifested behaviorally through the display *reticent* behaviors. In this regard, shy children tend to

watch peers without joining them (i.e., onlooking), remain unoccupied (e.g., staring into space), or engage in parallel play (i.e., play nears other without interacting) (Asendorpf, 1991; Coplan, 2000; Coplan et al., 1994, 2004). Shy children remain trapped in this social-avoidance motivational conflict, strongly interested in others but without being able to actively start a social contact (Coplan & Ooi, 2014; Coplan et al., 2004).

These behavioral manifestations may serve as a strategy for coping with feelings of social unease (Rubin et al., 2009). For instance, Coplan, Rubin and colleagues (1994) found that shyness rated by mothers was associated with observed reticent behaviors at 4 years old. Moreover, in the same study, children were observed display reticence and anxiety behavioral manifestation hovering of the hedge of peer group. Coplan colleagues (2004) found that shyness in preschool was positively associated with teacher ratings of anxiety, but not a child self-reported preference to play alone. These results provide some empirical evidence of the approach/avoidance internal conflict experienced by shy children (Asendorpf, 1990, 1993). Taken together, it can be argued that shy children's arousal increases during social situations, adding to feelings of discomfort, distress, and wariness, which in turn, increase the probability of an anxiety induced-avoidance motivation (expressed with anxious, withdrawn, and reticent behaviors). Notwithstanding a desire to play with peers, when faced with novel and familiar social contexts, shy children feel mistrust, display excessive behavioral control (e.g., stopping playing or speaking), and demonstrate uneasiness. At the same time, shy children's unfulfilled desire to interact with others is evidenced by their tendency to hover near peers, and their non-preference for solitary play (Coplan et al., 2009, Kagan, 1997).

Shyness is considered a trait that may emerges during the first few months of life, growing from early childhood through adolescence and remaining moderately to

highly stable over time and across situational context (especially among extreme groups) (Degnan, Henderson, Fox, Rubin, & Nichols, 2008; Fordham & Stevenson-Hinde, 1999; Sanson, Pedlow, Cann, Prior, & Oberklaid, 1996; Pedlow, Sanson, Prior, & Oberklaid, 1993). During very early childhood, shyness manifests as wariness, unease and hesitation in response to unknown people, then during preschool shy children begin to develop self-consciousness when facing interactions with others, accompanied by feelings of embarrassment or shame as a reaction to a situation of perceived social evaluation (Buss & Plomin 1984; Crozier 2010; Schmidt & Buss, 2010; Kalutskaya et al., 2015). Notwithstanding, Karevold and colleagues (2012) found moderate stability and increasing levels of shyness across time from early childhood to adolescence, with the steepest increase during early childhood. Moreover, shyness during early childhood predicted anxiety symptoms and higher levels of depression in adolescence.

Shyness is associated with a wide range of socio-emotional difficulties across the life span (Coplan, Arbeau, & Armer, 2008; Gazelle & Ladd, 2003). For instance, shyness during childhood and adolescence has been associated with loneliness, peer problems (e.g., rejection, exclusion, victimization), internalizing problems (e.g., anxiety, depression, lower self-worth), use of less positive coping strategies, and school-related difficulties (e.g., poorer academic achievement, less positive teacher-child relationships) (Arbeau, Coplan, & Weeks, 2010; Bohlin, Hagekull, & Andersson, 2005; Coplan et al., 2008; Karevold, et al., 2012; Kopala-Sibley & Klein, 2017).

Specifically, the transition to formal education settings (preschool in Italy) may also impart unique challenges for shy children and mark an increase of social demands (Coplan & Arbeau, 2008). Behaviors as low self-esteem, lack of verbal or social participation and loss of concentration may have negative implications for shy children's

social, academic success and school adjustment (Eggum-Wilkens, et al., 2014). Therefore, during preschool years shyness resulted to be related to lower social competence, lower self-esteem, anxiety, peer rejection, increased teacher attention, and academic difficulties (Bohlin et al., 2005; Coplan & Prakash, 2003; Coplan, Findlay, & Nelson, 2004; Sette et al., 2018). For example, Graham and Coplan, (2012) reported that shy preschool children were rated by teachers as more anxious and withdrawn, indicating that from early childhood shyness was related with internalizing problems. Sette and colleagues (2017) found that shyness during preschool was related to peer difficulties (i.e., rejection, victimization), negative self-conscious emotions (i.e., guilt/shame), and poorer child-teacher relationship quality (i.e., lower level of closeness with the teacher).

Moreover, such peer difficulties may exacerbate shy children's already existing tendency to avoid social interaction, increasing negative feelings about the self and others (e.g., worries, anxiety, fears, low self-esteem) and decreasing motivation and interest for social relationships (Stevenson-Hinde & Glover, 1996). For instance, in a sample of 3rd through 7th-grade Chinese children, Coplan, Liu, and colleagues (2017) found that shyness was negatively associate with peer preference. Moreover, results from mediation analyses indicated that shyness also indirectly predicted poorer school adjustment and internalizing problems through peer liking. In other words, shy children received less positive nomination by their classmate and the fact to be excluded had a negative impact on their school achievement, and determinated the development of internalizing problems (e.g., loneliness, negative self-perception, depression symptom).

Accordingly, these findings highlight the importance of early identification of shy children and the necessity to continuing the effort to raise awareness among caregivers (e.g., parents, teachers, educators) of the potential negative socio-emotional

and academic implication of shyness from preschool age (Arbeau & Coplan, 2007; Arbeau, Coplan, & Weeks, 2010; Graham and Coplan, 2012). Notwithstanding, although shyness is the most studied subtype of social withdrawn, there remains much to learn about what factors and mechanism may have a positive or negative influence on shy children's socio-emotional development.

4.2 Unsociability

Unsociability has been previously called with a number of terms such as *preference for solitude* (Burger, 1995), *solitropic orientation* (Leary, Herbst, & McCrary, 2003), *social disinterest* (Coplan et al., 2004) *affinity for aloneness* (Goossens, 2013).

According to Asendorpf's (1990) motivational perspective, unsociable children withdraw from peer interactions for very different reasons than shy children. Therefore, unsociable children have both low social approach and low social avoidance motivations (Asendorpf, 1990; Coplan & Weeks, 2010; Coplan, Ooi, Baldwin, 2019). According to this theorization, unsociable children's withdrawn behaviors are the result of a lack of interest for social interaction, and not adversity to social interaction. Therefore, unsociability steam from an *intrinsic motivation* and *positive appeal* for spending time alone (Chua & Koestner, 2008; Coplan et al., 2019; Nguyen, Ryan, & Deci, 2018). For instance, unsociable children are not thought to experience discomfort, anxiety, distress, or fear due to peer interactions, as is the case of shy children (Coplan et al., 2004; Rubin et al., 2009). Instead, unsociable children withdrawn because a non-fearful preference for solitary play (Coplan et al., 2004), affinity for aloneness (Goossens, 2014), preference for solitary activities (Coplan et al., 2007).

It has also been suggested that, although unsociable children are less interested in *initiating* peer interactions, they are capable of establishing competent social

interactions in cases of social invitations that they consider attractive (Asendorpf & Meier, 1993; Coplan et al., 2013; Rubin & Asendorpf, 1993; Spangler, & Gazelle, 2009; Zelenski, Sobocko, & Whelan, 2014). Therefore, overall, unsociability is considered to be a comparatively benign form of social withdrawal (Coplan & Weeks, 2010). In support of this notion, results from several studies indicate that this subtype of social withdrawal is not related to anxiety, loneliness, depression, or other indices of internalizing problems in childhood (Bowker & Raja, 2011; Coplan & Weeks, 2010; Harrist et al., 1997).

Taking in account a developmental timing effect perspective Coplan and colleagues (2019) suggested that in the early childhood unsociability may be perceived as a normative behavior and a benign form of social withdrawal. Therefore, during preschool age children may be more self-centered. Moreover, solitary play and solitary activities are considered common, well perceived and even encouraged at this age (Coplan et al., 2004; Coplan et al., 2019). Unsociability may become increasingly associated with negative outcomes in later childhood and early adolescence when social interaction is more common and isolation may violate *social norms* and *expectations regarding peer interactions (*Coplan et al., 2013; Coplan et al., 2019; Rubin & Asendorpf, 1993). Finally, unsociability may become again more frequent and normative during later adolescence and emerging adulthood, when spending time alone is more achievable and accepted by others (Coplan et al., 2019; Larson, & Richards, 1991). Moreover, adolescence and emerging adulthood are a pivotal developmental moment to experience also the benefits of solitude (e.g., autonomy, identity formation, enjoyment of personal interests) (Bowker, Rubin, & Coplan, 2016; Coplan, Zelenski, & Bowker, 2017).

However, it must also be recognized that independently from the developmental stage, children require a significant amount of positive peer interaction for

healthy socio-emotional, and social-cognitive development and adjustment (Coplan, & Bowker, 2013; Rubin, Bukowski, & Parker, 2006). In this vein, even if unsociable children are prone to spend more time alone because they enjoy experiences of solitude, they may *miss out* the many benefits of peer interactions (Coplan et al., 2015). Therefore, there are at least some reasons why unsociability could constitute a risk factor for children socio-emotional maladjustment (Coplan et al., 2015; Coplan et al., 2019).

In the lasts years empirical literature on unsociability grew up, however the majority of empirical study on early childhood on social withdrawn regarded shyness (Coplan et al., 2019). Ladd and colleagues (2011) used peer-nominations to identify groups of unsociable, anxious-solitary (shy) and non-withdrawn children in Grade 5 (aged 10–11 years). Among their results, shy children (i.e., anxious-solitary) were more excluded by peers than were unsociable children, who in turn were more excluded than the non-withdrawn comparison group. Interestingly, unsociable children did not differ from the comparison group in terms of the likelihood of having a mutual best friend, the stability of that friendship over the school year, and the overall number of mutual friends. Kopala-Sibley and Klein (2017), in a longitudinal study on the effect of social withdrawal across childhood, reported that whereas shyness appeared to be more problematic in early to middle childhood, unsociability was more maladaptive in later childhood. Specifically, from ages 6 to 9 years, unsociability predicted anxiety in both boys and girls and predicted increases in depressive symptoms in boys.

Considering the specific developmental period taking in account in this dissertation, across studies on preschool age, unsociability was not broadly related to parents or teaches assessment of internalizing problems, such as anxiety or depression (Coplan et al., 2004; Coplan et al., 2014; Coplan et al., 2017; Ooi et al., 2018)

Nevertheless, there have been some mixed results with regard to the peer experiences of unsociable children. For instance, some studies, reported non-significant associations between unsociability and ratings of peer exclusion (Coplan et al., 2014, 2017). In contrast, there is at least some evidence to suggest that children's unsociable behaviors may not be particularly well-received by peers (Coplan et al., 2004; Ooi et al., 2018), perhaps because peers are put off by children who tend to play alone and infrequently initiate peer interaction (Coplan & Weeks, 2010).

For example, in the study of Coplan, Bullock and colleagues (2015), on teachers attitudes and believes on preschool children behaviors, results showed that unsociability may be perceived as a not problematic form of social withdrawn by teachers. Therefore, teachers reported that unsociability was the least likely behavior to invoke anger or concern, and that unsociable children would be expected to do the best academically in the class. Moreover, unsociability presented more positive social outcomes, including greater peer liking, less exclusion, and a lower likelihood of being ignored. Also, in Coplan and colleagues' study (2014) unsociability was unrelated with peer exclusion evaluated by teachers and perceived peer acceptance measured by peers. Unsociable children reported high preference for solitary play, but this preference was not mediated by peer exclusion (contrary to what happened for shy children), suggesting an internal positive motivation for wanting to play alone. Finally, in Coplan and colleagues' study (2017) unsociability, during kindergarten and Grade 1 was found to be a distinct form of social withdrawal and controlling for shyness and social avoidance was not related with peer difficulties or internalizing problems, such as social anxiety and depression.

Conversely, in Ooi and colleagues' study (2018) on a sample of children from 4 to 7 years old unsociability was related not only with asocial behaviors but also with exclusion by peers. More specifically, asocial behavior with peers mediated the relation between unsociability (i.e., preference for solitary play) and peer exclusion. In other words, children who prefer to play alone may experience peer difficulties due to their tendencies to withdrawn. Harrist and colleagues (1997) analyzing sociometric and social-cognitive differences in social withdrawal subtypes in early childhood (i.e. kindergarten children) found that unsociable children had high levels of sociometric neglect and rejection.

Taken together, these findings suggest that unsociability is a distinct subtype of social withdrawal from early. Although unsociability appears to be relatively benign overall, particularly when compared with shyness, unsociable preschool children with their withdrawn behavior and tendency to solitude may be perceived as aloof, standoffish or unfriendly (Coplan et al., 2019; Ding et al., 2015). In other words, notwithstanding the reasons why unsociable children spend time alone there may be some cost of missing out important opportunity to develop their socio-emotional competence and consequently the many benefits of social interaction and relationships with peers (Coplan et al., 2015; Coplan et al., 2019). For this reason, it is important to extend the empirical study of unsociability, especially considering the critical age of preschool, and taking in account different perspective (e.g., peer evaluation) as well as risk and protective factors.

4.3 Social Avoidance

The third form of social withdrawal theorized by Asendorpf (1990) is social avoidance. Social avoidance is thought to arise from the combination of low social approach motivation and high social avoidance motivation. Thus, socially avoidant children are conceptualized as not only possessing a comparatively lower desire to initiate social interaction, but also as actively avoiding peers. Accordingly, socially avoidant children would not only desire solitude, but as opposed to unsociable children, also actively avoid social interactions (Coplan et al., 2013).

Compared to shyness and unsociability, relatively little is known about the meaning and implications of this particular combination of social motivations (Coplan et al., 2015). Social avoidance has been conceptualized in terms of several different underlying developmental processes. For example, one hypothesis is that social avoidance may evolve from more extreme forms of shyness. In this scenario, negative emotions such as fear, discomfort, and concern of social evaluation become so intense that shy children's social approach motivation may be extinguished over time (Coplan et al., 2018; Schmidt & Fox, 1999). Another suggestion is that negative peer experiences (e.g., exclusion, victimization) may exacerbate negative feelings among initially shy children, and as a consequence determinate higher level of social avoidance motivation, extinguishing children desire to interact with others (Bowker & Raja, 2011; Coplan, Ooi, Rose-Krasnor, & Nocita, 2014). These different underlying causal mechanisms may not be mutually exclusive. For example, as described by Gazelle and colleagues (e.g., Gazelle & Ladd, 2003; Gazelle & Rudolf, 2004) repeated negative experiences with peer relations may over time promote increases in negative feeling and depressive symptoms in children who were already anxious and lonely.

Finally, and from a different perspective, it has also been suggested that social avoidance may have a unique etiology related to the early development of depression in childhood (Coplan et al., 2015). In this regard, social avoidance may represent an early manifestation of social anhedonia, defined as a reduced capacity to derive pleasure from social contact (Blanchard, Gangestad, Brown, & Horan, 2000).

Asendorpf (1990) speculated that social avoidance might be the most problematic subtype of social withdrawal and associated with pervasive socio-emotional difficulties. Up to this point, the few empirical studies on social avoidance have provided initial support for this assertion. For instance, Coplan et al. (2013) reported that a subgroup of socially avoidant older children demonstrated the highest levels of anxiety, depressive symptoms, the most negative attributional style, the lowest positive and the highest negative affect as compared to shy, unsociable, and non-withdrawn children. In another study on elementary and middle school children in China, Sang et al., (2016) found that social avoidance was uniquely associated with emotion dysregulation and internalizing problems. Further, it was the only form of social withdrawn related with peer problems (i.e., peer victimization, acceptance, rejection) (Sang et al., 2016).

Bowker and Raja (2011) reported that avoidance was significantly and positively correlated not only with sad and nervous affect but also with depressed affect (contrarily to shyness and unsociability) in a sample of Indian adolescents. Finally, Nelson (2013) found that socially avoidant young adults reported higher level of emotional dysregulation, internalizing problems, and relationship difficulties than did unsociable or non-withdrawn individuals. Of note, however, in this study social avoidance did not differ significantly from shyness.

Considering early childhood, Coplan and colleagues (2018) recently studied social avoidance in kindergarten and first grade children. One of the aims of the study was to explore if social avoidance in young children was uniquely associated with indices of socio-emotional maladjustment, differentiating from the other two subtypes of social withdrawn (i.e., shyness and unsociability). Results supported the hypothesis that social avoidance assessed by parents was considered a distinct form of social withdrawal. Moreover, the study provided first empirical results on the postulation that social avoidance may constitute unique risks for young children socio-emotional functioning. Therefore, after controlling shyness and unsociability, avoidance was associated with peer problems. Furthermore, after controlling for this association, social avoidance was positively related to depressive symptoms (assessed with a single item). Of the three withdrawal subtypes, social avoidance was the only one significantly and positively associated with depression. Finally, this result support the hypothesis that social avoidance may be the most problematic subtypes of social withdrawal. Further studies are required to better elucidate the implications of social avoidance in early childhood.

5. The study of social withdrawal in Italy

Although, no previous Italian studies investigated social withdrawal taking in account Asendorpf (1990) motivational perspective and the three subtypes of social withdrawal (i.e., shyness, unsociability, and social avoidance), Italian researchers analyzed similar constructs such as loneliness, solitude, solitary play, social isolation, behavioral inhibition, social inhibition, internalizing behaviors, affinity of aloneness, and autonomous motivation for solitude (Corsano, 1999; Corsano, Majorano, Michelini, & Musetti, 2011; Lo Coco, Rubin, & Zappulla, 2008, Majorano, Musetti, Brondino, & Corsano, 2015; Pace, D'Urso, & Zappulla, 2019; Pace, Zappulla, & Di Maggio, 2016;

Zappulla, & Lo Coco, 2003). The majority of these Italian studies focused on adolescents or preadolescents children. For instance, Ponti and Tani's study explored the moderated role of friendship relationships in the association between shyness and internalizing difficulties in a sample of early adolescent and late adolescents. Results showed that shy adolescent who perceived their friend as helpful and supportive had fewer internalizing problems (i.e., withdrawn behaviors, somatic complaints and anxious-depressed behaviors) (Ponti, & Tani, 2015).

Focusing on social isolation in childhood Lo Coco and colleagues (2008) underlined that withdrawn children may lose important opportunity to interact with others and this may have an impact for later socio-cognitive adjustment and for the development of appropriate behavioral and personality characteristics.

Considering early childhood, Sette and colleagues (2014; 2016) investigating shyness in relation with children socio-emotional adjustment in samples of preschool children. For instance, Sette et al. (2014) analyzed the moderating role of teacher relationship (i.e., closeness, conflict and dependence) in the association between shyness and children social adjustment and maladjustment. Shyness resulted to be related to peer rejection and internalizing behaviors, both measured by teachers. Moreover, child-teacher relationships moderated the association between shyness and children adjustment or maladjustment. For instance, at low levels of closeness, shy children showed lower level of social competence and higher level of peer rejection. Conversely, at high levels of dependence, shyness was negatively related with children social competence (Sette, Baumgartner & Schneider, 2014). In Sette et al. (2016) was investigated the moderating role of emotional knowledge in the link between children' shyness and their socio-emotional functioning. Result of this study confirmed that shyness was related with index

of internalizing behaviors, such as anxiety and peer rejection. At high level of emotional knowledge (i.e. emotion recognition) the positive relation between shyness and anxiety and peer rejection was attenuated (Sette, Baumgartner, Laghi, & Coplan, 2016). In both studies' shyness was conceptualized has a temperamental trait characterized by the desire to interact with others and the tendency to withdraw because of feelings of anxiety and social fear (Coplan et al., 2004).

5. General Aims

In the last 20 years, the study of social withdrawal has grown substantially. However, considering the impact that social withdrawal may have on children's development, researchers should continue to explore this construct, with specific areas of consideration that merit increased research attention. For example, to date, few researchers have considered variables that may moderate the relations between social withdrawal and adjustment outcomes (Rubin, & Coplan, 2004).

The present dissertation aimed to investigate the construct of social withdrawn from multifaceted perspectives and using a multi-method and multi-source approach. It includes three studies, each of them treating different and critical aspects of social withdrawal in young and preschool-aged children, and considering the subtypes of shyness, unsociability, and social avoidance. Specifically, this dissertation aimed to verify: (a) how socially withdrawn young children are perceived by others; (b) whether different subtypes of social withdrawn are perceived as differentiated and associated with different socio-emotional adjustment outcomes; and (c) factors that may moderate the relations between social withdrawal and adjustment outcomes, with a specific attention on protective factors. As mentioned above, it is particularly important to investigate social withdrawal when children shift from the family to the preschool environment. For this

reason, the three studies of the present dissertation included samples of children of a critical age from 3 to 6 years old.

In detail, Study 1 aimed to explore the three subtypes of social withdrawn (i.e., *shyness, unsociability,* and *social avoidance*) from preschool children point of view. Participants were 212 children, who were administered a structured interview created to assess children's attitudes and responses toward hypothetical social behaviors. The main aim of this study was to investigate children's perceptions, beliefs, and anticipated outcomes about different types of social withdrawal.

In Study 2, a sample of 112 Italian preschoolers was considered to explore protective factors for social withdrawn children's socio-emotional adjustment. In this study, *shyness* and *unsociability* were investigated to verify the existence of different socio-emotional related outcomes. A multi-source approach was used, including parental ratings of children's shyness and unsociability, teacher ratings of children's internalizing problems, externalizing problems, and social competence, child interview assessments of preference for solitary play, and peer (sociometric) ratings of peer acceptance. The main aim of this study was to examine the protective role of peer acceptance in the links between two subtypes of social withdrawal (i.e., *shyness, unsociability*) and indices of young children's socio-emotional functioning.

Finally, Study 3 included 212 Italian young children and considered specifically one of the three subtypes of social withdrawn (i.e., *shyness)*. Child shyness was measured by parents, and children were also evaluated by their parents and teachers on their empathic behaviors. Finally, a measure of child self-reported empathic feelings was used. This study aimed to investigate the relation between shyness and positive moral emotion (i.e., empathy). Specifically, the main aim was to verify the theoretical

hypothesis that shy children are perceived as less empathetic than their more sociable peers, due to a performance rather than a competence deficit. With this purpose, the moderating role of shyness in the association between empathic feelings and empathic related reactions and indices of socio-emotional adjustment in preschool was explored.

These three studies gave a contribution to the current investigation on social withdrawn and related socio-emotional adjustment in young preschool children. To my knowledge, no other studies had examined these issues in Italian samples using innovative methods. Implications for children's development are discussed in the next chapters.

Chapter Two

Study 1: Shyness, Unsociability and Social Avoidance. Social withdrawal from young children perspective: preschool children's understanding and beliefs about hypothetical socially withdrawn peers

The paper summarizing this research was published in: Zava, F., Watanabe, L. K., Sette, S., Baumgartner, E., Laghi, F., & Coplan, R. J. Young Children's Perceptions and Beliefs about Hypothetical Shy, Unsociable, and Socially Avoidant Peers at School. *Social Development*. doi: 10.1111/sode.12386

1. Abstract

The goal of the present research was to explore young children's perceptions, beliefs, and anticipated outcomes about all the three subtypes of social withdrawal (i.e. shyness, unsociability, social avoidance). Participants were N = 212 children (110 boys, 102 girls) aged 2.55 to 6.37 years (M = 4.86, SD = 0.89) attending preschools in Centre Italy. Children were interviewed individually on theirs believes about hypothetical peers displaying different types of social withdrawal (i.e., shy, unsociable, socially avoidant). For comparison purposes, peers displaying aggressive and socially competent behaviors. Among the three vignettes depicting types of withdrawn children, children rated the hypothetical shy peer as having the highest social motivations, the unsociable peer as receiving the least sympathy from others, and the avoidant peer as being the least intelligent and least liked by the teacher. In addition, girls reported wanting to play more with the shy peer than boys, and older reported a higher affiliative preference for all subtypes of socially withdrawn peers than younger. These findings suggest that

Italian preschool children have a sophisticated ability to differentiate among the different social motivations and emotions that may underlie social withdrawal.

2. Introduction

In early educational contexts, establishing positive relationships with peers and teachers is a crucial developmental task for children's healthy socio-emotional development (Rubin, Bukowksi, & Bowker, 2015).

In this vein, children's responses to peers' behaviors also depends on their perceptions and beliefs about these behaviors (e.g., Graham & Hoehn, 1995). Due to the fact that children are one of the most accoutered assessors of the social adjustment and social functioning of their peers, is very important investigate how children view different social behaviors and specifically, in the interest of this dissertation, how children perceived social withdrawal. Moreover, it results important investigate how this view may change across years and gender. Children point of view is of extreme value, because children represent not only observer but also participants in the behavior of theirs peers (Younger, Gentile, & Burgess, 1993). Children ability to differentiate between emotions and motivations behind their peers' social behaviors may help to account for their differences in the emotional and behavioral responses toward others (Coplan et al., 2007; Ding et al., 2015).

Researchers who studied children perception of social behavior typically evaluated two main broad categories of young children's social maladjustment: social withdrawal and aggression (Younger et al., 1993). Early studies considering that a well-developed social schema of social withdrawal emerged lately than for physical aggression. For this reason, has been arguing that young children may not view social withdrawal as particularly salient.

For instance, Goossens, Bokhorst, Bruinsma, and van Boxtel (2002) investigated in a sample of 1st and 2nd grade children their judgments of socially withdrawn, aggressive, and prosocial behaviors. Their results suggested that withdrawn hypothetical children elicited fewer negative feelings than aggressive hypothetical children, such as less anger, and more sympathy, and conversely more negative feelings than prosocial hypothetical children. Overall, social withdrawal was considered more negative than socially competent behavior but less negative than aggressive behavior.

Moreover, social withdrawn has been considered a relatively normative pattern of behavior in early childhood (e.g., Bukowski, 1990; Younger, Schwartzman, & Ledingham, 1986). For example, Younger and colleagues (1993) reported that until seventh Grade children describes maladjustment manly reported aggression behaviors, while social withdrawal is conspicuously absent. Growing in ages this pattern may change and children referred to social withdrawal when describing social maladjustment while aggression was less frequent.

However, there are evidence linking social withdrawal with peer rejection and exclusion in early childhood, suggesting that young children may have negative perceptions of such behaviors and consider social withdrawal as somewhat deviant (Coplan et al., 2004). Moreover, subsequent study reported that even young children were able to differentiate between withdrawal from the peer group and rejection, or exclusion, suggesting that young children may have a more sophisticated implicit perception of different social behaviors, appearing to hold different beliefs about peer emotions, motivations, and attributions (e.g., intelligence, intentionality; Goossens, et al., 2002; Graham & Hoehn 1995). For example, young children appear to understand and distinguish among different *reasons* why peers might spend time alone at school (e.g.,

Gavinski Molina, Coplan, & Younger, 2003; Galanaki, 2004). In this vein is clear the necessity to further the research on this issue, perhaps using new measure adapted for young children (Younger et al, 1993).

As social withdrawal is nowadays considered a multidimensional construct that may underlined different emotions and motivations, researchers have sought to examine young children's understanding and beliefs about different *subtypes* of social withdrawal using hypothetical vignettes. Shyness, unsociability and social avoidance have different emotional and motivational substrates, therefore withdrawn children's behaviors may be understood differently from children and for this reason may determinate different reactions from the peer groups. For instance, Coplan et al. (2013) in a sample of children from 9 to 12-year-olds found that both shyness and social avoidance, but not unsociability, displayed a direct path to peer difficulties. This differentiation in peer acceptance or rejection may also be due to differences in peers' perceptions and beliefs about these different types of social withdrawal (Ding et al. 2015).

Coplan, Girardi, Findlay, and Frohlick, (2007) analyzed differences in perceptions, beliefs, and anticipated outcomes regarding shyness and unsociability, in a kindergarten and Grade 1 sample. Among the results, children understand that shy hypothetical peer would have a higher desire to play with others than the unsociable hypothetical peer, which suggests an understanding of different social motivations underpinnings withdrawal behavior. Children also expressed more sympathy and liking for the shy peer versus the unsociable peer. In a follow up study, Coplan, Zheng, Weeks, and Chen (2012) reported that Canadian and Chinese kindergarten and Grade 1 children were able to make differential inferences about the motivational and emotional underpinnings of shyness versus unsociability. For instance, in both countries, children

display more sympathy for shy peers showing to understand that unsociable children withdrawal because they are happy to play by themselves.

To date, in only one study, researchers examined young children's views about the three subtypes of social withdrawal, including social avoidance, in a Chinese sample of children from kindergarten to Grade 1. Results suggested that, children have quite sophisticated (i.e., differentiated) beliefs about these three forms of social withdrawal. For example, the hypothetical shy peer was deemed as having significantly greater social motivations than the unsociable peer, who in turn, was characterized as wanting to play with others significantly more than the avoidant peer. The unsociable peer was perceived as the happiest compared to others subtypes of social withdrawal (Ding et al., 2015). Children also reported that they expected the most negative outcomes (e.g., most negative impact in class, most negative relationship with teacher) for the avoidant peer compared to the unsociable and shy peers.

3. Aims

The main aim of this study was to explore preschool children's beliefs and perceptions about subtypes of social withdrawal (i.e., shyness, unsociability, social avoidance). To serve as a comparison and to follow protocols from previous studies (e.g., Coplan et al., 2007), vignettes depicting children engaged in aggressive and socially competent behaviors were included. This comparison is useful to better understand if the subtypes of social withdrawal may be considered more positive (or more negative) than aggressive and socially competent behaviors (Coplan et al., 2007; Ding et al., 2015). With the goal to expand upon the few previous studies in this area the age of the sample was extending including for the first-time preschool children aged from 2.5 to 4 years. Second aim of this study was to examine young children's social perceptions of the three subtypes

of social withdrawal (i.e., shyness, unsociability, and social avoidance) in a Western sample as well as in the Italian context. There are just a previous study conducted in China about children's beliefs about social avoidance (Ding et al., 2015). Therefore, the Italian context may be similar to other western cultures, and this study may help to better conceptualize the three subtypes of social withdrawal (i.e., shyness, unsociability, social avoidance) at a younger age.

Consistent with previous literature (e.g. Goossens et al., 2002), the hypothesis was that overall, socially withdrawn behaviors would be considered more negative than socially competent behaviors, but less negative than aggressive behaviors. In keeping with conceptualizations of the multiple forms of social withdrawal (Coplan et al., 2018), it was further hypothesized that children would perceive the hypothetical shy peer as having the lowest intentionality and highest social motivations, followed by the unsociable peer, and then the avoidant peer. It was expected that children would perceive the unsociable peer as the happiest. Moreover, it was hypothesized that the avoidant peer would be perceived as the most problematic subtype of social withdrawal (e.g., causing the most problems within the classroom context), confirming results of the Chinese study in the Italian educational context (Ding et al., 2015).

On a more exploratory basis, potential gender and age differences were explored. In accordance with gender stereotypes, boys would express more negative beliefs and emotions toward the socially withdrawn hypothetical peers than girls (Pronk & Zimmer-Gembeck, 2010). Previous studies have found that socially withdrawn behaviors are more often rewarded and accepted when displayed by girls, whereas boys' withdrawn behaviors are more discouraged and less acceptable (Doey, Coplan, & Kingsbury, 2014). In some of the previous vignette studies, gender differences did not

consistently emerge in response to the withdrawn vignettes (Coplan et al., 2007; Goossens et al., 2002). However, Coplan et al. (2012) found that in both Canadian and Chinese samples, hypothetical shy and unsociable boys were anticipated to cause more problems in class compared to girls. In addition, Chinese (but not Canadian children) rated shy and unsociable boys as less desirable playmates as compared to girls.

Finally, previous studies have only examined age-related differences in kindergarten and first grade children (Coplan et al., 2007; Coplan et al., 2012; Ding et al., 2015). Peer interactions are important for children from 3 to 6 years old (Chen, Chang, Liu, & He, 2008) and, for this reason, extending the study about perceptions of social withdrawal to a younger sample (i.e., preschoolers) may represent a novel contribution.

It was hypothesized that older children would have more sophisticated perceptions of hypothetical peers' social behaviors compared to younger children, given that older children display more advanced emotional and social competences (Denham et al., 2003; Eisenberg, Spinrad, & Knafo-Noam, 2015) and have better developed social perceptions (Denham et al., 2003; Pons, Harris & de Rosnay 2004). In other words, preschool Italian children would be able to differentiate among the three subtypes of hypothetical withdrawn behaviors in terms of their understanding of intentionality, social motivations, and emotions. It is important to investigate such age differences in perception and understanding as they may underlie developmental changes in peer responses to withdrawn behaviors.

4. Method

4.1 Participants

Participants were N = 212 Italian children (n = 102 girls) ranging in age from 2.55 to 6.37 years (M = 4.86, SD = 0.89). Children were recruited from 10 classes in three preschool and kindergarten centers in central Italy. The sample was composed of N = 117 (n = 55 girls) preschoolers (from 2.55 to 4.99 years; M = 4.18, SD = 0.55) and N = 95 (n = 47 girls) kindergartens (from 5.01 to 6.37 years; M = 5.70, SD= 0.37). Approximately 83% of participants were born in Italy, 5% in other European countries, and 4% in non-European countries (birthplace information was missing for 8% of children). Of the total sample, about 73% of the children spoke Italian as their primary language at home whereas 18% of the children spoke Italian as their second language at home (the language information was missing for 9% of the children). Of the latter children, 9% spoke another European language (e.g., English, Albanian) and 9% spoke a non-European language (e.g., Arab, Urdu) as their primary language at home. Children were from families of medium-low socioeconomic status. More specifically, about 6% of mothers and 7% of fathers achieved an elementary school education, 25% of mothers and 24% of fathers had attended middle school, 36% of mothers and 43% of fathers had attended high school, and 27% of mothers and 19% of fathers had a university degree or beyond (parental education was not available for 6% of mothers and 7% of fathers). Just over 84% of the parents were married or living together and 73% of children had siblings (this information was missing for the 6% of the families).

4.2 Procedure

Parent provided written informed consent (100% consent rate) and before to start the interview all children were asked for verbal consent. A female research

assistant, previously trained in interview techniques interviewed children independently at the preschool by female research assistants, previously trained in interview techniques. Children were interviewed in a 15 minute session and the interviews were conducted in a quiet location in the school. This study was approved by the Ethics Committee of the Department of Developmental and Social Psychology of Sapienza, University of Rome.

4.3 Measure

4.3.1 Children interview attributions for aggressive and withdrawn behaviors. The structured interview used in this study was an adapted version of the *Interview Attributions for Aggressive and Withdrawn Behaviors* (IAAWB, Graham & Hoehn, 1995) The IAAWB is appropriated for young children and make use of gender-matched vignettes accompanied by cartoon pictures. Originally created to assess children's belief and perception toward hypothetical aggressive vs. socially withdrawn peers, (Graham & Hoehn, 1995), was subsequently adapted to include a socially competent hypothetical peer (Goossens et al., 2002), shy and unsociable hypothetical peers (Coplan et al., 2007), and most recently, a socially avoidant hypothetical peer (Ding et al. 2015).

The interview was translated and back-translated from English into Italian to ensure accuracy. Children were read a brief description of each (same-sex) target hypothetical peer (i.e., shy, unsociable, avoidant, socially competent, aggressive) while being shown an accompanying cartoon picture. The complete English text and the Italian version of each vignette is displayed in Table 2.1 and the cartoon images are displayed in Figure 2.1.

The presentations of the vignettes were counterbalanced across participants using a Latin Square design to control for possible order effects. After having seen each

cartoon picture and listened the related vignette description children responded to a series of questions concerning their beliefs and attitudes in term of internal processes, social motivations, and underlying emotions to the hypothetical peers. To facilitate children and limit verbal responses a visual three-point scale (1 = *not at all*, 2 = *a little*, 3 = *a lot*) was used. Children responded by pointing to circles of increasing size. Indeed, using pictorial aids and limiting verbal responses are effective protocols for assisting young children to provide reliable and valid reports of internal constructs, including social motivations (Coplan et al., 2014; Ooi, Baldwin, Coplan, & Rose-Krasnor, 2018). Results from previous studies indicate a strong evidence of the reliability and validity of this assessment protocol in different cultures (Chinese, Canadian). Furthermore, behavioral descriptions in the interview, cartoon picture and limited verbal response young children understand the behavioral descriptions in the interview (Coplan et al., 2007; Ding et al., 2015).

Of interest for the current study, one set of questions assessed understanding of the hypothetical children's internal states, including three questions pertaining to *intentionality* ("Do you think ___wants to act that way?"), *social motivations* ("How much does ___ want to play with other kids?"), and *emotions* ("Is ___ happy?"). A single item also assessed perceived *intelligence* of the hypothetical peer ("Is ___ smart?"). Other questions concerned children's *affiliative preferences* toward the hypothetical peers (the mean among the following two questions: "How much would you like play with__?", "How much would you want to be ___friend?"; *rs* = .81, .76, .82, .72, .66, $p < .01$, for aggressive, shy, avoidant, unsociable, socially competent hypothetical peers, respectively), the *social standing* of the hypothetical peer ("Would other kids in your class want to play with ___?"), anticipated the *negative impact* of social behaviors

within the classroom ("Do kids who act like ___ cause a problem in your class?"), *relationships with the teacher* ('Does the teacher like ___ ?'), and children's *sympathy* toward the hypothetical peer ("How much do you feel sorry for ___?").

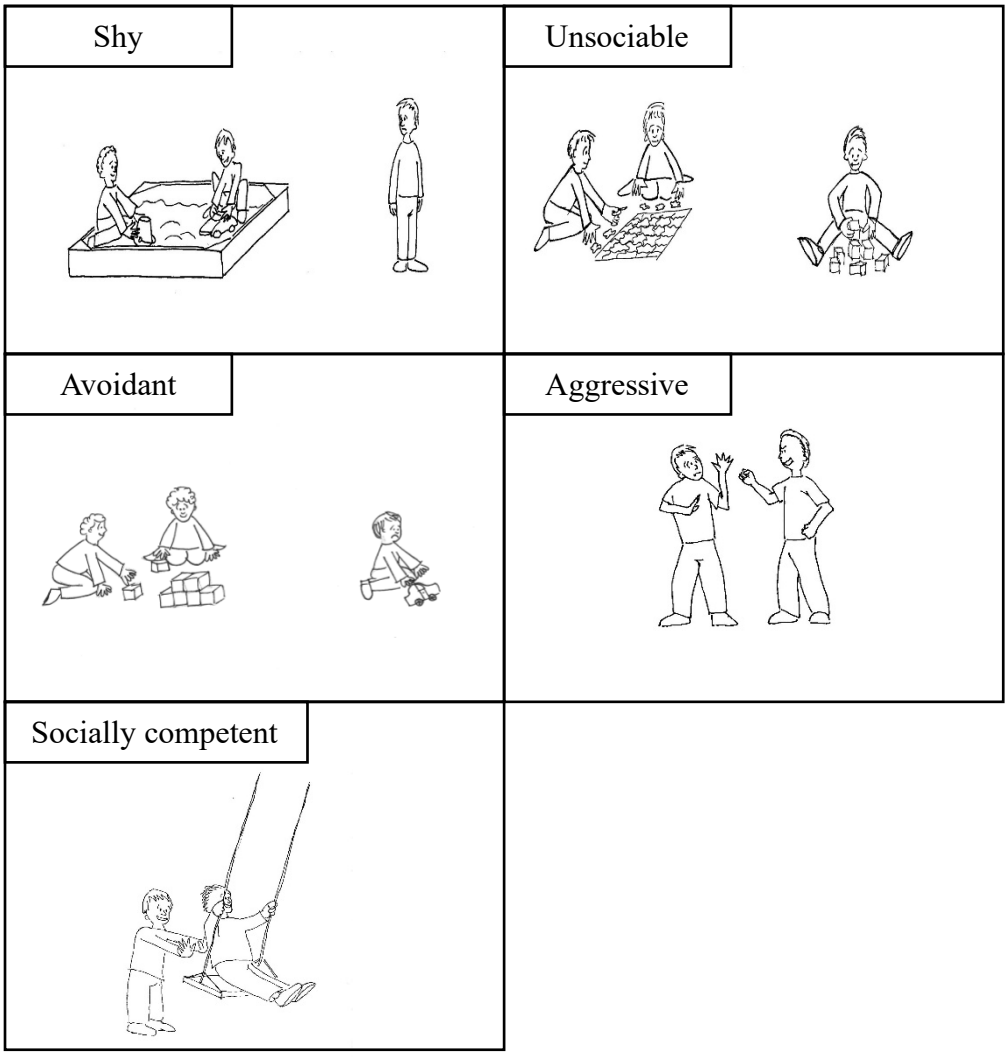
4.4 Overview of Analyses

After checking data, the skewness and kurtosis indices were judged sufficient to meet the assumptions for the analysis (Curran, West, & Finch, 1996). A series of mixed repeated-measures ANOVAs was conducted, with Vignette (socially competent, aggressive, shy, unsociable, avoidant hypothetical peers) as a within-subject variable and child Age (younger children from 2.55 to 4.99 years vs. older children from 5.01 to 6.37 years) and Gender (boys vs. girls) as between-subject variables. The Bonferroni post hoc analysis was used to test for specific vignette differences.

Table 2.1. *Italian and English text of Hypothetical Vignettes (Girls' Version)*

Shy This is Giulia. Giulia is afraid to talk to other kids. When other kids are playing, she just watches them. *Timido* Questa è Giulia. Giulia ha paura di parlare con gli altri bambini. Quando gli altri bambini giocano lei non gioca con loro e li guarda soltanto.
Unsociable This is Michela. Michela likes to play on her own. When other kids playing, she plays by herself. *Scarsamente Socievole* Questa è Michela. A Michela piace giocare per conto suo. Quando gli altri bambini giocano lei preferisce giocare da sola
Avoidant This is Francesca. Francesca does not like playing with other kids. She plays by himself even when other kids ask her to play with them. *Socialmente Evitante* Questa è Francesca. A Francesca non piace giocare con gli altri bambini. Anche quando gli altri bambini le chiedono di giocare con loro lei (non vuole e) gioca per conto suo/da sola
Aggressive This is Tina. Tina gets angry a lot and starts fights. When she plays with other kids, she bosses them around and always wants her own way. *Aggressivo* Questa è Tina. Tina si arrabbia spesso e litiga con gli altri. Quando gioca con gli altri bambini fa la cattiva e vuole fare sempre quello che vuole lei
Socially competent This is Alessia. Everyone thinks Alessia is really nice. When she plays with other kids, they have lots of fun. *Socialmente Competente* Questa è Alessia. Tutti pensano che Alessia sia molto gentile. Quando lei gioca con gli altri bambini loro si divertono molto

Figure 2.1. *Cartoon Images (Boys' Version) Accompanying the Vignettes*



5. Results

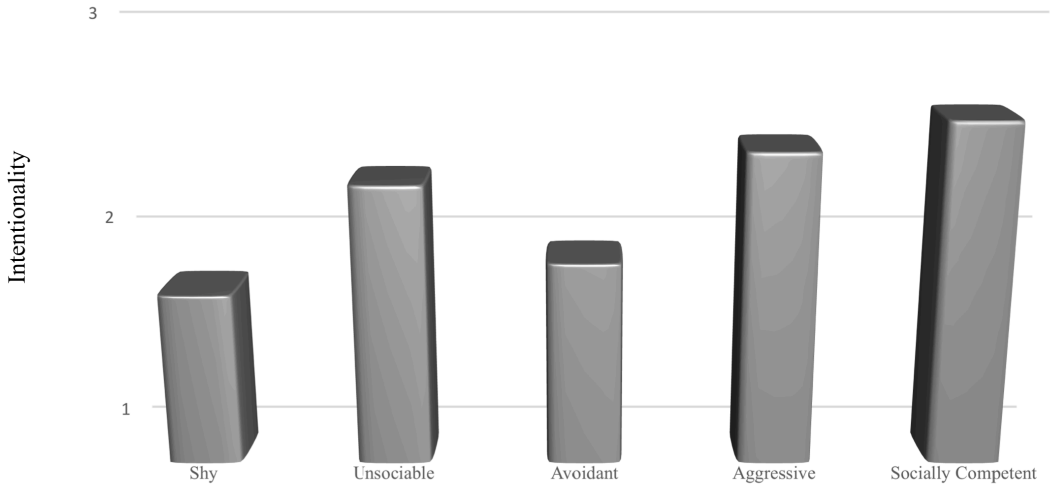
5.1 ANOVA

5.1.1 Intentionality

For the question concerning beliefs about the children's perceived *intentionality* of the hypothetical peers (i.e., acts that way), results showed a significant main effect of Vignette, $F(4, 812) = 42.229$, $p = .001$, $\eta^2 = .17$, and a significant Gender X Vignette interaction, $F(4, 812) = 2.744$, $p = .03$, $\eta^2 = .01$. There were no significant main effects of Gender, $F(1, 203) = 2.080$, $p = .15$, $\eta^2 = .01$, and Age, $F(1, 203) = 0.060$, $p = .81$, $\eta^2 = .001$, and no significant Vignette X Age interaction, $F(4, 812) = 0.424$, $p = .79$, $\eta^2 = .01$.

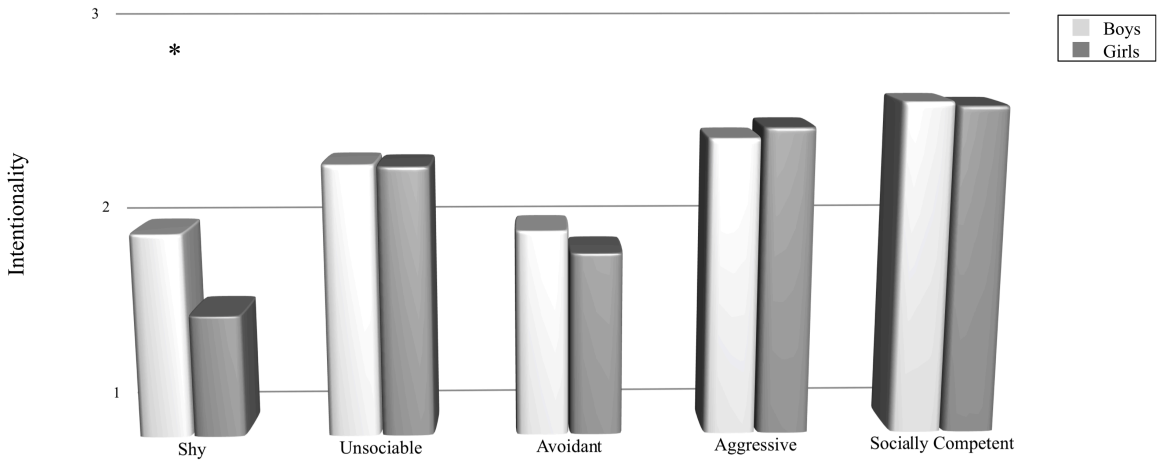
For the main effect of Vignette, the hypothetical aggressive and socially competent peers were perceived as the most intentional. However, significant differences were also found among the three subtypes of social withdrawal, with the unsociable peer described as the next most intentional, followed by the avoidant peer, and then the shy peer (see Table 2.2; see Figure 2.4a).

Figure 2.4a. Main Effect of Intentionality



For the Vignette X Gender interaction, results from follow-up *post hoc* analyses revealed significant differences among boys and girls for the vignette of the hypothetical shy peer. Specifically, boys ($M = 2.00$, $SD = 0.96$) rated the shy hypothetical peer as more intentional compared to the ratings completed by girls ($M = 1.60$, $SD = 0.84$). In contrast, in the other vignettes, no other gender differences emerged (see Figure 2.2a).

Figure 2.2a – Post Hoc Test Means for Intentionality



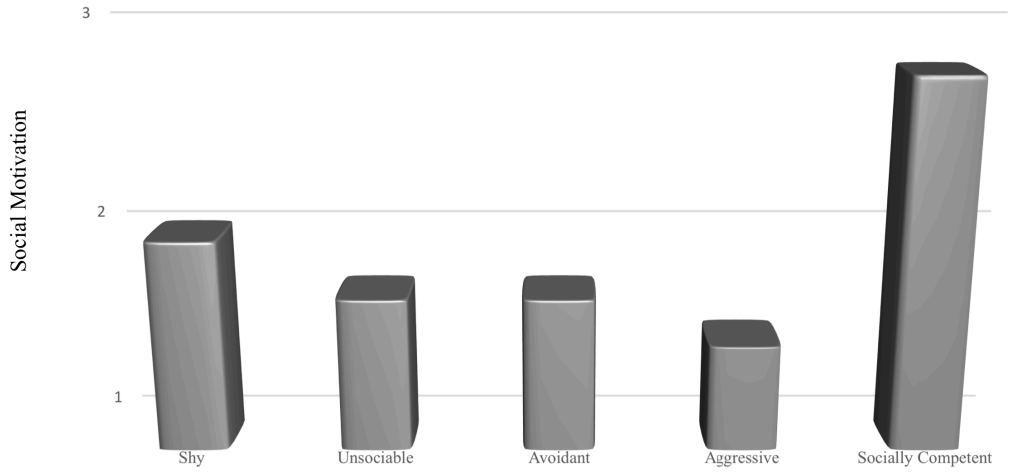
5.1.2 Social Motivations

For *social motivations* (i.e., wants to play with others), results indicated a significant main effect of the Vignette, $F(4, 808) = 100.860$, $p = .001$, $\eta^2 = .33$, and a significant main effect of Gender, $F(1, 202) = 4.630$, $p = .03$, $\eta^2 = .02$. There was no significant main effect of Age, $F(1, 202) = .481$, $p = .49$, $\eta^2 = .01$, Vignette X Gender interaction, $F(4, 808) = 0.929$, $p = .45$, $\eta^2 = .01$, nor Vignette X Age interaction, $F(4, 808) = 0.262$, $p = .90$, $\eta^2 = .01$.

Regarding the main effect of the vignette, results revealed that the socially competent peer was perceived as wanting to play with others significantly more than all

other children. Interestingly, the shy peer was also perceived as having significantly higher social motivations than the avoidant and unsociable peers (who did not differ significantly). The aggressive peer was perceived as the least wanting to play with others (see Table 2.2; see Figure 2.4b). For the main effect of child gender, results indicated that overall, girls rated hypothetical female peers as displaying higher social motivations (M = 2.04, SD = 0.49) than boys did for the hypothetical male peers (M = 1.90, SD = 0.48).

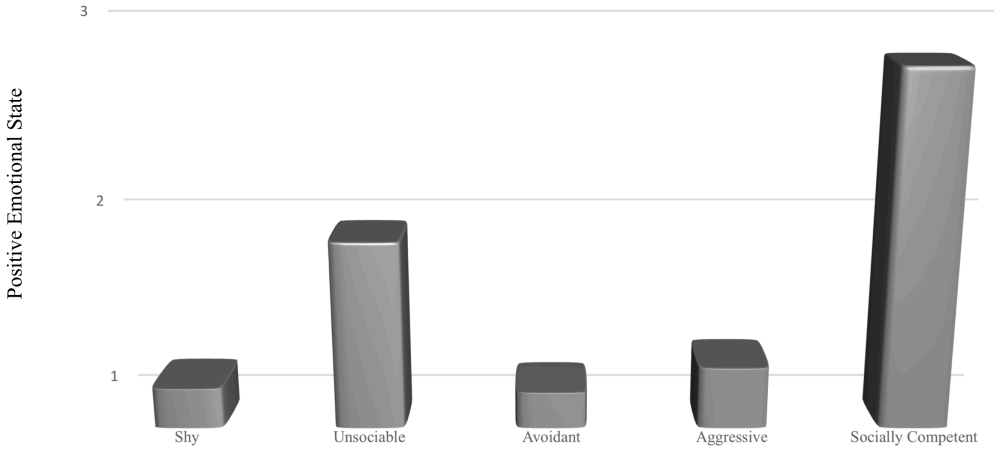
Figure 2.4b. Main Effect of Social Motivation



5.1.3 Positive Emotional States

For children's perceptions of the hypothetical peers' *positive emotional state* (i.e., is happy), results revealed only a significant main effect of Vignette, $F(4, 812) = 284.155$, $p = .001$, $\eta^2 = .58$. There was no significant main effect of Gender, $F(1, 203) = 0.216$, $p = .64$, $\eta^2 = .01$, or Vignette X Gender interaction, $F(4, 812) = 0.479$, $p = .75$, $\eta^2 = .01$, main effect of Age $F(1, 203) = 0.316$, $p = .57$, $\eta^2 = .01$, or Vignette X Age interaction, $F(4, 812) = 1.214$, $p = .30$, $\eta^2 = .01$. Children rated the socially competent peer as feeling significantly happier than the other hypothetical peers, followed by the unsociable, aggressive, shy, and avoidant peers. The shy and avoidant peers did not differ among them in terms of children's perception of positive emotional state (see Table 2.2; see Figure 2.4c).

Figure 2.4c. Main Effect of Positive Emotional State



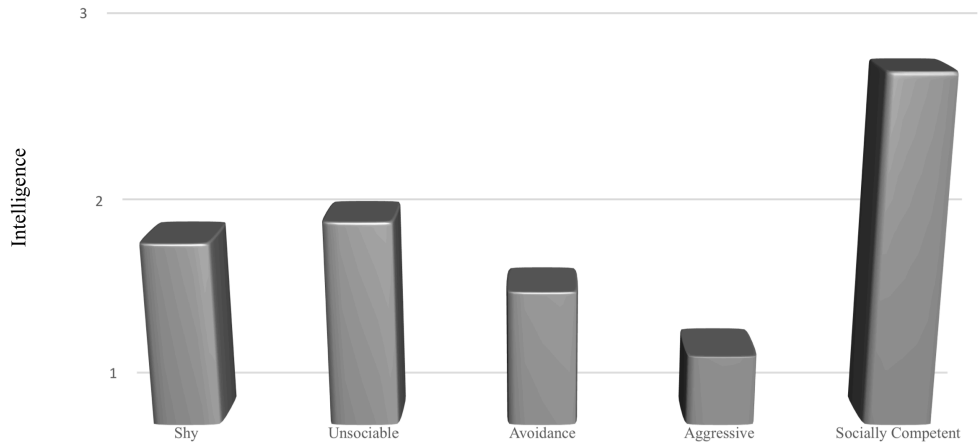
5.1.4 Perceived Intelligence

For children evaluation of *intelligence* of the hypothetical peers (i.e., is smart), there was a significant main effect of Vignette, $F(4, 812) = 127.213$, $p = .001$, $\eta^2 = .39$, and a significant main effect of Gender, $F(1, 203) = 4.122$, $p = .04$, $\eta^2 = .02$. There was no significant Vignette X Gender interaction, $F(4, 812) = 1.441$, $p = .22$, $\eta^2 = .01$, main effect of Age, $F(1, 203) = 0.975$, $p = .33$, $\eta^2 = .01$, or Age X Vignette interaction, $F(4, 812) = 2.001$, $p = .09$, $\eta^2 = .01$.

Overall, children thought that the socially competent peer was the smartest, followed by the unsociable peer and the shy peer (who did not differ from each other), then the avoidant peer, and the aggressive peer (rated as the least intelligent) (see Table 2.2; see also Figure 2.4d). In addition, with regards to the main effect of child gender,

results revealed that girls were perceived as smarter (M = 2.05, SD = 0.50) than boys (M = 1.91, SD = 0.51).

Figure 2.4d. Main Effect of Intelligence



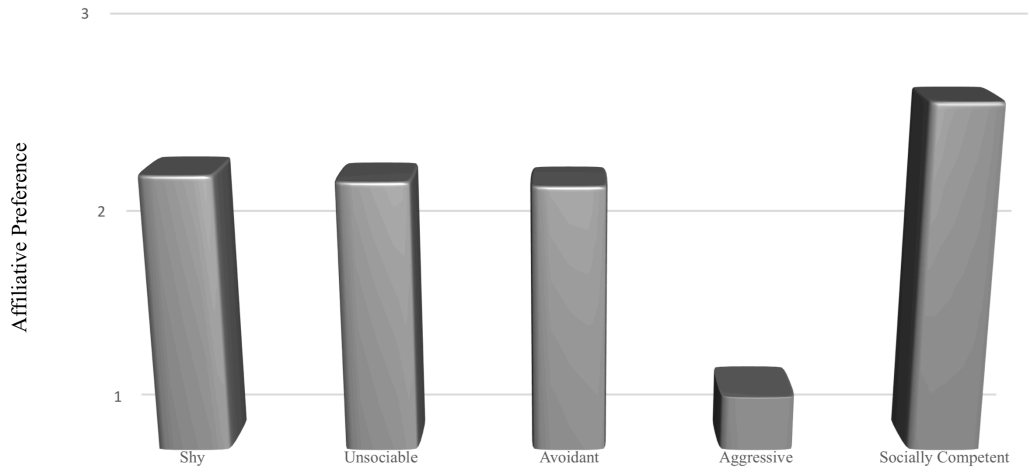
5.1.5 Affiliative Preference

For children's *affiliative preference* toward hypothetical peers (i.e., want to play with child, wants to be a friend), results again indicated a main effect for Vignette, $F(4, 812) = 173.873$, $p = .001$, $\eta^2 = .46$, as well as a significant Vignette X Gender interaction, $F(4, 812) = 3.150$, $p = .01$, $\eta^2 = .02$, and Vignette X Age interaction, $F(4, 812) = 3.212$, $p = .01$, $\eta^2 = .02$. Significant main effects of Gender, $F(1, 203) = 6.926$, $p = .01$, $\eta^2 = .03$, and Age, $F(1, 203) = 9.279$, $p = .01$, $\eta^2 = .04$, were also found.

Not surprisingly, children reported less affiliative preferences for the hypothetical aggressive peer compared to the other hypothetical peers and the highest

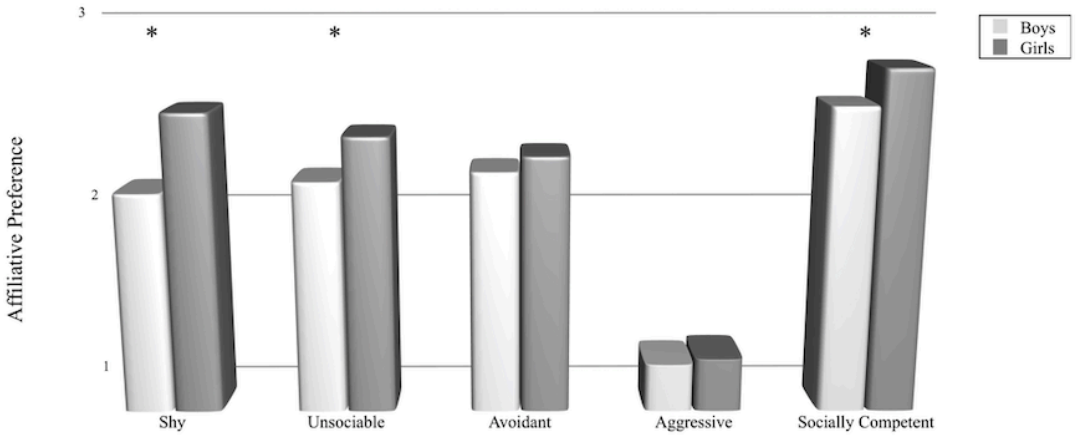
affiliative preference for the socially competent peer. Somewhat surprisingly, no significant differences emerged among the three hypothetical social withdrawn peers (see Table 2.2; see Figure 2.4e).

Figure 2.4e. Main Effect of Affiliative Preference



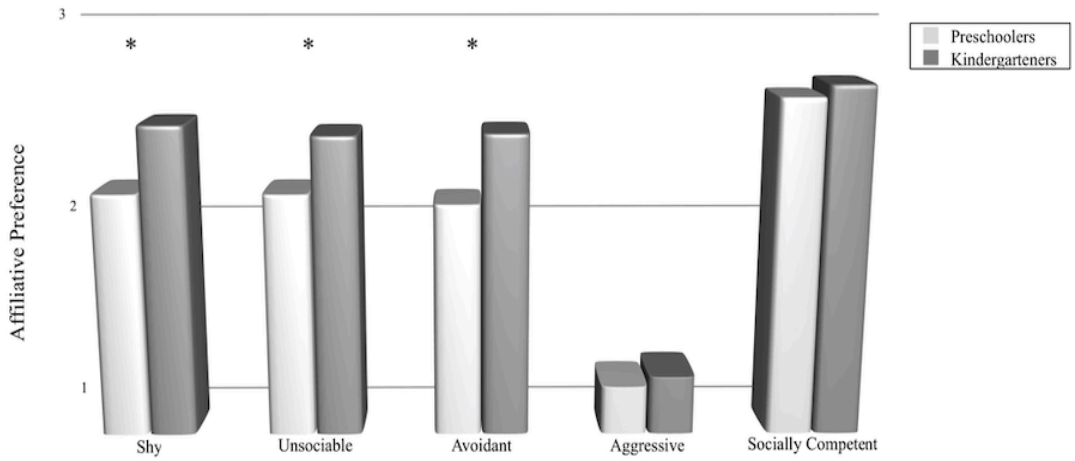
For the main effect of gender, girls reported to have higher level of affiliative preference than boys. For the Vignette X Gender interaction (see Figure 2.2b) follow-up *post hoc* analysis revealed that girls were more prone to play with the socially competent (M = 2.78, SD = 0.46), the shy (M = 2.56, SD = 0.67), and the unsociable (M = 2.44, SD = 0.74) hypothetical peers compared to boys ($M_{\text{socially competent}}$ = 2.59, SD = 0.69; M_{shy} = 2.15, SD = 0.88; $M_{\text{unsociable}}$ = 2.22, SD = 0.84). In contrast, no significant gender differences were found among affiliative preference for the socially avoidant and aggressive children.

Figure 2.2b – Post Hoc Test Means for Affiliative Preference



Regarding the main effect of age, older children displayed a higher level of affiliative preference compared to younger. For the Age x Vignette interaction, follow-up post hoc analysis showed that older children (M_{shy} = 2.53, SD = 0.74; $M_{avoidant}$ = 2.48, SD = 0.76; $M_{unsociable}$ = 2.48, SD = 0.77) displayed a higher affiliative preference for the three subtypes of social withdrawal compared to younger children(M_{shy} = 2.20, SD = 0.84; $M_{avoidant}$ = 2.14, SD = 0.85; $M_{unsociable}$ = 2.19, SD = 0.80) (Figure 2.3a).

Figure 2.3a – Post Hoc Test Means for Affiliative Preference

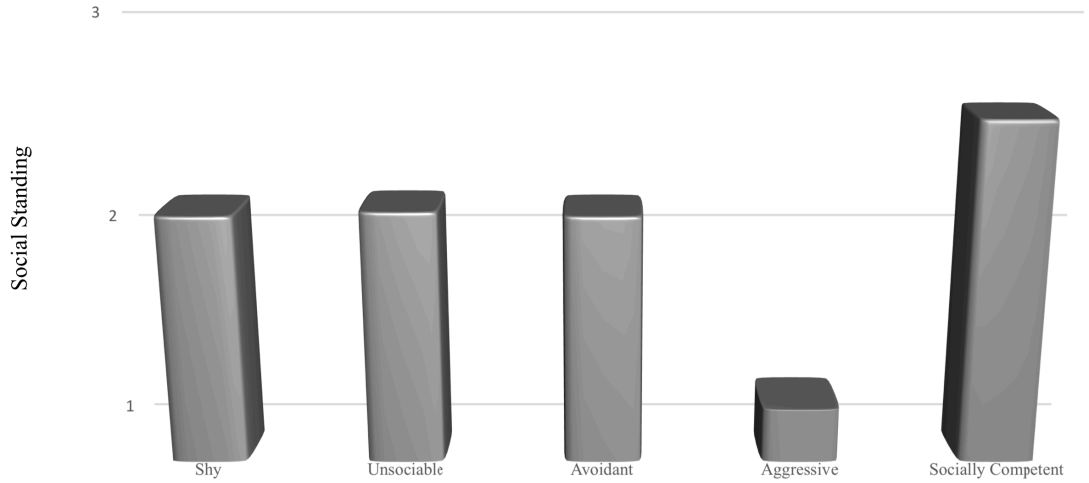


5.1.6 Social Standing

For *social standing* (i.e., others want to play with the hypothetical child), results indicated main effects for Vignette, $F(4, 812) = 111.859$, $p = .001$, $\eta^2 = .36$, and Gender, $F(1, 203) = 9.336$, $p = .01$, $\eta^2 = .04$, as well as a significant Vignettes X Gender interaction, $F(4, 812) = 2.868$, $p = .02$, $\eta^2 = .01$. There was no significant main effect of Age, $F(1, 203) = 2.918$, $p = .09$, $\eta^2 = .01$, or Vignette X Age interaction, $F(4, 812) = 2.249$, $p = .06$, $\eta^2 = .01$.

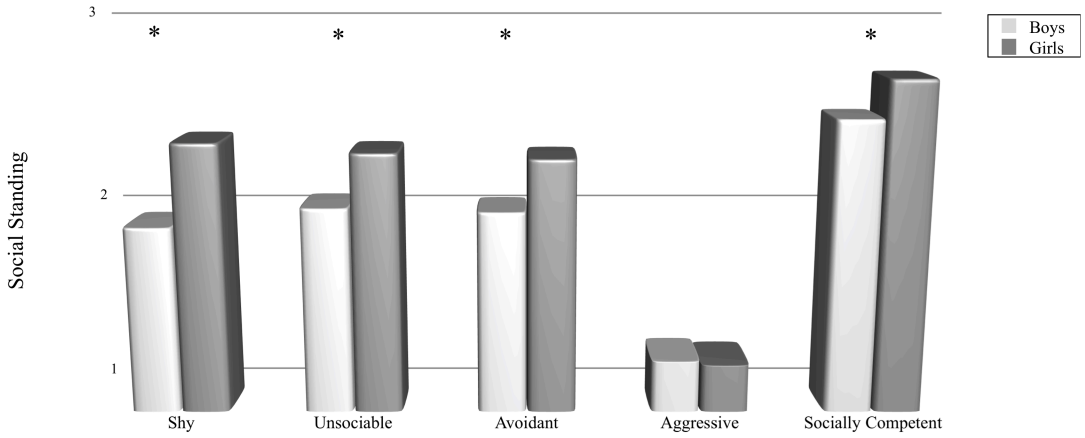
Overall, children displayed the highest social standing for the socially competent hypothetical peer and lowest for the aggressive peer, whereas the three subtypes of social withdrawal did not differ significantly among each other (see Table 2.2; see also Figure 2.4f).

Figure 2.4f. Main Effect of Social Standing



For the Vignette X Gender interaction (Figure 2.2c), follow-up *post hoc* analyses indicated differences between girls and boys for all the vignettes, except for the aggressive peer. Specifically, girls and boys did not differ in the social standing evaluation of the hypothetical aggressive peer, although girls reported that the socially competent (M = 2.72, SD = 0.57), unsociable (M = 2.35, SD = 0.85), shy (M = 2.40, SD = 0.83), and avoidant (M = 2.32, SD = 0.85) peers may appear as more attractive playmates for other children than what was reported by boys ($M_{\text{socially competent}}$ = 2.52, SD = 0.75; $M_{\text{unsociable}}$ = 2.07, SD = 0.97; M_{shy} = 1.97, SD = 0.93; M_{avoidant} = 2.05, SD = 0.94).

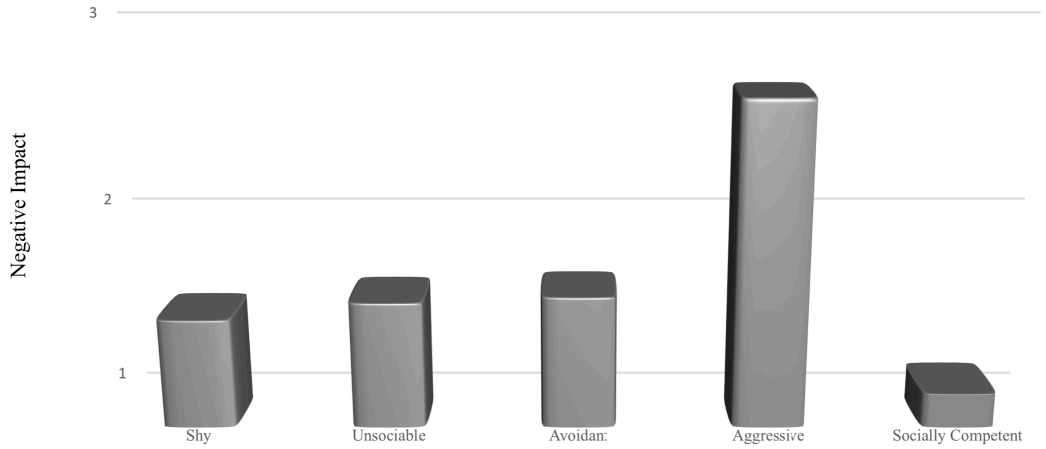
Figure 2.2c – Post Hoc Test Means for Social Standing



5.1.7 Negative Impact

For the potential *negative impact* perceived by children (i.e., cause a problem in class), results indicated only a significant main effect for Vignette, $F(4, 812) = 157.793$, $p = .001$, $\eta^2 = .44$. There was no significant main effect of Gender, $F(1, 203) = 0.086$, $p = .77$, $\eta^2 = .01$, or Age , $F(1, 203) = 1.681$, $p = .20$, $\eta^2 = .01$, and no significant Vignette X Gender interaction, $F(4, 812) = .296$, $p = .88$, $\eta^2 = .01$, or Vignette X Age interaction, $F(4, 812) = 1.858$, $p = .12$, $\eta^2 = .01$. Overall, children perceived the highest negative impact for the aggressive peer and the least negative impact for the socially competent peer. The three subtypes did not differ among them (see Table 2.2; see also Figure 2.4g).

Figure 2.4g. Main Effect of Negative Impact



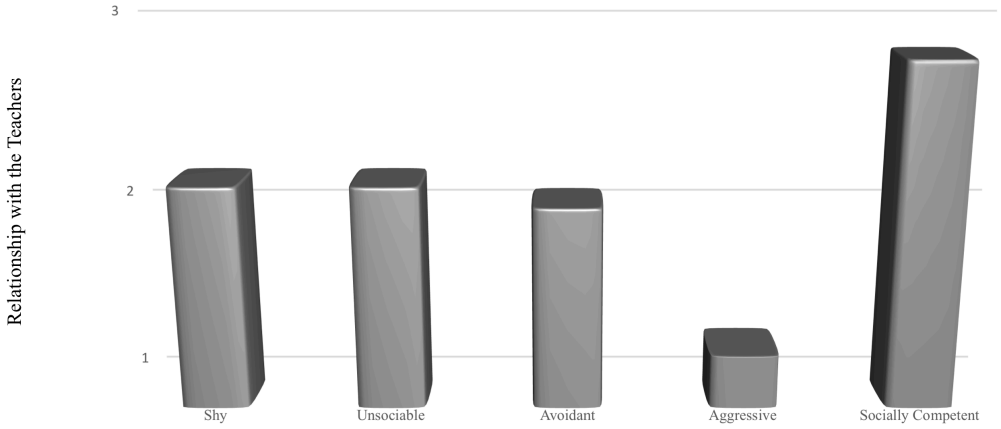
5.1.8 Relationship with Teacher

For children's perception about *relationships with the teacher*, results indicated significant main effects of Vignette, $F(4, 812) = 138.547$, $p = .001$, $\eta^2 = .41$, and Gender, $F(1, 203) = 3.917$, $p = .05$ $\eta^2 = .02$, as well as a significant Vignette X Age interaction, $F(4, 812) = 4.820$, $p = .001$, $\eta^2 = .02$. There was no significant main effect of Age, $F(1, 203) = 2.182$, $p = .14$, $\eta^2 = .01$, or Vignette X Gender interaction, $F(4, 812) = 0.570$, $p = .69$, $\eta^2 = .01$.

For the main effect of Vignette, children anticipated that the socially competent peer would form the closest relationship with the teacher, followed by the shy and unsociable peers (who did not differ significantly from one another, then the avoidant peer, and finally the aggressive peer; Table 2.2; see also Figure 2.4h). For the main effect of Gender, results revealed higher scores in girls ($M = 2.20$, $SD = 0.48$) compared to boys ($M = 2.06$, $SD = 0.51$). For the Age X Vignette interaction (see Figure 2.3b), follow-up

post hoc analyses indicated differences for the aggressive, shy, and socially competent peers. Older children ($M = 1.19$, $SD = 0.53$) believed that teachers may like the aggressive peer less than what preschool children ($M = 1.38$, $SD = 0.77$) may believe and that teachers may like the shy ($M = 2.41$, $SD = 0.81$) and socially competent ($M = 2.94$, $SD = 0.35$) peers more than what younger children believe ($M_{shy} = 2.03$, $SD = 0.91$; $M_{socially\ competent} = 2.77$, $SD = 0.55$).

Figure 2.4h. Main Effect of Relationship with the Teacher



5.1.9 Sympathy

For children's *sympathy* toward the hypothetical peers (i.e., feel sorry for child), results revealed only a significant main effect of Vignette, $F(4, 812) = 14.913$, $p = .001$, $\eta^2 = .07$. There were no significant main effect of Gender, $F(1, 203) = 0.040$, $p = .84$, $\eta^2 = .01$, and Age, $F(1, 203) = 2.523$, $p = .11$, $\eta^2 = .01$, and no significant Vignette X Gender interaction, $F(4, 812) = 0.810$, $p = .52$, $\eta^2 = .01$, or Vignette X Age interaction,

$F(4, 812) = 1.979$, $p = .10$, $\eta^2 = .01$. Overall, children displayed less sympathy toward the aggressive peer compared to the shy and avoidant peers. Interestingly, children displayed more sympathy toward the shy and the avoidant peers compared to the unsociable and socially competent peers (see Table 2.2; see also Figure 2.4i).

Figure 2.4i. Main Effect of Sympathy

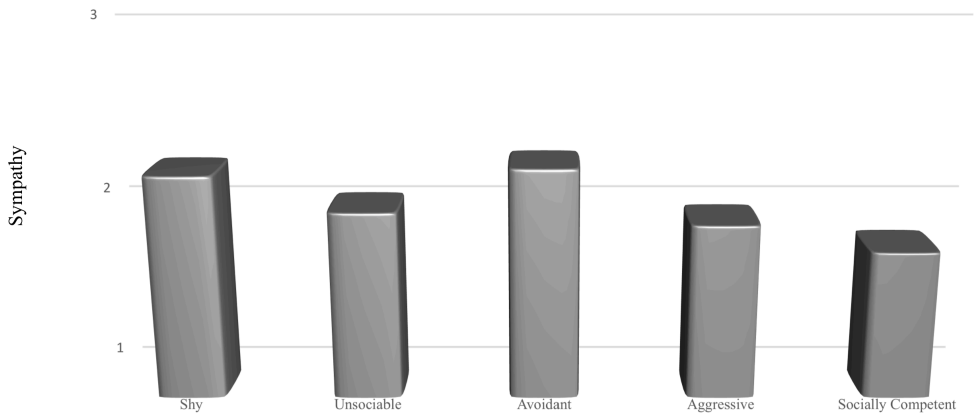


Table 2.2

Means (SDs) of Child Interview Responses to Vignettes

	Shy		Unsociable		Avoidant		Aggressive		Socially Competent	
Interview Responses	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Intentionality	1.81_{a}	0.92	2.32_{c}	0.86	1.96_{b}	0.91	2.47_{d}	0.82	2.61_{d}	0.73
Social Motivation	2.03_{c}	0.90	1.75_{b}	0.85	1.75_{b}	0.87	1.52_{a}	0.81	2.80_{d}	0.51
Positive emotional state	1.21_{a}	0.56	1.97_{c}	0.92	1.19_{a}	0.54	1.32_{b}	0.69	2.83_{d}	0.49
Intelligence	1.96_{c}	0.91	2.07_{c}	0.93	1.71_{b}	0.87	1.37_{a}	0.73	2.81_{d}	0.49
Affiliative Preference	2.35_{b}	0.81	2.32_{b}	0.80	2.30_{b}	0.83	1.27_{a}	0.61	2.69_{c}	0.60
Social Standing	2.18_{b}	0.90	2.20_{b}	0.92	2.18_{b}	0.90	1.26_{a}	0.62	2.62_{c}	0.67
Negative Impact	1.57_{b}	0.83	1.66_{b}	0.84	1.69_{b}	0.85	2.69_{c}	0.65	1.18_{a}	0.52
Relationship with the Teacher	2.20_{c}	0.88	2.20_{c}	0.91	2.09_{b}	0.92	1.29_{a}	0.68	2.85_{d}	0.48
Sympathy	2.25_{c}	0.85	2.05_{b}	0.87	2.29_{c}	0.83	1.98_{a}	0.90	1.83_{b}	0.90

Note. All responses were measured on a three-point scale. Means with different subscripts differ significantly at $p < .05$.

6. Discussion

The main aim of the present study was to explore preschool Italian children's responses to hypothetical peers' behaviors, investigating their perceptions and beliefs about the three subtypes of social withdraw (i.e., shyness, unsociability, social avoidance)., and, for comparison purposes, socially competent and aggressive behaviors. This results replicated and extended previous findings (e.g., Coplan et al., 2007; Coplan et al., 2012; Ding et al., 2015), demonstrating that Italian children from the age of 3 to 6 years old were able to differentiate among shyness, unsociability and social avoidance in terms of beliefs, social motivations, and emotions. Overall, the most problematic subtype of social withdrawal resulted to be social avoidance. In addition, unsociability was comparatively perceived as a quite benign subtype of social withdrawal and children seemed to have a sophisticated understanding of shy children's internal conflict between social approach and social avoidance motivations. These findings suggest that young children may have a sophisticated perception of the motivations and emotions that underlie different social withdrawal behaviors, appropriately interpreting the cues provided in the vignettes.

6.1 General Beliefs about Social Withdrawal

General believes about social withdrawal compared to aggression and social competent withdrawal were first analyzed. This comparison was useful to better understand if the subtypes of social withdrawal may be considered more positive or more negative than aggressive and socially competent behaviors (Coplan et al., 2007; Ding et al., 2015). Overall results suggested that socially withdrawn behavior may be considered by young children as a deviant form of social behavior, considered more negatively than

socially competent behavior, but that socially withdrawn children may be at less risk of negative reactions than aggressive peers.

Specifically, preschool children seem to consider social withdrawal behaviors as less deviant compared to the hypothetical aggressive peer. Aggressive behavior was considered more negative, more intentional than withdrawal behavior elicits lowest level of sympathy. The aggressive hypothetical peer was considered as being the least liked by other children, having more problems at school (i.e. negative relationship with teachers, causing the most problems in the classroom, least intelligent), and also perceived as less motivated to play with others.

These results are consistent with previous literature considering aggression behaviors as a trait of maladjustment and a major risk factor for social, emotional, and academic outcomes in early childhood (Coie & Dodge, 1998; Crick, Ostrov, & Werner, 2006). Moreover, results confirm previous findings suggesting that children children rate peers more negatively when individuals display intentional deviant behaviors because they seem to be more responsible of their conducts (Giles & Heyman, 2004; Goossens et al., 2002). For instance, in a sample of first and second grade children, Goossens et al. (2002) found that the aggressive peers were perceived as more responsible for their behaviors and less desirable as friends compared to prosocial and socially withdrawn peers. Therefore, it is possible that aggressive peers may elicit more negative reactions, less prosocial responses, and receive lower levels of sympathy from others (Graham & Hoehn, 1995; Juvonen, 1991).

In contrast, social withdrawal has been perceived more deviant compared to socially competent behaviors. Indeed, the socially competent hypothetical peer was perceived as the happiest and the best adjusted at school (i.e. smartest, and most liked by

teachers). These results also support previous findings indicating that young children rated and reacted positively to prosocial behavior which is associated to positive outcomes in early childhood (Eisenberg et al., 2015). However, although results suggested that socially withdrawn behavior may be considered by young children as a deviant form of social behavior (i.e., it is considered more negatively than socially competent behavior), socially withdrawn children may be at less risk of negative reactions than aggressive peers.

6.2 Beliefs about Shyness, Unsociability, and Social Avoidance

Social withdrawal has been widely recognized as a heterogeneous and multidimensional construct (Coplan et al., 2015) and for these reason one of the novel contributions of the present study was to explore, for the first time in a Western sample, preschool children's ability to differentiate underlying motivations and emotions among the three subtypes of social withdrawal, shyness, unsociability, and , social avoidance . Results extend previous findings (Coplan et al., 2007; Coplan et al., 2012; Ding et al., 2015), suggesting that even young children perceived shyness, unsociability, and social avoidance as distinct forms of withdrawn behaviors. Moreover, this study provides a previous evidence that preschool children have a rather sophisticated comprehension of the social approach and avoidance motivations (i.e. Asendorpf's (1990) social withdrawal approach-avoidance model) that may underlie shyness, unsociability and social avoidance. Therefore, the hypothetical shy child was perceived as having higher desire to play with other children (i.e., social motivation) compared the unsociable and avoidant children. Furthermore, shy children's withdrawn behaviors were seen as less intentional (i.e., "… wants to act that way") than the other hypothetical withdrawn children. Young children may had at least an implicit understanding of the approach-avoidance conflict

experienced by shy children, who desire to engage with peers but withdrawn because of feelings of anxiety, fear, whereas unsociable and avoidant children *want* to spend time alone (albeit for different reasons), and in this sense their withdrawal behaviors are more intentional (Asendorpf, 1990; Coplan et al., 2015). Moreover, young children were showed at least a primary understanding that unsociable peers are content to play alone and are not negatively bothered or affected in social settings indeed the hypothetical unsociable child was rated as happier than the shy and avoidant child (Ding et al., 2015). Finally, consistent with the notion that unsociable children are not experiencing difficulties when playing alone, and that shy and avoidance children may experiencing negative feelings, preschool children reported that they would feel more sympathetic toward the shy and the avoidant peers as compared to the unsociable peer.

Taken together, this findings could be interpreted as support for the notion that children hold the following distinctive beliefs about different forms of social withdrawal, recognizing associated differences: (1) shy children want to play with others, but play alone instead – and are not happy to be alone; (2) unsociable children want to – are happy to - play alone; and (3) socially avoidant children want to play alone, but are not happy to do so.

6.3 Implications of social withdrawal

Having at least tentatively, established that young children differentiate among these three subtypes of social withdrawal – next aim of the study was to verify if children anticipated different outcomes for hypothetical children displaying these different withdrawn behaviors. These hypotheses received mixed support.

Researchers suggest that socially avoidant children may to be particularly at risk for negative outcomes in childhood (Coplan et al., 2013; Coplan et al., 2018). The

findings of this study suggest that young children appear to have at least an implicit awareness of this. Social avoidant hypothetical peer was considered the most problematic form of social withdrawn. For example, as compared to the hypothetical shy and unsociable peers, the avoidant child was characterized as less intelligent, anticipated as having a poorer relationship with the teacher. These findings represent a novel contribution to our understanding of the meaning and implications of social avoidance in a Western culture. Similar results were found in a Chinese educational context, where children generally perceived social avoidance as a particularly problematic social behavior (Ding et al., 2015).

Results in the peer domain were less clear. Therefore, although there was some differentiation in terms of outcomes in the academic domain (e.g., intelligence, relationship with teachers), children anticipated similar outcomes in the peer domain for all three types of socially withdrawn children and no significant differences in affiliative preference or anticipated social standing emerged among the hypothetical shy, unsociable, and avoidant peers. Specifically, children reported wanting to play more with (i.e., higher affiliative preference) - and thought others would want to play more with (i.e., higher social standing) - the socially competent peer compared to all three socially withdrawn peers. They also believed that the aggressive child would have the worst social outcomes. This finding contrasts with previous results of lower affiliative preference for unsociable compared to shy peers (Coplan et al., 2007; Coplan et al., 2012). For instance, among Chinese children lower level of friendship preferences toward the social avoidant peer were founded (Ding et al., 2015). Overall, solitary activities during preschool may be considered by children as more normative, and social withdrawal less problematic

during preschool age, and more benign than in Grade 1 (see Coplan et al., 2018 for a recent review).

6.4 Gender and age differences

Secondary goal of the study was to explore gender and age differences. Should be clarified that, it is not possible to discern if gender differences are due to the gender of the participating child or the gender of the hypothetical child depicted in the vignettes due to the fact that vignettes were gender matched. Therefore, gender differences should be interpreted with caution because children's responses may have differed if vignettes also depicted mixed-sex social exchanges. Notwithstanding, some gender differences emerged. For instance, girls wanted to play with – and anticipated more positive social outcomes - for socially withdrawn girls compared to boys' beliefs about socially withdrawn boys. Socially withdrawn behaviors may be considered more problematic in boys because of a violation of gender stereotypes about male dominance assertion. For this reason, may evoke more negative responses when displayed by boys than girls. (Doey et al., 2014). Gender differences were not found among the different subtypes of social withdrawal. It may be that the "reasons" why children display solitary behaviors in the presence of peers is less influential than the solitary behaviors themselves (Coplan et al., 2013).

Somewhat surprisingly, older children reported a *higher* affiliative preference for all three subtypes of social withdrawal compared to younger children. Indeed, given rising norms and expectations regarding peer interactions across the childhood years (Coplan et al., 2018) – we might have expected older children to have a more negative view of socially withdrawn peers than younger children. However, a closer inspection of Figure 2.2b suggests that older children are generally reporting higher

affiliative preference for all of the hypothetical peers with the exception of the aggressive child. Older children similarly reported that the aggressive child would have a worse relationship with the teacher than younger children. There is evidence to suggest that aggressive behaviors are particularly salient (perhaps because of their overt nature) for younger children (Bukowski, 1990; Coplan et al., 2007; Younger et al., 1986). Notwithstanding, future research is required to more closely investigate what appears to be subtle developmental differences in how younger and older children perceive and understand these behaviors.

7. Strengths, limitations, and future directions

The present study has a number of limitations. First, data were cross-sectional, and this did not allow to infer possible causal relations among the study variables. Future studies could examine the children's perceptions, beliefs and responses to different subtypes of social withdrawal over time using longitudinal samples.

The second limitation concerns a better understanding about unsociability. Unsociability resulted to be a complex subtype of social withdrawal (Coplan et al, 2007; Ding et al., 2015). Unsociable peers may be perceived as happy to play alone (and the happiest compared to both shy and avoidant peers), at the same time unsociable children may also be perceived more negatively as aloof and distant. It would be useful to ask additional questions to better investigate the different aspects of unsociability in future study.

Third, it would be interesting to conduct cross-cultural comparative studies in order to understand if children's perceptions and believes about the different subtypes of social withdrawal may vary in terms of cultural context.

Fourth, whereas children's perception of social withdrawal could differ in real-life situations future studies may use observational data (e.g., children behavior in playground setting) to investigate how children's perceptions towards real-life socially withdrawn peers may differ from their perceptions on hypothetical socially withdrawn peers.

Despite these limitations, the present study has some strength. First for the first time were analyzed young children's social perceptions of the three subtypes of social withdrawal (i.e. shyness, unsociability, and social avoidance) in a Western sample. Second, investigated children's point of view and their internal perceptions about social withdrawal by the use of an individual interview for children (with the aid of pictorial vignettes), can provide additional important information on the topic especially considering that social withdrawal in early childhood has been most often assessed with parental or teacher reports (Coplan et al., 2018; Kopala-Sibley & Klein, 2017). Finally, these results can have important implications to better understand children's perceptions and interpretations of their peers' behaviors (Hymel, 1986; Ladd & Mars, 1986). A better understanding of children's perceptions and interpretations of their peers' behaviors can help to foster positive peer relationships (Hymel, 1986; Ladd & Mars, 1986). Continuing to explore children's attitudes about socially withdrawn behaviors will also help us understand why and how peers may (or may not) negatively respond to socially withdrawn children. Raising awareness about the differences between shyness, unsociability, and social avoidance among the peer group could also help to improve the quality of social climate as well as children's interactions with peers who display different social behaviors in early education environments. This is particularly important because withdrawn children may experience increased motivations to engage in social

interactions when the social environment is sympathetic and socially inclusive (Gazelle & Rudolph, 2004; Oh et al., 2008).

In this perspective, to explore protective factor that may help social withdrawal children to interact with others, study 2 is presented. Considering the importance of positive socio-emotional adjustment during preschool, study 2 aimed to explore the protective role of peer acceptance in the relation between social withdrawal and indices of preschool children's socio-emotional adjustment. Moreover, in the next study only two subtypes of social withdrawal were taking in account (i.e., shyness, unsociability) to analyzed them more in detail.

Chapter three

Study 2: Shyness and Unsociability. Social withdrawal and protective factors: the positive role of peer acceptance for shy and unsociable preschool children

The paper summarizing this research was published in: Sette, S., Zava, F., Baumgartner, E., Baiocco, R., & Coplan, R. J. (2017). Shyness, unsociability, and socio-emotional functioning at preschool: The protective role of peer acceptance. *Journal of Child and Family Studies*, *26*(4), 1196-1205. doi: 10.1007/s10826-016-0638-8

1. Abstract

In present study, we examined the protective role of peer acceptance in the relation between two subtypes of social withdrawal *shyness and unsociability* and indices of preschool children's socio-emotional adjustment. Participants were N = 112 Italian preschool children (n = 54 boys) aged 36-74 months (M = 56.85 months, SD = 10.14). Multi-source assessments were used, including: (1) parental ratings of children's shyness and unsociability; (2) teacher ratings of children's internalizing problems, externalizing problems, and social competence; (3) child interview assessments of preference for solitary play; and (4) peer ratings (sociometric procedure) of peer acceptance. Among the results, shyness was positively related to internalizing problems at preschool, whereas unsociability was associated with preference for solitary play. In addition, results from multiple regression analyses indicated significant interactions between peer acceptance and both shyness and unsociability in the associations with indices of socio-emotional functioning. For example, at lower levels of peer acceptance, shyness was positively related to children's preference for solitary play, whereas children's unsociability was

associated with externalizing problems. In contrast, these relations were attenuated at higher levels of peer acceptance. Findings are discussed in term of the potential protective role of young children's peer acceptance for different subtypes of social withdrawal during early childhood.

2. Introduction

Positive social relationships with important others may represent a protective factor for socially withdrawn children, who generally spend less time in interaction with others (e.g., Coplan et al., 2008; Graham & Coplan, 2012). For example, young shy children particularly benefit from positive (i.e., warm/close, not overly-dependent or conflictive) relationships with teachers. Indeed, supportive and close relationships between teachers and shy children are predictive of both social and school adjustment (Arbeau, Coplan, & Weeks, 2010; Sette, Baumgartner, & Schneider, 2014). More specifically, considering that subtypes of social withdrawal are characterized by distinct temperamental, emotional, and motivational substrates (Coplan et al., 2013) positive social relationships with important others may represent a distinct protective factor for both shyness and unsociability, (e.g., Coplan et al., 2008; Graham & Coplan, 2012). Therefore, in childhood shyness has been related to difficulties in social relationships (e.g., peer exclusion, victimization), a lack of social competence, and greater internalizing problems (Bohlin, Hagekull, & Anderson, 2005; Clauss & Blackfors, 2012; Coplan et al., 2014). For example, Karevold, Ystrom, Coplan, Sanson, and Mathieson (2012) reported that preschoolers' shyness predicted anxiety symptoms and poorer social skills at ages 12-13 years. Indeed, as evidenced in a meta-analysis conducted by Clauss and Blackford (2012), shyness during early childhood represents one of the principal risk factors for the later development of social anxiety disorder. In

contrast, unsociability appears to be a comparatively benign subtype of social withdrawal, particularly in early childhood. For example, unsociable young children do not tend to differ from their non-withdrawn counterparts in terms of most indices of socio-emotional functioning (Coplan et al., 2004; Harrist, Zaia, Bates, Dodge, & Pettit, 1997; Spangler & Gazelle, 2009). However, there is some evidence to suggest that unsociability can be associated with negative peer experiences, including peer dislike and exclusion (Coplan, Girardi, Findlay, & Frohlick, 2007; Coplan et al., 2004; Coplan & Weeks, 2010). For instance, Coplan et al. (2007) found that young children preferred to play with hypothetical socially competent peers, followed by shy, unsociable, and, lastly aggressive peers. Thus, it is possible that the preference for solitary activities may influence peers to, as consequence, actively reject unsociable children (Coplan et al., 2013). In this vein, it results extremely important to explore factors that may ameliorate socio withdrawal children socio-emotional functioning. Therefore, recent researchers have start to identify positive moderators (i.e., buffering process) that may be protective factors for social withdrawal children (Arbeau, Coplan & Weeks, 2010). Within the context of family social relationships both the protective role of positive parents and sibling interactions has been explored (Coplan, Arbeau, & Armer, 2008; Nichols, Silk, Tan, & Garelik, 2011; Rubin, Cheah, & Fox, 2001). For instance, Graham and Coplan, (2012), considered the protective role of sibling relationship in the associations between shyness and indices of socio-emotional adjustment in a sample of preschool children. Results underlined at least some evidence of the protective effect of closer and more supportive relationship with sibling for shy children. Therefore, among children with more positive sibling relationships, associations between shyness and internalizing difficulties (i.e. teacher-rated anxiety and child-reported loneliness) were attenuated.

Less is known in terms of protective role of the school context relationships. Although, recently some authors explored the protective role of positive relationships with teachers (Arbeau, Coplan, & Weeks, 2010). For example, young shy children may particularly benefit from positive (i.e., warm/close, not overly dependent or conflictive) relationships with teachers. Indeed, supportive and close relationships between teachers and shy children are predictive of both social and school adjustment (Arbeau, et al.,2010; Coplan, Liu, Cao, Chen, & Li, 2017). Sette, Baumgartner and Schneider (2014), in an Italian sample of preschool children found that shyness was positively related with rejection and internalizing problems measured by teachers. This relation was moderated by child-teacher's relationships. Specifically, while at lower level of closeness with the teachers shyness was positively related to peer rejection, at high level this association was attenuated. These results underlined the important protective role of close and warm relations with important one for social withdrawal children, who generally tend to spend less time in interaction with others. Regarding school environment peer relationships are really important for children socio-emotional adjustment and being accepted at school may represent a unique benefit for social withdrawal children's development. Therefore, developmental scientists also highlight the critical and unique contribution of positive peer relationships to young children's socio-emotional adaptation (Rubin et al., 2015). Accordingly, children's social acceptance from peers has been associated with sympathy and prosocial behavior (Eisenberg, Spinrad, & Knafo, 2015). For example, Malti, Gummerum, Keller, Chaparro, and Buchman (2012) found that being liked by peers was a significant predictor of children's sharing behaviors. Regarding social-withdrawal there is at least some evidence to suggest that negative peer relationships may represent a particular risk

factor for socially withdrawn children and adolescents (Markovic & Bowker, 2015; Rubin, Wojslawowicz, Rose-Krasnor, Booth-LaForce, & Burgess, 2006). For example, in early childhood, Coplan et al.'s (2014) reported that peer exclusion increased the positive association between shyness and children's self-report preference to play alone (rather than with peers). Sette and colleagues (2017), in a sample of preschool Italian children highlights the potential role of negative experiences with peers in helping to account for the link between shyness and self-conscious negative emotions (i.e. guilt and shame). In other words, negative peer experiences may exacerbate shy self-conscious emotions, reinforcing their internalized negative self-evaluations and reticent behaviors at school (Henderson et al., 2014; Muris & Meesters, 2014; Schore, 1994). Finally, the authors suggested that shy children's positive experiences with peers should be enhanced at preschool in order to help reduce their feelings of guilt and shame (Sette et al., 2017).

3. Aim

In sum, most previous research on the peer relationships of socially withdrawn children has focused on the potential exacerbating effects of peer rejection and exclusion. As well, previous samples have mostly included older children and adolescents. Finally, the central construct assessed in previous studies was either shyness or a global measure of social withdrawal with a lack of consideration of unsociability. Accordingly, the purpose of the present study was to examine the moderating role of positive peer experiences (i.e., peer acceptance) in the links between social withdrawal subtypes (i.e., shyness, unsociability) and indices of socio-emotional functioning in young children at preschool. We hypothesized that at lower levels of peer acceptance, shyness would be more strongly associated with indices of maladjustment in the

preschool (e.g., internalizing problems, a lack of social competence, lesser desire to play with peers). In contrast, we hypothesized that these associations would be attenuated at higher levels of peer acceptance. For unsociability, hypotheses were more speculative in nature. Unsociable children are thought to be able to demonstrate competent social skills during peer interactions. Thus, positive experiences with peers might create an attractive social environment for unsociable children, which in turn could encourage a higher level of peer interaction. However, given that unsociable children generally do not experience social fear/anxiety, it is possible that their experiences of lower levels of peer acceptance may result in differential adjustment difficulties as compared to shy children. Finally, we also considered possible gender differences in the association between shyness, unsociability, and children's socio-emotional functioning.

4. Method

4.1 Participants

Participants of the present study were $N = 112$ preschool children (79.5% Caucasian; 54 boys, 58 girls) between the age of 36 and 74 months ($M = 56.85$ months, SD = 10.14). Children were attending five different preschool classrooms in Italy. The families of the children who participated in the study belonged to a low or medium-low socioeconomic status. Approximately 37.5% of fathers and 35.7% of mothers had attended only high school, 37.5% of fathers and 41.1% of mothers had a university degree or beyond, 11.6% of fathers and 10.7% of mothers finished middle school, and only 2.7% of fathers and 0.9% of mothers achieved an elementary school education (parental education was not available for 10.7% of fathers and 11.6% of mothers). Teachers who participated (one per classroom) were all females, with age of 41-50 years and with teaching experience of 16-20 years.

4.2 Procedure

The present study was part of a larger research project aimed at investigating children's social withdrawal from ages three to six years. Parental informed consent was obtained for all children. Multi-source assessments were employed, including parent, peer, and teacher ratings, as well as child interviews. Parents provided background information and rated children's shyness and unsociability. Teachers assessed children's social behaviors at preschool. Children were interviewed to assess their preference for solitary play, and peers rated classmates on their level of social acceptance. Teachers and parents were not paid to participate in the present research and children did not receive any rewards or gifts after the interview.

4.3 Measures

4.3.1 Social withdrawal subtypes. Parents completed the Child Social Preference Scale (CSPS; Coplan et al., 2004). The scale was a parent-report measure of children preference for solitude and social approach motivations, which assesses subtypes of social withdrawal (i.e. shyness and unsociability) in early childhood. The CSPS has been used in previous study to assess shyness and unsociability and showed good psychometric properties (Coplan et al., 2004, 2008; Coplan & Armer, 2005). For the present study the scale was translated and then back-translated for its use in the Italian sample. The CSPS includes 11 items rated on a five-point Likert scale (1 = Not at all, 5 = A lot) with subscales assessing shyness (7 items, α = .76; e.g., "My child seems to want to play with other children, but is sometimes nervous to") and unsociability (4 items, α = .73; e.g., "My child often seems content to play alone"). The two subscales demonstrated alpha values consistent with other studies (Coplan et al., 2014; Dyson, Klein, Olino, Dougherty, & Durbin, 2011). The CSPS has been previously successfully translated and

validated for use in other cultures (e.g., Li, Zhu et al., 2016; Okada, Tani, Ohnishi, Nakajima, & Tsujii, 2012).

4.3.2 Preference for solitary play. To assess child preference for solitary activities, we used the Preference for Solitary Play Interview (PSPI), developed by Coplan et al. (2014). Female trained interviewers, who had previously familiarized with the group class, presented each child 11 cartoon images (in a random order) representing a wide range of play activities, including games-with-rules (e.g., board games), sensorimotor/functional games (e.g., climbers, slide), dramatic games (e.g., dress-up), and constructive games (e.g., Legos, blocks). Children indicated if they preferred to perform each activity with another child or alone by pointing to the relevant representative cartoon image (i.e., child alone or child with a peer). The final score was calculated by summing children's responses (1 = play alone, 0 = play with another child) and dividing the total by the number of items presented. The Cronbach's alpha for the current study was .82, which was consistent with the findings of Coplan et al. (2014).

4.3.3 Children's socio-emotional behaviors. One teacher for each class completed the Italian version of the Social Competence and Behavior Evaluation scale (SCBE; Sette, Baumgartner, & MacKinnon, 2015; originally developed by LaFreniere & Dumas, 1996). The SCBE includes 21 items rated on a six-point Likert scale (1 = never, 6 = always), with subscales assessing social competence (α = .91; e.g., "Cooperates with other children"), externalizing problems (α = .87; "Opposes the teacher's suggestions"), and internalizing problems (α = .91; "Inhibited or uneasy in the group").

4.3.4 Peer acceptance. Peer acceptance was assessed using the sociometric procedure developed by Asher, Singleton, Tinsley, and Hymel (1979). Each child was presented with three boxes with different smiley faces, representing happy, neutral, and

sad emotional expressions. The child was asked to insert pictures of classmates into one of the three boxes with the following explanation: happy face = children you like to play with; neutral face = children you kind of like to play with; sad face = children you do not like to play with. The total score of peer acceptance was calculated by summing the three scores (i.e., 3, 2, and 1 scores for the happy, neutral, and sad faces, respectively) and dividing the total by the number of children in the class. The final score was standardized for each child within the classroom.

4.4 Overview of Analyses

Data were checked for normality (e.g., skewness, kurtosis) and then correlations analyses were computed to assess associations among the study variables. Also a series of ANOVAs to examine gender differences for the main study variables was conducted. Finally, were computed four separate hierarchical multiple regression equations to examine the potential moderating role of peer acceptance in the links between subtypes of social withdrawal (i.e., shyness, unsociability) and indices of socio-emotional functioning. For these analyses, preference for solitary play, internalizing problems, externalizing problems, and social competence served as dependent variables. For each regression, child gender and age were entered as control variables at Step 1, main effect variables (shyness, unsociability, peer acceptance) were entered at the Step 2, and the conceptually relevant interaction terms (shyness x peer acceptance, unsociability x peer acceptance) were entered at Step 3. We also tested two-way interactions terms involving gender and each of the social withdrawal subtypes (i.e., gender x shyness, gender x unsociability). Significant interaction terms were decomposed using simple slope analyses.

5. Results

5.1 Preliminary analyses

Results from preliminary analyses indicated that none of the study variables revealed significant deviations from normality (values less than |2| for skewness and |7| for kurtosis; see Curran, West, & Finch, 1996) or univariate outliers. Descriptive statistics and correlations among all study variables are presented in Table 1. Of note, children's age was significantly and negatively related to preference for solitary play and internalizing problems and positively associated with peer acceptance and socially competent behaviors.

5.2 Gender differences

Results of the ANOVAs indicated that, overall, girls were rated by parents as more unsociable (M = 2.22, SD = 0.83) than boys (M = 1.80, SD = 0.60), $F(1, 100)$ = 8.392, p = .01, partial η^2 = .08, and that girls were rated by teachers as more socially competent (M = 4.07, SD = 0.93) than boys (M = 3.62, SD = 0.83), $F(1, 110)$ = 7.236, p = .01, partial η^2 = 06. No other significant gender differences emerged. Accordingly, both child age and gender were statistically controlled for in subsequent analyses.

5.3 Relation among the study variables

Overall, the pattern of linear associations among variables was consistent with our expectations (see Table 3.1). For example, although shyness and unsociability were significantly inter-related, shyness was significantly and positively related to teacher-rated internalizing problems, whereas unsociability was significantly and positively associated with children's self-reported preference for solitary play.

Table 3.1

Means, standard deviations, and correlations among the study variables

Variable	*M*	*SD*	1	2	3	4	5	6	7	8	9
1. Shyness	2.08	0.69	_								
2. Unsociability	2.02	0.76	.47***	_							
3. Preference for solitary play	0.31	0.27	.10	.20*	_						
4. Internalizing behaviors	2.32	0.91	.24**	.15	.10	_					
5. Externalizing behaviors	2.03	0.97	.02	.13	.03	-.01	_				
6. Social competence	3.85	0.91	-.11	-.06	-.15	-.36***	-.31***	_			
7. Peer acceptance	2.16	0.26	-.02	.01	-.01	-.12	-.31***	.40***	_		
8. Child age	56.85	10.14	.11	-.11	-.19*	-.22*	-.04	.40***	.25**	_	
9. Gender	-	-	-.07	.28**	.02	.08	-.08	.25**	.01	-.15	_

Note. For peer acceptance, we reported the unstandardized score. Gender (0 = *boys*,1 = *girls*).

*$p < .05$. **$p < .001$. ***$p < .001$

5.4 The moderating role of peer acceptance in the links between children subtypes of social withdrawal socio-emotional functioning

Complete results of hierarchical multiple regression analyses are presented in Table 3.2. Here, we focus the discussion on the interaction effect results (Step 3). Since the two-way interactions terms involving gender and each of the subtypes of social withdrawal were not statistically significant in any model, results are presented here without them to ease presentation.

For preference for solitary play, results indicated a significant shyness x peer acceptance interaction effect. Results from the simple slope analyses (see Figure 2.1) revealed that among children with lower levels of peer acceptance (1 SD below the mean), shyness was significantly and positively related to preference for solitary play (b = .15, p = .03). However, at higher levels of peer acceptance (1 SD above the mean), this association was negative (although only marginally significant; b = -.12, p = .08).

For externalizing problems, findings revealed a significant unsociability x peer acceptance interaction. Simple slope analyses (Figure 3.2) indicated that the association between unsociability and anger-aggression was significant and positive at lower levels of peer acceptance (b = .51, p = .01). However, this relation was attenuated at higher levels of peer acceptance (b = -.04, p = .85).

Finally, for social competence and internalizing problems, no significant interaction terms emerged. However, the main effects of peer acceptance on social competence and shyness on internalizing problems were found (see Table 3.2).

Table 3.2

Summary of the regression models analyzing the role of peer acceptance in the link between shyness, unsociability, preference for solitary play, and socio-emotional behaviors

	Step 1				Step 2				Step 3			
	B	*β*	*t*	*p*	B	*β*	*t*	*p*	B	*β*	*t*	*p*
DV = Preference for Solitary Play												
Gender	-.02	-.04	-0.399	.69	-.05	-.08	-0.784	.44	-.04	-.07	-0.635	.53
Age	-.01	-.23	-2.260	.03	-.01	-.23	-2.229	.03	-.01	-.29	-2.769	.01
Shyness					.02	.05	0.404	.69	.02	.04	0.322	.75
Unsociability					.06	.17	1.437	.15	.06	.17	1.469	.15
Peer acceptance					.02	.06	0.632	.53	.03	.10	0.976	.33
Shyness X Peer acceptance									-.13	-.30	-2.740	.01

Unsociability X Peer acceptance									.04	.11	1.037	.30
	$F(2, 98) = 2.555, p = 08$				$F(5, 95) = 1.873, p = .11$				$F(7, 93) = 2.490, p = .02$			
R^2	.05				.09				.16			
DV = Externalizing behaviors												
Gender	-.13	-.07	-0.654	.52	-.21	-.11	-1.065	.29	-.18	-.09	-0.910	.37
Age	-.01	-.03	-0.293	.77	.01	.08	0.746	.46	.01	.07	0.701	.49
Shyness					-.14	-.10	-0.873	.39	-.11	-.08	-0.715	.48
Unsociability					.28	.21	1.828	.07	.23	.18	1.557	.12
Peer acceptance					-.32	-.33	-3.313	.01	-.32	-.33	-3.354	.01
Shyness X Peer acceptance									.16	.11	0.951	.34
Unsociability X Peer acceptance									-.27	-.23	-2.096	.04
	$F(2, 99) = 0.232, p = .79$				$F(5, 96) = 2.854, p = .02$				$F(7, 94) = 2.718, p = .01$			
R^2	.01				.13				.17			
DV = Social competence												
Gender	.60	.33	3.831	.001	.59	.32	3.768	.001	.59	.32	3.796	.001

Age	.04	.48	5.551	.001	.04	.41	4.842	.001	.04	.42	4.947	.001
Shyness					-.13	-.10	-1.059	.29	-.12	-.09	-0.936	.35
Unsociability					-.07	-.06	-0.608	.55	-.09	-.07	-0.734	.47
Peer acceptance					.28	.31	3.739	.001	.27	.30	3.643	.001
Shyness X Peer acceptance									.21	.15	1.557	.12
Unsociability X Peer acceptance									-.15	-.14	-1.489	.14
	$F(2, 99) = 19.921, p = .001$				$F(5, 96) = 12.581, p = .001$				$F(7, 94) = 9.539, p = .001$			
R^2	.29				.40				.42			
DV = Internalizing behaviors												
Gender	.04	.02	0.221	.83	.08	.04	0.425	.67	.05	.03	0.282	.78
Age	-.02	-.20	-1.960	.05	-.02	-.22	-2.125	.04	-.02	-.21	-2.019	.05
Shyness					.37	.28	2.456	.02	.36	.26	2.328	.02
Unsociability					-.02	-.02	-0.163	.87	.01	.01	0.065	.95

Peer acceptance			-.03	-.04	-0.366	.72	-.03	-.04	-0.370	.71
Shyness X Peer acceptance							-.10	-.07	-0.598	.55
Unsociability X Peer acceptance							.21	.18	1.647	.10
	$F(2, 99) = 2.063, p = .13$		$F(5, 96) = 2.467, p = .04$				$F(7, 94) = 2.171, p = .04$			
R^2	.04		.11				.14			

Note. Unstandardized (B) and standardized (β) beta coefficients are reported. Gender (0 = *boys*,1 = *girls*).

Figure 3.1. The moderating role of peer acceptance in the association between shyness and preference for solitary play

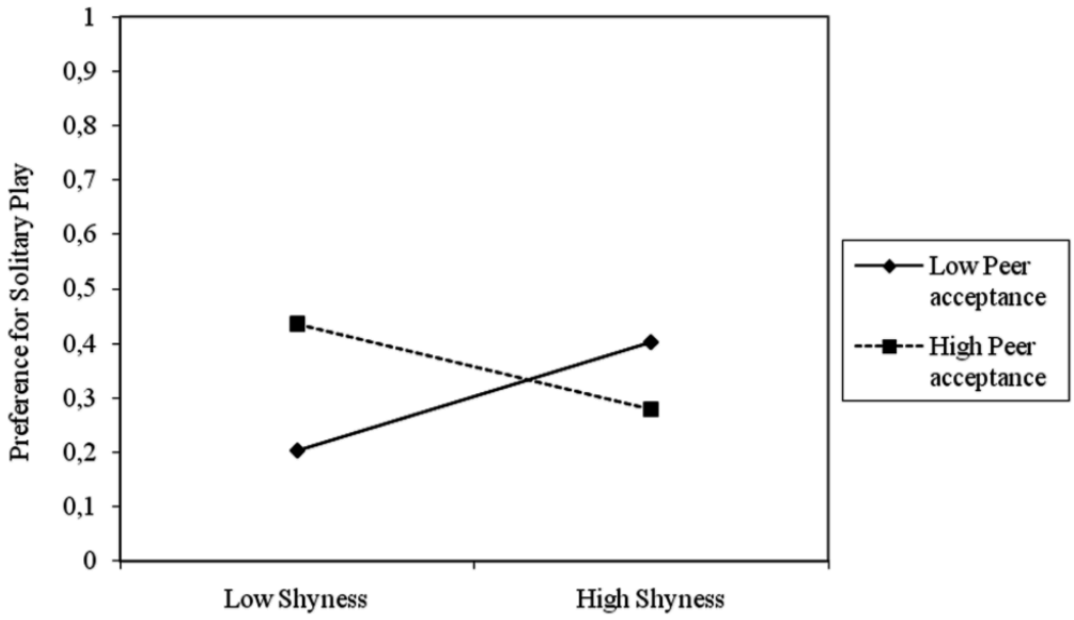
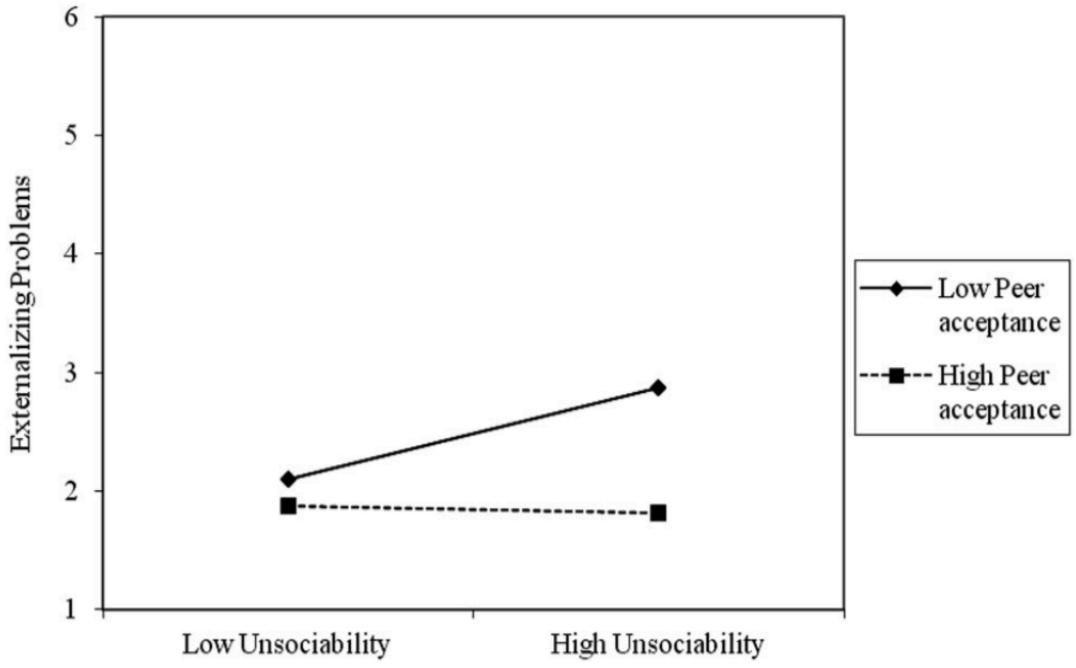


Figure 3.2. The moderating role of peer acceptance in the association between unsociability and externalizing problems



6. Discussion

The primary goal of this study was to examine the potential protective role of positive peer experiences in the links between the two subtypes of social withdrawal (i.e., shyness, unsociability) and young children's socio-emotional functioning. Overall, shyness was positively related to internalizing problems, whereas unsociability was associated with self-reported preference for solitary activities. Some initial support was also found for the protective role of peer acceptance, but differential findings were evident for different subtypes of social withdrawal. For example, among preschool children with lower levels of peer acceptance, shyness was associated with a preference for solitary activities. In contrast, at higher levels of peer acceptance, this relation was attenuated. Somewhat surprisingly, unsociability was associated with externalizing problems among children with lower, but not higher, levels of peer acceptance. Thus, there is at least some preliminary evidence to suggest that the protective role of positive peer experiences functions somewhat differently among subtypes of social withdrawal during early childhood.

6.1 Shyness and socio-emotional functioning in preschool children

Results from the current study at to the growing number of studies demonstrating differential associations between subtypes of social withdrawal and young children's socio-emotional behaviors (e.g., Coplan et al., 2004; Harrist et al., 1997). First, maternal-rated shyness was associated with teacher ratings of internalizing problems at preschool. This finding is consistent with previous researches linking shyness to indices of internalizing problems. For example, Karevold, Coplan, Stoolmiller, and Mathiesen (2011) reported that shyness during infancy and early childhood was a significant predictor of internalizing problems at age 8.5 years.

Previous scholars have demonstrated a connection between shyness in childhood and negative social outcomes, both concurrently and later in life (Rubin et al., 2009; Walker, Henderson, Degnan, Penela, & Fox, 2014). Indeed, because they withdraw from social situations, shy children may miss out on important opportunities to practice and develop new cognitive and social skills (Jones et al., 2014). Perhaps as a result, shyness has been related to difficulties in social relationships (e.g., peer exclusion, victimization), a lack of social competence, and greater internalizing problems (Bohlin, Hagekull, & Anderson, 2005; Clauss & Blackfors, 2012; Coplan et al., 2014). For example, Karevold, Ystrom, Coplan, Sanson, and Mathieson (2012) reported that preschoolers' shyness predicted anxiety symptoms and poorer social skills at ages 12-13 years. Indeed, as evidenced in a meta-analysis conducted by Clauss and Blackford (2012), shyness during early childhood represents one of the principal risk factors for the later development of social anxiety disorder.

Although our study was cross-sectional, these findings represent a potential indicator for concern for shy children, as elevated but sub-clinical symptoms of anxiety in children may be predictive of more serious internalizing problems in later years. For example, Goodwin, Fergusson, and Horwood (2004) reported an association between anxious-withdrawn behaviors at 8-year-olds (e.g., fearfulness of new situations or people) and internalizing behaviors (e.g., social phobia, depression) at 16-21-year-olds (while controlling for family, childhood, and social risk factors).

However, it is also worth noting that our results did not reveal significant associations between shyness and other indices of children's socio-emotional functioning, including preference for solitary play, social competence, and peer acceptance. It has been previously reported that preschool children who prefer to play with other children did not differ in term of shyness from children who prefer play alone

or with the teacher (Coplan et al., 2004). This result could be interpreted as support for the notion that shy children do indeed desire social interaction. Accordingly, other researchers have argued that although shy children may remove themselves from larger peer groups, they may be more apt to establish close relationships with one or few peers (Rubin et al., 2006). In future studies, it would be interesting to analyze other types of social interactions with others to understand if shy children display differences in playing in dyadic or in small group interactions.

Notwithstanding, the non-significant associations between young children's shyness and both social competence and peer acceptance is not consistent with previous studies conducted in North American samples (e.g., Coplan et al., 2008; Gazelle & Ladd, 2003). Moreover, in one of the few previous studies of shyness in young Italian children, Sette et al. (2014) reported a significant association between shyness and both internalizing behaviors and peer rejection (but not social competence). It is not clear why these associations did not emerge in the present sample, although a comparatively smaller sample size may have reduced power to detect associations.

6.2 Unsociability and socio-emotional functioning in preschool children

Overall, unsociability was only significantly associated with children's self-reported preference for solitary activities, and not with other indices of socio-emotional difficulties (e.g., internalizing problems). These findings are in keeping with the notion that unsociable children manifest a non-fearful preference to play alone – and that unsociability could represent a comparatively benign form of social withdrawal in early childhood (Coplan et al., 2004). However, as we will discuss in more detail in a later section, unsociable behaviors may still come with some social costs for the child, particularly in the realm of peer relations (Coplan et al., 2013).

Unsociability appears to be a comparatively benign subtype of social withdrawal, particularly in early childhood. For example, unsociable young children do not tend to differ from their non-withdrawn counterparts in terms of most indices of socio-emotional functioning (Coplan et al., 2004; Harrist, Zaia, Bates, Dodge, & Pettit, 1997; Spangler & Gazelle, 2009). However, there is some evidence to suggest that unsociability can be associated with negative peer experiences, including peer dislike and exclusion (Coplan, Girardi, Findlay, & Frohlick, 2007; Coplan et al., 2004; Coplan & Weeks, 2010). For instance, Coplan et al. (2007) found that young children preferred to play with hypothetical socially competent peers, followed by shy, unsociable, and, lastly aggressive peers. Thus, it is possible that the preference for solitary activities may influence peers to, as consequence, actively reject unsociable children (Coplan et al., 2013).

6.3 Gender differences

Interestingly, girls were rated by parents as being more unsociable than boys. This gender difference has not been reported in previous studies of unsociability in North America (e.g., Coplan et al., 2013; Coplan et al., 2004; Coplan & Weeks, 2010). However, it is possible that Italian parents perceived unsociability as more acceptable in girls than in boys, given that solitary activities could be reflective of the gender stereotype that girls are quieter than boys (Doey et al., 2015). Indeed, there is some previous evidence to suggest that unsociability carries more negative consequences in boys than in girls (e.g., Coplan et al., 2013; Ding, Weeks, Liu, Sang, & Zhou, 2015; Spangler & Gazelle, 2009). For instance, Spangler and Gazelle (2009), reported that unsociability was more strongly related to peer exclusion in boys than in girls in middle childhood.

6.4 The protective role of peer relationships

Although we did not find any associations between children's social withdrawal subtypes and peer acceptance, our results indicated that peer acceptance

moderated the relations among each type of social withdrawal and different indices of children's socio-emotional functioning. More specifically, among children who were less accepted by peers, shyness was associated with a greater preference to play alone. Conversely, at higher levels of peer acceptance, this positive association was not only attenuated, but became a marginally significant negative association. These findings are consistent with the previous results of Coplan et al. (2014), who also reported a similar pattern of results in an interaction between shyness and peer exclusion in the association with the preference for solitary play. More negative peer experiences may heighten feelings of anxiety and depression among children already prone to shyness (Gazelle & Ladd, 2004). This in turn may serve to extinguish social approach motivations and heighted the desire to play alone (Coplan et al., 2015).

In contrast, greater acceptance by peers may help young shy children feel more comfortable and confident during social interactions. As consequence, it is possible that shy children have more opportunity to improve the quality of social interactions and acquire new social skills. Indeed, recent early intervention programs for young extremely shy children that have included components of social skills training and adult-facilitated peer play have demonstrated encouraging initial results. As compared to waitlist comparisons, young shy children in the intervention groups have demonstrated increased levels of peer play at preschool and reduced anxiety post intervention (Chronis-Tuscano et al., 2015; Coplan, Schneider, Matheson, & Graham, 2010; Li, Coplan et al. 2016).

This study found a moderating role for peer acceptance in the link between unsociability and socio-emotional behaviors in early childhood. Results from some previous studies have suggested that unsociability is related to peer exclusion and rejection (e.g., Coplan et al., 2013; Coplan & Weeks, 2010). However, our results revealed that such negative peer experiences may evoke harsh responses among some

unsociable children. At lower levels of peer acceptance, we found that unsociability was (somewhat surprisingly) positively associated with teacher-ratings of externalizing problems. Conversely, at higher levels of peer acceptance, the relation between unsociability and externalizing problems was no longer significant. These results are the first to suggest that unsociable young children who experience less social acceptance by peers may actively react with anger and aggression.

This novel finding suggests that peer rejection may encourage some unsociable children to move against others, through aggressive and oppositional behaviors. Although the cross-sectional nature of our data, it is possible that children's aggression may predict higher levels of peer exclusion and children's adjustment problems over time (Ladd & Troop-Gordon, 2003). This result seems to differentiate unsociable children from shy children, that differently withdrawn themselves from peer group at lower levels of social acceptance. Thus, experiencing (or not experiencing) anxiety or fear in presence of peer exclusion may be a factor that differentiates the social behaviors of the two subtypes of social withdrawal (i.e., moving away from others for shy children and moving against others for unsociable children). However, the social acceptance appears to represent a protective factor for both subtypes of social withdrawal. In this regard, our results provide further evidence of the importance of differentiating between these two subtypes of social withdrawal: in social exclusion contexts, shyness and unsociability appear to be differentially related to indices of socio-emotional problems. Nevertheless, it would be interesting to understand the intensity and persistency of the preference for solitary play (for shy children) and externalizing problems (for unsociable children) as consequences of peer exclusion over time.

7. Strengths, limitations, and future directions

Our findings add to the growing literature on subtypes of social withdrawal in childhood in several important ways. For example, to our knowledge, this was the first study that focused on positive peer relationships as a protective factor in the adjustment of subtypes of socially withdrawn young children – and during early childhood. As well, a particular strength of the study was the use of a multi-method and multi-informant approach, including peer ratings, parent and teacher evaluations, and child interview assessments.

Notwithstanding, some caveats and limitations should be considered in the interpretation of the results. First, this was the first time that the Child Social Preference Scale (CSPS, Coplan et al., 2004) has been used to assess shyness and unsociability among young children in Italy. We had no conceptual rationale for expecting a different factor structure for this measure in this cultural context, and the subscales did display acceptable internal reliability. However, our sample size was not large enough to permit a direct test of the factor structure. In addition, given that we used parents' perceptions on shyness and unsociability, it would be of use adopt other measures that investigate children's motivations underlying to their decisions to be socially withdrawn. Relatedly, the finding that parents rated girls as more unsociable than boys should also be interpreted with some caution given the small sample size. These results should be replicated before drawing strong inferences regarding the longer-term implications of social withdrawal in Italian boys and girls.

In addition, we only tested the cross-sectional relations among subtypes of social withdrawal, peer acceptance, and children's socio-emotional functioning. Accordingly, we must also consider other plausible causal explanations for the pattern of results reported. For example, it may be that shy children who also prefer to play alone

evoke more negative peer responses (i.e., lower peer acceptance) from their classmates. It is also possible that aggressive children may respond to peer dislike by becoming more unsociable over time. Future studies should investigate the associations among these variables longitudinally in order to understand possible consequences of subtypes of social withdrawal over time. This is particularly important for the long-term effects of unsociability that, to date, remain largely unexplored. For instance, Kopala-Sibley and Klein (2016) recently reported that unsociability at age 6 years significantly predicted depressive and anxiety problems at age 9 years.

Finally, it would be interesting to investigate the relation between social withdrawal and other possible protective factors such as indices of positive adjustment that may facilitate social interactions and help to maintain positive peer relationships.

In this vein, study 3 investigated the relation between social withdrawal (i.e. shyness) and empathy. Therefore, given the importance of being perceived empathic in promoting children's positive socio-emotional adjustment, the aim of this study was to explore the moderating role of shyness in the association between empathic feelings and empathic-related reactions.

Chapter Four

Study 3. Shyness. Social withdrawal moral emotion: Shyness and Empathy in Early Childhood: Examining Links between Feelings of Empathy and Empathetic Behaviors

The paper summarizing this research was submitted in: Shyness and Empathy in Early Childhood: Examining Links between Feelings of Empathy and Empathetic Behaviors in revision at *The British Journal of Developmental Psychology*

1. Abstract

Despite a relative lack of empirical evidence, shy children have been described as less empathetic than their more sociable peers. However, it has been suggested that this lack of empathy may be due to a *performance* rather than a *competence* deficit. In this regard, shy children may feel empathy but are less able to express empathy and act empathically. The aim of the present study was to explore the moderating role of shyness in the association between empathic feelings and empathic-related reactions and indices of socio-emotional adjustment in preschool. Participants were $N = 212$ (102 girls) preschool children ($M_{age} = 58.32$ months, $SD = 10.72$), their parents, and their teachers (one for each classroom). Multi- source assessments were used, including: (1) child self-reports of empathic feelings; (2) parental ratings of child shyness and empathic responding (i.e., expressed empathy, reparative behaviors); and (3) teacher ratings of child socio-emotional functioning at preschool (i.e., anxiety-withdrawal, prosocial behaviors and popularity). Results from hierarchical multiple regression analyses revealed significant interaction effects between empathic feelings and shyness in the prediction of outcome variables. Follow-up simple slope analyses indicated that among children with lower

levels of shyness, empathic feelings were positively related to empathy expression and reparative behaviors. At higher level of shyness, this relation was attenuated or negative. The findings provide some of the first evidence to suggest that although young shy children may not differ from their more sociable counterparts in terms of experiencing empathetic emotions, they do seem to be less likely to act upon these such feelings.

2. Introduction

The preschool period is characterized by increased social demands, including interacting with a large group of peers, learning to share toys, participating in school activities, respecting turn-taking, and offering help. It has been suggested that such demands may be particularly stressful for shy children, exacerbating social fear and wariness (Coplan & Arbeau, 2008; Kalutskaya et al., 2015). Results from several studies have indicated negative associations between shyness and social cognitive skills, indices of social competence, and prosocial behaviors (Coplan, & Arbeau, 2008; Coplan, & Armer, 2005; Coplan et al., 2004; Graham, & Coplan, 2012). For instance, Eggum-Wilkens and colleagues (2014) reported that shy children's hesitancy to approach peers in kindergarten reduced cooperative participation during the first years of school.

Similarly, in a longitudinal study aimed to investigate shyness from ages 1.5 to 12.5 years, Karevold and colleagues (2012) found that shyness was concurrently and predictively associated with poorer self-social skills (e.g., cooperation, assertion, self-control). Perhaps, as a result, in early education contexts, shy children also tend experience peer difficulties such as rejection, exclusion or victimization, and school adjustment difficulties (Coplan et al., 2008; Coplan, Ooi, Rose-Krasnor, & Nocita, 2014; Sette et al., 2014; Sette et al., 2018).

Nevertheless, it should be noted that some researchers have argued that shy children's poorer socio-emotional, socio-communicative, and academic skills may be due

more to *performance* deficits rather than *competence* deficits (Findlay, Girardi & Coplan, 2006; Hughes & Coplan, 2010; Kalutskaya et al., 2015). In this regard, shy children's heightened reactivity in response to social stressors is thought to inhibit their abilities to behavioral display their competence (Coplan & Weeks 2009; Crozier & Hostettler, 2003). In support of this notion, Hughes and Coplan (2010) reported that shyness was negatively related to teacher-rated achievement but not standardized tests. Specifically, teacher rated shy children as having poorer skills in math and reading, despite that shyness was not significantly associated with nonverbal IQ or standardized tests of reading comprehension and math competence. Thus, despite possessing appropriate levels of cognitive and academic competence, shyness was still associated with poorer academic performance. This suggests that teachers may perceive shy children as less intelligent because of a performance deficit (Coplan, Hughes, Bosacki, & Rose-Krasnor, 2011).

These findings support the hypothesis that shyness may not be related to age-normative academic or socio-emotional knowledge and skills, but anxiety and distress experienced by shy children may inhibit the display of these abilities in specific contexts (Crozier, 1995; Hughes & Coplan, 2010). For example, Rubin and Coplan, (2010) suggested that underlying psychological mechanisms such as less perseverance, lower self-esteem, and reluctance to get involved in social situations may influence shy children's behaviors in the contexts of language and academic performance. In other words, shy children's performance may not reflect what the actually know or are able to do. Shy children may be more competent (e.g., academically, linguistically, and socially) than perceived by adults, but they may need to be encouraged and reassured to implement this competence. Although this theorization was explored and received some first empirical evidences in the academic and linguistic domain (Crozier, 1995; Hughes & Coplan, 2010; Kalutskaya et al., 2015), to the best of our knowledge, this postulation

remains empirically understudied in the socio- emotional domain (Findlay et al., 2006). In this vein, in the present study we sought to test this phenomenon in the previously unexplored domain of children's empathy.

The ability to empathize and respond appropriately to others' distress is an important developmental task and crucial to children's socio-emotional development. Empathic responding can be considered one of the foundations of children's development of care-based morality, and early moral conduct (Eisenberg & Eggum, 2009; Eisenberg, Spinrad, & Knafo-Noam, 2015). Empathy is a basic human capacity, fundamental in social life because it plays a crucial role in navigating social relationships, interpersonal sensitivity, and social competence (Decety, 2010; Eisenberg & Fabes, 1990). Empathy can be defined as an internal state that stems from the ability to feel, imagine, and/or comprehend another person's emotional state or condition (Eisenberg et al., 2015; McDonald & Messinger, 2011). This affective reaction is congruent or very similar, to what the other person is feeling, and it involves both cognitive and emotional components, such as the capacity to recognizing and experiencing others emotional state (Valiente et al., 2004; Zahn- Waxler & Radke-Yarrow, 1990; Zhou et al., 2002).

The ability to experience empathy and to react empathically emerges early in children's development. Indeed, it is already possible to detect modest levels of other-oriented empathy in infants as young as 8 to 14 months, and from 2 years onward children are capable of quite sophisticated helping and comforting behaviors (Davidov, Zahn-Waxler, Roth-Hanania, & Knafo 2013; Roth-Hanania, Davidov, & Zahn-Waxler, 2011). By the preschool years, additional significant developments occur in cognitive and affective empathy (Kochanska, Koenig, Barry, Kim, & Yoon, 2010; Wellman, Cross, & Watson, 2001). For example, at age three years children are capable of a variety of

empathy related behaviors, including expressing verbal and facial concern, showing interest in another's distress, prosocial and reparative behaviors (McDonald & Messinger, 2011; Trommsdorff, Friedlmeier, & Mayer, 2007).

From empathic feelings may emerge positive socio-emotional behaviors, which in turn may promote higher quality of contemporaneous and later social functioning such as cooperation, cohesion, and social competence **(**Sallquist, Eisenberg, Spinrad, Eggum, & Gaertner, 2009; Valiente et al., 2004; Zahn-Waxler, Radke-Yarrow, Wagner, & Chapman, 1992). Therefore, conceptual and empirical evidence suggests that empathy may predict the proneness to react adaptively to another's needs, as well as the implementation of prosocial (e.g., helping, comforting, sharing) and reparative behaviors (i.e., amending or repairing behaviors in which a moral norm or rule has been violated, Kochanska, DeVet, Goldman, Murray, & Putnam, 1994). In turn, such behaviors may facilitate social interaction and help to maintain positive peer relations (Eisenberg, & Fabes, 1990; Levine, & Hoffman, 1975; Webster-Stratton & Reid, 2004; Zahn-Waxler et al., 1992). For instance, Colasante, Zuffianò, Bae, and Malti (2014) reported that sympathy (i.e., other oriented emotion steam by empathy feelings, conceptualized as affective sorrow and concern for others; see also Zuffianò, Colasante, Peplak, & Malti, 2015) was associated with higher levels of reparative behaviors in a sample of 4-8 year-old children.

Empathy also promotes positive outcomes in the peer context, including popularity, supportive friendships, and social competence (Caravita, Di Blasio, & Salmivalli, 2009; Marcus, 1980). For instance, in their review, Eisenberg and Miller (1987) found that children with higher levels of empathy were more prone to display cooperative and socially competent behaviors. More recent findings further support the importance of empathy for positive and competent socio-emotional functioning in

children (McDonald & Messinger, 2011; Zhou et al., 2002). For example, Sallquist and colleagues (2009) reported both concurrent and longitudinal positive relations between empathy and social competence in a sample of children aged 4-8 years. The authors suggested that empathy might promote social competence as a result of approach and exploration tendencies (e.g., display of positive affect).

To date, only a handful of studies have specifically examined the relation between empathy and shyness. However, the general pattern of results suggests a negative association between child shyness and empathy-related constructs. For example, Young, and colleagues (1999) found that shy (behaviorally inhibited) toddlers were evaluated as lower in global ratings of empathy (e.g., concerned expression and caring behaviors) and showed less prosocial behaviors toward others (especially in unfamiliar context) as compared to their more sociable counterparts. Also, in a sample of toddlers (girls), Mark et al. (2002) reported that shyness (behavioral inhibition) at 16 months predicted less empathic responses for a stranger in distress at age 22 months.

Miller and Jansen op de Haar (1997) reported that 2-8 year -old children higher in empathy were also lower in shyness. In a sample of children in kindergarten and grade 1, Findlay et al. (2006) also found that emphatic children were rated by their mothers as less shy and socially withdrawn. Finally, and also of note, results from several studies have indicated negative links in early childhood between shyness and other emphatic-related behaviors, such as prosocial, helping, and comforting behaviors (e.g., Coplan et al., 2004; Eisenberg et al., 1996; Stanhope et al. 1987).

It has been speculated that shyness may influence children's expression of empathy rather than shy children's ability to experience empathic feelings towards others. In other words, shy children may be perceived as less empathic because of a *performance* deficit instead of a *competence* deficit (Eisenber & Fabes, 1998; Findlay et al., 2006). In

this regard, shy young children may feel overwhelmed by empathic feelings and unable to positively self-regulate themselves or act in a prosocial manner. As a result, instead of helping and comforting others, shy children may be more likely to react potentially empathy-inducing situations by withdrawing as a way of coping with feelings of distress (Eisenberg et al., 1998; Wagers & Kiel, 2019).

In general, shy children seem to have difficulty to cope with, or regulate adequately their emotions, choosing instead nonassertive or withdrawn strategies (Findlay, Coplan, & Bowker, 2009; Bayram Özdemir, Cheah, & Coplan, 2015; Rubin, Cheah, & Fox, 2001). This assumption is also in line with the conceptualization of shyness as an internal approach-avoidance conflict in which shy children may remain trapped, behaving with wariness and reticence (Asendorpf, 1990). In other words, there may be a discrepancy between shy children's ability to feel empathy and the lower levels of observed or expressed empathic related reactions because shy children are suppressing the *expression* of empathy and empathic related behaviors, and consequently they appear to caregivers and peers as less socially-skilled, socially detached, and less competent than their more sociable peers (Findlay et al., 2006).

There is at least some indirect empirical support for these postulations. In a sample of preschoolers, Stanhope et al. (1987) reported that shy children displayed fewer helping behaviors toward unfamiliar adults as compared to their more outgoing peers, but these differences in empathic behaviors were attenuated when considering helping behaviors at home (i.e., in a more familiar social context). This suggests that shy children may display more appropriated levels of empathic behavior in familiar contexts, and conversely, they may have more difficulties responding empathically in unfamiliar situations. According to this assumption, parents may more easily detect their shy children's empathic behaviors (McDonald & Messinger, 2011).

3.Aims

It has been postulated that shy children may only appear to be less empathic (i.e., performance deficit), as opposed to actually being less empathic (i.e., competence deficit) (Eisenberg et al., 1998; Findlay et al., 2006). To date, however, this notion has not yet been tested empirically. Accordingly, the primary purpose of the present study was to examine the *moderating* role of shyness in the links between empathic feelings (i.e., child self-reported feelings of empathy) and both empathic behaviors (i.e., parent-rated empathy and reparative behaviors) and indices of empathy-related socio-emotional functioning (teacher-rated prosocial behavior, popularity) in preschool children. Overall, we hypothesized that shyness would be positively related to indices of socio-emotional difficulties (i.e., anxiety withdrawal) and negatively related to empathic related behaviors (as measured by parent and teachers). Moreover, we hypothesized that shyness would *moderate* relation between emphatic feelings and empathic-related responses (e.g., expressions of empathy or empathic behaviors). More specifically, we speculated that at lower levels of shyness, empathic feelings would be strongly associated with empathy behaviors and socio-emotional adjustment observed by parents and teachers. In contrast, these associations were expected to be attenuated at higher levels of shyness.

Finally, we also considered possible gender differences in the association between empathic feeling, empathic related behaviors, and shyness. It has been suggested that shyness may be more problematic when displayed by boys than for girls (Doey, Coplan, & Kingsbury, 2014). For instance, Eisenberg, Shepard and colleagues (1998) reported that shyness in kindergarten was negatively predictive of popularity and social status in grade 2 for boys but not girls.

4. Method

4.1 Participants

Participants were N = 212 young children (n = 102 girls) ranging in age from 30.59 to 76.48 months (M = 58.32 months, SD = 10.72), their parents, and their teachers. Children were recruited from 10 classes in three preschools situated in central Italy.

Children came from families predominantly of medium-low socioeconomic status. Approximately 27% of mothers and 19% of fathers had a university degree or beyond, 36% of mothers and 43% of fathers had attended high school, 25% of mothers and 24% of fathers had attended middle school, and about 6% of mothers and 7% of fathers had elementary school education (parental education was not available for 6% of mothers and 7% of fathers). Eighty-four percent of parents were married or living together, and 73% of children had siblings (this information was missing for the 6% of the families). Approximately 64% of fathers and mothers spoke Italian as their main language at home, with the remaining 26% of fathers and 28% of mothers speaking Italian as a second language. This information was missing for 10% of fathers and 8% of mothers. Specifically, 14% of fathers and 17% of mothers spoke another European language (e.g., English, Albanian) as their primary language at home, whereas 12% of fathers 11% of mothers spoke a non-European language (e.g., Arab, Urdu).

4.2 **Procedure**

The present study was part of a larger research project investigating socio-emotional adjustment and social withdrawal in preschool children (Zava et al., 2019). Multi-source and multi-method assessments were completed, including parental ratings (67.9% mothers), teacher ratings (all teachers were female, ranging in age from 41-50 years, and with 21-25 years of experience), and children interview assessments.

Before data collection, written parental informed consent was obtained for all children (100% consent rate). After having expressed their verbal consent for participation, children were interviewed independently by (previously familiarized) female research assistants in a calm and quiet location within the schools. Each child self-report evaluation session generally lasted about 10 minutes. The study was reviewed and approved by the Ethics Commission of the Department of Developmental and Social Psychology of Sapienza, University of Rome and research procedure conformed to the APA ethical standards for research with children. Parents and teachers were not paid for their effort during the data collection and children did not receive any rewards or gifts after the interview.

4.3 Measures

4.3.1 Parent-rated shyness and empathic behaviors. To assess child shyness, parents completed the Italian version of the *Child Social Preference Scale* (CSPS; Coplan et al., 2004). The CSPS is a parent-report measure of children's social withdrawn (i.e. shyness) and has been previously successfully translated and validated for use in other cultures (Bayram Özdemir, Cheah, & Coplan, 2017; Li et al., 2016). Of particular interest for the present study was the subscale assessing shyness (e.g., "Although he/she appears to desire to play with others, my child is sometimes anxious about interacting with other children"), which has been previously used in Italy (e.g., Sette, Zava, Baumgartner, Baiocco, & Coplan, 2017, the second study of this dissertation). For the present study, shyness was rated with 6 items (Cronbach's α =.74) on a 5-point scale (1= *not at all*, 5 = *a lot*).

Parents also assessed children's observed proneness to demonstrate empathy with the *Children Behavior Questionnaire* - short form (CBQ-SF; Putnam & Rothbart, 2006; for the Italian adaptation see Matricardi, Albiero, & Cigognetti, 2010). The empathy scale

is comprised of 14 items (α = .81), rated on a 7-point Likert scale (from 1 *extremely untrue* to 7 *extremely true*). Item content focuses on children observed emotional reaction to other's emotions (e.g., "Seems upset when parents are in a bad mood"; "Becomes upset when s/he thinks someone else has been hurt").

Finally, parents assessed their child's reparative behavior using the reparation scale from the *My Child* questionnaire (Kochanska, et al., 1994). This scale provides a measure of children conscience (e.g., "When she or he has caused some damage, dropped or broken an object, will try to put the pieces together, clean up, etc.") and has previously been used with sample of young children (see Cornell, & Frick, 2007; Kochanska, Gross, Lin, & Nichols, 2002). For the present study, the reparation was measured with 7 items on a 7-point Likert scale (from 1 *extremely untrue, not at all characteristic* to 7 e*xtremely true, very characteristic*) and also showed acceptable levels of internal reliability consistent with previous studies (α =.76; Colasante, et al., 2014).

4.3.2 Teacher- rated of empathy-related socio-emotional functions. Teachers assessed children's anxiety-withdrawal behaviors completing the SCBE-30 questionnaire (SCBE; LaFreniere & Dumas 1996; for Italian adaptation see Sette, Baumgartner, & MacKinnon, 2015). The anxiety-withdrawal subscale was composed by 10 items each rated on a six-point Likert scale (1 = *never*, 6 = *always*) of inhibition and anxious behaviors (e.g., "sad, unhappy, and depressed", α = .86).

Teachers also provided an evaluation of children prosocial behaviors (e.g., helping, sharing comforting others) and popularity using the measure created by Caprara and Pastorelli (1993) and adapted by Bombi, Cannoni, Di Norcia, and Valente (2011) for use with preschool-age children. The prosocial (e.g., try to help other children) and popularity (e.g., He=she is much sought after for group activities in classroom) scale were

composed of three items each, on a 3-point Likert scale (1 = *never*, 3 = *always*) and showed acceptable levels of internal reliability (Cronbach's α = .92).

4.3.3. Children rated empathic feelings. During interview assessments, children provided a self-report of empathic feelings (Bryant, 1982; Eisenberg, Fabes, Schaller, Carlo, & Miller, 1991). Item content focused on dispositional empathy (e.g., "Sometimes I cry when I watch TV"; "I feel sorry for people who don't have the things that I have"). The 8 items (α =.76) were rated on a 3-point visual scale (i.e., circle increasing in size; 1 = *not like you;* 2 = *sort of like you;* 3 = *really like you*), which was provided to aid the children in determining their response, limiting possible verbal disadvantages. For the present study, the original questionnaire items were translated into Italian and then independently back-translated to English to ensure accuracy and translation adequacy.

Children were administered the empathy questionnaire verbally. After the experimenter read each question (in random order), the child was instructed to answer spontaneously (i.e., not think too long about their answers) by pointing to the visual scale. This assessment has been previously used with preschool and kindergarten children, with good evidence of reliability and validity (Eisenberg et al., 2007; Spinrad et al, 1999; Valiente et al, 2004)

4.4 Overview of Analyses

Data was first checked for their normality in terms of skewness and kurtosis and then correlations analyses were computed to assess associations among the study variables. Finally, we computed three separate hierarchical multiple regression equations to examine the potential moderating role of shyness in the links between seal-report empathic feelings and emphatic related observed reactions and behaviors. For these analyses, preference for empathic reactions, Guilt/shame observed affect, and reparative behavior served as dependent variables. For each regression, child gender and

age were entered as control variables at Step 1, main effect variables (self-reported empathic feelings and shyness) were entered at the Step 2, and the conceptually relevant interaction terms (self-report emphatic feelings x shyness) were entered at Step 3. Significant interaction terms were decomposed using simple slope analyses.

5. Results

5.1 Preliminary Analyses

Results from preliminary analyses revealed no substantive issues with normality (see Curran, West, & Finch, 1996). Descriptive statistics and correlations among study variables are shown in Table 4.1.

5.2 Relations among the study variables

Of note, self-reported empathic feeling assessed by children was significantly and positively related with reparative behaviors, prosocial behaviors, and popularity, as well as negatively correlated with anxiety-withdrawal. Shyness was significantly and positively related with anxiety-withdrawal and negatively associated with popularity. Finally, reparative behavior was positively associated with empathy as measured by parents, and prosocial behavior and popularity were positively inter-related, and both negatively correlated with anxiety-withdrawal behaviors.

In terms of demographic variables, child age was significantly and positively related with prosocial behavior. Mother and father education were positively related with empathy rated by parents. Moreover, only mother education was negatively correlated with shyness. Finally, results from ANOVA's, $F(1, 176) = 9.378$, $p = .01$, $\eta^2 = .05$, indicated that, overall, girls ($M = 2.03$, $SD = .59$) were rated as more prosocial than boys ($M = 1.77$, $SD = .53$). No other significant gender differences emerged.

Table 4.1

Descriptive Statistics and Inter-Correlations among Study Variables

Variable	*M*	*SD*	1	2	3	4	5	6	7	8	9
1.Self-reported Empathy (Child)	2.12	0.51	-								
2.Shyness (Parents)	1.83	0.70	-.08	-							
3.Empathy (Parents)	5.11	0.77	.09	-.06	-						
4.Reparative Behavior (Parents)	4.99	1.05	.17*	-.13	.40***	-					
5.Anxiety-withdrawal (Teachers)	2.07	0.83	-.14*	.21**	0.19	-.01	-				
6. Prosocial Behavior (Teachers)	1.90	0.57	.25**	-.13	-.06	.07	-.44***	-			
7.Popularity (Teachers)	2.16	0.62	.13*	-.16**	-.01	.13	-.52***	.50***	-		
8.Child Age	58.32	10.72	.13	-.02	-.03	.10	-.03	.14*	.15**	-	
9.Father Education	4.44	1.33	.04	-.11	.18**	.09	-.09	.03	.08	-.05	
10.Mother Education	4.58	1.42	-.07	-.16*	.17**	.08	-.03	.04	.01	-.02	.67***

Note. * $p < .05$. ** $p < .01$. *** $p < .001$

5.3 The moderating role of shyness on the relation between empathic feelings and empathic behavior and related socio-emotional functioning

To explore the potential moderating role of shyness in the link between children self-reported empathic feelings and empathic related reactions observed by parents and teachers, a series of hierarchical multiple regression analyses were conducted. For each regression, child gender, child age, and parental education (as an indicator of SES) were entered at Step 1 as control variables. At Step 2, the main effect variables of empathetic feelings and shyness (mean-centered) were entered. Finally, at Step 3, the conceptually relevant two-way interaction term was entered (i.e., emphatic feelings x shyness). Of note, additional two-way interaction terms and the three-way interaction term were not significant in any equation and omitted here to ease presentation. Separate regressions were computed to predict parent-rated empathetic reactions and reparative behaviors), as well as teacher- ratings of prosocial behavior, popularity, and anxiety-withdrawal. Results are presented in Table 4.2.

Table 4.2

Regression Analyses Predicting Empathic Behaviors and Social Functioning from Shyness and Empathetic Feelings

	Step 1				Step 2				Step 3			
	B	*β*	*t*	*p*	B	*β*	*t*	*p*	B	*β*	*t*	*p*
DV =Empathic Reaction												
Gender	.19	.12	1.698	.09	.19	.12	1.655	.10	.23	.15	2.047	.04
Age	-.02	-.03	-442	.65	-.03	-.03	-.514	.60	-.02	-.02	-.406	.68
SES mothers	.06	.11	1.124	.26	.05	.10	1.017	.31	.06	.10	1.111	.26
SES fathers	.05	.09	926	.35	.05	.09	.928	.35	.05	.09	.924	.35
Self-reported empathy					.07	.04	.627	.53	.06	.04	.548	.58
Shyness					-.04	-.04	-.529	.59	-.04	-.04	-.581	.56
Self-reported empathy X Shyness									-.41	-.18	-2.481	.01

	$F(4, 181) = 2.598, p = 03$				$F(6, 179) = .372, p = .69$				$F(7, 178) = 6.153, p = .01$			
R^2	.05				.05				.09			
DV = Reparative Behavior												
Gender	-.04	-.02	-.276	.73	-.05	-.03	-.370	.71	-.00	-.00	-.035	.97
Age	.12	.11	1.518	.13	.10	.09	1.278	.20	.11	.09	1.342	.18
SES mothers	.01	.02	.223	.82	-.00	-.00	-.033	.97	.00	.00	.054	.95
SES fathers	.06	.08	.856	.39	.06	.08	.871	.38	.06	.08	.840	.40
Self-reported empathy					.30	.14	1.931	.05	.29	.14	1.928	.05
Shyness					-.13	-.09	-1.217	.22	-13	-.09	-1.238	.21
Self-reported empathy X Shyness									-.53	-.17	-2.313	.02
	$F(4, 183) = 1.005, p = .40$				$F(6, 181) = 2.864, p = .06$				$F(7, 180) = 5.349, p = .02$			
R^2	.14				.22				.28			

DV = Anxiety Withdrawn												
Gender	.01	.01	.113	.89	.01	.00	.134	.89	.00	.00	.03	.97
Age	.01	.01	.176	.86	.02	.02	.420	.67	.02	.02	.403	.68
Education Mother	.01	.02	.269	.78	.03	.06	.660	.51	.03	.06	.627	.53
Education Father	-.06	-.10	-1.026	.30	-.06	-.10	-1.060	.29	.-06	-.10	-1.043	.29
Self-reported empathy					-.23	-.14	-1.963	.01	-.23	.19	-1.928	.00
Shyness					.22	.19	2.615	.05	.22	-.11	2.622	.05
Self-reported empathy X Shyness									.11	-.12	.642	.52
	$F(4, 183) = .357, p = .83$				$F(6, 181) = 5.796, p = .00$				$F(7, 180) = .412\ p = .52$			
R^2	.08				.26				.36			
DV = Prosocial Behavior												
Gender	.25	.24	3.114	.00	.24	.21	3.039	.00	.26	.23	3.299	.00

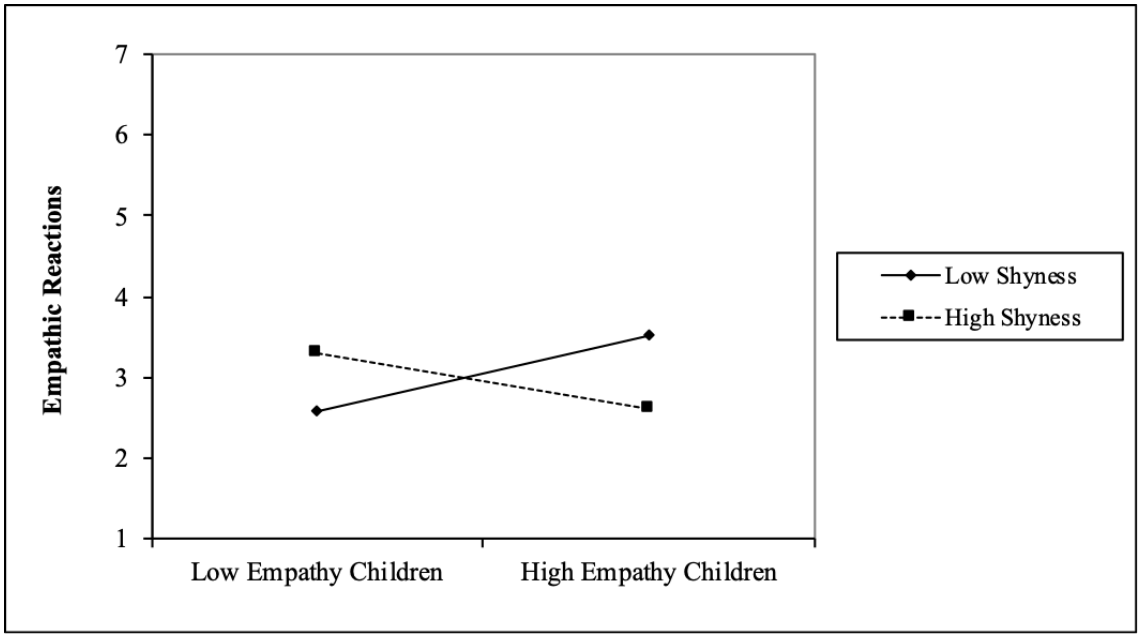
Age	.07	.12	1.698	.09	.06	.09	1.409	.16	.06	.10	1.461	.14
Education Mother	-.00	-.01	-.120	.90	-.01	-.04	-.437	.66	-.01	-.03	-.352	.72
Education Father	.00	.01	.137	.89	.00	.01	.149	.88	.00	.01	.108	.91
Self-reported empathy					.22	.19	2.780	.00	.21	.19	2.714	.00
Shyness					-.08	-.11	-1.553	.12	-.09	-.11	-1.594	.11
Self-reported empathy X Shyness									-.21	-.12	-1.765	.07
	$F(4, 183) = 3.073, p = .01$				$F(6, 181) = 5.453, p = .00$				$F(7, 180) = 3.116\ p = .07$			
R^2	.25				.34				.36			
DV = Popularity												
Gender	.08	.06	.927	.35	.08	.06	.953	.34	.10	.08	1.167	.24
Age	.07	.11	1.530	.12	.06	.09	1.363	.17	.07	.10	1.402	.16
Education Mother	.03	.08	.855	.39	.02	.05	.549	.58	.02	.06	.619	.53

Education Father	-.07	-.16	-1.643	.10	-.07	-.16	-1.662	.09	.-07	-.16	-1.699	.09
Self-reported empathy					.13	.10	1.450	.14	.12	.10.	1.389	.16
Shyness					-.14	-.15	-2.184	.03	-.14	-.16	-2.215	.02
Self-reported empathy X Shyness									-.18	-.10	-1.411	.16
	$F(4, 183) = .1.529, p = .19$				$F(6\ 181) = 3.716, p = .02$				$F(7, 180) = 1.990\ p = .16$			
R^2	.06				.11				.13			

In the prediction of *empathic reactions*, no significant main effects of empathic feelings or shyness were found. However, there was a significant empathy x shyness interaction effect. Results from follow up simple slopes are displayed in Figure 3.1. Among children with lower levels of shyness (1 SD below the mean), empathic feelings was significantly and positively related to empathic reactions ($b = .35$, $p = .02$). However, at higher levels of shyness (1 SD above the mean), this association was attenuated ($b = -.23$, $p = .17$).

Figure 4.1.

The moderating role of shyness in the link between self-reported empathic feelings and empathic reactions measured by parents

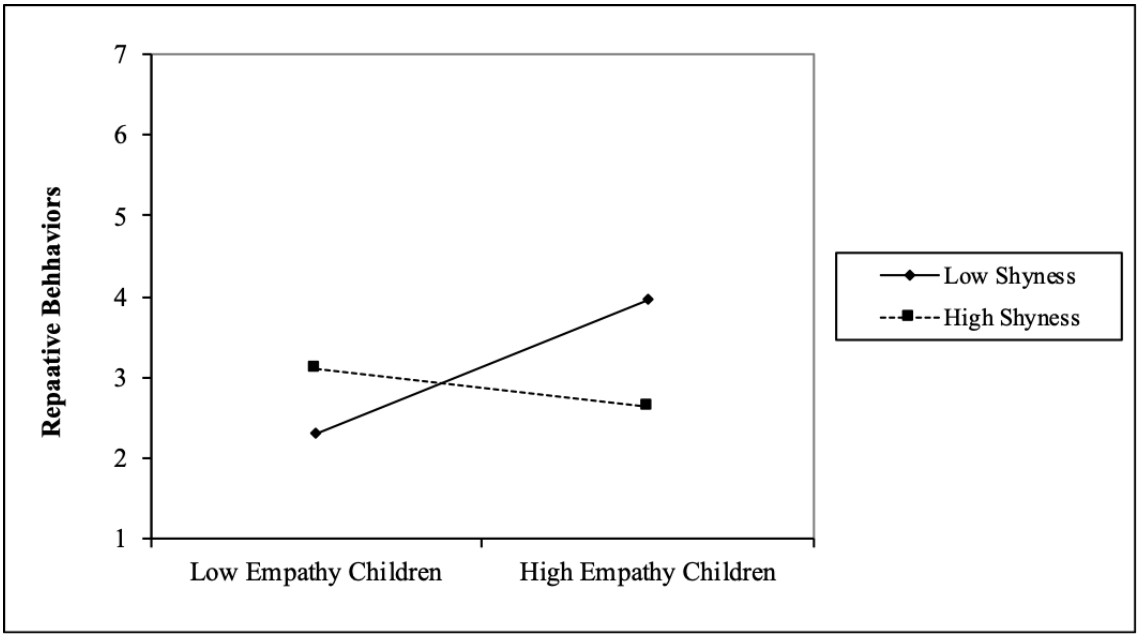


For *reparative behavior*, a positive main effect of self-reported empathy on reparative behavior was found. Results also again revealed a significant empathy x shyness interaction effect (see Figure 3.2). At lower levels of shyness, empathy was

positively related to reparative behavior (b = .67, p = .01), whereas at higher levels of shyness this association was attenuated (b = -.07, p = .73).

Figure 4.2

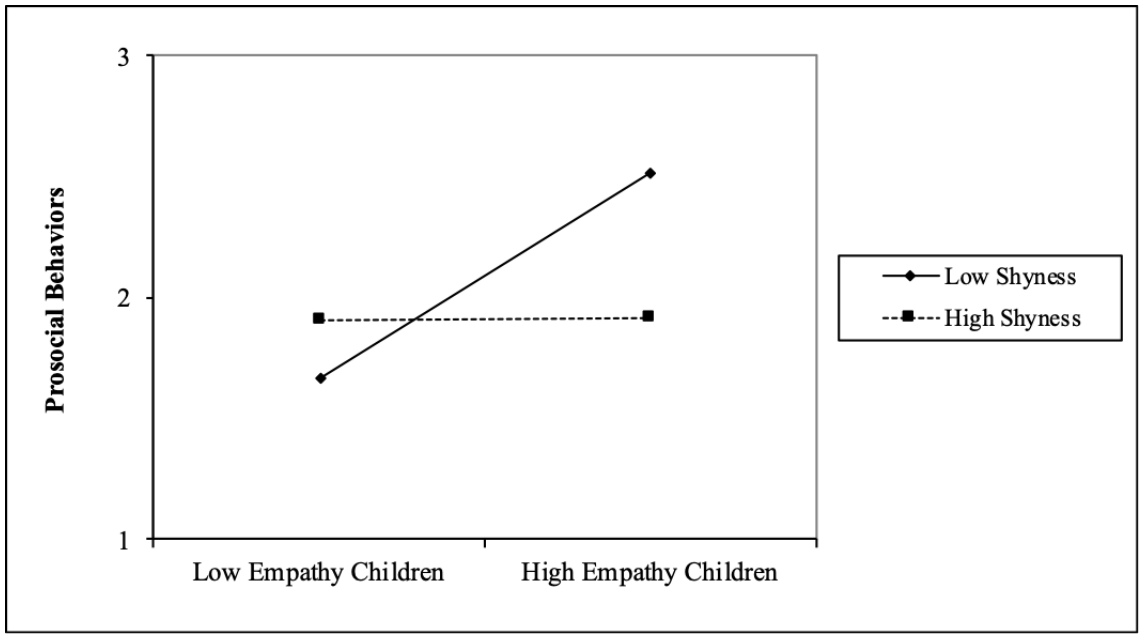
The moderating role of shyness in the link between self-reported empathic feelings and reparative behaviors measured by parents



For teacher-rated *prosocial behaviors*, a significant main effect of empathic feelings was found, as well as a marginally significant empathy x shyness interaction (see Figure 3.3). At lower levels of shyness, empathic feelings were positively associated with prosocial behaviors (b = .36, p = .01), whereas at higher levels of shyness this association was attenuated (b = -.06, p = .56).

Figure 4.3

The moderating role of shyness in the link between self-reported empathic feelings and prosocial behaviors measured by teachers



There were no significant interaction effects found in the prediction of *anxiety-withdrawal* or *popularity*.

6. Discussion

The primary aim of the present study was to explore the moderating role of shyness in the relations between young children's empathic feelings and their empathic behaviors. Overall, results suggested (for the first time empirically) that shy children may have a performance deficit, rather than a competence deficit in the domain of empathy. These findings support previous assertions that shy children may only appear to be less empathic, as opposed to actually being less empathic (Eisenberg et al., 1998; Findlay et al., 2006).

6.1 Assessment and Implications of Empathy in Early Childhood

The current findings added to our knowledge about the assessment and concomitants of different aspects of empathy in early childhood. For example, overall, preschool children's self-reports of empathic feelings were positively associated with reparative behaviors (assessed by parents), as well as prosocial behaviors and popularity (assessed by teachers). These results provide additional evidence of the *construct* validity of the self-report measure of empathetic feelings (Bryant, 1982; Eisenberg, et al., 1991). Therefore, in the present study the association founded across different sources of assessment (i.e., from child-report to both teacher/parent report) support the validity of this self-reported empathy measure.

These results also are in line with previous studies that suggested that empathy is related to positive socio-emotional adjustment in childhood (Colasante et al., 2014; Eisenberg, Fabes, & Spinrad, 2006; Eisenberg, Spinrad, & Sadovsky, 2006). For instance, Sallquist and colleagues (2009) reported that maternal-ratings and laboratory observations of preschool children's empathy longitudinally predicted indices of children's social competence 1 year later. Zhou and colleagues (2002) reported similar findings in a sample of elementary school children. Feelings of empathy may promote empathy related behaviors and positive socio-emotional functioning as a result of approach and exploration tendencies and, in turn, facilitate positive social interactions (Frijda, Kuipers, & ter Schure, 1989; Sallquist et al., 2009). Therefore, empathy may have positive implication for young children socio-emotional functioning, promoting socially competent behaviors (McDonald & Messinger, 2011; Zhou et al., 2002).

In the present study, empathic feelings self-reported by children were also negatively related with anxiety-withdrawn measured by teachers. Eisenberg and Fabes' (1990) suggested that children high in personal distress, such as those who are anxious in

social situations, may attempt to deal with negative emotions by avoiding situations. In other words, anxious children may experience personal distress and discomfort in reaction of other feelings and for this reason withdrawal themselves from others. Anxious children may be more focused to their negative emotion than other emotions and therefore anxiety may prevent children to feel empathy for others.

6.2 Implications of Shyness in Early Childhood

Overall, maternal rated shyness was positively associated with anxiety withdrawn and negatively with popularity. It is particularly noteworthy that in the present study shyness was negatively related to teacher ratings of popularity, since some previous study reported that shyness may be viewed as not problematic until middle or later childhood (Rubin, Chen, & Hymel, 1993). Despite this, these findings add to the growing number of studies linking shyness with indices of internalization and socio-emotional difficulties in early childhood (Coplan et al., 2018). For example, Eisenberg and colleagues (1998) in a longitudinal study in a sample of 6 to 12 year old children found that overall shyness measured by parents was related with parents reported internalizing negative emotions and shyness assessed by teachers was related with low popularity rated by peers (i.e. sociometric status). In Eggum and colleague's study (2014) shyness in kindergarten predicted lower level of popularity 1 year later, shy children from early childhood may be perceived by peers as fewer desirable playmates due to a lack of social competent behaviors and expression of anxiety behaviors. Coplan and colleagues (2008) reported that shyness in kindergarten was strongly associated with internalizing problems (i.e., anxiety and emotion symptom) and difficulties with peers. Similarly, in a sample of Italian preschoolers, Sette and colleagues (2016) found that shyness was associated with teachers' ratings of internalizing behaviors (i.e. anxiety-withdrawal). Therefore, these

results suggested that shyness may have a negative impact on children socio-emotional adjustment also in young age (Coplan et al., 2018).

6.3 Shyness and Empathy in Early Childhood

In the present study shyness resulted not to be linearly associated with any of the parental observed empathic behaviors (i.e., empathy and reparative behaviors) nor with children self-reported empathic feelings.

Although we did not find any direct associations between children shyness and empathy, our results indicated (for the first time) that shyness *moderated* relations among empathic feelings and different indices of empathy related behaviors. Of particular interest, our results supported the hypothesis that shyness may have an impact on the manifestation of empathic behaviors and related socio-emotional functioning. Among young children with lower levels of shyness, self-reported empathic feelings were positively associated with empathic and reparative behaviors (as rated by parents), as was as prosocial behaviors (as rated by teachers). In contrast, among children with higher levels of shyness, these relations were attenuated.

These results provide at least some preliminary empirical evidence to suggest that although shy children may have difficulties displaying empathic related behaviors (e.g., reparative or prosocial behaviors), they do not appear to lack the ability to feel empathy. Specifically, our results showed that shyness may have an impact on the expression of empathic and (empathic related) and consequently, caregivers (especially parents) may perceive shy children as globally less empathic. These results are in line with previous speculations that shy children may have less empathic skills because of a *performance* deficit instead of a *competence* deficit (Eisenberg et al., 1998; Findlay et al., 2006; Young et al., 1999). Shy children may feel overwhelmed by empathic feelings in response of others' emotions and may react by withdrawing, instead of acting empathically or

prosocially (Findlay et al., 2006; Eisenberg et al., 1998). Indeed, this nonassertive strategy may reflect shy children typical proneness to a lack of social initiative (Findlay et al., 2006; Özdemir, Cheah, & Coplan 2015).

There was at least some evidence to suggest that this moderating effect of shyness was stronger among variables assessed by parents than by teachers (i.e., only a marginally effect was found in the prediction of teacher-rated prosocial behavior). Some researchers suggest that parents can more easily detect their shy children's empathic behaviors (McDonald & Messinger, 2011). Zuffiano, and colleagues (2018) argue that teachers and parents may differ in their perceptions of children's empathy because they observed them in different contexts. For instance, teachers observe children at school amongst a variety of peers (i.e., additional reference points, more opportunities for child to display a variety of social behaviors) and in an environment that generally commands respect for rules. In contrast, parents tend to observe their children at home with less reference points (even after considering siblings) and potentially under different sets of rules and expectations. From this perspective, teachers may be more able to detect shy children's attempts to positively relate with peers (Zuffiano, Sette, Colasante, Buchmann, & Malti, 2018). However, it should be specified that the measures assessed by teachers were empathy-related socio-emotional functioning (i.e., prosocial behavior, popularity) and not directly measures of empathic behaviors such as those assessed by the parents (i.e., empathic behaviors, reparative behaviors).

7. Strengths, limitations, and future directions

To the best of our knowledge, this was the first study to find preliminary empirical support for the hypothesis that shy children may be perceived as less empathic because of a *performance* deficit rather than *competence* deficits (Findlay et al. 2006). Previous research has found evidence for this dynamic in the academic and linguistic domain

(Crozier, 1995; Hughes & Coplan, 2010; Kalutskaya et al., 2015), this was the first study to explore this theorization in the socio-emotional domain. Another strength of the present study was the use of a multi-method and multi-informant approach, including parent and teacher ratings as well as child self-reported assessments.

Notwithstanding, some caveats and limitations should be considered. First, the single time point design means we must also consider other plausible causal explanations for the pattern of results reported. For example, it may be that shy children's attempt to act empathically gradually extinguish over time due to repeated negative peer experiences such as rejection, exclusion or victimization. Previous results showed that peers difficulties may have a negative impact on shy children decreasing motivation and interest for social interactions and impacting on different areas such as internalizing behavior but also school functioning (Stevenson-Hinde & Glover, 1996). Further, Sette and colleagues (2019) reported that shyness in early childhood was related with peer difficulties (i.e., victimization and peer rejection), which in turn was associated with heightened negative moral emotions (i.e., guilt/shame). Conversely, positive peer experiences may have a protective role on shy children performance competence, helping them to interact and express more their socio-emotional internal competence (Graham, & Coplan 2012; Sette et al., 2016). In addition, although a multi-source approach was used, future studies could measure child via peer nominations or direct observations. Moreover, as already mentioned, teachers in the current study only measured empathy-related socio-emotional functioning such as prosocial behaviors and popularity. Therefore, future studies should consider empathy observed behaviors as reported by teachers. Finally, of note, in the present study shyness was also found to be negatively correlated with maternal educational level (but not father education). Previous results have suggested that children in a lower socioeconomic household are at greater risk to display internalizing

behaviors and reinforce their shy tendencies (Cicchetti & Toth, 1998; Spence, Najman, Bor, O'Callaghan, & Williams, 2002; Turner & Butler, 2003). Lower socio-economic status may elevate parental stress, which may lead parents to use coercive discipline, that may in turn, exacerbate children avoidance behaviors (Loukas, & Prelow 2004; Morgan, Farkas, & Wu, 2009; Shaw, Gilliom, Ingoldsby, & Nagin, 2003). Future studies could also investigate parenting style and attachment style (Hastings, Nuselovici, Rubin, & Cheah, 2010).

In conclusion, results of the present study may have important implications for early educational contexts. Considering that shy children may have difficulties in expressing empathy, and for this reason may be perceived as more aloof and less socially competent, caregivers can encourage more empathic responses by creating a warm and accepting environment. In this regard, caregivers can help shy children to reduce feelings of anxiety and reticence, while conversely increasing their sense of security. This will facilitate the expression of empathy and its associated behaviors. Consequently, the promotion of empathic skills may help shy children to better interact with others establishing more positive and protective relationships, helping them to benefit from peer interactions.

Chapter five

General Discussion

The main purpose of the present dissertation was to analyze preschool aged children socio-emotional developmental aspects related to children subtypes of social-withdrawal. In all the three studies a multidimensional perspective of social withdrawn was taking in account, and the threes subtypes of social withdrawal subtypes were explored: *shyness, unsociability* and *social avoidance*. Study 1 investigated young children's comprehension and perception of shyness, unsociability, and social avoidance. Specifically, this study's purpose was to investigate whether different underlying emotions and motivations that guide social withdrawal are understood by preschoolers, and further if this comprehensive led to differential responses to these different subtypes of withdrawn behaviors. Study 2 investigated a potential protective factor for both shyness and unsociability in young children. In this study, the moderating role of peer acceptance was assessed in the relation between these forms of social withdrawal and indices of socio-emotional functioning. Finally, Study 3 tested the moderating role of shyness in the relation between empathic feelings measured by children and empathic related behaviors and reactions depicted by parents and teachers. Specifically, shy children differences in the ability of feeling empathetic or express empathy was studied, revealing a performance deficit instead of a competence deficit

Results from this dissertation provided additional support for the notion that social withdrawal is a multi-dimensional construct representing a behavioral effect of different underlying emotional and motivational substrates. Therefore, shyness, unsociability, and social avoidance emerged as different subtypes, associated with different outcomes and with specific and differentiated impacts on children socio-

emotional functioning (Coplan et al., 2018). Moreover, results confirmed and extended the social approach-avoidance theory (Asendorpf, 1986, 1990).

Shyness was explored in all the three study. Overall results supported the approach-avoidance perspective (Asendorpf, 1990) confirming that shyness may stem from co-occurrent high level of approach motivation and high level of avoidance motivation. Therefore, study 1 demonstrated that even young children (i.e., preschool age) conceive shyness as the result of an internal conflict (i.e., conflicted shyness, see Coplan et al, 2004) between the motivation to interact and the motivation to withdrawn from social situations. In this study, shyness was perceived as a distinct subtype of social withdraw characterized by high social motivation. Therefore, shy children were evaluated as more motivated and desirous to play with others, compared to the unsociable and avoidant hypothetical peers (i.e., high social motivation). Furthermore, shy children were perceived as sad, because they were not happy to play alone, supporting the idea that shyness is characterized by an internal desire to play with peers (Asendorpf, 1990; Coplan et al., 2015). Finally, shy children's withdrawal behaviors were seen as less intentional compared to the unsociable and the social avoidant hypothetical peers, indicating that shy children withdrawal behavior is not due to an intrinsic desire to avoid interactions. In other words, shy children did not want to play alone because they prefer solitude, they played alone because they experienced anxiety, fear, distress during social interaction. Therefore, in study 2 shyness, although was associated with anxiety, was not related with preference for solitary play, indicating that shy children, although experienced negative feelings (i.e. high avoidant motivation), did not like or desired to play alone peers (i.e., high social motivation). These results supported again the theorization of shyness as an internal conflict between the tendencies of withdraw due to negative feeling and the desire to interact. Finally, also in study 3 it was possible to find some support of the approach-

avoidance theorization. Therefore, results of study 3, on the relation between shyness and empathy, indicated that shy children seemed to be trapped in an internal approach-avoidance conflict between their ability to experience empathy and their ability to express empathy. In other words, despite their social competence (i.e., ability to feel empathy) they were not able to respond emphatically, and instead behaved with wariness and reticence (Asendorpf, 1990). More specifically, in study 3, there was a discrepancy between shy children's ability to feel empathy and lower levels of observed or expressed empathic related reaction, because shy children may suppress the expression of their social ability or desire. In other words, shy children may remain trapped between the desire to interact empathically and feelings of distress that may push them to withdrawn (Findlay et al., 2006). Therefore, overall, shy children seem to have difficulty to cope with, or regulate adequately their emotions, choosing instead nonassertive or withdrawn strategies (i.e., high avoidance motivation) (Findlay, Coplan, & Bowker, 2009; Bayram Özdemir, Cheah, & Coplan, 2015; Rubin, Cheah, & Fox, 2001).

Talking about implication of shyness during preschool age, results of the three studies underlined that shyness from 3 to 6 years old was associated with socio-emotional difficulties. Therefore, in different samples of preschool children, shyness (as measured by parents) was positively associated with teacher ratings of anxious-withdrawal behaviors (Study 3) and internalizing problems (Study 2). Moreover, in Study 1 children evaluated the shy hypothetical peer as sadder than the unsociable peer, in line with the theory that shyness may be associated with internalizing problems (Arbeau et al.,2010; Graham and Coplan, 2012; Karevold, et al., 2012; Kopala-Sibley & Klein, 2017).

Unsociability was explored in study 1 and study 2. As well, in both studies, results supported the notion that unsociability is a separate subtype of social withdrawal

conceptualized as the combination of low avoidance motivation and low approach motivation (Asendorpf, 1990; Coplan et al., 2017). In other words, results supported the idea that unsociability is a non-fearful preference for solitude, and that unsociable children are happy to play calmly by themselves (Coplan et al., 2004). Therefore, in Study 2, unsociability was positively associated with child self-reported preference for solitary play (in contrast to shyness). Unsociable children reported that they preferred to carry out some activities (e.g., play, eat a snack) calmly alone. A similar result emerged in Study 1, preschool children were able to understand that the withdrawal behavior displayed by the unsociable hypothetical peer was more intentional (i.e., intrinsic motivation and positive appeal for spending time alone) compared to the shy hypothetical peer and the avoidant hypothetical peer. Also, the unsociable hypothetical peer was rated to have less eager to play with other children (i.e., low social motivation) compared to the shy hypothetical peer. Moreover, in the same study children rated the unsociable hypothetical peer as happier to play. These results suggested that even young children understood that unsociability steam form an intrinsic and positive motivation to be alone.

Talking about socio-emotional implication of unsociability in line with previous results, unsociability was found to be a comparatively benign subtypes of social withdrawal (Ooi et al, 2018). Therefore, in Study 2, unsociability was not significantly related with indices of socio-emotional maladjustment. Moreover, in study 1 unsociable children were perceived to be happy. These findings supported and extended previous studies indicating that unsociability, especially in childhood, is not associated indices of internalizing problems in childhood, such as to anxiety, loneliness depression, contrary to shyness (Bowker & Raja, 2011; Coplan & Weeks, 2010; Harrist et al., 1997).

Results regarding peer context are mixed, as previously found in literature (Coplan et al., 2004; 2014; 2017; Ooi et al., 2018). Previous researchers suggested that

despite being happy to play alone, unsociable children may be also be perceived by peers as indifferent and aloof, resulting in being less liked by their peers. (Coplan et al, 2007; Coplan et al., 2015; Coplan et al., 2019; Ding et al., 2015). Conversely, results from Study 1 suggested that in Italian preschool unsociable children may be accepted, and in contrast with previous studies, children affiliative preference for unsociable hypothetical peers did not differ compared to shy peers (Coplan et al., 2007; Coplan et al., 2012). This result supported the postulation that unsociability may be perceived as less problematic and more acceptable in early childhood, becoming more problematic later on development (Coplan et al., 2018).

Notwithstanding, even if unsociability is comparatively benign, there may be some cost of missing out important opportunity to develop their socio-emotional competence. Unsociable children may accumulate the costs of missing out the many benefits of social interaction and relationships with peers (Coplan et al., 2015; Coplan et al., 2019). Therefore, Study 2 showed the importance of positive peer relationships also for unsociable children, suggesting that unsociable young children who experience less social acceptance by peers may actively react with anger and aggression. In other words, results of study 2 showed that despite their preference to spend time alone and to play by themselves, unsociable children may suffer if actively isolated by other children and peer rejection may encourage some unsociable children act aggressively. Nevertheless, a protective and acceptance environment seems to be particularly important also for unsociable children.

Finally, social avoidance was explored only in Study 1. Results confirmed theoretical hypotheses on this subtype of social withdrawal. For example, socially avoidant hypothetical peers were perceived by preschool children as having low desire to interact with others (i.e. low approach motivation), and more intentional in their

withdrawal behaviors compared to the shy hypothetical peers (i.e., high avoidance motivation). These results reflect Asendorpf's (1990) social withdrawal approach-avoidance perspective. Thus, socially avoidant children may not only have a comparatively lower desire to initiate social interaction, but also actively avoid peers (Asendorpf, 1990; Coplan et al., 2013; Coplan et al., 2015). Moreover, social avoidant children were perceived as more sad than the unsociable hypothetical peer, suggesting that preschool children understand that social avoidance may be related with negative feelings. Indeed, Coplan and colleagues (2018) showed the first evidence that social avoidance in early childhood may be an early manifestation of depressive symptoms. Finally, in line with previous findings, social avoidance also appeared to be the most problematic subtype of social withdrawal (Coplan et al., 2013; Coplan et al., 2018). Preschool children perceived social avoidant hypothetical peers as less intelligent, and as having a poorer relationship with the teacher, suggesting that also in the school domain social avoidance may have a negative impact.

To my knowledge, no other studies have examined these issues in Italian children, and social withdrawal remains under-explored in the international literature. These studies used a multi-source methodology, taking in account parents, teachers, and also young children's perception of their socio-emotional world. In each of the three studies, child interviews were used to extend the investigation on this topic. Investigating children's point of view and their internal perceptions about social withdrawal by the use of an individual interviews (with the aid of pictorial vignettes) or peer interviews (i.e., sociometric procedure) can provide additional important information on the topic, especially considering that social withdrawal in early childhood has been most often assessed with parental or teacher reports (Coplan et al., 2018; Kopala-Sibley & Klein, 2017).

Furthermore, results from these three studies have important implications for Italian preschool, in which generally teachers and classmates are the same for several years. Therefore, considering that teachers can have an important role in creating a supportive and warm environment (e.g., encouraging positive peer relationships and promoting children's emotional, behavioral regulation, and social adjustment within classroom) it is important investigate the relations between social withdrawal and socio-emotional functioning. Raising awareness about the differences between shyness, unsociability, and social avoidance in early childhood may help teachers and caregivers to improve the quality of social climate as well as children's interactions with peers who display different social behaviors in early education environments and at home. This is particularly important because withdrawn children may experience increased motivations to engage in social interactions, to express their feelings, to act their internal competence when the social environment is protective, understanding, sympathetic, and socially inclusive (Gazelle & Rudolph, 2004; Oh et al., 2008).

Despite these merits, this work has some limitations. First, data were cross-sectional, and it was not possible to establish causal relations among variables. Future research could investigate longitudinal relations between social withdrawal subtypes and children's social adjustment. Longitudinal studies are also required to examine the developmental processes of the children's social withdrawal, as well as peer responses to each subtype of social withdrawal over time. Second, this research did not analyze possible differences among classroom peer groups. Future studies should investigate if children's perceptions and attitudes about the subtype of social withdrawal may differ as a function of the classroom context, in terms of group composition and teacher educational practices (Avant, Gazelle, & Faldowski, 2011).

Third, considering the presence of second immigrant generation children in the Italian school context it would be interesting to consider this variable in order to understand if the impact of different subtypes of social withdrawal may vary in terms of cultural context.

In conclusion, the present dissertation can be considered as a contribution to the actual investigation on social withdrawal in young and preschool children in the Italian context, by highlighting the importance of considering collateral and inextricably related processes, such as social, moral emotion, and affective aspects of children's development.

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