WHAT’S IN A NAME? THE INFLUENCE OF AN ADHD-INATTENTIVE TYPE LABEL ON PERCEIVED SOCIAL COMPETENCE AS VIEWED BY MENTAL HEALTH PROFESSIONALS AND TEACHERS

A dissertation submitted

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Abstract:
Objective: To determine whether the presence of an ADHD-PI label influenced adult perceptions of a female adolescent’s social competence. Method: Forty four primary and secondary teachers and 54 mental health professionals rated their perceptions based on a vignette that included or did not include the label ADHD-PI. Results: The ADHD-PI labeled vignettes elicited more negative perceptions of the child’s social acceptance and ability to make close friends. Also, mental health professionals rated the girl as more socially accepted, regardless of diagnosis. There were no other significant main effects and there were no significant interaction effects. Conclusion: The presence of an ADHD-PI label has a significant influence on how the child is perceived by caregivers, and teachers are more likely to have less positive perceptions of adolescents with attention differences than do mental health professionals in certain domains. The electronic version of the dissertation is accessible at the OhioLink ETD center http://www.ohiolink.edu/etd.
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Chapter 1: Introduction

When it comes to making assumptions about a person based on perceived characteristics, there is little difference between generalization, prejudice, or stereotype. These words may seem different in terms of severity or importance, but they all speak to the power of stigma. In the field of mental health, a diagnostic label can be used to cluster a set of symptoms, which can help guide the course of treatment. The label can also help validate the individual’s experience by bringing clarity to a previously unexplained problem (Klasen, 2000; Ohan, Visser, Strain, & Allen, 2011). A label may cover domains of functioning, such as emotional, scholastic, or behavioral, but it is not intended to encompass all aspects of an individual. It is, however, intended to describe a certain set of clinically significant behaviors that interfere with daily functioning. In regards to children, adults can be influential in social settings, interpersonal relationships, and other skills (Collett & Gimpel, 2004). Also, adult perceptions regarding children’s competencies can be influenced by their own experiences, biases, or assumptions, particularly as they relate to the stigma of a psychodiagnostic label (Eisenberg & Schneider, 2007). Specifically, it is likely that adult ratings of children’s competency will differ based on both the profession of the adult and also in the presence of a diagnostic label, which have the potential to negatively impact perceptual ratings.
Positive outcomes occur in optimal situations when all information is accurately and objectively assessed, presumptions are avoided, and the level of impairment is carefully considered (Gathje, Lewandowski, & Gordon, 2008). However, it is often the case that diagnostic labels are not applied based on best practice standards, which include multiple methods of assessment (Handler & DuPaul, 2005). In addition, many misconceptions surrounding a diagnosis often influence perceptions about given abilities, and these misconceptions are often reinforced by personal experience or media influence (Law, Sinclair, & Fraser, 2007; Penn & Wykes, 2003). This is particularly true when considering how symptoms manifest differently in different genders (Ohan & Johnston, 2005).

In a mental health situation when best practice techniques are applied, labels are used to better understand how to help an individual overcome or cope with their stated difficulties (Handler & DuPaul, 2005; Hinshaw, 2005; Klasen, 2000). This concept is compromised slightly when it comes to children, who are just beginning to form identities and are greatly impacted by adult influence (Collett & Gimpel, 2004). It is compromised even further when labels are used to make broad-sweeping assumptions about individuals that the diagnoses do not even cover: as an example, when the application of a label to a child decreases a caregiver’s confidence in their ability to teach the child (Ohan et al., 2011). Although some diagnostic labels describe learning difficulties, the majority of them do not.
The mental health disorder known as Attention Deficit/Hyperactivity Disorder has gone through many changes as a diagnosis (Wheeler & Carlson, 1994). It first began as a diagnosis for children in the DSM-III and then grew in social popularity over the next two decades. It eventually rose to the point of being jargon used to describe anybody who had any sort of attention difficulties, a far larger percentage than the actual prevalence (Sciutto & Eisenberg, 2007). In actuality, the prevalence of this commonly misunderstood and over-pathologized disorder has changed little since its inception, varying between three and seven percent (American Psychiatric Association, 2000).

Within the diagnosis, there remains a discrepancy between perception and actuality. ADHD has three subtypes that generally manifest in very different ways. A child with the hyperactive-impulsive subtype, or ADHD-HI, will generally be someone who exhibits externalized and impulsive symptoms, both verbal and physical (Gaub & Carlson, 1997a). A child with the primarily inattentive type, or ADHD-PI, tends to have difficulties with sustained attention and often makes errors with small details (APA, 2000). A third subtype, ADHD-C, has symptoms of both of the other subtypes. The difference between ADHD subtypes primarily has to do with either internalizing or externalizing behaviors. Because externalizing factors are more visible, the hyperactive-impulsive and combined subtypes generally get more attention from adults (Gaub & Carlson, 1997a). Most of these behaviors are also exhibited by boys. Due to the lack of
externalizing features, ADHD-PI receives the least attention. When the disorder manifests in children, more attention generally gets paid to the child who displays disruptive behaviors as opposed to the child who has difficulty sustaining attention (Gaub & Carlson, 1997a).

When an adult becomes aware of a child’s diagnosis, it is likely that they will have certain assumptions about the child (Corrigan, 2004). These assumptions have to do with generalities about the particular disorder, and they are often not accurate (Corrigan, 2004). These initial assumptions can spread to social, academic, emotional, and other realms of functioning (Eisenberg & Schneider, 2007). As time passes and certain aspects of the assumptions become reality, they tend to integrate into a part of the child’s identity. This will tend to reinforce the adult’s initial assumptions about how the diagnostic label impacts the child, which is an example of confirmation bias (Nickerson, 1998). Adults that strictly look for evidence to support their initial hypotheses can result in the creation of many more problems than originally existed within the child (Barber, Grubbs, & Cottrell, 2005). This means that the label itself may have a greater influence on the child than many of the symptoms. While it is true that children with ADHD differ from normal children in various ways, the stigma of the label itself is a major influence in how the child is treated by caregivers.

The difference between self and other perception is similar to the difference between subjectivity and objectivity. When there is no discrepancy
between how children and adults view the child’s competence, problematic secondary effects can be minimized. The insidious aspect about the discrepancy between self and other perception in the disorder is not if the disorder is over or underdiagnosed. It is also not if it exists or how it manifests. These aspects can readily be cleared up by using best practice methods of assessment and considering frequency, duration, and severity of symptoms (Lewandowski, Lovett, Coddin, & Gordon, 2008). The difficulty arises when the negative symptoms that result from poor social interactions are not addressed, and a cyclical pattern emerges. Children who have social engagement difficulties, particularly those with attention difficulties, are often ignored or rejected by peers, are not exposed to appropriate social relationships, and do not develop appropriate social skills (Andrade, Brodeur, Waschbusch, Stewart, & McGee, 2009). This will continue to distance children with attention difficulties from their peers, not only keeping them further from positive social relationships but also exacerbating underlying emotional difficulties (Sørensen, Hugdahl, & Lundervold, 2008).

Caregivers, including teachers, parents, and mental health professionals, can unintentionally cause new and exacerbate previously existing symptoms when influenced by the presence of a label. The result of the label is a more indirect process, almost a lack of understanding about disorders, mental health, and childhood identity. There have been many studies that show the strength of
labeling, particularly regarding symptom severity (Stinnett, Crawford, Gillespie, Cruce, & Langford, 2001), competencies (Corrigan, 2004), and interpersonal difficulties (Harris, Milich, Corbitt, Hoover, & Brady, 1992). Some focus on causal factors (Dryer, Kiernan, & Tyson, 2006b), whereas others focus on positive adult interactions (Klasen, 2000). All of this points to the power of a diagnostic label and how much influence it has on others’ perception.

Difficulty arises when considering the actual diagnosis of ADHD-PI in that many of the symptoms are either similar to symptoms for other diagnoses, or are not easily objectively measurable by outside observers (Hinshaw, Carte, Sami, Treuting, & Zupan, 2002). A provider’s personal and social experiences can influence whether or not a diagnosis is valid (Dryer et al., 2006b). Also, many mental health providers do not use best practice techniques when assessing ADHD (Handler & DuPaul, 2005). As ADHD symptoms are common to individuals both with and without ADHD (Lewandowski et al., 2008), a different way of looking at ADHD becomes apparent. When the level of impairment is considered and seen as more important than the presence or absence of a symptom, ADHD-PI can be more accurately diagnosed (Crawford, Kaplan, & Dewey, 2006; Gathje et al., 2008).

The focus on externalizing behaviors excludes a large group of children who exhibit inattentive symptoms, and also excludes girls, who have a different symptom presentation when compared to boys. Girls with ADHD tend to have
similar social goals as non-diagnosed peers, in addition to similar social skills. Adults can have a major impact on these goals and skills, and if the adult is influenced by a label, the impact will generally be negative (Collett & Gimpel, 2004; Corrigan, 2004; Dryer, Kiernan, & Tyson, 2006a). This speaks to how stigma and misunderstanding of a diagnosis can contribute to a child’s social development. It also speaks to the protective factor of positive self-illusions. It is hoped that mental health professionals will be less affected by the addition of a label when compared to teachers, although adults in all professions are influenced by stigma. Therefore, it is important that all caregivers have similar, objective perceptions regardless of a label, and that any discrepancies should be eliminated through psycho-education.

**Background and Rationale for the Study**

There is a multitude of data regarding perceptions and ADHD. Most of the research focuses on ADHD-HI and ADHD-C, as behaviors with these disorders are more visible and easily referable (Law et al., 2007) and occur primarily in boys (Abikoff et al., 2002). Also, children’s self-perceptions and both parental and teacher attitudes regarding children’s social competence have been studied. There seems to be a discrepancy between how children view themselves and how adults view them. Specifically, children with ADHD tend to overestimate their social competence (Hoza et al., 2004), although they are often aware of their deficits (Klimkeit et al., 2006). What is less clear is how children with ADHD-PI
are perceived by certain treatment providers, or rather, mental health professionals. There is very limited data detailing mental health professional opinions of children’s competence. Therefore, the rationale for comparing both teacher and mental health professional perceptions is to determine if there is a discrepancy in the perception of competence between caregivers.

Another factor that is relevant to the study is the influence of a stigmatizing label. Research on stigma generally points to a label being strikingly influential in how a person is perceived over multiple domains (Stier & Hinshaw, 2007). While this is especially true for more severe disorders (Corrigan, 2004; Hinshaw, 2005), it also holds true for ADHD (Harris et al., 1992). Because of this, the inclusion or exclusion of a label will be a major factor in the study. This will help determine the influence of the label, and whether or not it is stigmatizing across professions. Diagnostic labels are intended to describe a specific set of symptoms, but are not comprehensive enough to explain every aspect of an individual. ADHD-PI symptoms describe inattentive behaviors, not how socially competent a child is or is not. It is often the case that the label becomes more influential than the symptoms, mainly in regards to how adults perceive the child.

ADHD has been the topic of many studies, as has the concept of perceived competence. With all of the research that exists, there still is a gap that necessitates examination. Girls with ADHD-PI are often overlooked for treatment. Many assumptions are placed on children in the absence of a real
understanding of the diagnosis and how it actually impacts them. Because teachers and mental health professionals are so influential in a child’s life, it is important to know exactly how they perceive the children they are trying to help. Closing the gap between perceived and actual competence is not necessarily the issue. The main issue has to do with all people involved, including the child, mental health professional, and teacher, having similar perspectives in order to minimize potential negative effects on the child.
Chapter 2: Review of the Literature

There is a great deal of research that explores the impact of stigma and diagnostic labels. A diagnostic label is not in itself problematic, and an individual’s psychological symptoms, once identified, can help guide treatment in order to minimize any potential negative problems. This occurs in an ideal situation when stigma does not play a role. The problem exists when more emphasis is placed on stigma rather than on the diagnostic label itself. When this occurs, treatment is not sought, self-esteem is diminished, and people are deprived of social opportunities (Corrigan, 2004). Also, when dealing with children, adult caregivers can perpetuate stigmatizing beliefs rather than understanding what the diagnostic label actually means, and from this, a different cluster of symptoms can arise (Collett & Gimpel, 2004). A child’s social life, interpersonal skills, and overall abilities can be impacted when they are required to not only deal with their symptoms, but also the negative attitudes of others regarding a diagnostic label (Penn & Wykes, 2003).

When considering ADHD in children, the mere presence of the label can lead to negative perceptions by others, perceptions that cannot be explained by objective differences, including test scores and measurable behaviors (Eisenberg & Schneider, 2007). It is the case that children with ADHD differ from non-diagnosed peers, as they can overestimate their abilities, often as a self-protective
measure (Ohan & Johnston, 2002). They also are able to accurately measure the abilities of others (Evangelista, Owens, Golden, & Pelham, 2008). The discrepancy between self- and other-perception due to the stigmatizing effects of the diagnostic label can result in an increase in symptomatology and less social engagement (Dryer et al., 2006a).

Another issue that arises in the research is a focus on the hyperactive and combined subtypes of ADHD. These two subtypes are primarily comprised of boys. This focus not only excludes the primarily inattentive subtype but also girls (Abikoff et al., 2002; Gaub & Carlson, 1997a; Gaub & Carlson, 1997b; Ohan et al., 2011).

In 1992, Harris et al. studied how assigning a stigmatizing label influenced how hyperactive behaviors were perceived. The authors were particularly interested in how a label influenced interactions between children in the presence of a cluster of diagnosable symptoms, in this case attention-deficit/hyperactive disorder, or ADHD. Children both with and without ADHD symptoms were assigned the label and then were paired with a peer observer who was informed about the child’s labeled behaviors. The observers reported that their labeled peers were less friendly, engaged less, and less competent. They also described their peers in global, non-specific terms related to hyperactivity. Those who were assigned the label described their interactions with observers as less positive, less collaborative, and that their peers were meaner. This holds true both for children
with and without ADHD but who were assigned the label. The authors concluded that the stigmatizing label may not only exacerbate symptoms but also create negative interactions and experiences that would not have otherwise existed in the absence of a label. While this study is not the first of its kind, nor is it the last, it does demonstrate the power of a stigmatizing label.

The confluence of preexisting symptoms and external negative attitudes is relatively common (Hinshaw, 2005; Klasen, 2000; Law et al., 2007; Penn & Wykes, 2003; Stier & Hinshaw, 2007). It is also not exclusive to children. Misunderstandings about symptom scope, implications, and impact are prevalent throughout much of society. It exists when the observers are teachers (Barber et al., 2005; Eisenberg & Schneider, 2007), parents (Eisenberg & Schneider, 2007; Hoza et al., 2004), mental health professionals (Dryer et al, 2006a; Penn & Wykes, 2003), and also the media (Penn & Wykes, 2003; Sciutto & Eisenberg, 2007; Stier & Hinshaw, 2007). It is true that individuals with a specific cluster of symptoms differ from the general population; How they differ is frequently misunderstood. Lewandowski et al. (2008) found ADHD symptoms both in individuals with and without a diagnosis. The factors that led to a diagnostic label were symptom severity, duration, and frequency. However, the presence of symptoms in both groups indicates a commonality between diagnosed and non-diagnosed children. Therefore, the difference between a diagnosed and a non-diagnosed child may be slight in less obvious cases. However, the power of the
applied label can be drastic, and can create a chasm between perception and reality.

**ADHD: Subtypes, Gender Differences, Potential Diagnostic Complications**

ADHD is one of the most common childhood mental disorders (Sciutto & Eisenberg, 2007), found in three and seven percent of the general population (APA, 2000). Within that diagnosis, there are three different subtypes; Predominantly Inattentive (ADHD-PI), Predominantly Hyperactive-Impulsive (ADHD-HI), and Combined (ADHD-C). There is a dramatic gender split with all subtypes of ADHD, as it exists in two to nine times as many boys as girls (APA, 2000). This difference may be in part due to less attention being placed on the inattentive group, and also because most research has been conducted on clinic-referred children. ADHD is assumed to be a male disorder (Law et al., 2007), and the majority of clinic-referred children are boys. This is because boys tend to engage in disruptive and externalizing behaviors which referral sources are more likely to notice (Abikoff et al., 2002 Caci, Bouchez, & Baylé, 2009). Girls do get referred, but it tends to be at an older age (Gaub & Carlson, 1997a).

One of the main differences between the different subtypes is how the symptoms are exhibited. As stated above, externalized and disruptive symptoms tend to be associated more with ADHD-HI and ADHD-C, whereas internalized symptoms generally correspond to ADHD-PI. Because they are more visible, the externalizing behaviors tend to get more attention, leading to earlier referrals.
Also, because ADHD is dominated by males, most of the research on the subject is on how symptoms present in boys. This implies a lack of data and understanding on both how ADHD differs between genders and how ADHD presents in girls (Hinshaw, 2002; Ohan & Johnston, 2005; Thurber, Heller, & Hinshaw, 2002).

Due to the lack of research and social understanding about ADHD, girls are more likely to have unmet service needs (Bussing, Zima, Perwein, Belin, & Widawski, 1998; Gaub & Carlson, 1997b). Also, and partly due to societal behavioral expectations of girls, ADHD in girls is less accepted as having an impact on functioning (Eisenberg & Schneider, 2007; Sciutto & Eisenberg, 2007). Teachers tend to underreport emotional difficulties in girls, particularly quiet girls, due to the halo effect of social expectations (Sørensen et al., 2008).

While there is a lack of research on girls with ADHD, the research that does exist presents interesting information about how ADHD and comparison girls differ. Specifically, there does not seem to be a difference between girls with and without the diagnosis regarding social goals (Thurber et al., 2002). Social goals in this case were defined as the desire to be liked by other children and to maintain friendships. This may be due to the data collection process, approval-seeking behavior, or specific sample, and therefore the results may not be generalizable. Regardless of the reason, the results seem to imply that girls both with and without ADHD do not differ in regards to social desirability. Where the
two groups differed was with respect to social behaviors. Girls with ADHD demonstrated more aggressive behaviors and fewer negotiating behaviors than comparison girls (Ohan & Johnston, 2005; Thurber et al., 2002). In addition, girls with ADHD tend to be more socially isolated (Hinshaw, 2002) and be seen in a negative light by peers (Hinshaw, 2002; Thurber et al., 2002). However, girls with ADHD tend to be more socially accepting of other girls with ADHD than comparison girls are (Hinshaw, 2002).

When the different subtypes are compared, the distinction between inattentive behaviors and hyperactive-impulsive behaviors becomes more dramatic. Girls with ADHD-PI were shown to demonstrate less aggressive behaviors than girls with ADHD-HI and ADHD-C (Gaub & Carlson, 1997a). They were also seen in a more positive light than peers with hyperactivity (Gaub & Carlson, 1997a; Hinshaw, 2002). However, they also exhibited more isolation and withdrawal than their non-diagnosed peers (Hinshaw, 2002; Wheeler & Carlson, 1994).

**Comorbidity and Cognitive Influences**

In addition to subtype differences, coexisting factors also have an influence on children with ADHD. Children with multiple disorders tended to perform worse on academic measures than comparison peers (Crawford et al., 2006). Social impairments are also strongly correlated to anxious (Karustis, Power, Rescorla, Eiraldi, & Gallagher, 2000; Wheeler & Carlson, 1994) and
depressive (Collett & Gimpel, 2004; Hinshaw, 2002; Karustis et al., 2000) symptoms. ADHD is also influenced by executive functioning deficits that are found in both ADHD-PI and ADHD-C (Hinshaw et al., 2002). The influence of comorbid disorders certainly has an effect on ADHD symptoms, but the relationship seems to be correlational, not causal.

Processing speed also has an effect on children with ADHD. It has been shown to be lower with ADHD-PI, even when compared to the other two subtypes or comparison groups (Penny, Waschbusch, Carrey, & Drabman, 2005). Children with ADHD-PI in the absence of hyperactive or impulsive symptoms have been categorized as having a sluggish cognitive tempo (Hinshaw et al., 2002). This sluggish tempo led to delayed processing, but did not impair global processing. This means that the children were eventually able to understand taught concepts (Andrade et al., 2009; Penny et al., 2005; Wheeler & Carlson, 1994). Sluggish cognitive tempo did, however, influence visual processing and fluid reasoning. Children with ADHD-PI tended to have difficulty with reasoning, concept formation, and problem solving in unfamiliar environments (Penny et al., 2005).

Social abilities exist in healthy amounts in children with ADHD, particularly with respect to girls and inattentive type. As previously described, girls with and without ADHD tend to have similar social goals, in that both groups desire the making and maintenance of friendships. However, girls with
ADHD tend to underutilize their prosocial skills and demonstrate more awkward social interactions than girls without ADHD (Ohan & Johnston, 2007; Thurber et al., 2002). The combination of awkwardness and underutilization has a negative impact on friendship maintenance. Children with ADHD also have difficulty with sustained attention (Andrade et al., 2009), which has been linked to social behavior problems. Children who have social difficulties tend to be ignored by peers, and as a result the children tend to participate less socially. This in turn minimizes the potential opportunities to learn new and utilize previously acquired social skills (Andrade et al., 2009; Wheeler & Carlson, 1994). This is a vicious cycle that is perpetuated not only by peers, but also by adult caregivers. It has social implications concerning interrelatedness, competency, and socialization, and is particularly significant when others’ perceptions are involved. As children age, they become more aware of their differences, leading to more reported relationship dissatisfaction (Rucklidge & Kaplan, 2000) and less self-reported social skills and lower self-esteem (Shaw-Zirt, Popali-Lehane, Chaplin, & Bergman, 2005).

**Perception and the Positive Illusory Bias**

Some differences between children with and without ADHD are cognitive and objectively measurable, such as with processing speed, whereas some are inter-relational and more subjective. The junction of these differences is where difficulties begin to emerge. Children with ADHD tend to be treated differently...
than their non-diagnosed peers (Eisenberg & Schneider, 2007; Gaub & Carlson, 1997b; Penn & Wykes, 2003). As a result, they can compensate by overestimating certain skills and abilities (Owens, Goldfine, Evangelista, Hoza, & Kaiser, 2007). While it is true that children with ADHD do not necessarily lack social skills, they do tend to demonstrate them less often and in different ways. In particular, children with ADHD tend to overestimate their social competence when compared to adult caregiver perceptions (Evangelista et al., 2008; Hoza et al., 2004), a concept known as the Positive Illusory Bias (Hoza et al., 2004). The difficulty with perceptual ratings is that they do not necessarily consider underutilized skills, or even skills that exist but need fostering to flourish and become apparent. Nonetheless, a discrepancy exists between adult and child ratings of perceived abilities.

One explanation for the Positive Illusory Bias may be protective. Children may overstate their competence in order to protect themselves against feelings of incompetence or failure (Evangelista et al., 2008; Hoza et al., 2004), feelings that are reinforced by negative peer and adult interactions. Attempts to prove abilities in order to avoid being seen as incompetent are attempts to protect self-esteem (Ohan & Johnston, 2002) While children with ADHD tend to overestimate their own abilities, they are able to accurately perceive others’ social competence (Evangelista et al., 2008), which demonstrates an awareness of social skills. The
importance of accurate self-perception has been shown to be related to positive mental health (Hoza et al., 2004).

The above studies demonstrate the protective nature of Positive Illusory Bias as measured by teacher and parent ratings. They also highlight the discrepancy between perceived and actual skills in children with ADHD. Although children with ADHD, particularly ADHD-PI, may have social skills, they tend to underutilize them. Children with ADHD-PI not only are more able to judge scholastic competence when compared to the other two subtypes, they also underestimate certain abilities (Owens et al., 2007), demonstrating a distinct difference between the subtypes. Children with all three subtypes of ADHD tend to be liked less by peers than their non-diagnosed peers (Gaub & Carlson, 1997a; Harris et al., 1992; Wheeler & Carlson, 1994). However, this rejection of peers is not reciprocated, as children with ADHD tend to like peers better than they are liked (Mrug et al., 2009). This negative imbalance may be due to misperception of social interactions or the projected desire to be liked by others, as children with ADHD compare equitably with non-ADHD children in terms of accurate perceptions of social competence (Evangelista et al., 2008).

Perception and Stigma – Effects of a Label

The differences between ADHD and non-ADHD children are amplified and exacerbated with the application of a diagnostic label. In both hypothetical and real studies, the simple application of a label has generally had a negative
impact on perceived abilities (Cornett-Ruiz & Hendricks, 1993; Eisenberg & Schneider, 2007; Harris et al., 1992; Law et al., 2007). There is a significant difference when comparing teacher and parent perceptions to self-perceptions of children. Though self-perceptions did not differ in both diagnosed and non-diagnosed children, the label had a much greater effect for teachers than could be explained by the actual differences in academic abilities in ADHD and non-ADHD children (Eisenberg & Schneider, 2007). Parents rated children more negatively, possibly due to misunderstanding what cluster of symptoms the label is meant to represent (Eisenberg & Schneider, 2007). This speaks to the importance of psycho-education, specifically that the stigmatizing effects of a diagnostic label are lessened when adults have experience with a symptomatic child and have been educated about the disorder (Ohan et al., 2011). This is true for those teachers who have received training, and should also hold true for mental health professionals who have taken courses in understanding diagnoses.

Though most research on stigma has been conducted on adults, stigmatizing effects are certainly evident in children (Hinshaw, 2005). The application of a label can yield negative peer-to-peer attitudes (Law et al., 2007). In addition to teachers and parents, other children rate ADHD peers negatively simply due to the application of the label (Koonce et al., 2004; Law et al., 2007). Non-diagnosed children who were assigned an ADHD label were rated more negatively than non-labeled ADHD peers, even when the label was fabricated and
the demonstrated behaviors had no relation to the fabricated label (Harris et al., 1992). This seems to imply that the perception of the label is more important than demonstrated behaviors, at least when children with ADHD are the focus. It also speaks to the stigmatizing effects of the label, as social competency was greatly influenced by stereotypic impressions and misunderstandings.

Stigmatizing effects can also be seen in the perceptions of mental health professionals (Hinshaw, 2005). “Stigma exists even among those of us in this field, which may act as a subtle barrier to treatment access, adherence, and efficacy” (Penn & Wykes, 2003, p. 207). In addition to being a barrier to treatment, stigma also influences interpretations for behavior. Though not related to social abilities or inter-relatedness, the application of a label influenced causal explanations of ADHD (Dryer et al., 2006a). It also increased the perceived seriousness of the problem (Stinnett et al., 2001). There is the issue of overdiagnosis as it relates to perception as well. False positives are generally related to comorbidity, as the symptoms of ADHD can mimic other disorders, including anxiety, depression, and even trauma (Sciutto & Eisenberg, 2007). A comprehensive and objective assessment by mental health professionals can go a long way toward eliminating potential biases toward a certain disorder and perceived abilities.

A few groups are particularly vulnerable to the effects of stigma. Girls with ADHD “were more than three times as likely as boys to have unmet service
needs; minority status, low income, and health maintenance organization coverage also emerged as possible risk factors for unmet service needs” (Bussing et al., 1998, p. 880). Minority youth with ADHD experience difficulties due the lack of parental involvement, which may result from wanting to avoid a stigmatizing label (Hervey-Jumper, Douyon, Falcone, & Franco, 2008). When children are not given access to treatment, due to ethnicity, stigma, gender, or even perception of symptom severity, the likelihood of improvement diminishes. Even when children with attention difficulties are treated, it is possible that their symptoms will not be taken as seriously as seemingly more severe disorders. This is problematic, as symptoms of inattention tend to be correlated to emotional problems (Sørensen et al., 2008)

**Implications of Stigma – Caregiver Perceptions**

The stigma of mental illness can often have more of an impact than the illness itself. Many people with mental illness choose not to participate in treatment due to the associated stigma (Corrigan, 2004), and the stigma can compound the effects of the mental illness (Stier & Hinshaw, 2007). Not specific to any disorder, stigma can decrease self-esteem and limit social opportunities, as individuals with mental illness are often the targets of stereotypes, prejudice, and discrimination (Corrigan, 2004). This tends to create false perceptions and further distances the individual from treatment.
Whereas the stigma of mental illness can negatively influence perception of an individual’s skills and abilities, the opposite is true as well. “For example, eccentric behavior that is not characteristic of a psychiatric disorder could be misunderstood as mental illness. Just as these signs may yield false positives, so may their absence lead to false negatives” (Corrigan, 2004, p. 615). This again speaks to the importance of accurate assessment.

The effect of stigma on children is less clear than how it affects adults. Although children do react negatively to other children with mental illness, it is possible that the negative reactions have no basis, as children are not necessarily aware of what mental illness is (Penn & Wykes, 2003). Though possibly not aware of how mental illness affects peers (Hinshaw, 2005), children are aware of different behaviors and often speak of labeled peers in derogatory terms (Law et al., 2007). Because negative attitudes toward children with mental illness exist, early intervention and shaping positive and realistic attitudes toward those with mental illness continues to be important. This is particularly important when considering that, while knowledge about mental illness increases over time, stigmatization does not abate (Hinshaw, 2005; Penn & Wykes, 2003).

The stigmatizing effects of an ADHD label are also evident in perceptions by service providers. Subsequent interactions with the child can be altered as a result of applying a label (Stinnett et al., 2001). The addition of the label caused providers to state that brain function was the causal reason for ADHD behaviors,
whereas home environment was strongly endorsed as the cause in the absence of the label (Dryer et al., 2006a). Also, teachers exhibited more negative attitudes toward children in the presence of a label, particularly when the symptoms were observed as opposed to being described in vignettes (Koonce et al., 2004).

There is also a discrepancy between how stigma affects the different subtypes of ADHD. In contrast to the more overt, disruptive behaviors present in ADHD-HI and ADHD-C, ADHD-PI is not as clearly defined (Hinshaw et al., 2002). Also, the presence of inattentive symptoms can be a result of non-ADHD factors, including trauma (Sciutto & Eisenberg, 2007) and the lack of academic stimulation (APA, 2000). Possibly due to the lack of externalizing behaviors, ADHD-PI is described as being more socially and culturally neutral, especially compared to the disruptive behaviors generally exhibited with the other two subtypes of ADHD (Abikoff et al., 2002). The symptoms are also more apparent and become more severe later in the day (Caci et al., 2009).

It is possible that different behaviors and expectations exist in different settings, particularly at home where children are more familiar with their environment (Solanto, Pope-Boyd, Tryon, & Stepak, 2009). This may partially explain why children with ADHD-PI are referred less often, especially by teachers. While those with ADHD-PI are still impaired by their symptoms, they are seen as less aggressive, less delinquent, and are better liked than peers with the other two subtypes (Gaub & Carlson, 1997a; Hinshaw, 2002). Children with
ADHD-PI tend to be more socially isolated than peers with ADHD-HI or ADHD-C (Hinshaw, 2002), but they are not necessarily disliked more. They do demonstrate less assertive behaviors than peers with ADHD-HI and ADHD-C (Solanto et al., 2009). All of this speaks to how children who exhibit disruptive behaviors seen in the hyperactive-impulsive and combined subtypes are seen as “careless, lonely, crazy, and stupid” (Law et al., 2007, p. 106), as opposed to how children who exhibit inattentive symptoms tend to be ignored and seen as different yet harmless.

**Protective – and Often False – Self-Perceptions**

The Positive Illusory Bias can help protect self-esteem in children with ADHD. Though it is based off of false impressions and creates a false sense of competence, it is still valuable in that it can help mitigate negative effects to the self-esteem (Hoza et al., 2004). It also implies that children with ADHD are not aware of their weaknesses, which is not the case. Children with ADHD self-report more disorganization, negative self-perception, and poorer social skills than non-ADHD children (Klimkeit et al., 2006; Shaw-Zirt et al., 2005), in addition to lower levels of self-esteem (Shaw-Zirt et al., 2005). They also report being aware of their negative social status (Mrug et al., 2009), in addition to being able to accurately perceive competence and social cues in others (Evangelista et al., 2008). The ability to perceive others’ strengths while generally misjudging their own might be an attempt to minimize potential negative effects on others. This
may be related to empathy, in that it demonstrates a genuine understanding of their situation and how perception can decrease self-esteem.

Given that children with ADHD are able to accurately perceive social competence in others yet attempt to minimize the effects it has on them, a curious discrepancy arises. Specifically, the existence of negative attributions seems to arise from perceptions, and those attributions can have exacerbating effects. This only enhances the protective aspects of the Positive Illusory Bias as opposed to creating more realistic sense of self. When a stigmatizing label is applied to the child, many secondary effects can occur as a result. For example, “Once others become aware of a single negative feature, this can affect their impressions of the stigmatized individual in a more global manner, encompassing dimensions that may in fact be irrelevant to the actual stigma itself” (Harris et al., 1992, p. 48).

Children with ADHD are often aware of how they are perceived, similar to children without ADHD. However, they differ from non-diagnosed children in terms of attribution patterns. Positive events are generally seen as situation-specific (Collett & Gimpel, 2004) and with an external locus of control (Johnston & Freeman, 1997). Adults with ADHD, when looking back to their childhood, reported increased relationship dissatisfaction in addition to not being in control of negative events (Rucklidge & Kaplan, 2000). Though not causal, it demonstrates how repeated negative experiences can contribute to low self-esteem and depressive symptoms (Barber et al., 2005; Collett & Gimpel, 2004).
Since it is true that children with ADHD are generally seen as different and less socially competent than children without ADHD, it is important for adult caregivers to minimize not only the negative interactions that may occur due to symptoms but also as a result of the stigmatizing label. Negative secondary effects can be minimized when the child is described objectively, considering strengths, weaknesses, and utilizing positive feedback as opposed to simply focusing on the diagnostic label and making assumptions about how it affects the child. “Children will gauge their own actions and behaviors by the reactions they receive from others, so it is critical that healthcare professionals, teachers, and parents recognize the effects they may have by singling out these children for negative behavior” (Barber et al., 2005, p. 244). Children with ADHD-PI also demonstrate less assertiveness (Solanto et al., 2009), and increasing positive interactions as opposed to focusing on negative ones can help enhance the child’s social knowledge. Positive feedback can help to reduce positive illusions (Hoza et al., 2004), but this requires ignoring the stigmatizing label, or put another way, not perpetuating positive illusions by enhancing negative illusions.

It is also important to consider that not all children with ADHD experience peer rejection or relationship difficulties (Mrug et al., 2009). Therefore, applying stereotyping statements to all children with a given disorder eliminates individuality and can create difficulties that did not exist in the first place. Adults influence children in myriad ways, and if parents, teachers, and mental health
providers are influenced by a stigmatizing label, the child will be negatively impacted.

**Importance of Perceptual Concordance**

A major factor in a child’s development is the convergence of adult, peer, and self-perspectives. When a child with ADHD is limited by certain factors, such as cognitive sluggishness, and they are seen in a negative light by peers, decreasing social interactions, adult intervention becomes necessary. However, this problem is compromised when adults also view the child in a biased manner. It becomes more complicated when adults have differing viewpoints, based on the setting they observe the child, their profession or relationship to the person, their knowledge of mental health, or how the stigma of mental health influences them. Therefore, it is crucial that adult caregivers have a similar understanding of how the disorder affects the child, as problems will arise when perspectives differ.

Parents, in their attempts to help their children, often try to avoid the negative impacts of stigma by not involving their children in treatment (Hervey-Jumper et al., 2008). While this may seem like a caring thing to do, it also increases the negative impact of the disorder by not allowing them access to services that can teach and support social skill development. In fact, early adult intervention can greatly influence positive outcomes (Rucklidge & Kaplan, 2000), particularly when positive interactions are the focal points of treatment (Barber et al., 2005). When adults focus on the underlying contributions to social deficits,
such as inattention and impulsivity, behavioral difficulties and social skill deficits can be better managed (Andrade et al., 2009). In addition, when perceptions of social abilities are in accordance with actuality for children and adults, the impact on self-esteem, motivation, and performance is lessened (Eisenberg & Schneider, 2007).

Children who display overt disruptive behaviors are referred for treatment more often, and as these behaviors are presumed to be primarily male behaviors, girls generally get overlooked (Law et al., 2007; Ohan & Johnston, 2007). Also, when girls display mild to moderate symptom of inattention, they often do not receive treatment (Eisenberg & Schneider, 2007). Because of this, it is crucial that providers objectively view the different genders and how symptoms may differ.

The above examples speak to the importance of parental and teacher awareness, as they generally are the ones to refer children with ADHD. Mental health professionals also play a role in treatment in helping to increase self-esteem, which helps to mitigate the impact of stigma. When doctors attempt to minimize the impact of stigma by not discussing a disorder with parents, by not thinking a diagnosis can be helpful, or because they fear that the application of a label can decrease the chances of improvement, they can invalidate both the child’s and parent’s experience (Klasen, 2000).

The above speaks to the positive benefit of a label, which is, presumably, in the absence of stigmatizing attitudes. If properly understood, a diagnostic label
can bring much-needed clarity to the family (Hinshaw, 2005; Klasen, 2000; Ohan et al., 2011), and when the individual’s actual strengths and weaknesses are known, interventions can be more effective.

As ADHD symptoms exist in many children, and many children are misdiagnosed, the level of impairment tends to be more important than the presence of the diagnosis itself. While a label exists due to the presenting symptoms, it does not necessarily bleed over to different domains, such as social and emotional functioning. When the individual has negative experiences as a result of their label, their symptoms may worsen. The result of this is that observers will believe their initial hypotheses (Nickerson, 1998), as opposed to focusing on initial symptom presentation and how their biases were influential in the first place. Because of the compounding effects of confirmation bias and stigma on symptoms of ADHD-PI, it is crucial that adult interpretations of behaviors focus only on accurate perceptions and not on pre-existing beliefs about implications of a label.

**Research Questions**

1. Do teachers and mental health professionals perceive social competence differently in children?

2. How much influence will a label of ADHD-PI impact how the teacher or mental health professional perceives social competence?
Hypotheses

1. For both teachers and mental health professionals, scores on all four subscales of the Self-Perception Profile for Adolescents (SPPA) without a label will be significantly higher than scores on the SPPA with a label.

2. Teachers will score significantly lower than mental health professionals on all four subscales of the SPPA both with and without a label.
Chapter 3: Research Design and Methodology

Description of Research Design

The purpose of this study was to quantitatively examine the influence of a diagnostic label on teacher and mental health professional perceptions of adolescent’s social competence. The rationale for using quantitative research was that it assumes that a demographically representative sample will provide results that are representative of the general population (Svajl, 2012). Quantitative research assumes that the research is objective, has a specific and replicable methodology, and is reliable (Bernard, 2000). All of this was applicable for the current research, although there were inevitably limitations to these assumptions, which are described below.

For this study, the independent variables were defined as profession, either teacher or mental health professional, and the presence or absence of an ADHD-PI label. Therefore, there were four independent groups: teachers who were given the diagnosis in a vignette, teachers who were not given the diagnosis in a vignette, mental health professionals who were given the diagnosis in a vignette, and mental health professionals who were not given the diagnosis in a vignette. There were four dependent variables, which were the scores on four subscales of the Self-Perception Profile for Adolescents (SPPA). The select subscales were Social Acceptance, Job Competence, Close Friendship, and Global Self-Worth.
(Harter, 1988). These subscales were chosen with the author’s permission as they relate to social competence, whereas the other SPPA subscales do not (see Footnote 1). The subscales that were not included are; Scholastic Competence, Athletic Competence, Physical Appearance, Romantic Appeal, and Behavioral Conduct (Harter, 1988). In addition to these variables, a short demographic questionnaire was included, asking about the participants’ age, years of experience, and gender (see Appendix C).

Both vignettes (see Appendix D) were brief and offered a short description of certain behaviors that match the diagnostic criteria for ADHD-PInattentive Type (APA, 2000). Ohan et al. (2011) found that experience with children who have a diagnostic label was not necessarily a buffer against stigma, as it was only a predictor of teacher willingness to implement behavioral plans. As mental health professionals have received trainings on diagnoses, it was likely easier for them to identify these behaviors as being characteristic of the diagnostic criteria for ADHD-PI and, presumably, to not be influenced by the mere inclusion of the diagnostic label. Because one of the purposes of this study was to determine the impact of the label, previous knowledge of ADHD was unimportant, as the diagnostic criteria for ADHD-PI were not variables.

**Selection of Participants**

Participants in this study were elementary or secondary school teachers, and mental health professionals with a graduate degree in Counseling or Clinical
Psychology (MA, MS, EdD, PhD, PsyD), Marriage and Family Therapy (MFT), and students enrolled in programs to earn those degrees. Therefore, this study used a non-random sample. Teachers were chosen by email solicitation by the researcher at elementary and secondary schools in metropolitan areas of California, including San Diego, Los Angeles, San Jose, San Francisco, Oakland, and Berkeley (see Appendix A). Mental health professionals were also chosen by email solicitation. An email was sent to county psychological associations and educational institutions from the same metropolitan areas (see Appendix A). Only those who responded were included as participants. Also, only practicing teachers and mental health professionals, in addition to current students, were selected for participation in order to determine current perceptions of ADHD-PInattentive Type (ADHD-PI). Familiarity with ADHD-PI was not a prerequisite for participation. There were 96 total participants: 25 teachers read the vignette with the diagnosis: 19 teachers read the vignette without the diagnosis: 28 mental health professionals read the vignette with the diagnosis: 24 mental health professionals read the vignette without the diagnosis.

**Description of Instruments**

Instrumentation for this study included both the SPPA and an informal questionnaire. The informal questionnaire asked about gender, age, degree, and years practicing. Although this instrument is generally intended to be administered to adolescents, it was given to adults because it describes self-
perceptions for adolescents as opposed to adult perceptions of the adolescent (see Footnote 2).

The SPPA was developed using four different samples of boys and girls between eighth and eleventh grade. There were 177, 109, 242, and 123 boys and girls in samples A, B, C, and D, respectively (Harter, 1988). Internal consistencies for the four samples range between .77 to .90 for the Social Acceptance domain, .79 to .85 for the Close Friendship domain, .55 to .93 for the Job Competence domain, and .80 to .89 for the Global Self-Worth domain. The Job Competence domain was revised for sample D, which yielded an internal reliability of .74. Though there are nine subscales on the SPPA, because reliability was determined independently for each subscale, reliability was compromised when only four subscales were used.

The SPPA was designed to be a self-reporting measure; therefore, all questions were posed to report on adolescents in general (see Footnote 2). Therefore, the questions were modified to describe the adolescent in the provided vignette. For example, the question, “Some teenagers find it hard to make friends” was changed to read, “This teenager finds it hard to make friends,” and, “Some teenagers are kind of hard to like” was changed to read, “This teenager is hard to like.” Therefore, the SPPA was altered to be an informant-report measure, not a self-report measure, and this writer obtained permission from the publisher to do so (see Footnote 2).
Procedures

When conducting this study, the first step was to recruit the participants. In the recruitment letter, participants were asked to click a link which directed them to a specific page at surveymonkey.com. This internet site allowed for anonymity and easy access to information, both for the researcher and participants. Participants were not asked to give their names and, as only minimal identifying details were provided, the survey was confidential. Once at the internet site, they were given the following instructions: First, they read a short statement that discusses informed consent and explicitly stated that their participation was voluntary (see Appendix B). Next, they were asked demographic information (see Appendix C).

Participants from each profession were randomly assigned to one of two groups: One group read a hypothetical vignette that described a child who exhibits ADHD-PI symptoms and has an ADHD-PI diagnosis, whereas the other group read a hypothetical vignette that described the exact same child without the diagnostic label (see Appendix D). The website surveymonkey.com randomly assigned one of the two vignettes. They read their assigned vignette and then were asked to complete a short psychological questionnaire, which consisted of select SPPA questions. Upon completion of the SPPA, the participants submitted their information, and there was an option that if the participant wanted to receive the results of the study upon completion, the lead researcher would provide them.
**Data Processing Techniques**

Data was analyzed using SPSS Version 20. A 2x2 between subjects ANOVAs was conducted for each subscale. This determined and examined main effects and interactions between the four groups. The results that were found to be significant at a .05 level were examined in order to clarify which aspects of the relationship were significant. The groups that were compared were mental health professionals and teachers, and the vignette with and without the diagnosis. These groups were compared four times, once for each subscale. Because there were only two groups being compared, a post-hoc test was not necessary.

**Methodological Assumptions and Limitations**

Both objectivity and reliability were assumed for this study (Bernard, 2000). Because the vignette only gave limited details and offered no opportunity to observe the child, in addition to not asking about previous knowledge of ADHD, results were interpreted with caution. Also, as mental health professionals were recruited in large cities, it was likely that they received trainings on ADHD, which has been shown to decrease the negative impact of the diagnostic label in the early stages of a career (Ohan et al., 2011). Results therefore may not necessarily be generalizable to different populations that are not exposed to these trainings, such as parents, medical doctors, etc, as the diagnostic label would likely have a greater negative influence.
Ethical Assurances

Risk to participants was minimal, as they were not incarcerated or otherwise dependent on an institution, and they are all adults. Because the vignette did not describe a real person, only select factors from a specific diagnosis, there was minimal risk to participation. One potential source of risk was that the adolescent described in the vignette may have resembled someone known to the participant, which might have increased the potential for emotional harm in that, after completing the questionnaire, they might view the individual’s social competence differently. To minimize this risk, the vignette clearly stated that the adolescent was fictitious. Participants were voluntary and were able to remove themselves from participation at any time with no pressure from the researcher or associated researchers. Some potential benefits to participation are increased knowledge of the impact of stigma, minimized assumptions about how symptoms influence global functioning, and earlier recognition of ADHD-PI. Additional benefits include information in the field regarding impact of a label and may improve educational efforts with parents, teachers, and other caregivers.
Chapter 4: Results

To examine caregiver perceptions of adolescent social competence, two-way ANOVAs were calculated for each of the dependent variables; Social Acceptance, Job Competence, Close Friendship, and Global Self-Worth. The between subjects variables were Vignette (with or without the diagnosis) and Profession (teacher or mental health professional). Demographic data can be found in Appendix E and means and standard deviations can be found in Appendix F. For Social Acceptance (see Table 1), the ANOVA revealed significant main effects for Vignette, $F(1, 92) = 10.34, \ p < .01, \ \eta^2=.10$, meaning that the adolescent with a diagnostic label was viewed as less socially accepted than a non-diagnosed peer with the same set of symptoms. It also revealed a significant main effect for profession, $F(1, 92) = 4.31, \ p < .05, \ \eta^2=.05$, suggesting that mental health professionals viewed the adolescent with symptoms of ADHD-PI as more socially accepted than teachers do, regardless of the presence or absence of the diagnosis. This suggests that mental health professionals are more able to more accurately view adolescents without being influenced by potentially stigmatizing symptoms. However, the ANOVA failed to reveal a significant interaction between Profession and Vignette, $F(2, 92) = \ .91, \ ns, \ \eta^2=.00$.

For Job Competence (see Table 2), the ANOVA failed to reveal significant main effects for Profession, $F(1, 84) = \ .15, \ ns, \ \eta^2=.00$ and Vignette,
F(1, 84) = 1.57, ns, $\eta^2=.02$, and failed to reveal a significant interaction between Profession and Vignette, F(1, 84) = .30, ns, $\eta^2=.00$. For Close Friendship (see Table 3), the ANOVA revealed a significant main effect for Vignette, F(1, 88) = 8.06, $p < .01$, $\eta^2=.08$. This means that the adolescent with an ADHD-PI label was seen as less able to form close friendships than the adolescent without an ADHD-PI diagnosis. However, the ANOVA failed to reveal a significant main effect for Profession, F(1, 88) = 1.23, ns., $\eta^2=.01$, and failed to reveal a significant interaction for Profession and Vignette, F(1,88) = .00, ns, $\eta^2=.00$. For Global Self-Worth (see Table 4), the ANOVA failed to reveal significant main effects for Profession, F(1, 89) = .35, ns., $\eta^2=.00$, and Vignette, F(1, 89) = 2.87, ns., $\eta^2=.03$, and failed to reveal a significant interaction between Profession and Vignette, F(1, 89) = .04, ns, $\eta^2=.00$.

The first hypothesis was that, for both teachers and mental health professionals, scores on all four subscales of the SPPA without a label would be significantly higher than scores on the SPPA with the label. The null hypothesis, that there was no difference between vignettes, was rejected only for Social Acceptance and Close Friendship. The other two subscales showed no significant difference between scores. Therefore, the null hypothesis, that there was no significant difference between vignettes, cannot be rejected entirely.

The second hypothesis was that teachers would score significantly lower than mental health professionals on all four subscales of the SPPA both with and
without a label. The null hypothesis, that there was no difference between professions, was rejected only for Social Acceptance. The other three subscales showed no significant difference between scores. Therefore, the null hypotheses, that there was no significant difference between professions, cannot be rejected entirely.
Table 1. ANOVA Results for Social Acceptance

<table>
<thead>
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<th>p</th>
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<tbody>
<tr>
<td>Profession</td>
<td>31.03</td>
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<td>4.31</td>
<td>.041*</td>
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<tr>
<td>Vignette</td>
<td>74.56</td>
<td>1</td>
<td>10.34</td>
<td>.002**</td>
</tr>
<tr>
<td>Profession*Vignette</td>
<td>.08</td>
<td>1</td>
<td>.01</td>
<td>.914</td>
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<tr>
<td>Error</td>
<td>663.18</td>
<td>92</td>
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</tr>
</tbody>
</table>

Note: * = Significant at the .05 level. ** = Significant at the .01 level.

Table 2. ANOVA Results for Job Competence

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<td>Profession</td>
<td>.60</td>
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<td>.70</td>
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<td>Vignette</td>
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<tr>
<td>Error</td>
<td>345.63</td>
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Table 3. ANOVA Results for Close Friendship

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<tbody>
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<td>1.23</td>
<td>.27</td>
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<tr>
<td>Vignette</td>
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<td>8.06</td>
<td>.01**</td>
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<td>.00</td>
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<td>.00</td>
<td>.99</td>
</tr>
<tr>
<td>Error</td>
<td>806.31</td>
<td>88</td>
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</tr>
</tbody>
</table>

Note: ** = Significant at the .01 level.

Table 4. ANOVA Results for Global Self-Worth

<table>
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<tr>
<td>Profession</td>
<td>2.81</td>
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<td>.35</td>
<td>.56</td>
</tr>
<tr>
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<td>23.23</td>
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<td>2.87</td>
<td>.09</td>
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<td>Profession*Vignette</td>
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<td>1</td>
<td>.04</td>
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<td>Error</td>
<td>719.54</td>
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</table>
Chapter 5: Discussion and Conclusions

Previous studies have found a relationship between perceptions of competence and an ADHD label: The presence of a label will generate more negative perceptions of an individual’s competence. This study yielded similar results, but only in regards to certain domains. The results confirm the parts of the hypothesis that state that an individual with an ADHD-PI diagnosis is seen as less competent in the areas of Social Acceptance and Close Friendship than an individual without the diagnosis. These measures both rate the degree to which the adolescent is accepted by peers, is easy to like, and has the ability to make close friends. However, the presence of the label did not significantly influence how the adolescent was perceived in the domains of Job Competence and Global Self-Worth. These results suggest that the mere presence of an ADHD label is more influential on perceived social interactions and skills than it is on actual skills, abilities, or self-esteem.

Not only did the presence of the label contribute to a significant difference regarding perceptions of social acceptance and close friendship, but the results also yielded medium effect sizes. Also, even for the non-significant difference in vignette ratings for Global Self-Worth, there was a small effect size. This means that not only was the inclusion of a diagnostic label significant in how children with ADHD are perceived, but the magnitude of the effect is medium in strength.
The only significant result when profession was considered was Social Acceptance. For this subscale, mental health professionals, when compared to teachers, viewed the adolescent as being significantly more accepted by peers. One possible interpretation of this may be that teachers see inattentive behaviors as socially distancing, regardless of the presence or absence of actual negative social skills. Mental health professionals, on the other hand, are possibly more able to view the individual on a deeper level, as opposed to being strongly influenced by perceived negative characteristics. It has been shown (Ohan et al., 2011) that ADHD-specific trainings increase the willingness to support treatment as a result of increased awareness. Although previous knowledge of ADHD was unknown, it is possible that the significant difference in profession ratings is due to a greater knowledge base for mental health professionals.

Most research on adolescents with ADHD focuses either on the child with the diagnosis or on teachers or parents. While the majority of recommendations involve receiving treatment, psycho-education, and other potential issues that likely involve mental health professionals, research that focuses on how the treatment providers view these children is limited. These results seem to suggest that mental health professionals, similar to other adults, are not immune to the power of stigma, as they also rated the diagnosed adolescent as being less socially accepted. This adds to the existing body of literature that those who have a mental health diagnosis are seen as less competent (Stier & Hinshaw, 2007) and are
treated differently (Penn & Wykes, 2003). That mental health professionals were just as influenced as teachers is a cause for concern, as they have likely received more trainings in diagnoses, especially in regards to what symptoms a certain diagnosis is intended to describe. This speaks to the importance of considering symptom severity and level of impairment, not simply the presence of a diagnosable symptom (Gathje et al., 2008).

Limitations

While the results of this study suggest that teachers and mental health professionals are influenced by a stigmatizing label when considering social acceptance, these results should be interpreted with caution. For one, as participants live in metropolitan areas of a primarily progressive state, it is likely that they were less influenced by stigma. Had the sample consisted of adults who were not in a caregiving profession, it is possible that more of the subscales would have yielded significant results. Also, due to limited information regarding the subject, participants were asked to use their imaginations, which goes against best practices for making diagnostic impressions (Handler & DuPaul, 2005).

The vignettes did not discuss symptom severity, which is generally a determinant of clinical significance for making a diagnosis (Gathje et al., 2008). Also, participants may have been influenced by the location of the statement of the diagnosis, which was the first sentence in the diagnosis vignette. Were it at the end, it is possible that the label may not have had as much as an impact, allowing
participants to form their own diagnostic opinions before being presented with the
diagnosis (Ohan et al., 2011). Also, participants were asked to rate a child based
on limited information and no opportunity for direct observation.

The SPPA in itself may have led to limited significant results. Ratings
consisted of a 4-point Likertized scale, which allowed for little variance in the
responses. Were the response range greater, it is possible that more of the
domains would have yielded significant results. The vignette did not mention any
information about her job skills, which may be the reason for the smallest
variability in scores between all four groups. Also, although there were enough
participants to confirm the effect size, it is possible that a larger number of
participants may yield different results.

**Implications**

One main implication of this research is that adolescents with ADHD-PI
may be seen as less socially competent than their non-diagnosed peers by both
mental health professionals and teachers. The only variable for which mental
health professionals viewed the child as being more socially competent than
teachers did was for Social Acceptance. This is cause for concern, particularly
since mental health professionals are theoretically supposed to be objective and
unbiased while providing treatment. When providers believe the client to be less
socially competent, it is possible that their delivery of treatment will cause them
to treat the client differently, which may yield a different set of symptoms (Collett
& Gimpel, 2004). These new symptoms will likely be in accordance with that the provider initially believed about the child, confirming their initial opinion about the child (Nickerson, 1998) and potentially ignoring the initial issue, which is that children with ADHD-PI are treated differently than non-diagnosed peers in part due to the mere presence of the label, as it would seem that the more objective a clinician can be, the more effective and unbiased treatment can be, especially when mental health diagnoses are involved.

Though seemingly innocuous, the application of an ADHD-PI label can result in overly stigmatizing effects. When compared to children with ADHD-HI and ADHD-C, children with ADHD-PI are more socially isolated but are not disliked (Hinshaw, 2002). However, as their isolation continues over time and they are treated as others believe them to be, anxiety, depression, and general self-doubt can increase. When referred for treatment to providers who have negative assumptions about children with ADHD, it is possible that the non-ADHD symptoms will be exacerbated, in part due to misrepresentation of the diagnosis, attitudes of superiority, and parental blame (Hinshaw, 2002). This will do very little in advancing the child’s mental health.

One positive implication of overdiagnosis and pathology has to do with getting children and adolescents into treatment. Regardless of the reason, if the child is being treated differently based on their diagnostic label, it is possible that they will be referred for treatment. If the label is accurate, the clinician will be
able to work with ADHD symptoms, assuming objective treatment. If the label is accurate, the clinician will be able to make a thorough assessment and determine what is causing the harmful behaviors. Either way, the child is referred for treatment.

**Recommendations for Future Research**

This study continued the body of research regarding the influence of stigmatizing labels. While this study focused on adolescent girls, which is a generally overlooked population in research, it is unclear as to the importance of either her gender or her age. Therefore, future research may benefit from considering gender differences and labeling, especially with ADHD-PI. Though the criteria for diagnosis are similar for all genders, it is likely that presentation may differ. It may also be important to focus on different age groups and perceived competence, as this questionnaire asked about some concepts that were essentially limited to an adolescent population. As this sample grouped all mental health professionals together, grouping different graduate degrees together may highlight a specific degree that may benefit from more education around diagnoses and stigma. The same is true for teachers, since there was no distinction between elementary, middle, and high school teachers.

Regardless of the amount of training a caregiver has, their initial impression is likely to remain intact, even in the face of contradictory information (Downey & Christensen, 2006). Therefore, it may benefit clinicians and teachers
to see how negative impressions of ADHD-PI diagnosed children change over time, particularly with specific psychoeducational interventions. Targeted interventions for both caregivers and adolescents may help mitigate not only the negative effects of the disorder, but also of stigma as well.
Chapter 6: References


Footnotes

1“Teachers/adults do not need 6 items per subscale to insure reliability, 3 are enough. Plus, you may not want to include all domains. If you just selected the main ones that should be impacted, this will also cut down on the task, for the teacher” (S. Harter, personal communication, February 27, 2012).

2“‘The really true converted to really true for this individual (or teenager) is fine” (S. Harter, personal communication, February 27, 2012).
Appendix A

Sample of Solicitation Letter

Dear Teachers at An Elementary School/A County Psychological Association,

My name is Jason Arkin, and I am a doctoral candidate at Antioch University Santa Barbara. I am conducting a study to gain an understanding about caregiver perceptions about adolescents. I sincerely appreciate you taking the time to participate in this study, but there is no obligation to do so.

Your participation in this study is both voluntary and anonymous, and should take no more than 10 minutes. The survey, along with instructions and other information, can be found at https://www.surveymonkey.com/s/9LPV25C. If you are a teacher or mental health professional who is either currently working or still in school, you are eligible to participate in this study. If you have any questions, please feel free to contact me at jarkin@antioch.edu.

Sincerely,

Jason Arkin, M.A.
Doctoral Candidate
Antioch University Santa Barbara
Appendix B

Informed Consent Form: Caregiver Perception Study

Antioch University is committed to protecting your rights as a research participant. This form will provide you with information about those rights. This is a research study that may not offer any direct benefit to you. The purpose of this study is to learn more about adult perceptions of adolescents. It will take less than ten minutes to complete, and is completely voluntary. You do not have to participate, and at any time if you want to remove yourself from participation, you have the right to do so.

As a participant, you will be asked a few questions about yourself (your profession, age, etc.). Next, you will read a short story describing a fictitious person. Finally you will be asked to complete a short questionnaire. If there is a question you do not want to answer, simply skip it and move on. You can choose to not answer any question you wish.

As with any research study, there are some risks associated with participation. Though the risks are minimal, it is possible that the person described in the story may resemble someone you know, and answering questions about them may change your perception about them. Although your participation may not directly help you, it is possible that this study will add to the research about how adolescents are perceived by caregivers, and especially if there are differences in perception.

If you have any questions about the study, you may contact Jason Arkin, MA, at jarkin@antioch.edu, his supervisor, Dr. Ryan Sharma, at 602 Anacapa St., Santa Barbara, CA 93101, (805) 962-8179, or Dr. Barbara Lipinski, the Institutional Research Board chair for Antioch University, at the same address and phone
number. While it is highly unlikely that participation in this study will create discomfort, please know that you may contact the study investigators, who will take steps to provide you with a list of local resources that can provide counseling and support.

Your participation is requested, yet is strictly voluntary. All information will be kept confidential and no identifiable data will be associated with any research findings. By clicking yes below, you state that you are 18 years old, have read this informed consent form and are able to give consent, agree to the terms of this agreement, and wish to participate.
Appendix C

Demographic Questions

What is your age?

What is your gender?

What is your profession?

How long have you worked at your current profession?
Appendix D

Sample Vignettes

Vignette 1: Sara is a 15 year old girl. She is well liked by peers and adults, and reports that she is happy with her life. She usually does her easier schoolwork first, and tends to avoid more difficult tasks. Though not intentional or manipulative, she has difficulty following instructions and often seems forgetful. She has good attendance in school, and while she enjoys it, she tends to lose homework and makes many careless errors. Her friends say that Sara often appears as though she is not paying attention to them, but when asked, Sara says that she very much enjoys her friendships.

Vignette 2: Sara is a 15 year old girl who has a diagnosis of Attention-Deficit/Hyperactive Disorder – Inattentive Type. She is well liked by peers and adults, and reports that she is happy with her life. She usually does her easier schoolwork first, and tends to avoid more difficult tasks. Though not intentional or manipulative, she has difficulty following instructions and often seems forgetful. She has good attendance in school, and while she enjoys it, she tends to lose homework and makes many careless errors. Her friends say that Sara often appears as though she is not paying attention to them, but when asked, Sara says that she very much enjoys her friendships.
## Appendix E

### Demographic Data for Participants

#### Age

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## Appendix F

### Means and Standard Deviations for SPPA Variables

#### Table 5. Means and Standard Deviations for Social Acceptance

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<td>Professionals</td>
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#### Table 6. Means and Standard Deviations for Job Competence

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<td>11.99, 2.20</td>
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<td>Professionals</td>
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#### Table 7. Means and Standard Deviations for Close Friendship

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#### Table 8. Means and Standard Deviations for Global Self-Worth

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Appendix G

Insuring Informed Consent of Participants in Research:

Questions to be answered by AUSB Researchers

The following questions are included in the research proposal.

1. Are your proposed participants capable of giving informed consent? Are the persons in your research population in a free-choice situation?…or are they constrained by age or other factors that limit their capacity to choose? For example, are they adults, or students who might be beholden to the institution in which they are enrolled, or prisoners, or children, or mentally or emotionally disabled? How will they be recruited? Does the inducement to participate significantly reduce their ability to choose freely or not to participate?

The participants in this study are both mental health professionals and teachers. They are all adults who are capable of giving informed consent. There are no presumable limits to their participation and they are not being forced to participate. If at any time they wish to withdraw from participation, they may do so with no negative consequences.

Both teachers and mental health professionals will be recruited through electronic mail. An email will be sent to various school districts, mental health
institutions, and graduate schools asking professionals and students to participate.

2. How are your participants to be involved in the study?

Participants will log on to a confidential website. First, they will fill out demographic information that includes gender, age, degree, city of residence, and years teaching/practicing or if they are still in school. They will then read a short vignette that has been randomly assigned, one of which has a stated diagnosis of ADHD – Inattentive Type and one of which does not. Finally, they will then fill out select questions from the Self-Perception Profile for Adolescents. Upon completion of the surveys, they will be asked if they wish to receive the results of the study upon completion by the researcher.

3. What are the potential risks – physical, psychological, social, legal, or other? If you feel your participants will experience “no known risks” of any kind, indicate why you believe this to be so. If your methods do create potential risks, say why other methods you have considered were rejected in favor of the method chosen.

One potential source of risk is that the described subject may resemble someone known to the participant. This may increase the potential for emotional harm in that, after completing the SPPA, they may view that
individual in a different light. Specifically, the potential for focusing on their social competence may increase, which may influence how they interact with that person. In order to minimize this, the vignette will clearly state that the described individual is fictitious.

4. What procedures, including procedures to safeguard confidentiality, are you using to protect against or minimize potential risks, and how will you assess the effectiveness of those procedures?

Participants will not be asked to provide identifying detail aside from age, location, profession, and years working. This is to maximize anonymity, in addition to only asking for information that is relevant to the current study. A password will be given to participants in order to sign on to the website. Data will be collected and stored on a computer that does not have access to the internet. The computer will be kept in a locked cabinet and a password is necessary to use the computer.

5. Have you obtained (or will you obtain) consent from your participants in writing? (Attach a copy of the form.)

Informed consent will be explained before participants begin filling out the demographic information. There will be an opportunity to check a box if informed consent is granted, which will give the participant the opportunity to
continue participation. If they choose not to check the box, they will not be able to continue participation due to declining consent.

6. What are the benefits to society, and to your participants that will accrue from your investigation?

Benefits include increased knowledge about how adolescents with ADHD-PI are perceived by caregivers. In addition, it hopes to bridge the potential gap between how they are seen by teachers who may be unfamiliar with the diagnosis and mental health providers who are more familiar with it. This may also increase knowledge about what domains the diagnosis covers and potentially lead to earlier detection, which can minimize future difficulties.

7. Do you judge that the benefits justify the risks in your proposed research?

Indicate why.

Yes, in part due to no more than minimal risk to participants. The benefits include increased knowledge about competence perception, and add to the literature regarding the importance of agreement between treatment providers.

Both the student and his/her Dissertation Chair must sign this form and submit it before any research begins. Signatures indicate that, after considering
the questions above, both student and faculty person believe that the conditions
necessary for informed consent have been satisfied.

Date:_____________________  Signed:_____________________________

Student

Date:_____________________  Signed:_____________________________

Dissertation Chair