The Stigma of Mental Illness in Children & Adolescents: A Systematic Review

Anya Kaushik, Evgenia Kostaki, Marinos Kyriakopoulos

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The Stigma of Mental Illness in Children & Adolescents: 

A Systematic Review

Anya Kaushik\textsuperscript{a}, Evgenia Kostaki\textsuperscript{a}, Marinos Kyriakopoulos\textsuperscript{a, b, c}

\textsuperscript{a}National and Specialist Acorn Lodge Inpatient Children’s Unit, Bethlem Royal Hospital, South London and Maudsley NHS Foundation Trust, Monks Orchard Road, Beckenham BR3 3BX, UK

\textsuperscript{b}Institute of Psychiatry, Psychology and Neuroscience, King’s College London, London, UK

\textsuperscript{c}Icahn School of Medicine at Mount Sinai, New York, NY, USA

- **Corresponding Author:** Dr. Anya Kaushik BM MRCPsych CCT
  
  Telephone: 0203 228 4399; Fax number: 020 3228 4511; E-mail: Anya.Kaushik@slam.nhs.uk

Abstract

One in ten children and adolescents suffer with mental health difficulties at any given time, yet less than one third seek treatment. Untreated mental illness predisposes to longstanding individual difficulties and presents a great public health burden. Large scale initiatives to reduce stigmatization of mental illness, identified as a key deterrent to treatment, have been disappointing. This indicates the need for a clearer understanding of the stigmatizing processes faced by young people, so that more effective interventions are employed. A systematic review of the literature, assessing public stigma and self-stigma (i.e. internalized public stigma) specifically in children and adolescents with mental health difficulties (YP-MHD), was conducted. Forty-two studies were identified, confirming that stigmatization of YP-MHD is a universal and disabling problem, present amongst both children and adults. There was some variation by diagnosis and gender, and stigmatization was for the most part unaffected by labelling. Self-stigmatization led to more secrecy and an avoidance of interventions. The findings confirm that stigmatization of mental illness is poorly understood due to a lack of research and methodological discrepancies between existing studies. Implications for the findings are discussed, and suggestions made for future research.
1. Introduction

1.1. Mental health difficulties in children and adolescents

Mental health difficulties in children and young people are prevalent, estimated to affect 10%-20% of 5-18 year olds (Green et al., 2004; U.S. Public Health Service., 2000). Indeed, half of all lifetime cases of mental illness begin by age 14 (Sawyer at al., 2000; Kessler et al., 2005a; Kessler et al., 2005b). Untreated, they present a profound and longstanding impact on the individual and society (Patel et al., 2007; Jokela et al., 2009; Moses T., 2009a; Post et al., 2010). Having a mental health difficulty from a young age is associated with educational underachievement, family disruption, substance misuse and violence. Young sufferers experience poorer physical and sexual health than peers without mental health problems (Farina and Felner, 1973; Barkley, 2002; Donenberg and Pao, 2005), and have increased mortality rates from suicide and accidental injury (Gould et al., 2003; Aaron et al., 2004; Commission on Adolescence Suicide Prevention, 2005; Vijayakuma et al., 2005). On a societal level, public sector spending on untreated young sufferers presents a significant socioeconomic burden at £59,000 per child per year (Department of Health, 2001; Green et al., 2004) - 10 times higher than spending on unaffected peers (Scott et al. 2001; Romeo et al., 2006). For the purpose of this paper, YP (young persons) will be used to describe ‘children and adolescents without mental health difficulties’, and YP-MHD will be used to describe ‘children and adolescents under 18 with mental health difficulties’.

1.2. What is stigma?

Stigma has been defined as a deeply discrediting attribute associated with a given condition, directed towards those of considered lower social standing (Goffman, 1963). It consists of three key components: Stereotypes, prejudice and discrimination (Corrigan, 2005; Thornicroft, 2006). Stereotypes are learned, oversimplified and often negative attitudes embedded in society,
which allow individuals to generate quick impressions of specific subgroups (e.g. psychiatrists are eccentric), without necessarily believing in them (Jussim, 1995). Prejudices are endorsed stereotypes, meaning they are accompanied by negative emotional reactions. This inevitably leads to avoidance and social distancing, resulting in discrimination. Public stigma refers to the reaction of the general public towards stigmatized groups; it can be further differentiated into personal stigma (an individual’s own views of a stigmatized group) and perceived stigma (an individual’s perception of how others view a stigmatized group).

The extent to which a stigmatized individual is aware of public stigma has been termed stigma consciousness (Pinel, 1999; Thornicroft et al., 2007). The greater one’s stigma consciousness, the more likely they are to internalize public stigma, i.e. to self-stigmatize (Corrigan and Watson, 2002b). This makes them more likely to exhibit unfavorable behaviors in line with stereotypes (such as withdrawing from the general public), resulting in a perpetuating, negative cycle (Pinel, 1999). The result is one of impaired self-esteem and avoidance of treatment, leading to poorer long-term outcomes (Corrigan and Watson, 2002a).

1.3. Stigma in YP-MHD

It is increasingly evident that YP-MHD experience stigmatization, from both adults and children (Weiss, 1986; Adler and Wahl, 1998; Rose et al., 2007). Research has shown that YP-MHD are more stigmatized than children with physical illness or learning disability (Wilkins and Velicer, 1980) and that stigmatizing views and behaviors can develop from early childhood. Children as young as 6 appear to grasp everyday terms associated with mental illness and are well familiarized with cultural stereotypes by age 10, or even earlier if they themselves form part of a stigmatized group (Costello et al., 2006; Gale, 2007).

Stigmatizing views in YP are believed to develop as an assimilation of parent/carer views (Gale, 2007), media representation and cognitive development (Donenberg and Pao, 2005); and children are also more vulnerable to stigmatization due to their lower social status (Phares, 2003). There are key developmental considerations as to why understanding and targeting the stigmatization of YP-MHD, by both adults and children, is paramount. Firstly, the use of mental health services by YP-MHD is remarkably low (Sawyer et al., 2001; Essau, 2005; Zachrisson at al., 2006)
and stigma has been identified as an especially important barrier to help-seeking (Penn et al., 2005; Pescosolido et al., 2007b; Gulliver et al., 2010; Mukolo et al., 2010; Clement et al., 2014). Early intervention can result in long-term benefits (Barrett et al. 2001, Biederman, 2003; Hazell, 2007), which highlights the importance of accessing early effective care.

Secondly, stigmatization of YP-MHD may influence personal identity and independence in the long-term, as adolescence in particular is a key stage in the development of autonomy (Hinshaw S.P., 2005). Positive peer relationships are important not only for promoting self-esteem, adjustment and resilience (Brown and Lohr, 1987; Parker et al., 1995; Azmitia, 2002), but also result in better outcomes in YP-MHD (Bagwell, et al., 1989). Hence, if YP-MHD are stigmatized by peers, they are more likely to avoid seeking support (Chandra and Minkovitz, 2006), and less likely to do well in the future.

1.4. The purpose of this study

Unfortunately, stigmatization of YP-MHD is under-researched and not well understood (Hinshaw, 2005; McKeague et al, 2015), yet children are not necessarily stigmatized as their adult counterparts, and stigma is likely to have different long-term implications based on a child’s development. This lack of a more specific understanding has resulted in expensive large scale national initiatives with predominantly disappointing results (Rickwood et al., 2004). A clearer understanding of the origins and constructs of the stigmatization of YP-MHD could better inform future stigma reduction policies and improve engagement, peer relationships and outcomes. This paper sets out to systematically review the literature examining the stigmatization of YP-MHD by adults and peers. Specifically, the objectives of the review were to identify how stigmatization of YP-MHD was affected by diagnosis, age and demographics and which key themes identified in the adult literature pertained to YP-MHD. We hypothesized, in line with the adult literature, that:

- Not all conditions would be stigmatised equally and that certain stigmatizing views would be more prominent in certain conditions e.g. dangerousness in psychosis.

- females and individuals of higher education attainment would be less stigmatising towards YP-MHD;

- Stigmatisation of YP-MHD would increase with increasing age of unaffected peers
Children and adolescents experience self-stigma and that this would have a detrimental effect on their emotional wellbeing.

2. Methods

Following PRISMA guidelines (Moher et al., 2009), Pubmed, PsycINFO, and the Cochrane Library were searched by 2 authors working collaboratively (AK and EK) for original research papers published between 1980 and 2015, examining stigmatization of YP-MHD. Search terms used were:

- Stigma: stigma, self-stigma, discrimination, prejudice, attitude, stereotype.
- Mental illness: mental, psychiatric, psychological, AND illness OR disorder OR disturbance OR difficulty; Individual searches were also conducted for commonly diagnosed or significant conditions in childhood.
- Children and adolescents: adolescent* OR child* OR young person*.

For a full list of the individual searches conducted please refer to supplement 1.

Abstracts (and where necessary full reports) were screened independently by AK and EK. Only English language, original research papers, assessing adults' and YP stigmatizing views towards YP-MHD (specified age range 0-18) or self-stigma in YP-MHD were included in the review. Papers were excluded if:

- They did not address any component of mental health stigma.
- They examined stigmatization towards individuals outside the 0-18 specified age range. If the papers concerned a wider age range but had extractable data for the 0-18 age group, these were included.
- They reviewed stigmatization following a stigma reducing intervention.
- The paper was a review article.
- There was no extractable data.
- They focused on stigmatization of mental health treatment, which we considered to be important enough to warrant a separate review.
Eligible papers were hand-searched for relevant references meeting the same criteria. Data was extracted using a predetermined data extraction sheet. Methodological quality was assessed using the Effective Public Health Practice Project “Quality Assessment Tool for Quantitative Studies (EPHPP), which gave ratings of either strong, moderate or weak quality. Qualitative studies were assessed using the Critical Appraisal Skills Programme (CASP) (Public Health Resource Unit, 2006), resulting in ratings of either good or weak methodological rigor. Data and quality were assessed independently by two of the authors (AK and MK) and discrepancies were discussed until a consensus was reached.

Qualitative data was analyzed using a thematic analysis approach (Liamputtong and Ezzy, 2005). An initial coding framework was manually created by AK, deduced from examination of this literature and background reading on stigma in mental health disorders. AK and MK then applied the coding template to the papers, revising the framework as was necessary until themes were identified.

3. Results

The database searches returned 5925 items after the removal of duplicates. Screening titles and abstracts identified 27 studies which met all 3 inclusion criteria (Fig. 1). A hand-search of reference lists resulted in a further 15 relevant studies, resulting in a total of 42 studies for the purpose of this review.

Thirty-two papers examined YPs’ stigmatizing views towards YP-MHD (Table 1) and 7 papers examined adults’ stigmatizing views towards YP-MHD (Table 2). Of these 39 papers, 31 reported on quantitative findings, ranging in quality from strong (10 studies), to moderate (15 studies) and weak (6 studies). Eight papers were qualitative in nature, and all of good methodological rigour, but one (Poster et al, 1986). Only 3 papers were found, by the same author, examining self-stigmatization. These were mixed methods papers of robust methodological means.

Studies were mainly conducted in the USA, followed by the United Kingdom, Ireland, Israel, Australia, Iran, Canada, Greece and Japan. Papers were published between 1985 and 2015 and participant numbers varied from 24 to 55,520. The age of participants in papers examining YP views was 6-18. Papers examining adults’ views did not all specify participants’ age range. All
studies but one (Harris et al., 1992) included male and female participants. The following results summarize the main findings.

3.1. Key themes in the relationship between mental illness and stigma in YP-MHD

All 42 identified studies examining adults’ and YPs’ views evidenced that YP-MHD experienced stigmatization (Table 1). Most identified papers measured personal stigma. Regardless of assigned quality ratings, YP-MHD were consistently more stigmatized than unaffected peers (Peterson et al., 1985; Poster et al., 1986; Harris et al., 1992; Friedrich et al., 1996; Brook et al., 2000; Brook and Geva, 2001; Campbell et al., 2004.; Corrigan et al 2005.; Ghanizadeh et al., 2006; Pescosolido et al., 2007a; Mukolo and Heflinger, 2011; O’Driscoll et al., 2012; Ohan et al., 2013; Swaim and Morgan, 2001; Bellanca and Pote, 2013). They were more stigmatized than peers with learning difficulties (Brook and Geva, 2001; Bellanca and Pote, 2013) and peers with physical health conditions and disability (Corrigan et al., 2005; Martin et al., 2007; Pescosolido et al., 2007a; Walker et al., 2008; Mukolo and Heflinger, 2011). The only condition more stigmatizing than mental health difficulties was alcohol misuse (Corrigan et al., 2005).

Interestingly, the only study that compared the same mental health condition in adults and children reported childhood depression to be considered more severe than adult depression (Perry et al., 2007). The key, identified themes related to stigmatization were consistent with findings in the adult literature. These were as follows:

3.1.1. Blame and responsibility

Ten studies commented on the role of ‘blame/responsibility’ on stigmatization. Seven examined YP views (Peterson et al., 1985; Corrigan et al., 2005; Coleman et al., 2009; Swords et al., 2011; O’Driscoll et al., 2012; Dixon et al., 2013; Dolphin and Hennessy, 2014; O’Driscoll et al., 2015) and two examined adults’ views (Martin et al., 2007; Mukolo and Heflinger, 2011). The degree of blame varied by diagnosis (e.g. Corrigan et al., 2005). High caliber qualitative and quantitative means found that where causal attributions were identified as beyond the child’s control, YP-MHD were not blamed (Peterson et al., 1985; Dolphin and Hennessy, 2014; O’Driscoll et al., 2015).

3.1.2. Behavioral Intentions and Social Distance
Eighteen studies, of varying scientific rigor, examined social distance/behavioral intentions, making it the most frequently assessed construct of stigmatization (Table 1). Blaming views were associated with a desire for greater social distance (Corrigan et al., 2005; Coleman et al., 2009; Dixon et al., 2013). The desire for social distance was also reliably related to diagnosis (Martin et al., 2007; Walker et al., 2008; Mukolo and Heflinger, 2011; Ohan et al., 2013); ethnicity (Mukolo and Heflinger, 2011); participant age (Martin et al., 2007) and identification with YP-MHD (Secker et al., 1999). Negative beliefs and attitudes were mirrored with negative behavioral responses (Harris et al., 1992; Moses T., 2010b). Positively, negative emotions and attitudes were not always predictive of peer exclusion (Friedrich et al., 1996; Swaim and Morgan, 2001; Campbell et al., 2004; O’Driscoll et al., 2012; Washington et al., 2012; Dolphin and Hennessy, 2014; Mavropoulou and Sideridis, 2014). Being white, female, and educated resulted in less social distance (Martin et al., 2007).

3.1.3. Dangerousness

Dangerousness was endorsed more frequently in YP-MHD than in YP with physical disorders or normal troubles (Pescosolido et al., 2007a). Participants rated female mental health sufferers as less dangerous than their male counterparts, and fourteen year olds as less dangerous than eight year olds (Poster et al., 1986). ‘Dangerousness’ was most often, but not always (O’Driscoll et al., 2012)-, associated with psychotic or behavioral disorders (Secker et al., 1999; Yoshioka et al., 2013), though it was also identified as a stigmatizing belief in depression (Reavley and Jorm, 2011). Children aged 12-13 more commonly reported perceptions of dangerousness than children aged 6-7 (Spitzer and Cameron, 1995). Surprisingly, greater familiarity increased perceptions of dangerousness in some YP-MHD (Corrigan et al., 2005). Adult studies mirrored the above findings (Martin et al., 2007; Pescosolido et al., 2007a) with some adults believing depressed children to be more dangerous than depressed adults (Perry et al., 2007).

3.1.4. Familiarity

Six studies commented on the role of familiarity (i.e. experiencing or knowing someone with a mental illness) in shaping attitudes towards YP-MHD (Secker et al., 1999; Corrigan et al., 2005; Law et al., 2007; Martin et al., 2007; Bellanca and Pote, 2013; Mavropoulou and Sideridis, 2014). Results were inconsistent: familiarity was identified as decreasing (Bellanca and Pote,
2013; Mavropoulou and Sideridis, 2014; Secker et al., 1999), increasing (Corrigan et al., 2005) or not affecting stigmatizing attitudes (Law et al., 2007). These differences could not be explained based on quality ratings. Among adult participants, personal contact with YP-MHD only reduced stigmatization if this contact was rated as positive (Martin et al., 2007).

3.2. Stigmatization varies by mental health diagnosis

In order to examine the first hypothesis, the authors searched the identified literature for stigmatizing views related to specific disorders. Eleven papers, of predominantly robust methodological means, looked at stigmatization by diagnosis (Table 1 & Table 2). Nine papers looked at depression (Poster et al., 1986; Secker et al., 1999; Walker et al., 2008; Coleman et al., 2009; Swords et al., 2011; O’Driscoll et al., 2012; Bellanca and Pote, 2013; Dixon et al., 2013; Ohan et al., 2013); 6 papers examined Attention deficit and hyperactivity disorder (ADHD) (Walker et al., 2008; Coleman et al., 2009; Swords et al., 2011; O’Driscoll et al., 2012; Bellanca and Pote, 2013; Ohan et al., 2013); 3 papers examined anxiety (Poster et al., 1986; Dixon et al., 2013; Yoshioka et al., 2013), 3 papers examined schizophrenia (Poster E., 1992; Secker et al., 1999; Yoshioka et al., 2013) 1 paper examined anorexia (Secker et al., 1999) and 1 paper studied Borderline personality disorder (Catthoor et al., 2015).

It is unclear whether ADHD or depression in children is more stigmatized by YP (Walker et al., 2008; Coleman et al., 2009; Swords et al., 2011; O’Driscoll et al., 2012; Bellanca and Pote, 2013). Adults appear to stigmatize depression more than ADHD (Ohan et al., 2013). Children with anxiety were favored over children with depression (Dixon et al., 2013). YP generally recognized schizophrenia as a mental illness (Poster E., 1992; Secker et al., 1999; Yoshioka et al., 2013), but were less clear about anorexia (Secker et al., 1999) and social phobia (Yoshioka et al., 2013). In Catthoor et al. (2015), borderline personality disorder was the highest rated condition with regards to stigmatizing experiences.

3.2.1. A mental health label does not necessarily increase stigma, but a negative behavioral description does.

Six studies looked at the interaction between mental health labels and actual/described behavior on stigmatizing attitudes towards YP-MHD; 4 studies examining YPs’ views (Harris et al., 1992;
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Friedrich et al., 1996; Swaim and Morgan, 2001; Law et al., 2007) and 2 studies looked at adults (Martin et al., 2007; Ohan et al., 2013). The 4 studies examining YPs views found that the addition of a diagnostic label did not increase stigmatization but rather that participants were reacting to the behaviors present or described in the target children. This finding was consistent, despite varying methodological considerations. In the 2 carefully considered adult studies, despite using different quantitative tools, the addition of a mental health label or the recognition of the child as “mentally ill” did result in an increase in stigmatization. Although there appears to be a difference in the way adults and YP responded to the addition of a label, overall it is the delivery of a negative description and actual behavior that results in the most discrimination.

3.3. The impact of demographic factors on stigmatization

3.3.1. Age

The authors hypothesized that stigmatization of YP-MHD would increase with increasing age. Looking at the evidence, 15 papers studied the relationship between participants’ age and stigmatizing attitudes (Table 1). Despite different quality ratings, knowledge of mental health difficulties improved with increasing age, (Poster, 1992; Spitzer and Cameron, 1995; Brook and Geva, 2001). However, knowledge did not equate to acceptance. A number of high quality studies, predominantly comparing primary school children of 2 different ages, identified younger children to be more accepting than older children (Peterson et al., 1985; Swaim et al., 2001; Campbell et al., 2004; Bellanca and Pote, 2013; McKeague et al, 2015). This contrasted with the carefully considered work of Swords et al (2011), who found that adolescents aged 14-18 were more positive than children aged under 12, towards peers with ADHD and depression. Some studies found no differences in beliefs about YP-MHD (O’Driscoll et al., 2015).

Amongst adult participants, participant age did not impact on endorsed beliefs (Mukolo and Heflinger, 2011). In other studies the observed relationships were much more complex and dependent on other variables (O’Driscoll et al., 2012; Mavropoulou and Sideridis, 2014;). In two studies, attitudes were similar across grades, with subtle differences depending on the specific construct being measured (Mavropoulou and Sideridis, 2014). A comparison of 13-17 year olds with 18-24 year olds found that adolescents and their families had greater difficulty with disclosure and
acceptance than the older age group and their families (Elkington et al., 2012). Identifying with the character based on age was helpful in reducing stigma (Secker et al., 1999).

3.3.2. Gender

The relationship between gender and stigmatization was examined in twenty-three papers. As predicted in the hypothesis and identified in many studies of adults’ views, several robust studies identified more positive attitudes amongst female participants (Peterson et al., 1985; Martin et al., 2007; Reavley and Jorm, 2011; Swords et al., 2011; O’Driscoll et al., 2012; Dolphin and Hennessy, 2014; Yoshioka et al., 2014). At the same time, two well executed experiments, looking at Tourette Syndrome and Autism, found male participants to be more positive than females on certain measures of stigma (Friedrich et al., 1996; Swaim and Morgan, 2001) and a third study found boys to be better at recognizing deviant behavior (Spitzer and Cameron, 1995). Females were more likely to endorse stress as a causal factor for mental illness (Swaim and Morgan, 2001) and children were more likely to draw a “crazy person” as male, particularly if they were female (Poster et al., 1986). In some cases, participant gender had no impact on attitudes (Corrigan et al., 1995; Law et al., 2007; Mukolo and Heflinger, 2011; Washington et al., 2012; O’Driscoll et al., 2015) or findings were mixed (Mavropoulou and Sideridis, 2014). Being of the same sex as the child increased identification and reduced stigmatization (Secker et al., 1999). Boys reported more perceived peer stigmatization (Moses T., 2010b). There was some suggestion that children of both genders more often identified a child with psychological difficulties to be male, whereas children with physical difficulties were more often thought of as female (Roberts et al., 1981; Roberts et al., 1984).

3.3.3. Ethnicity

Few studies examined the role of ethnicity in this age group and findings are not comparable due to the quality of the studies and different ethnicities considered (Martin et al., 2007; Walker et al., 2008; Coleman et al., 2009; Moses T., 2010b; Mukolo and Heflinger, 2011; Elkington et al., 2012). There may be a trend towards ethnic minority groups holding more stigmatizing views but this requires further exploration.

3.3.4. Socioeconomic status
Despite hypothesizing that the evidence would find less stigmatizing attitudes amongst individuals of higher educational attainment, only 2 moderately rated papers (Roberts et al., 1984; McKeague et al., 2015) specifically examined the role of socio-economic status in children’s perceptions of psychological disturbance. These did not find significant differences between the beliefs of participants in high and low socioeconomic groups.

3.4. Self-Stigma

Only 3 studies were identified to examine the effects of self-stigma on emotional wellbeing in YP-MHD. These were all moderately rated and are summarized in Table 3 (Moses, 2009a; 2009b; 2010a). They looked at the same sample of sixty 12-18 year old YP-MHD. Self-labelling resulted in increased levels of self-stigma and depression and a trend towards a lower sense of self-mastery, but no impact on self-esteem (Moses, 2009a). Self-labelling practices were also more prominent in those with greater perceived public stigma, younger age at initiation of treatment and a higher socio-economic status. Older adolescents; lower age at treatment onset; and being of white ethnicity were linked to higher self-stigma. Less self-stigmatization was noted in those with externalizing disorders e.g. conduct disorder. Parental factors were also of relevance, in that parental optimism and a greater faith in the child’s ability to control behavior was protective against self-stigmatization, whereas parental secrecy increased self-stigma (Moses, 2010a), resulting in greater personal rejection and shame.

Correlations were also identified between adolescents understanding/perceptions of mental illness and self-stigma (Moses T., 2010a). Self-stigma increased in adolescents who perceived less control over their mental health difficulties and believed their problems to be life-long. Perceived causal explanations for illness that correlated with increased self-stigmatization were social problems, family problems, trauma, personality/way of thinking, and biological causes. The more causal factors identified per patient, the higher their self-stigma rating. Perceived economic difficulties as a causal factor were not correlated to self-stigmatizing beliefs. Parental secrecy regarding a child’s mental health problems also increased self-stigmatization among adolescents.

3.5. Perceived Stigma

Several reliable lines of evidence suggest that perceived stigma is greater than personal stigma (Friedrich et al., 1996; Moses T., 2010b; Elkington et al., 2012; Yoshioka et al., 2014). Girls
and participants aged 12 (as compared to participants aged 9) gave lower ratings for their classmates’ behavioral intentions (i.e. perceived stigma) towards a peer with autism than their own (personal stigma) (Swaim and Morgan, 2001). Greater peer stigmatization was also perceived by Whites, males, those receiving treatment from a younger age and youth with at least one mood disorder (Moses T., 2010b). A study examining whether children with ADHD viewed their behaviors as stigmatizing found that diagnosed children reported more perceived stigmatization on all fronts—teachers, parents and peers (Wiener et al., 2012), which had knock on effects on their global self-worth.

4. Discussion

4.1 Summary of findings

This paper is, to the best of the authors’ knowledge, the first systematic review examining stigma specifically towards YP-MHD. With this in mind, the authors investigated a number of predetermined hypotheses guided by the adult literature, and conducted a thematic analysis to start to build a picture of stigmatization in this age group.

Most notably, the evidence for stigmatization in YP-MHD was found to be significant, universal and multifaceted, with levels of stigmatization varying depending on the characteristics of both the stigmatizers and the stigmatized. There were several parallel themes between stigmatization of YP-MHD and adult patients. Specifically, YP-MHD, like their adult counterparts, suffered more discrimination than peers with other health needs; and themes such as familiarity and blame/responsibility had discreet effects on the degree of stigmatization individuals experienced. Consistent with the adult literature (Chandra and Minkovitz, 2006; Burke et al., 2008; Andersson et al., 2010) and our hypothesis, males were both more stigmatized and more stigmatizing than females, possibly as a result of the same widely held belief that males should be self-sufficient at managing mental health difficulties, leading to a lower uptake of treatment by male children. Also consistent with the hypotheses, there was evidence of variation in stigmatizing views based on participants’ diagnosis; and stigmatizing beliefs for the most part appeared to increase with age, possibly as children’s awareness of mental health difficulties increased. It was not felt possible to
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comment on the impact of socioeconomic status and ethnicity, as studies were too few and varied in their methodology.

At a rate of 25%, Moses (2009a) found the prevalence of self-stigmatizing attitudes to be lower than adult self-stigmatization figures. The strongest evidence for stigmatization due to ‘labeling’ was also amongst adults. Today’s youth may be more open and supportive of YP-MHD, and the media’s role in normalizing MHD may be filtering through to YP-MHD such that they no longer feel as “singled out”. Although encouraging, this leaves much room for improvement for the 25% who will suffer self-stigmatizing attitudes, resulting in secrecy, denial and possible poorer outcomes (Moses T., 2010b).

4.2. Limitations

Whilst this review represents a promising start to our understanding of stigma towards YP-MHD, it has some limitations. Firstly, although 42 papers were identified, the rich variation in methodology, sample size and subsequent quality presented a challenge in comparing the data, as the concepts being investigated were not always like-for-like. This is in part due to the absence of standardized, validated tools, to compare experiences of stigma in YP-MHD, until recently (McKeague et al, 2015). Hence, this made it difficult to both draw comparisons between groups, and also investigate change over time. Secondly, the studies only reviewed a limited number of stigma components. Thirdly, due to the specific age range reviewed for the purposes of this paper, recent studies which overlapped with our age range but from which we could not readily extract child-specific data were excluded. Fourthly, most studies also looked at self-reporting of stigmatizing attitudes and this may not reflect true behavioral intentions. Finally, evidence regarding self-stigmatization came from only one sample of YP-MHD.

4.3. Future directions

It was very positive to identify that YP may present as more accepting than adults of YP-MHD. YP reacted to the behaviors displayed by their peers rather than any labels attached,
which suggests that naming the concern, so that appropriate interventions can be sought, may not have such a negative impact on YPs’ attitudes.

Future studies will need to further investigate sex-related aspects of stigmatizing attitudes and in particular why females have less stigmatizing views than males, and at what point self-stigmatization develops in both sexes. It is also important to understand why familiarity and knowledge do not necessarily equate to a reduction in stigmatizing views, as this may often be an assumption when designing projects to reduce stigmatization. There is a need to replicate the above work to ensure findings are reproducible and more widely applicable, and to invest in longitudinal studies to understand how stigma evolves across the developmental trajectory of children and adolescents.

Based on our findings, future investment should aim at

• Targeting gender differences with special emphasis on males e.g. working with boys’ schools and providing better pastoral care.

• Targeting worries associated with specific diagnoses e.g dangerousness in psychosis.

• Offering tailored psychoeducation following diagnosis to YP-MHD and their family. The evidence has shown that those with a greater sense of responsibility for their illness have a higher level of self-stigma, so specific psychoeducation programs around this may reduce the impact of this false notion.

• Offering family orientated interventions. Unless stigma is addressed within families, transgenerational transmission of stigmatizing attitudes will continue to affect access to services and appropriate treatment of YP with mental health problems. Families in lower socioeconomic groups may be in greater need of intervention of this kind.

• Setting up anti-stigma campaigns led by individuals with an understanding of the wider cultural context. A ‘one size fits all’ approach is likely to fail in an ethnically diverse society, as different cultural beliefs come into play from childhood, influencing attitudes and discrimination.

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Table 1:
Detailed analysis of studies investigating young persons (YP) stigmatizing views towards young people with mental health difficulties (YP-MHD)

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<tr>
<th>Number of Young People</th>
<th>Country</th>
<th>No. participants</th>
<th>Age</th>
<th>Gender</th>
<th>Ethnicity</th>
<th>Purpose</th>
<th>Methods</th>
<th>Outcome Measures</th>
<th>Summ ary of key</th>
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<tr>
<td>1</td>
<td>Bellanço et al 2013 Personal stigma Quality: Moderate</td>
<td>UK</td>
<td>273</td>
<td>7-11 mean 9.2 yrs</td>
<td>128 F (46%)</td>
<td>Not stated</td>
<td>To examine social distance (conative attitudes) and cognitive attitudes towards a peer with one of five difficulties: ADHD, depression, learning disabilities (LD)</td>
<td>Children listened to 4 vignettes describing a peer with either depression, ADHD, or no concerns. Questionnaires completed in school.</td>
<td>ACL SAQ2</td>
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<tr>
<td>2</td>
<td>Brook et al 2001 Personal stigma Quality: Weak</td>
<td>Israel</td>
<td>104</td>
<td>10-18 mean 14 yrs</td>
<td>52 F (50%)</td>
<td>Not stated</td>
<td>To investigate knowledge and attitudes towards ADHD and LD</td>
<td>Pupils completed an anonymous questionnaire in class, designed by the authors. 50% validated by a panel of professionals.</td>
<td>Author designed Questionnaire, validated by other professionals</td>
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<tr>
<td>3</td>
<td>Campbell et al 2004 Quality: Strong</td>
<td>USA</td>
<td>576</td>
<td>8-12 mean 10 yrs</td>
<td>282 F (49%)</td>
<td>Caucasian 80.6%; African American 0.7%; Latina 4.5%; Asian American 0.7%; Other 5.2%</td>
<td>To assess behavioral intentions towards an unfamilial peer with autism.</td>
<td>Pupils randomly assigned to watch same videos as in Swaim et al; each pupil watched 2 videos: one of a typical peer with a description, and one of a 12 year old male peer with a description and without an explanation for autism.</td>
<td>ACL SARG SRQ</td>
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<td>4</td>
<td>Cattabber et al 2015 Quality: Moderate</td>
<td>Belgium</td>
<td>133</td>
<td>mean age 16.6 yrs</td>
<td>111 F 85%</td>
<td>Not stated</td>
<td>To investigate a stigmatization in YP-MHD diagnosed with a personality disorder compared to YP diagnosed with other mental health difficulties.</td>
<td>YP-MHD admitted to an inpatient unit underwent a standardized assessment process and also completed the stigma measures.</td>
<td>Stigma Consciousness Questionnaire Perceived Discrimination</td>
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The Stigma of Mental Illness in Children and Adolescents: A Systematic Review

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<td>Coleman et al, 2009</td>
<td>USA</td>
<td>1991</td>
<td>926 F (48.7%)</td>
<td>14.8 years</td>
<td>White, African American, Hispanic</td>
<td>To investigate the causal attribution about childhood mental illness by age, race, ethnicity and gender. To assess social distance</td>
<td>Children were randomly assigned vignettes depicting a child with one of: ADHD, depression, or asthma and responded to an online survey.</td>
<td>Stigmatization by diagnosis: Depression was more stigmatized than ADHD. Blame/Responsibility: See below. Causal attributions, Blame/Responsibility and Social distance: Poor parenting, substance misuse and low effort resulted in a more blaming view and an increased desire for social distance. Endorsed beliefs of stress, poor parenting, substance misuse and low effort were most commonly endorsed for the depression vignette. Genetic and brain difference were identified as causal attributions in all vignettes equally. Genetics, brain differences and God’s will were not associated with social distance. Ethnicity: Differences were identified by ethnic background. Gender: Girls were significantly more likely to endorse stress as a causal factor. Self-stigma: Those who reported a diagnosis of depression or ADHD were more likely to endorse parenting, low effort and substance misuse causes (moralistic causal beliefs). Social distance: See Causal attributions above.</td>
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<td>Corrigan et al, 2005</td>
<td>USA</td>
<td>303</td>
<td>13 to 19 years (mean ±SD age, 16.4±2.5 years)</td>
<td>171 F (58%)</td>
<td>Asian American, Black, Hispanic, Native American</td>
<td>To investigate: 1. differences in stigmatization between mental and physical health conditions; 2. the effect of causal attributions and beliefs about dangerousness on discriminatory behaviors; 3. The role of familiarity on stigmatizing views</td>
<td>Adolescents were presented with one of 4 vignettes; peer with mental illness; peer with mental illness and untreated peer; peer with leukaemia.</td>
<td>Stigmatization of TP-MH: Alcohol misuse was the most stigmatized of the conditions (statistically significant). Mental illness was more stigmatized than leukaemia on measures of pity, dangerousness, fear, help and avoidance. Dangerousness: Greater familiarity resulted in stronger attributions of dangerousness but with a small effect size (R² = 0.05). Ethnicity &amp; Gender: No associations were identified between demographics of participants and familiarity. Familiarity &amp; Blame/Responsibility: Greater familiarity resulted in greater responsibility being attributed to people for their mental illness. Social distance: Willingness to help was associated with pity and inversely associated with anger. Danger was positively correlated with fear (R² = 0.53) and which was in turn positively correlated with avoidance (R² = 0.26). Note: Some students had been exposed to the anti-stigma campaign so some responses may be post an anti-stigma intervention and such studies were generally excluded from the paper.</td>
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<p>| Dixon et al, 2013 | UK | 25 | 8 and 9 (Year 4) | M and F | White British Children | To explore children's understanding and views of peers experiencing anxiety and depression. | Children were read vignettes of non-gender specific children experiencing anxiety and depression. A interpretative phenomenological analysis (IPA) to assess children draw and write technique | Stigmatization by diagnosis: The child with anxiety was favoured over the child with depression. Blame/Responsibility: Beliefs about control over behavior i.e. responsibilities resulted in more negative attitudes, and a greater desire for social distance. The authors comment that &quot;little |</p>
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<td>Dolphin et al 2014</td>
<td>Personal stigma Quality: Strong</td>
<td>Ireland</td>
<td>14-75 yrs</td>
<td>Female</td>
<td>17-08 yrs</td>
<td>To investigate adolescent perceptions of a peer with depression, looking at causal attributions and views of personal responsibility</td>
<td>Structural Equation Modeling used to calculate the relationship between causal attributions and perceived responsibility and social acceptance or exclusion</td>
<td>Personal Control Subscale of Revised Causal Dimension Scale (CDS II) and Friendship Activity Scale (FAS)</td>
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<td>Elkington et al 2012</td>
<td>Quality: Good</td>
<td>USA</td>
<td>13-24 yrs</td>
<td>Female</td>
<td>5% Latino</td>
<td>To investigate mental illness-related stigma in a hypothetical outpatient treatment</td>
<td>Young people were interviewed and thematic analyses conducted to look at stigma at individual and structural levels</td>
<td>Thematic analysis of individual interviews</td>
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<td>Friedrich et al 1996</td>
<td>Personal stigma Quality: Strong</td>
<td>USA</td>
<td>9-11 yrs</td>
<td>Not stated</td>
<td>9-5 yrs</td>
<td>To investigate differences in attitudes and behavioral intentions towards a hypothetical peer with and without Tourette Syndrome (TS); and to look at differences by gender and grade</td>
<td>Children were presented with a video depicting either: child without TS; child with TS &amp; explanation of condition; or child with TS and no explanation.</td>
<td>ACL^2, Activity Preference Scale, The (Modified) Fantasy Questionnaire</td>
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<td>Harris et al 1992</td>
<td>Personal stigma Directly observed and reported. Quality: Strong</td>
<td>USA</td>
<td>Grades 3-6</td>
<td>Not stated</td>
<td>Grades 3-6</td>
<td>To examine the effects of stigma and actual diagnosis or peer interactions on children towards a hypothetical child with ADHD</td>
<td>A 'perceiver' child and 'target' child of similar age were paired to play. The 'perceivers' were told their partner (target) had hyperactive behaviors. Their interactions were filmed and children responded to questions on the stigma of negative expectancy.</td>
<td>8-point Likert scale questionnaire used to rate 'measure of affect' and 'performance'</td>
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<td>Law et al 2007</td>
<td>Quality: Weak</td>
<td>UK</td>
<td>11-12 yrs</td>
<td>Not stated</td>
<td>88% Caucasian</td>
<td>To investigate the impact of labeling on attitudes and behavioral intentions of children towards a hypothetical child with ADHD</td>
<td>Children were randomly assigned a vignette of a child with ADHD: without any label; with an 'attention deficit hyperactivity' label; or with an 'attention deficit hyperactivity disorder', after which they completed the outcome measures</td>
<td>ACL^2, SAQ^2</td>
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Stigma towards the experience of feeling worried or sad was apparent. IPA of responses identified 3 themes. One theme related to empathy versus blame. Social distance: As above.

Responsibility: Peers with depression were more likely to be pitied and socially accepted if they were not felt to be responsible for their depression. Gender: Female participants were more accepting than males. Also, depressed female peers were more accepted than depressed male peers. Social distance: Unlike previous research, negative emotional reactions did not necessarily predict peer exclusion.

Only results specific to the 13-17 age group reported.

Perceived stigma in YP-MHD: 13-17 year old specifically reported experiences whereby their families denied or rejected their illness or need for treatment.

Stigmatization of YP-MHD: Children rated the child without TS more favorably than the child with TS, regardless of whether the video was accompanied by an explanatory text. Gender: Boys rated the child more favorably than girls.

Perceived stigma: Children reported greater perceived stigmatization than personal stigmatization.

Social distance: Behavioral intentions did not vary between groups and reported that they were just as likely to include each child in activities.
<p>| 13 | Mavropoulou et al 2014 | Greece | 475 | Grades 4-8 | Mean age 10.97 | 110 F (49%) | Caucasian | To examine the knowledge, attitudes and empathy of children with and without classroom contact with ASD peers. | Children's attitudes towards peers with autism spectrum disorder measured using self reported Adjective Checklist. | ACL-SAQ B &amp; S (Basic Empathy Scale) | Age &amp; Gender: There were positive changes for both boys and girls, with gender differences based on the specific construct being measured. Subtle differences in the strength of positive findings were noted between gender and grades. | Familiarity: Children who had actual classroom contact with peers with ASD held more positive attitudes and behavioral intentions and were more empathic than children who hadn't had classroom contact. This different was maintained at 3 months. | Social Distance/behavioral intentions: See above |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 14 | McKeague et al, 2015 | Ireland | 562 | 9-16 (mean age 13) | 316 F, 246 M | White Irish | To develop questionnaires assessing stigmatizing views in children and adolescents towards peers with mental health difficulties. | The Peer mental Health Stigmatization Questionnaire (PMHSS) was developed for this study and administered in class. It measures stereotypes, prejudice, discrimination and lower status. | PMHSS SDQ | The PMHSS showed good validity and reliability. Stigmatization of YP-MHD: YP were able to distinguish between personal stigma (their own stigmatizing views) and societal stigma (other peoples' stigmatizing views) towards YP-MHD. Socioeconomic status (SES): Did not show any differences in stigmatizing views. | Age: Older participants were more stigmatizing of YP-MHD than younger children |
| 15 | Moses et al. 2012 | United States | 56 | 12-18 | 41 F, 15 M | White | To examine adolescents perceptions of being “treated differently” by family, peers and school staff as a result of a mental health difficulty. | Qualitative analysis of mixed method, semi-structured interviews | Qualitative analysis of mixed method, semi-structured interviews | Ethnicity: Whites reported more peer stigmatization. Gender: Males reported more peer stigmatization. No difference found in family stigmatization based on demographic factors. Social distance &amp; Perceived stigmatization in YP-MHD: 62% participants described stigma in peer relationships amounting to friendship loss. Those who did not report difficulties were more secretive or to socialise with others with similar difficulties. 45% described stigmatization from family and 35% described stigma from school staff. 22% described a different but positive treatment from others as a result of their difficulties. 3 adolescents felt 'over-protected' by family members. Those who reported stigmatization in one domain were likely to report stigmatization in another domain. Youth with at least 1 affective disorder reported more perceived stigma from peers. |
| 16 | O'Driscoll et al 2012 | Ireland | 315 | 10-21 years &amp; 11-15, 36 years | 203 F (65%) | Not reported | To investigate implicit and explicit stigma towards peers with ADHD or depression. | Participants were given a booklet containing two vignettes about age and gender matched peers: one peer with “normal issues” and a second peer with either depression, or ADHD. Data was collected from qualitative analyses of narratives from mixed gender interviews. | IAT−AQ &amp; SAQ SIDS (Basic Empathy Scale) | Stigmatization by diagnosis: The peer with normal issues was respected to more positively overall. ON measures of explicit attitudes, the peer with ADHD was more stigmatized than the peer with depression on measures of: anger, relationship social distance, blame/responsibility, with some variations by age and gender. However, on measures of implicit attitudes, responses were more negative towards the peer with depression than ADHD. Age: Adolescents wanted less phys- |</p>
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<th>Stigmatization of YP-MHD:</th>
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<td>17</td>
<td>O’Driscoll et al 2015b</td>
<td>Ireland</td>
<td>10-11 years (n = 72)</td>
<td>80 F</td>
<td>White</td>
<td>Qualitative group study consisting of same-sex groups of 3-5 participants interviewed in school. Participants were randomly assigned to either the depression or ADHD groups and read to age and sex matched vignettes</td>
<td>Thematic analysis</td>
<td>Stigmatization of YP-MHD: This was the only study in the review which sought to explore YP views of excluding peers with a mental illness. The participants appeared to recognize the pros and cons of exclusion for YP-MHD. They appeared to respond that justification for excluding peers would depend on an extent to their relationship with the YP-MHD. They also recognized the benefits of positive peer relationships for YP-MHD but were concerned with the social costs for themselves of including them.</td>
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<td>Stigmatization of YP-MHD: Two main reasons were given to justify social exclusion (discrimination) of YP-MHD by peers: Failure to engage in a reciprocal social interaction, which participants felt would result in a very one sided or boring interaction. They were also concerned with the YP-MHD not liking them. Risk: Concerns about the impact that engaging with the YP-MHD would have on the participants own mental state, and the risk of disciplinary or social consequences of associating with them. Age: 10-11 year olds were more concerned about the disciplinary risks of engaging with e.g. a peer with ADHD; whereas the mid-adolescents were more concerned with the social consequences. Gender: Girls were more likely to comment on the failure of the vignette’s character to share her problems with others.</td>
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<td>19</td>
<td>Peterson et al</td>
<td>USA</td>
<td>9-11 and 11-16</td>
<td>Predominantly male children</td>
<td>Children were shown one of 4 IAT, SAQ, and SDS</td>
<td>Stigmatization of YP-MHD: Children rated the depressed child less favourively compared to a healthy child.</td>
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| 1985 | Self-reports | Australia | 10-13 | 956 (53%) | Not stated | To identify factors that are predictive of stigmatizing attitudes towards peers with depression in adolescents | 12 boys and 12 girls completed a series of measures investigating stigma-laising attitudes and self-perceived stigma and a self-rated measure of their own mental health | Low scores on the Stigma of Mental Illness Scale (SMS) and low scores on the Perceived Stigma of Mental Illness Scale (PSMIS). | Sociodemographic details on participants’ chronological age, gender, and ethnicity were collected using the Australian Bureau of Statistics (ABS) Census 2001. | Dangerousness: Beliefs about dangerousness/unpredictability were associated with increased beliefs in dangerousness, and weakness rather than sickness. |}

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| 1992 | Poster et al | USA | Grades 3-6 | 168 | Not stated | To examine children's perceptions of mentally ill individuals displaying behaviors commonly associated with mental illness | Students were presented with a vignette describing a mentally ill person and were asked to rate their perceptions of the mentally ill person | Children's responses to questions assessing liking, attractiveness, current behavior, future behavior, and therapy | Stigmatization of YP-MHD: Children more commonly depicted the 'crazy' person engaging in inappropriate behavior, with aggression and self-harm being less likely. Children were also more likely to believe the 'crazy' person would cause them to do things they didn't want to do. |}

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| 1992 | Poster EC | USA | Grades 3-6 | 168 | Not stated | To examine children's beliefs about mentally ill individuals | Children read six vignettes, each depicting a 'crazy' person engaging in inappropriate behavior, with aggression and self-harm being less likely. Children were also more likely to believe the 'crazy' person would cause them to do things they didn't want to do. | Children's responses to questions assessing liking, attractiveness, current behavior, future behavior, and therapy | Stigmatization of YP-MHD: Children more commonly depicted the 'crazy' person engaging in inappropriate behavior, with aggression and self-harm being less likely. Children were also more likely to believe the 'crazy' person would cause them to do things they didn't want to do. |}

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<th>Sample Size</th>
<th>Ethnicity</th>
<th>Aim</th>
<th>Procedure</th>
<th>Results</th>
<th>Outcome Measures</th>
</tr>
</thead>
</table>
| 2004 | Poster et al | USA | Grades 3-6 | 168 | Not stated | To examine children's beliefs about mentally ill individuals | Children read six vignettes, each depicting a 'crazy' person engaging in inappropriate behavior, with aggression and self-harm being less likely. Children were also more likely to believe the 'crazy' person would cause them to do things they didn't want to do. | Children's responses to questions assessing liking, attractiveness, current behavior, future behavior, and therapy | Stigmatization of YP-MHD: Children more commonly depicted the 'crazy' person engaging in inappropriate behavior, with aggression and self-harm being less likely. Children were also more likely to believe the 'crazy' person would cause them to do things they didn't want to do. |}

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<th>Outcome Measures</th>
</tr>
</thead>
</table>
| 1986 | Personal Stigma | USA | Grades 3-6 | 168 | Not stated | To examine children's beliefs about mentally ill individuals | Children read six vignettes, each depicting a 'crazy' person engaging in inappropriate behavior, with aggression and self-harm being less likely. Children were also more likely to believe the 'crazy' person would cause them to do things they didn't want to do. | Children's responses to questions assessing liking, attractiveness, current behavior, future behavior, and therapy | Stigmatization of YP-MHD: Children more commonly depicted the 'crazy' person engaging in inappropriate behavior, with aggression and self-harm being less likely. Children were also more likely to believe the 'crazy' person would cause them to do things they didn't want to do. |}
<table>
<thead>
<tr>
<th>Study</th>
<th>Country</th>
<th>Age</th>
<th>Gender</th>
<th>Ethnicity</th>
<th>Purpose</th>
<th>Methods</th>
<th>Outcome Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moderate</td>
<td></td>
<td>In children's perceptions of psychological and physical disturbance.</td>
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<tr>
<td>Roberts et al, 1981</td>
<td>USA</td>
<td>9-13</td>
<td>Not stated</td>
<td>To investigate children's perceptions towards imaginary peers with mild or severe psychological and medical disorders</td>
<td>Children read 4 vignettes each depicting a peer with mild or moderate psychological or medical difficulties.</td>
<td>Perceived desirability or the perceived bad peer and progress were examined using a written questionnaire.</td>
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<td>Recognizes to 9 open ended and detailed questions set by author.</td>
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<tr>
<td>Secker et al, 1999</td>
<td>Scotland</td>
<td>102</td>
<td>Young people in mainstream school</td>
<td>Gender</td>
<td>To explore young people's views of mental illness</td>
<td>Semi-structured individual interviews with focus groups. They were given 5 short vignettes, 3 of which depicted a teenager experiencing a mental illness (two other vignettes were of adult patients). Interviews were recorded &amp; analysed using the NU*DIST software package.</td>
<td>Stigmatization by diagnosis: Depression was more often recognized as an experience of everyday life rather than an illness. Young people were ambivalent about anorexia but much clearer that schizophrenia and paranoid symptoms represented mental illness. Age &amp; gender: Where participants could identify with the characters based on age &amp; gender, they were more sympathetic and less likely to express fear, whether or not they were recognised as mentally ill. Dangerousness: Fear was expressed more commonly towards the characters identified as unpredictable i.e. the vignettes depicting psychosis and behavioral problems. Familiarity: Young people's responses as to whether a particular problem described in a vignette constituted a mental illness, seemed very dependent on their ability to identify with the symptoms portrayed and their famili-</td>
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<tr>
<td>Study</td>
<td>Country</td>
<td>No. Participants</td>
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<td>Purpose</td>
<td>Methods</td>
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</tr>
<tr>
<td>Spitzer et al 1995</td>
<td>USA</td>
<td>90</td>
<td>Grades 1 (6-7), 4 (9-10) and 7 (12-13)</td>
<td>46 F (61%)</td>
<td>To examine: 1. School-age children's perception of deviant behavior, including exploring thought and causality. 2. School age children's perception of deviant behavior, including exploring thought and causality.</td>
<td>Children were given 3 vignettes regarding peers with either normal, antisocial or psychotic behavior.</td>
<td>Qualitative analysis of case vignettes &amp; interviews.</td>
</tr>
<tr>
<td>Swaim et al 2001</td>
<td>USA</td>
<td>233</td>
<td>9 and 12</td>
<td>117 F (50.2%)</td>
<td>To examine factors affecting children's attitude (cognitive component) and behavioral intentions towards a peer with autism.</td>
<td>Children were assigned to view one of 3 videos depicting a boy: without autism, with autism, and with autism and explanation.</td>
<td>AGI, SAQ2, Self SRS2</td>
</tr>
<tr>
<td>Swords et al 2011</td>
<td>Ireland</td>
<td>595</td>
<td>5 age groups: 6, 9, 12, 14 and 16</td>
<td>271 F (46.5%)</td>
<td>To examine the factors that contribute to or hinder acceptance of peers with depression or ADHD.</td>
<td>Children answered open and closed questions about hypothetical male and female peers with symptoms (not a diagnosis)</td>
<td>CAPPP, SAQ3</td>
</tr>
<tr>
<td>Study</td>
<td>Country</td>
<td>Year</td>
<td>Design</td>
<td>Sample Characteristics</td>
<td>Methods</td>
<td>Outcome Measures</td>
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<tr>
<td>Walker et al, 2008</td>
<td>USA</td>
<td>2008</td>
<td>Random</td>
<td>318 participants</td>
<td>To examine stigmatizing attitudes towards children with ADHD or depression, and to investigate differences by age, sex, and race/ethnicity.</td>
<td>Personal stigma: Young people were randomly assigned one of the vignettes representing a peer with depression, ADHD or asthma.</td>
<td></td>
</tr>
<tr>
<td>Washington et al, 2012</td>
<td>USA</td>
<td>2012</td>
<td>Random</td>
<td>89 participants</td>
<td>To investigate whether typically developing first graders are more rejecting towards peers with autistic behavior.</td>
<td>Social distance: Participants indicated a desire for more social distance from peers with depression, followed by ADHD and then asthma.</td>
<td></td>
</tr>
<tr>
<td>Wiesner et al, 2012</td>
<td>Canada</td>
<td>2012</td>
<td>Random</td>
<td>152 participants</td>
<td>The study had 3 main goals, only one of which was related to stigma as follows: Do children with ADHD or their peers with ADHD display stigmatizing behavior?</td>
<td>Perceived stigmatization was linked to lower self esteem. The findings suggested that children with ADHD are vulnerable to self-stigmatization and greater perceived stigma.</td>
<td></td>
</tr>
<tr>
<td>Yoshikawa et al, 2013</td>
<td>Japan</td>
<td>2013</td>
<td>Random</td>
<td>311 participants</td>
<td>To examine how Japanese high school students stigmatize peers with depression, social problems. Young people were randomly allocated a vignette about a 15-year-old (M or F) with either depression or ADHD.</td>
<td>Stigmatization by diagnosis: Social phobia was most commonly considered 'not a real illness' and schizophrenia was least likely to be considered 'not a real illness' Regarding measures of perceived stigma.</td>
<td></td>
</tr>
</tbody>
</table>
The Stigma of Mental Illness in Children and Adolescents: A Systematic Review

<table>
<thead>
<tr>
<th>Quality: Moderate</th>
<th>phobia and psychosis</th>
<th>schizophrenia</th>
<th>perceived stigma</th>
</tr>
</thead>
</table>

- Items about dangerousness in schizophrenia were most likely to be endorsed.
- Items relating to social phobia being a personal weakness were most likely to be endorsed.
- Items relating to 'not telling anyone' about depression were most likely to be endorsed.

**Dangerousness:** Beliefs about dangerousness were more commonly held about schizophrenia.

**Gender:** Males were more stigmatizing than females for all scales (statistically significant difference)

**Perceived stigma:** Personal stigma was lower than perceived stigma for all disorders.

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**KEY**
* Qualitative studies are starred

Quality: Quality rating for paper based on either CASP for qualitative studies or EPHPP for quantitative studies

1. The Adjectives checklist (ACL): A 32 item list which measures positive and negative cognitive attitudes towards target
2. CAPPP: Children's Attributions about Psychological Problems in their Peers
3. Revised Attribution Questionnaire (r-AQ): Measures stereotypes (Responsibility, dangerousness) and prejudice (emotional responses, such as fear, anger, pity, avoidance)
4. Shared Activity Questionnaire (SAQ): Measures behavioral intentions (i.e. discrimination) of elementary school children towards a target child.
5. Social Distance Scale (SDS): A scale which measures desire for social distance from people with mental illness
6. Implicit Association Test (IAT): Measures the strength of automatic associations between an individual's mental representations of concepts in memory.
7. Similarity Rating Form (SRF): This is a single item that served as a manipulation to determine whether typical children recognized the presence of autism in both AUT-D and AUT-D + E conditions.

**Table 2:**
Detailed analysis of studies investigating adults' stigmatizing views towards young people with mental health difficulties (YP-MHD)

<table>
<thead>
<tr>
<th>Views of Adults</th>
<th>Country</th>
<th>No. participants</th>
<th>Age</th>
<th>Gender</th>
<th>Purpose</th>
<th>Methods</th>
<th>Outcome Measures</th>
<th>Summary of key findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brook et al 2000</td>
<td>Israel</td>
<td>46</td>
<td>30-50</td>
<td>40 F (87%)</td>
<td>To investigate teachers' knowledge and attitudes towards ADHD and LD.</td>
<td>An author designed questionnaire of 54 questions in total, assessed, amongst other things, teachers' attitudes towards pupils with ADHD</td>
<td>Newly piloted questionnaire of demographics and teacher knowledge &amp; attitudes about ADHD &amp; LD (learning difficulties)</td>
<td>Stigmatization of YP-MHD: 1/2 teachers responded that pupils with ADHD should be taught in a special setting and 1/2 favoured mainstream education. Most teachers believed that students with ADHD have similar IQs to students without ADHD. 87% felt that children with ADHD required psychological support; and 85% would be more lenient towards students with ADHD. Teachers wanted to be informed if a child had ADHD. 15% thought that pupils with ADHD were less likely to be less successful in the future. 1/2 believed that children with ADHD would continue to struggle with peer relations and family life in the future. In summary, the authors reported that attitudes and understanding of ADHD were relatively poor.</td>
</tr>
<tr>
<td>Views of Adults</td>
<td>Country</td>
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</tr>
<tr>
<td>2 Ghanizadeh et al 2006</td>
<td>Iran</td>
<td>196</td>
<td>38.92 mean age</td>
<td>108 F (54%)</td>
<td>Not stated</td>
<td>To survey knowledge and attitudes of teachers towards elementary school pupils in Iran</td>
<td>Elementary school teachers from a stratified random sample on Shiraz anonymously completed a questionnaire on ADHD.</td>
<td>Self-report true/false Questionnaire assessing participant demographics, ADHD knowledge and attitudes</td>
</tr>
<tr>
<td>3 Martin et al 2007</td>
<td>USA</td>
<td>1393</td>
<td>Adults 18-89</td>
<td>794 F 14% Black 7% Other</td>
<td>To investigate adults’ social reactions to children with mental health difficulties. The study assessed attitudes towards 4 children described in non-labelled vignettes depicting children representing meeting DSM-IV criteria for ADHD, major depression, asthma and physical disabilities</td>
<td>2002 General Social Survey (GSS) data on the stigmatization of children analysed. Respondents were each read 1 vignette and asked a series of specifically designed questions assessing causal attributions, labelling, perceptions of dangerousness &amp; stigma associated with receiving mental health treatment.</td>
<td>National Stigma Study-Children (NSS-C) was administered, and bivariate analysis used to assess perceptions of dangerousness.</td>
<td>Blame/Responsibility: Social distance preferences were not reduced when the underlying causality was seen as biological. When causality was related to bad character or home life, the desire for social distance increased. Respondents were significantly more likely to reject a child whom they labelled “mentally ill.” Dangerousness: Children believed to be dangerous to self or others are more likely to be rejected. Children labelled as mentally ill also more likely to be perceived as violent. Ethnicity: Non-whites and non-blacks more likely to reject child. Familiarity: Those who reported having known someone with MHD where the relationship improved indicated a desire for less social distance. Gender: Women were more accepting of YP-MHD than men. Social distance/Behavioral intentions: Respondents preferred significantly greater social distance from children with ADHD and depression than the other 2 conditions (p &lt; 0.001). 1 in 5 did not want their children to have contact with children with behaviors consistent with ADHD or depression. Children described ADHD and depressive symptoms were 2-3 time more rejected than the other children.</td>
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<tr>
<td>Mukolo et al 2011</td>
<td>USA</td>
<td>1372</td>
<td>Not stated</td>
<td>800 F (58.3%)</td>
<td>79.5% White; 14.6% Black; 5.6% Other</td>
<td>To examine attributions about child health conditions and their impact on stigma</td>
<td>Secondary analysis of data from the GSS 2002 National Stigma Study-Children (NSS-C). Attributes were broadly classified into the categories of biological, environmental, and child rearing factors.</td>
<td>Descriptive analysis &amp; logistic regression used to account for the emergence and persistence of negative attitudes.</td>
<td>Blame/Responsibility: Child blame was endorsed as a causal attribution in over 70% of children depicted in the ADHD or depression vignette, which was higher than for asthma (43%) and normal troubles (65%). ADHD was the only one of the 4 conditions significantly positively associated with all four causal attributions. Higher educational achievement resulted in increased beliefs of environmental stress factors and less apportioning of blame to the child. Social distance/Behavioral intentions: Desire for social distance was significantly higher for children in the ADHD and depression vignettes than for asthma. ADHD had the highest mean desire for social distance, and parent blame was endorsed more frequently than biology. Gender, Age, race and income had no statistically significant difference with endorsed attributions. Ethnicity: Black respondents preferred greater social distance from the child.</td>
</tr>
<tr>
<td>Ohan et al 2013</td>
<td>Australia</td>
<td>225</td>
<td>39.17 +/- 5.42</td>
<td>200 F (89%)</td>
<td>Australian 92% Other 8%</td>
<td>To examine the impact of labeling on children with ADHD or depression</td>
<td>Parents answered questions on a vignette of a M/F child with either: no mental health difficulty; symptoms of depression or ADHD but no label; symptoms of either ADHD or depression with an attached diagnostic label</td>
<td>Stereotypes subscale, Prejudice subscale, Social distance subscale</td>
<td>Stigmatization of YP-MHD: Parents were significantly more stigmatizing (more stereotypes and prejudices held) towards children with symptoms of ADHD or depression than without. There was a further small significant increase in stigmatizing views when a label was attached. Stigmatization by diagnosis: ADHD was more stigmatized than depression on measures of prejudice and Social distance. Social distance As above</td>
</tr>
<tr>
<td>Views of Adults</td>
<td>Country</td>
<td>No. participants</td>
<td>Age</td>
<td>Gender</td>
<td>Race</td>
<td>Purpose</td>
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</tr>
<tr>
<td>6 Perry et al 2007 Personal stigma</td>
<td>USA</td>
<td>505</td>
<td>Adults 18-89 years</td>
<td>302 (60%)</td>
<td>13-15% African American</td>
<td>To compare public attributions and attitudes of the general population towards children and adults with depression, with a focus on causality, perceptions of violence and the use of coercion</td>
<td>Participants responded to questions assessing the described construct, following a vignette description of either a child or adults with depression</td>
<td>Descriptive &amp; bivariate logistic analysis of 5 sets of binary variables, comparing public attitudes and attributions toward child/adult depression</td>
<td>Stigmatization of YP-MHD: Childhood depression was perceived as more serious than adult depression (83% v 51%). Causal attributions: Both adult and childhood depression were attributed to stress. More people recognised childhood depression as a genetic condition, a chemical imbalance or a consequence of child rearing. Dangerousness: Respondents believed children with depression to be more dangerous than adults with depression (40% v 30%). They perceived the 2 groups to be of equal risk to themselves. In summary, authors concluded that children with depression may be more vulnerable to stigmatization than adults with the same condition.</td>
</tr>
<tr>
<td>7 Pescosolido et al 2007 Personal stigma</td>
<td>USA</td>
<td>1152</td>
<td>Adults 44 +/- 16.4 years</td>
<td>Not stated</td>
<td>78% White, 15% African American; 7% Other</td>
<td>To examine the public's beliefs of dangerousness in children with ADHD, depression, asthma, and daily troubles, and willingness to support coerced treatment</td>
<td>Data from the NSBC analysis, whereby adults were presented with vignettes describing children with either ADHD, major depression, asthma or daily troubles.</td>
<td>Multivariate analysis of predictors dangerousness predictors &amp; willingness to enforce treatment</td>
<td>Dangerousness: Beliefs about dangerousness to self or others were endorsed by 81% of the sample for children with major depression, 33% for children with ADHD but only 15% and 13% respectively for children with asthma and daily troubles. The child with depression was assessed as over twice as likely to be dangerous to others and 10 times more likely to be dangerous to themselves than the child with “daily troubles”. Individuals who labelled the child as mentally ill were 5 times more likely to endorse beliefs about violence.</td>
</tr>
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</table>
Table 3: Factors influencing self-stigmatization in young people with mental health difficulties (YP-MHD)

<table>
<thead>
<tr>
<th>Factors correlated with increased self-stigmatization in YP-MHD</th>
<th>Factors correlated with decreased self-stigmatization in YP-MHD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Clinical factors</strong></td>
<td><strong>Clinical Factors</strong></td>
</tr>
<tr>
<td>Younger age at first treatment</td>
<td>Externalising disorder e.g. conduct</td>
</tr>
<tr>
<td><strong>Demographic factors in YP-MHD</strong></td>
<td>Parental factors</td>
</tr>
<tr>
<td>Older participant age</td>
<td>Parental optimism</td>
</tr>
<tr>
<td>White ethnic background</td>
<td>Beliefs in ability of YP-MHD to control symptoms</td>
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<tr>
<td><strong>Parental factors</strong></td>
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<tr>
<td>Secrecy over child’s diagnosis</td>
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<td><strong>Self-Labelling</strong></td>
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<td></td>
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<tr>
<td><strong>Perceptions of causal factors</strong></td>
<td></td>
</tr>
<tr>
<td>Trauma, social skills deficits, family problems</td>
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</tr>
<tr>
<td>Personality/way of thinking</td>
<td></td>
</tr>
<tr>
<td>Biological factors</td>
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</tr>
<tr>
<td><strong>Perceptions about illness</strong></td>
<td></td>
</tr>
<tr>
<td>Lack of control over symptoms</td>
<td></td>
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<tr>
<td>Life-long course</td>
<td></td>
</tr>
</tbody>
</table>

**Highlights**

- Stigmatization of young people with mental health difficulties is widespread and starts from childhood.

- Young people seemed to be more accepting than adults’ of children and adolescents with mental health difficulties.

- Current evidence suggests that young people may be reacting more to the behaviours displayed in peers with mental health difficulties, rather than to mental health labels.

- More research, and validated instruments measuring stigma, are needed to better understand stigma and self-stigma, so that it can be targeted effectively in the future.
Figure 1. Flow Chart of systematic identification of papers examining stigma in children and adolescents with mental health difficulties, following PRISMA Guidance

Identification

Records identified through database searching (n = 5925)

Additional records identified through other sources (n = 16)

Records after duplicates removed (n = 4011)

Records screened (n = 4011)

Records excluded (n = 3857)

Full-text articles assessed for eligibility (n = 154)

Full-text articles exclude for the following reasons (n = 112)

1. Paper did not examine stigma specifically in mental health disorder (n = 33)
2. Paper examined stigma-reducing intervention (n = 24)
3. Paper examined stigmatization of treatment rather than stigmatization of label/diagnosis (n = 13)
4. Paper was not specific to desired age range (n = 24)
5. Paper did not specifically ask about stigmatizing attitudes to peers (n = 8)
6. No extractable data (n = 10)

Studies included in qualitative synthesis (n = 42)