## Mental Health and Wellbeing of Secondary Age Pupils

A thesis submitted to the University of Manchester for the degree of Doctor of Educational and Child Psychology in the Faculty of Humanities, and the School of Environment, Education and Development.

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# SCHOOL OF ENVIROMENT, EDUCATION AND DEVELOPMENT

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#### **Thesis Abstract**

The prevalence rates of mental health and wellbeing difficulties experienced by children and young people (CYP) are increasing. Schools are considered well positioned to identify and support CYP's mental health and wellbeing needs. This thesis appraises potential outcome measures for use in schools and explores the extent to which secondary age pupils report their mental health and wellbeing needs are met using the Human Givens framework.

The first paper describes a systematic review of mental health and wellbeing outcome measures included in the Measuring and Monitoring Children and Young People's Mental Wellbeing Toolkit for schools (MaMCYPMWT) (Deighton, et al. 2016). The second paper is a quantitative study of secondary age pupils' (n=816) mental health and wellbeing. The pupils completed an online questionnaire incorporating the Short Moods and Feelings Questionnaire (SMFQ) and the Human Givens Emotional Needs Audit (ENA).

The Good Childhood Index (GHI), KIDSCREEN-27, Stirling Children's Wellbeing Scale (SCWS) and the Warwick and Edinburgh Mental Wellbeing Scale (WEMBS) were identified as having potential utility for use in schools. Prevalence rates of mental health and wellbeing difficulties were observed to increase with age. Emotional needs, as measured in the ENA, were found to moderately correlation with total scores on the SMFQ

The GHI, KIDSCREEN-27, SCWS and WEMBS can be considered to align well with the NICE conceptualisation of mental health and wellbeing, have good psychometric properties and implementation characteristics. The ENA may provide further insight into factors contributing to CYP's experience of mental health and wellbeing and possible areas for intervention by schools.

## Declaration

No portion of the work referred to in the thesis has been submitted in support of an application for another degree or qualification of this or any other university or other institute of learning.

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#### **Thesis Introduction**

#### Aims of the research

In the United Kingdom (UK), there has been a growing attention on the mental health of children and young people (CYP) (Children's Society 2015; Department of Health [DoH] & Department of Education [DfE] 2017). The burgeoning research has identified adolescence as a key period for the onset of mental health difficulties in CYP (Joinsen et al., 2017) and has positioned schools as being ideally placed to support CYP's mental health and wellbeing (DfE & DoH 2017). The overarching aim of the thesis was to contribute to the growing evidence base of how schools and educational psychologists (EPs) might identify CYP's mental health needs and to provide data on the mental health and emotional needs of CYP within the North West (NW) Region. The systematic review, paper 1, aimed to answer the research question of which mental health and wellbeing self-report questionnaires are available to schools. It did this through evaluating measures in terms of their implementation characteristics, psychometric properties and how well questionnaire items measured mental health against the National Institute of Clinical Excellence (NICE, 2008) conceptualisation of mental health. The empirical research, paper 2, aimed to enhance understanding of the emotional needs and mental health of adolescents within NW schools. The empirical paper aimed to add to the growing research base in relation to prevalence rates, the development of protocols for assessment and whole school screening approaches and to provide schools with systematic evaluation to identify areas for intervention within an emotional needs framework of mental health.

#### **Overall strategy**

The systematic review, paper 1, identified four self-report measures suitable schools to use for screening adolescent mental health and wellbeing. The four measures had good implementation characteristics and psychometric properties; and items tapped domains of mental health and wellbeing as proposed by NICE (2008). One of the unique contributions of the review was to consider the readability of questionnaire items. This was considered a significant gap within

research due to findings that approximately 17% of CYP with special educational needs (SEN) have been identified as having some form of social, emotional and/or mental health difficulty (DfE 2016). A second unique contribution of the research was to evaluate how well measures aligned with the definition of mental health proposed by NICE (2008). The green paper entitled, Transforming Children and Young People's Mental Health Provision (DfE & DoH 2017) along with positioning school as ideally placed to identify CYP's metal health needs, position schools as being well placed to support and promote these. Therefore, it was considered that in order to support and promote CYP's mental health needs, schools would need systemic level information on where to target intervention. The empirical research, paper 2, utilised the Emotional Needs Audit (ENA) (Human Givens Institute, 2006) based on the Human Givens (HG) theory of mental health, alongside a well-established measure of mental health. The results of paper 2 support previous findings on prevalence rates within adolescent populations (see Patalay & Fitzsimmons, 2017) but also provide rich data on where systemic level interventions could occur within the HG framework. It was concluded in paper 3, the dissemination strategy for the thesis, that the findings contribute to the growing evidence base for mental health screening in schools and of HG as a framework for understanding CYP's mental health and systemic intervention. The aim of the dissemination strategy was to bring these findings to the attention of schools, EPs and educational psychology services (EPSs) within the NW region to support schools in meeting the proposals as set out in the green paper (DfE & DoH 2017).

#### Researcher's professional background and relevant experience

The researcher previously worked as an assistant EP (AEP) for a private EPS before starting the Doctorate in Educational and Child Psychology. One of the key roles as an AEP was to deliver therapeutic interventions with CYP with social, emotional and/or mental health (SEMH) difficulties whilst supervised by a clinical psychologist. The AEP also had a key role in conducting assessments with CYP.

The researcher reflected upon the large number of CYP referred for assessments who were experiencing SEMH difficulties. Whilst individually and group delivered therapeutic interventions were considered to generally support CYP's development, the CYP still had to operate within school systems which, as mentioned in the green paper (DfE &DoH, 2017), might have contributed to their difficulties. The researcher aimed to develop the knowledge of approaches to intervention at systems levels to support CYP's mental health and wellbeing needs. In addition, the researcher aimed to develop protocols for early identification of and intervention for mental health and wellbeing difficulties. It was hoped that on completing the Doctorate in Educational and Child Psychology, the researcher would have a well-developed model which could be utilised within their practice so that their commissioned time in schools could result in an impact on a greater number of children than can be achieved through a casework or individual therapeutic model.

#### **Rationale for engagement**

In the early stages of the researcher's doctoral studies, the green paper, Transforming Children and Young People's Mental Health Provision (DfE & DoH 2017) was published. This paper positioned schools as being ideally suited to early intervention and support for CYP's mental health and wellbeing. In the local authority (LA) where the researcher was completing their placement, there were a number of LA wide initiatives for developing CYP's resiliency in order to support the development of their mental health and wellbeing. From consultations with school staff and leadership, there remained barriers to schools adopting mental health and wellbeing policies and procedures due to lack of knowledge, skills, systems, time, resources. Whilst the schools with the LA in which the researcher completed their placement were unable to participate in the thesis due to existing research commitments to the resiliency initiatives, the consultations did provide the researcher with the rational to engage in this research in order to support schools in adopting early mental health and wellbeing assessments and protocols to enable rich data to be gathered to inform areas and levels of intervention relevant to their community.

Paper 2, the empirical research, was commissioned by a group of NW principal educational psychologists (PEPs). Their rationale for engagement was to provide a comprehensive picture of the mental health and wellbeing of adolescents in the NW region. The regional PEP representatives and university programme directors considered how the HG paradigm could be used as an approach to evaluate CYP's mental health and wellbeing. This contemporary therapeutic philosophy proposes that human beings have innate emotional needs (achievement, attention, challenge, community, control, emotional connection, meaning and purpose, privacy, security, status) and that if these needs are not met in balance, that individuals risk emotional distress (Griffin & Tyrrell, 2003). The co-founder of HG, Ivan Tyrrell, had developed a profiling tool, the ENA, which could be used to profile an individual's need's which had previously been used within a National Health Service (NHS) Primary Care Trust (Andrews, Twigg, Minami, & Johnson, 2011; Minami, Andrews, Wislocki, Short, & Chow, 2013). The use of the ENA within a National Health Service (NHS) trust suggested the it had good acceptability, strong internal consistency and positive construct validity (Tsaroucha, Kinngston, Corp, Stewart, & Walton, 2012). The regional PEP representatives and university programme directors felt that the ENA could therefore be utilised for large scale data gathering on the mental health and emotional needs of adolescents within the NW region. Around the time of the commissioning of paper 2 there was the publication of a journal article entitled, Mental ill-health among children of the new century (Patalay & Fitzsimmons, 2017). The article provided prevalence rates for mental health of CYP using the millennium cohort study (MCS) participants. The MCS is following the lives of around 19,000 young people born across England, Scotland, Wales and Northern Ireland in 2000-01 and provides multiple measures of the cohort members' physical, socio-emotional, cognitive and behavioural development over time. The findings from the MCS study indicated high prevalence rates of mental health difficulties in CYP and identified at risk vulnerable groups such as female year 9 pupils (Patalay & Fitzsimmons, 2017). This provided a further rationale for engagement, in that the data gained from the NW participants could be compared with a national picture of mental health. In addition, through repeating measures used with the millennium cohort, it would be possible to explore how well the ENA identified CYP experiencing mental health difficulties.

#### **Positioning for data access**

The research for paper 2 was undertaken with secondary schools within the NW region. The NW PEPs who commissioned the research approached schools through their services. EPs within the services advertised the research to secondary special educational needs coordinators (SENCos). The researcher contacted any and all SENCos who expressed an interest or requested further information about the research via email or telephone. Due to the researcher's previous experience as an AEP within the NW region, schools were also contacted where the researcher had a previous working relationship. The researcher also used their professional network of other EPs such as those working in private services to recruit secondary schools.

#### **Specific ethical issues**

Specific ethical issues were considered in relation to consent, the possibility of adverse reactions by CYP as they answered questions on their mental health and how the data would be presented and reported. The researcher consulted with university colleagues with experience of large scale data gathering of CYP's mental health to assess any potential risks. Following the consultation stage, the researcher conducted a pilot study in one secondary school with one year group. The pilot involved consultations with school senior leadership to develop a data gathering protocol, the administration of the questionnaire to a single year

group, focus group with a selection of pupils to explore their experiences of completing the questionnaire and the production of a report detailing the year-level results. The pilot study informed the methodology and ethical considerations for paper 2. This included anonymising and aggregating data, providing feedback to schools at a school level, incorporating information and consent forms into electronic format.

#### Evaluation of ontological, epistemological and axiological stance

Ontology refers to considerations of the nature of reality, and the lens or perspectives through which reality is considered; it debates whether reality is "of an objective nature, or the result of individual cognition" (Cohen, Manion & Morrison, 2018, p.5). Both papers 1 and 2 adopt a realist ontology. In paper 1 the position is one of mental health being something which can be measured and can be broken down into the domains as suggested by NICE (2008). Paper 2's position is that there is a scientifically established set of psychological needs as exemplified by HG via the ENA process. These needs are objective, basic, universal and of value to CYP. The inclusion of the Short Moods and Feelings Questionnaire (SMFQ) in paper 2 may appear contradictory to the findings of paper 1 as it can be considered to endorse an illness framework of mental health unlike the NICE (2008) conceptualisation. However, as Tibierius and Hall (2010) suggest, without some indication of what is good or of value, it would be difficult to conduct research in the area of mental health and/or wellbeing.

Epistemology refers to the "bases of knowledge – its nature and forms, how it can be acquired and communicated to other human beings" (Cohen et al., 2018, p.5). Papers 1 and 2 both have objectivism as the epistemological stance. In paper 2, the researcher is separate from what is being investigated as the research was gathered remotely. The findings are considered to, as suggested by Pring (2004), explain the way things are in relation to the experience of mental health difficulties experienced by CYP from the NW region.

Axiology refers to "the values and beliefs that we hold" (Cohen et al., 2018, p.3). The values and beliefs guiding the research were following a rigorous protocol/ procedure, researcher detachment and impartiality through not being in contact with the participating CYP, careful analysis of the findings, presenting the findings within the limitations of the study as not to overstate the significance of any findings and providing a protocol and methodology which could be replicated by others.

#### Rationale for (type of) systematic review

On scoping existing research exploring mental health outcome measures, screening tools, clinical assessments it became apparent that there is a plethora of mental health questionnaires. Many of the existing systematic reviews focus on psychometric qualities and clinical utility. One of the critiques aimed at the abundance of possible measures of mental health is that there is a lack of clarity of what is meant by mental health and mental health difficulties. The lack of shared definition may be one of the factors contributing to the range of developed measures. It was, therefore, felt that there was a gap within the existing reviews to consider how well questionnaire items tapped domains of mental health as suggested by NICE (2008) due to the research's location in the UK. It was also considered a gap that few reviews had considered the utility of measures for use in and by schools and its staff. This seemed salient at the time due to the publication of the green paper entitled, Transforming Children and Young People's Mental Health Provision (DfE & DoH 2017) and its proposals including for schools to identify CYP's mental health needs.

## Paper One: A review of mental health and wellbeing measures for

universal secondary school screening

Prepared for in accordance with author guidelines for submission to the Journal of Emotional and Behavioural Difficulties (Appendix 1)

Word count: 7697

#### Abstract

The mental health and wellbeing of children and young people is an area of great concern for those within education and health sectors, with young people reported to be especially at risk during adolescence. This has resulted in increasing demand for measures which can identify children and young people at risk of developing mental health difficulties, in order for appropriate and early intervention to be implemented. Previous literature highlights the large numbers of measures available, but guidance on which might be most appropriate for school use is limited. This review identified 10 measures which could be used for universal secondary school screening, from the Anna Freud National Centre for Children and Families (AFNCCF) and the Child Outcomes Research Consortium toolkit. Measures were evaluated in relation to their implementation, psychometric properties and quality; and to how well items measured domains identified by National Institute of Clinical Excellence (NICE) domains of mental health and wellbeing. Findings indicated that the Good Childhood Index, KIDSCREEN-27, Stirling Children's Wellbeing Scale and the Warwick and Edinburgh Mental Health Scale are all suitable measures for universal secondary school screening of young people's mental health and wellbeing, as defined by NICE.

#### Introduction

#### Mental health difficulties in children and young people

In the United Kingdom (UK), there has been growing attention on the mental health of children and young people (CYP) (Children's Society 2015; Department of Health (DoH) & Department of Education (DfE) 2017). This can be seen in response to evidence suggesting that the number of CYP experiencing mental health difficulties has increased significantly over recent years (Pitchforth et al. 2018). For example, data collected in the UK between January 2017 and October 2017, commissioned by National Health Service (NHS) digital,

found one in eight 5-19-year olds had a diagnosable mental health disorder (Sadler et al. 2018). Previous UK data had suggested a prevalence rate of one in ten (Green et al. 2005). UK mental health prevalence studies indicate that there may be higher rates of mental health difficulties in adolescence. For example, a survey in England found 37% of girls and 15% in boys in Year 10 (14-15 years old) had mental health difficulties (Lessof et al. 2016). In addition, a 68% increase in self-harm incidence was found amongst adolescent girls between 2011 and 2014 (Morgan et al. 2017), suggesting that mental health difficulties in CYP cannot be considered to be a transient phenomenon (Maughan and Collishaw, 2015).

Adolescence is a key period for the onset of mental health difficulties. Studies have suggested 75% of adults with mental health difficulties reported their difficulties started in adolescence (Kim-Cohen et al. 2003; Joinson, Kounali and Lewis 2017). It can therefore, be considered a high-risk period (Mcgorry et al. 2011, 15) and in need of attention.

In relation to the impact of mental health difficulties on CYP, Green et al (2005) suggested a child or young person with mental health difficulties was more likely to be excluded from school, become disengaged from the education process and to experience academic underachievement. Sadler et al.'s (2018) survey found that mental health difficulties in CYP were associated with increased experiences of being bullied and of being a bully; increased tobacco, alcohol and illicit drug use; higher occurrences of self-harm and suicide attempts; and higher truancy rates and school exclusions. In the long term, the impact of mental health difficulties is associated with CYP falling into crisis and requiring long term intervention into and during adulthood (Brimblecombe et al. 2017). The recent Green Paper entitled, Transforming Children and Young People's Mental Health Provision (DfE & DoH 2017) concluded the impact of mental health difficulties on CYP as creating "unequal chances in life" and of being a "burning injustice" (DfE & DoH 2017, 6).

#### The role of schools in identifying CYP at risk of developing mental health difficulties

The Green Paper (DfE & DoH 2017) positions schools as being well placed to have a key role in identifying CYP's mental health needs:

There is clear evidence that schools and colleges can, and do, play a vital role in identifying mental health needs at an early stage, referring young people to specialist support and working jointly with others to support young people experiencing problems (DfE & DoH, 2017, 4).

The position of schools as being well placed to identify CYP mental health needs, offer support and promote positive mental health is widely accepted (Burke and Stephan 2008). Schools are where CYP usually spend most of their time, where they socialise, and are accessible to families (Carta et al. 2015); and most mental health difficulties begin during a person's school years (Kessler et al. 2005). The DfE and DoH (2017) provided some specific guidance on the key role schools could play in identifying mental health difficulties at an early stage and implementing appropriate intervention. The guidance described a "graduated response" in which mental health difficulties are identified and interventions are put in place; how the school environment can be a risk factor in the development of mental health difficulties and as such is an ideal place for intervention to occur; and that the school environment is "non-stigmatising", therefore interventions are more likely to be well received by CYP (DfE & DoH 2017, 10).

In order for schools to provide effective mental health support and promotion, CYP at risk of developing mental health difficulties need early identification (DfE & DoH, 2017; Humphrey and Wigelsworth 2016). However, traditional school-based mental health identification practices often identify CYP after they present with social, emotional difficulties limiting opportunities for early intervention (Dowdy, Ritchey and Kamphaus 2010). One approach to early identification of mental health difficulties is universal screening, in which all CYP within a school complete a brief assessment designed to identify those at risk of developing mental health difficulties. Through screening for mental health difficulties, CYP can be identified before they reach clinically significant levels (Dvorsky, Girio-Herrera and Owens 2014).

Universal screening has been found to emphasise CYP with internalising concerns who may have typically been overlooked (Walker 2010) and increase referral rates for other service providers (Eklund and Dowdy 2014). In addition, Dvorsky et al. (2014) proposed that screening offers better value for money as a result of earlier identification and intervention and provides baseline data for future monitoring and assessment, resulting in a more datadriven approach to mental health promotion in schools. Furthermore, screening aligns well with the NICE recommendations that secondary schools systematically measure and assess CYP's emotional wellbeing and use the data for planning and evaluating intervention (NICE, 2008).

Identification of mental health difficulties in CYP using screening tools in UK schools is limited. A recent DfE survey found 24% of schools conducted targeted screening of pupils and only 15% of schools conducted universal screening (Marshall et al. 2017). Possible explanations for the lack of use of universal approaches have been suggested including: concerns regarding the usability and practicality of screening tools; the reliability and validity of screening tools; fears of stigma; time available for completion; and concerns regarding consent (Chafouleas, Kilgus and Wallach 2010; Dever, Raines, and Barclay 2012; Fox, Halpern and Forsyth 2008). In addition, previous systematic literature reviews evaluating measures of CYP mental health have highlighted the volume of choice facing schools. For example, Deighton et al. (2014) initially identified 117 possible measures. Given the overwhelming choice, in a working environment where staff lack of confidence around mental health (Rothi, Leavey and Best 2008); have excessive workloads and are under

pressure for targets, examinations and inspections (Naghieh et al. 2015); and have insufficient time to consider the appropriateness of specific measures (Dever et al. 2012; Fox et al. 2008), limited screening practice (Marshall et al. 2017) is perhaps unsurprising.

To support schools in selecting suitable measures of CYP mental health and wellbeing, Public Health England (PHE), the Anna Freud National Centre for Children and Families (AFNCCF) and the Child Outcomes Research Consortium (CORC) developed the Measuring and Monitoring CYP's mental wellbeing toolkit (MaMCYPMWT) (Deighton, et al. 2016). The MaCMCYPMWT was devised to provide secondary schools and colleges with information about validated measures available to assess CYP's mental wellbeing. It comprises of 30 mental wellbeing measures which purport to measure a wide range of factors linked to mental health and wellbeing (e.g. neighbourhood environment, home environment, health, coping skills, family relationships and emotional and social skills). The intended use of the toolkit is for schools and colleges to select an appropriate measure to identify the mental wellbeing and emotional needs of its pupils, and to inform intervention. The MaCMCYPMWT was compiled using rapid scoping, consultation and previous systematic reviews, with a focus on selecting tools which focus specifically on positive wellbeing (Deighton, et al. 2016). It can be considered important that measures included items on positive wellbeing as opposed to just the experience of symptoms. Focussing on positive wellbeing or "social and emotional" wellbeing within measures has been argued to be more acceptable to school staff than measures which focus on mental health difficulties (Humphrey and Wigelsworth. 2016, 28).

Although the MaCMCYPMWT addresses many of the reported barriers to screening identified in the research (cf. Chafouleas et al. 2010; Dever et al. 2012; Fox et al. 2008), and aligns well with the responsibilities being placed on schools (DfE & DoH, 2017), there remains an issue of how mental health is defined or conceptualised. Humphreys et al. (2007)

argued that a clear definition is a basic scientific requirement and yet one is not available in this area. The consequence of this lack of consensus has implications for policy makers, schools and researchers. Coleman (2009) explained that programmes intended to focus on and promote mental health and wellbeing may well focus on different aspects of mental health and wellbeing, making it difficult for comparisons to be made. Additionally, mental health is often a term used in relation to disorder by clinicians, whereas mental health difficulties and wellbeing are more often used by those within education (Coleman 2009). Humphrey and Wigelsworth (2016) suggested somewhere between the two conceptualisations is the 'dual factor' approach which conceptualises mental health as comprising two distinct dimensions, representing experience of symptoms of psychological distress and adaptive functioning, respectively (Dowdy et al. 2015). The dual factor conceptualisation of mental health can be considered to align well with the NICE (2008) definition – an outcome of a systematic literature review in which the authors distinguished between different types of wellbeing. The review argued that wellbeing can be classified into three distinct dimensions - emotional, social and psychological wellbeing (e.g. emotional well-being is viewed in terms of happiness and confidence *and* anxiety and depression) (NICE, 2008). Coleman (2009) stated that this definition, if used systematically, might reduce confusion about the conceptualisation of mental health and wellbeing.

Considering the above, this review aims to consider measures included in the MaCMCYPMWT placing importance on 1) broad measures that conceptualise mental health as per the NICE (2008) definition; 2) Accessible self-report measures for 11 to 16 year old pupils; and 3) measures with available evidence relating to psychometric properties.

#### Method

The review process to identify and filter appropriate measures consisted of four stages, summarised in Figure 1 and described below.

#### Stage 1: Identification of measures

To be included in the MaCMCYPMWT, the measure had to be:

- Suitable for use by children and young people.
- Considered feasible to use in school settings (i.e., not too long or requiring specific equipment).
- Not unduly burdensome in terms of time taken to administer.
- Inclusive of items measuring positive wellbeing (as opposed to only mental ill health or emotional/behavioural difficulties)

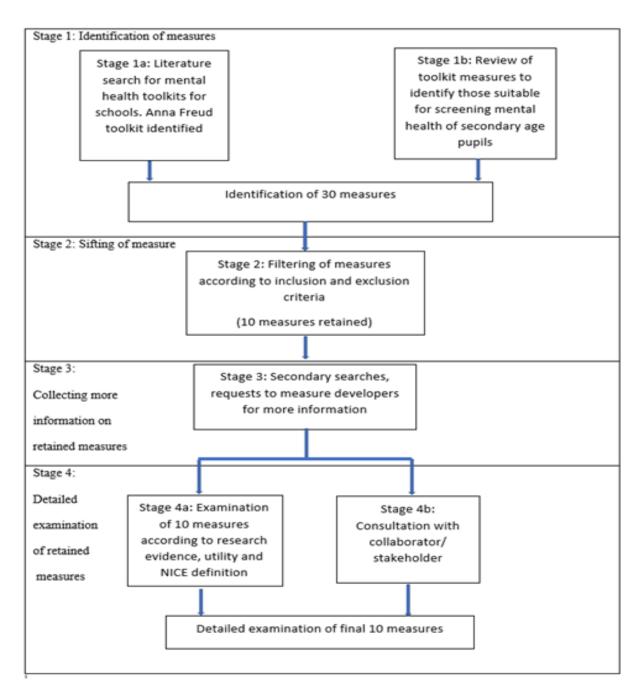


Figure 1 Flow diagram summarising the review process

### Stage 2: Sifting of measures

This stage involved the reading of the index of instruments of the MaCMCYPMWT and applying a list of inclusion/ exclusion criteria. In terms of the inclusion criteria, to be included, the measure had to be available as self-report only; available for use with secondary age pupils; and free to schools. A measure was excluded if it covered a specific factor associated with mental health and those focussed on the following were removed: family

relationships; peer relationships or popularity; combined measure of protective factors; health; time or money use or future plans; home environment; neighbourhood environment; school environment or feelings towards school; attitudes toward learning; view on service support. At the completion of stage 2, 10 measures had been identified.

#### Stage 3: Collecting more information of retained measures

The MaCMCYPMWT provided preliminary information of the 10 measures. Secondary searches were completed in order to gain the following further information in relation to the measures' scales and subscales; reading age/ reading ease of the measures; age range; accessibility/ ease of access; and availability of manuals/ protocols for scoring and interpretation. This information was collected through attempts to obtain measure manuals; gathering as many articles as possible on the measures; and contacting measure developers directly through email.

#### Stage 4: Detailed examination of retained measures

The 10 measures were evaluated for their implementation characteristics (see Table 1), psychometric properties (see Table 2) and quality in relation to how well the items measured the domains of mental health (emotional, psychological and social wellbeing) as identified by NICE (2008).

#### Implementation characteristics

Implementation characteristics were evaluated using a process closely aligned with the 'Stars rating system' as used by SPECTRUM (Wigelsworth et al. 2017) (see appendix 2). Measures were awarded points in relation to how easily available they were to schools, whether they covered the entire secondary period of schooling, and the ease of scoring/ interpretation. Brevity was not included, as the review to create the MaCMCYPMWT had previously evaluated measures against this criterion. An additional criterion to 'Stars' was the inclusion in the current review of readability, as it was considered that previous reviews had not

considered this as part of evaluating suitability. Research has indicated that respondents may not comprehend items with readability levels which exceed their own reading ability (Calderón et al. 2006). In addition, adolescents have been found to be more accurately able to self-assess their own wellbeing when they understand a measure (Velardo & Drummond 2017). Readability was assessed using the Flesch Reading East test, as recommended by previous readability research (Barbic et al. 2013) after questionnaire items were transferred onto Word documents (Zhou, Jeong & Green 2017). Measures with reading age of 10 years or younger were awarded a point. Three of the measures evaluated by the researcher were chosen at random and evaluated by the supervisor to ensure scoring reliability.

#### Psychometric properties

These were also evaluated using the Stars rating system. Points were awarded for whether there was evidence of UK norms, construct validity, criterion validity, internal constancy and reliability (See appendix 2). Again three of the 10 measures were evaluated by both authors. *Quality of measures items in relation to NICE definition of mental wellbeing* Each item of each measure was evaluated against the NICE (2008) definition of mental wellbeing (as the experience of happiness, feeling confident and not depressed); *psychological wellbeing* (feelings of autonomy, control in one's life, problem solving skills, resilience, attentiveness and involvement with others); and *social wellbeing* (good relations with others) (see appendix 2). To support the researchers in evaluating the items, a crib sheet was created (Appendix 3) using NICE (2008) descriptions, the researcher's and supervisor's knowledge and understanding of the field, reviews of previous key literature (e.g. Wiglesworth et al. 2011, Deighton et al. 2014) and key public policy literature (e.g. DfE & DoH, 2017). Both the researcher and supervisor evaluated each item on each questionnaire as to whether they

perceived it as measuring one of the NICE (2008) domains. Inter-rater agreement was calculated for each measure to ensure objectifiable analysis. Where the researchers disagreed on items, a discussion was held to reach consensus.

Once all the measures items had been evaluated, a percentage was calculated for each measure in relation to the percentage of items measuring each or any of the NICE (2008) domains. Results are shown in Table 3. In order to enable comparisons and offer guidance through ratings, the mean percentage and standard deviation were calculated for each of the evaluation criteria. A percentage score was rated medium if it was within one standard deviation of the overall mean percentage score, high if it was more than one standard deviation below.

#### Findings

The application of the criteria and process outlined resulted in the retention of 10 measures from the MaCMCYPMWT which were: 1. Good Childhood Index (GCI) (Rees, Goswami and Bradshaw 2010); 2. KidCOPE (Spirito, Stark and Williams 1988); 3. Kids Coping Scale (KCS) (Maybery, Reupert and Goodyear 2009); 4. KINDL-R (Ravens-Sieberer et al. 2001); 5. KIDSCREEN-27 (Ravens-Sieberer et al. 2007); 6. Pictured Child's Quality of Life Self Questionnaire (PCQoLSQ) (Gayral-Taminh et al. 2005); 7. Student's Life Satisfaction Scale (SLSS) (Huebner 1991); 8. Stirling Children's Wellbeing Scale (SCWS) (Liddle and Carter 2015); 9. World Health Organisation - Five Wellbeing (WHO-5) (WHO 1998); 10. Warwick and Edinburgh Mental Health Scale (WEMBS) (Stewart-Brown et al. 2009). The implementation characteristics, psychometric properties and quality in relation to NICE (2008) are outlined in Tables 1, 2 and 3.

In terms of implementation characteristics, the GCI and KIDSCREEN-27 scored maximum quality points. The SCWS and WEMBS scored the lowest. The WEMBS lost a

point due to the developers stating that the scale is only validated for CYP from the age of 13, although use with younger students is possible following consultation with them. Five of the measures' (KidCOPE, SLSS, SCWS, WEMBS, WHO-5) reading ease scores suggested a reading age above 10-11 years was required to read the questionnaire items.

In terms of psychometric properties, the WEMBS scored maximum quality points closely followed by the GHI, KIDSCREEN-27 and SCWS. The GHI, KIDSCREEN-27, SCWS and WEMBS all met key psychometric standard. Each measure had evidence of external reliability, internal consistency, validity and UK norms.

In relation to how well questionnaire items measured the NICE (2008) domains, again the GCI, KIDSCREEN-27, SCWS and WEMBS all scored higher than the other measures. The KidCOPE and KCS items focussed on measuring psychological wellbeing, as opposed to emotional and social while the SLSS can be considered emotional wellbeing. In terms of implementation characteristics, the GCI and KIDSCREEN-27 scored maximum quality points.

Measure	Response Scales	Readability	Age	Accessibility/	Scoring/interpretation manual available	Quality score
			range	ease of access		
				to acquire the		
				measure		
1. Good	5 items are on a 5-	91.9 = reading age of	From 8	Available through	Scoring guidance available for scoring two sets	4/4
Childhood	point Likert scale	10-11 years or	years	email request to	of questions to allow for mean score comparisons	
Index	with each point	younger needed to	onwards	The Children's	between aspects of life. Interpretation is	
(GCI)	labelled. A further 11	read and understand	with no	Society.	explained as scoring below 5 out of 10 is	
	items are on a 10-	items.	upper		considered as having low wellbeing within an	
	point Likert scale		limit.		aspect of life.	
	with poles and centre					
	labelled only.					
2. KidCOPE	Items related to	75 = reading of 12	Between	Measure is	Two approaches to scoring: 1) frequency can be	3/4
	frequency are	years + needed to read	7 years to	available in the	calculated as to whether a strategy was used or	
	labelled yes/no.	and understand items.	18 years	public domain and	not. 2) Positive/adaptive and	
	Items relating to		of age.	is not copyrighted,	negative/maladaptive mean scores can be	
	efficacy use 3-point			and can be found	calculated. Interpretation is advised in relation to	

## Table 1: Implementation characteristics of the 10 measures identified after stage 4

	Likert scale with			by a Google	secondary scores reflecting greater reported use	
	each point labelled.			search	and/or perceived helpfulness of the indicated	
					strategy.	
3. Kids	3-point Likert scale	92-5 = reading age of	From 7	Free for research	No information is available in the references	2/4
Coping Scale	with each point	10-11 years or	years	purposes via	reviewed.	
(KCS)	labelled.	younger needed to	with no	academic journal.		
		read and understand	upper	Further permission		
		items.	limit	needed from		
			stated.	authors for any		
				other use		
4. KINDL-R	5-point Likert scale	97 = reading age of	Between	Available through	Manual available for download through website.	3/4
	with each point	10-11 years or	7 years to	own website for	Information provided on scoring and analysis	
	labelled.	younger needed to	17 years	download and free	either manually or by using SPSS.	
		read and understand	of age.	for schools to use.		
		items.		Publishers request		
				user's complete		
				collaboration form		

5.	5-point Likert scale	100= reading age of	Between	Available through	Manual available for download once registered.	4/4
KIDSCREEN-	with each point	10-11 years or	8 years to	own website.	Questionnaires are scored as Rasch scales and	
27	labelled.	younger needed to	18 years	Schools would	can be translated into T-values. Scores can be	
		read and understand	of age.	need to register in	interpreted in three ways: Comparison between	
		items.		order to receive a	group scores on KIDSCREEN scales and the	
				log in and	reference population, Interpretation of the person	
				password to access	parameter estimates using the Rasch model	
				the measure	and/or Interpretation of the KIDSCREEN profile.	
6. Pictured	4 pictured faces	99.4 = reading age of	Between	Available through	CYP's responses are scored 0 -3 for each item.	3/4
Child's	expressing different	10-11 years or	6 years to	own website.	The scores are totalled and a score of 48 or lower	
Quality of	emotional states (i.e.	younger needed to	11 years	Schools would	is considered to indicate that the CYP's quality	
Life Self	very happy, happy,	read and understand	of age.	need to register in	of life in negatively affected. Scores can also be	
Questionnaire	unhappy or very	items		order to receive a	interpreted by several domains (e.g. family life,	
(PCQoLSQ)	unhappy).			log in and	health).	
				password to access		
				the measure		
7. Student's	6-point Likert scale	87.8 = reading age of	Between	Available through	Manual available through contacting the	3/4
Life	with each point	11-12 or older needed	8 years to	contacting	university directly. A summary/ general life	
	labelled.			university directly.	satisfaction score is calculated by averaging or	

Satisfaction		to read and understand	18 years	Also, can be found	summing all the items. Scores can also be	
Scale		items.	of age.	by Google search.	interpreted by several domains (e.g. family,	
(SLSS)					friends). Overall score below 4 indicate low life	
					satisfaction.	
8. Stirling	5-point Likert scale	89.2 = reading age of	Between	Measure is	Journal article found by developers which	2/4
Children's	with each point	11-12 or older needed	8 years to	available in the	provides scoring and interpretation guidance. A	
Wellbeing	labelled.	to read and understand	15 years	public domain and	score of 30 or below indicate mental health	
Scale		items.	of age.	is not copyrighted,	difficulties.	
(SCWS)				and can be found		
				by a Google		
				search		
9. The World	6-point Likert scale	65.7 = reading of 12	From 8	Measure is	The measure includes guidance on scoring and	3/4
Health	with each point	years + needed to read	years	available in the	interpretation. A raw score is calculated by	
Organisation-	labelled.	and understand items.	onwards	public domain and	totalling the figures of the five answers and can	
Five Well-			with no	is not copyrighted,	range from 0 to 25, 0 representing worst possible	
Being			upper	and can be found	and 25 representing best possible quality of life.	
(WHO-5)			limit.	by a Google	A raw score below 13 is considered to indicate	
(₩ΠΟ-3)			1111111.			
				search	mental health difficulties.	

10. Warwick	5-point Likert scale	75.8 = reading of 12	Scale	Measure is	The measure includes guidance on scoring and	2/4
and Edinburgh	with each point	years + needed to read	validated	available in the	interpretation. A raw score is calculated by	
Mental Health	labelled.	and understand items.	for CYP	public domain.	totalling the figures of the 14 answers and can	
Scale			13 years	Schools would,	range from 0 to 70, 0 representing lowest	
(WEMWBS)			onwards	however, need to	possible wellbeing and 70 representing the	
			with no	seek permission to	highest possible wellbeing. Scores below 32 are	
			upper	use the measure	considered to indicate mental health difficulties.	
			limit	by completing an		
				online form on the		
				University of		
				Warwick		
				WEMWBS		
				webpage		

Measure	UK norms		Validity		Relia	bility	Quality score
		Confirmatory	Construct	Criterion	Internal	External	-
		Factor Analysis			consistency	reliability	
		(CFA)					
1. Good	Yes	RMSEA = 0.035	No information is	No information is	0.83 (Rees, Goswami	0.84 Test-retest	4/5
Childhood		CFI = 0.996	available in the	available in the	& Bradshaw, 2010).	(Goswami, 2009).	
Index		(Pople & Rees, 2017).	references	references			
(GCI)			reviewed.	reviewed.			
2. KidCOPE	No	No information is	Coping Strategies	No information is	No information is	0.41 - 0.83 Test-	2/5
		available in the	Inventory, r=	available in the	available in the	retest (Spirito, Stark	
		references reviewed.	0.33-0.77	references	references reviewed.	& Williams, 1988).	
				reviewed.			
3. Kids	No	No information is	The Problem	No information is	0.30 – 0.61 (Maybery	No information is	1/5
Coping Scale		available in the	Focussed Coping	available in the	et al. 2009)	available in the	
(KCS)		references reviewed.	scale and SDQ	references		references reviewed.	
			(parent): positive	reviewed.			
			correlations range				

## Table 2 Psychometric properties of the 10 measures identified after stage 4

			0.11-0.19,				
			negative				
			correlations -0.08				
			to -0.25				
4. KINDL-R	No	RMSEA = 0.06	SDQ r=0.57	No information is	0.53-0.72	No information is	1/5
			(Erhart et al.	available in the	(Erhart et al. 2009).	available in the	
		CFI = 0.93	2009).	references	•	references reviewed.	
				reviewed.			
		(Erhart et al. 2009).					
5.	Yes	CFI -0.96	The HBSC	Kidscreen-52 r=	0.78-0.84 (Robitail et	0.61-0.74 Test-retest	4/5
KIDSCREEN-		RMSEA 0.068	Symptom	0.63 - 0.96	al, 2007)	(Ravens-Sieber et al,	
27		(Robitail et al, 2007)	Checklist:	(Ravens-Sieber et		2007)	
			Physical Well-	al, 2007)			
			Being dimension				
			(r = -0.42), with				
			Psychological				
			Well-Being				
			(r = -0.52),				

Autonomy		
(r = -0.40), and		
School		
Environment		
(r = -0.39).		
(Ravens-Sieber et		
al, 2007).		

6. Pictured	No	No information is	r=0.497	No information is	0.71	No information is	2/5
Child's		available in the	(Assumpção et al.	available in the	(Assumpção et al.	available in the	
Quality of		references reviewed.	2000)	references	2000)	references reviewed.	
Life Self				reviewed.			
Questionnaire							
(PCQoLSQ)							
7. Student's	No	No information is	Perceived Life	No information is	0.82 (Huebner,	0.74 Test-retest	3/5
Life		available in the	Satisfaction	available in the	1991).	Huebner, 1991).	
Satisfaction		references reviewed.	Scale, r = 0.58;	references			
Scale			Piers-Harris	reviewed.			
(SLSS)			Happiness				

			(Huebner, 1991).				
8. Stirling	Yes	No information is	WHO-5, r=0.74	No information is	0.847 (Liddle &	0.752 Test-retest	4/5
Children's		available in the		available in the	Carter, 2015)	(Liddle & Carter,	
Wellbeing		references reviewed.		references		2015).	
Scale				reviewed.			
(SCWS)							
9. The World	Yes	CFI= 0.99	Beck Depression	No information is	No information is	No information is	2/5
Health		RMSEA= 0.075	Inventory, r=49	available in the	available in the	available in the	
Organisation-		(Krieger et al., 2014).	(Blom et al.,	references	references reviewed.	references reviewed.	
Five Well-			2012).	reviewed.			
Being							
(WHO-5)							
10. Warwick	Yes	Model Chi Square	Kidscreen-27,	No information is	0.87 (Clarke et al,	0.66 Test-retest	5/5
and Edinburgh		p=0.44	0.59	available in the	2011)	(Clarke et al, 2011)	
Mental Health		GFI = 1	Mental Health	references			
Scale		AGFI>0.99	Continuum Short	reviewed.			
(WEMWBS)		RMSEA= 0.0032	Form (MHC-SF),				
		(Clarke et al, 2011)	r=0.65; WHO-5, r				

#### subscale, r =0.53

 =0.57; SDQ, r= -
0.44 0.66 Test-
retest (Clarke et
al, 2011)

Measure	Overall items measuring	Items measuring emotional	Items measuring psychological	Items measuring social
	at least one of the three	wellbeing	wellbeing	wellbeing
	domains identified by			
	NICE			
1. Good Childhood Index	High/ 81%	Medium/ 56%	Medium/ 13%	Medium/ 13%
(GCI)				
Example item(s)		"I have a good life"	"How happy are you with how	"My friends are great"
			much choice you have in your	
			life?"	
2. KidCOPE	High/ 93%	Low/ 7%	High/ 80%	Medium/ 7%
Example item(s)		"I yelled, screamed or got mad"	"I just tried to forget it"	"I stayed by myself"
3. Kids Coping Scale (KCS)	Low/ 67%	Low/ 0%	High/ 67%	Low/ 0%
Example item(s)			"You tried hard to fix the	
			problem"	
4. KINDL-R	Medium/ 71%	Medium/ 25%	Medium/ 29%	Medium/ 17%
Example item(s)		"I had fun and laughed a lot"	"I had lots of good ideas"	

### Table 3 Quality ratings of the 10 measures items in relation to the NICE definition after stage 4

#### "I get along well with my

5. KIDSCREEN	Medium/ 74%	Medium/ 30%	Medium/ 22%	High/ 22%
-27				
Example item(s)		"Have you felt sad"	"Have you been able to pay	"Have you felt lonely"
			attention"	
6. Pictured Child's Quality of Life	Low/ 45%	Medium/ 15%	Medium/ 9%	High/ 21%
Self Questionnaire (PCQoLSQ)				
Example item(s)		"How do you feel when you are	"How do you feel when people	"How do you feel when your
		at school"	tell you what to do"	friends are talking about you
7. Student's Life Satisfaction Scale	High/ 100%	High/ 100%	Low/ 0%	Low/ 0%
(SLSS)				
Example item(s)		"My life is going well"		
8. Stirling Children's Wellbeing	High/ 87%	Medium/ 47%	Medium/ 20%	Medium/ 20%
Scale (SCWS)				
Example item(s)		"I've been feeling calm"	"I've been able to make choices	"I think lots of people care
			easily"	about me"
9. The World Health Organisation-	Low/ 60%	Medium/ 60%	Low/ 0%	Low/ 0%
Five Well-Being				

WHO-5)

Example item(s)
"I have felt calm and relaxed"

10. Warwick and Edinburgh Mental
Medium/71%

Medium/29%
Medium/29%

Health Scale (WEMWBS)

Example item(s)

"I have been feeling relaxed"

"I have been thinking clearly"

other people"

#### Discussion

The degree to which the mental health and wellbeing measures reviewed in the current study measured dimensions of mental health and wellbeing, as per the NICE (2008) definition of mental health, provide further evidence of a lack of consensus or clear definition in relation to mental health (Humphreys et al. 2007). Through evaluating the measures against this definition, the findings also highlight how measures may focus on different aspects of mental health and wellbeing (Coleman 2009). Indeed, some of the measures only focused on psychological or emotional aspects of mental health and wellbeing, overlooking social aspects. It could therefore be argued that the measures which did not focus on all three aspects of mental health and wellbeing may not be suitable for universal screening as they could miss large numbers of CYP who may be struggling with particular aspects of mental health, such as social wellbeing.

The measures which focus more or one or two domains may still have some utility. For example, if a school wanted to focus identification and intervention on a specific aspect of mental health and wellbeing, such as improving its social environment. Existing research highlights adolescence as a period of significant social change where the main influences in CYP's life shift from parents to peers (Ohl, Fox & Mitchell, 2013). A meta-analysis also suggests CYP who receive social emotional intervention programs demonstrate significant improvements in relation to attitudes, behaviour and academic performance when compared to controls. It may, therefore be in secondary school's interests to prioritise identification and intervention in relation to the social aspects of mental health and wellbeing.

The extent to which measures focus on the three aspects of mental health and wellbeing may impact decision making and selection of measures. Humphrey and Wiglesworth (2016) suggest that the language and terminology within items and around measures may also influence selection. Screening for factors that school-based professionals

can understand and relate to could be considered as more socially acceptable than screening for symptoms (Burns and Rapee 2019), which may also fail to explain wellbeing in CYP (Patalay and Fitzsimmons 2016). Given the lack of a clear definition in relation to mental health and wellbeing (Humphreys et al. 2007), it may be that screening for emotional, psychological and social factors may alert school staff to the risk for a variety of mental health difficulties (Burns & Rapee, 2019). It may also support school staff to identify any aspects of mental health and wellbeing which can be considered as strengths. These strengths could potentially be used to mitigate the impact of difficulties experienced by the CYP in other aspects of mental health and wellbeing (Humphrey and Wiglesworth 2016).

A unique contribution of the current review is the consideration of the readability of measures. Five of the measures reviewed (KidCOPE, SLSS, SCWS, WHO-5, WEMBS) required a reading age above 10-11 years. This finding has implications in relation to reading access and to whether a measure obtained scores would accurately reflect a CYP's subjective mental health and wellbeing or their ability to comprehend the measure. The finding also has implications for future research as readability is not routinely accounted for in the development of, or the review of measures of CYP's mental health and wellbeing (Patalay, Hayes and Wolpert 2018) but could be argued to be an important criterion in terms of fitness for purpose for whole-school screening. In the wider context of the Children and Families Act (2014) and United Nations Convention of the Rights of the Child (UNCRC, 1989), it is also critical to support CYP to have a voice through reporting on their own wellbeing and health (Patalay and Fitzsimmons, 2016). It is therefore suggested that future development of and reviews of measures of CYP's mental health consider the readability of measures.

There are a number of limitations to the current review. The measures included within the MaMCYPMWT was compiled using rapid scoping, consultation and previous systematic reviews with a focus on selecting tools which focus specifically on positive wellbeing. The

inclusion and exclusion criteria used will have resulted in measures which also have good psychometric and implementation qualities being excluded; for example, the Strengths and Difficulties Questionnaire (SDQ. In addition, the use of systematic reviews has been criticised in relation to the publication bias in the form of greater numbers of studies being published with statistically significant results (Torgerson 2006).

#### Conclusion

The current review has identified the GCI, KIDSCREEN-27, SCWS and WEMBS as measures which have good implementation and psychometric qualities and as measures which align well with the NICE (2008) conceptualisation of mental health and wellbeing. It is hoped that in identifying these measures and their strengths and limitations, secondary schools will be supported in selecting an appropriate measure to identify the mental health and wellbeing of its pupils.

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## Paper Two: The mental health and emotional needs of secondary age pupils from the North West region of the UK

Prepared for in accordance with author guidelines for submission to the Journal of Pastoral Care in Education (Appendix 4)

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#### Abstract

There is a growing policy focus on children and young people's mental health. The UK government has positioned schools as being well placed to identify children and young people's mental health needs and to provide appropriate intervention. At the same time school staff report a lack of skills, knowledge and systems to support the early identification of mental health needs in order to inform appropriate intervention. In this paper, the aim was to explore the mental health and emotional needs of secondary age pupils from schools across the North West of England. 816 pupils aged between 11-16 completed the Short Moods and Feelings Questionnaire (SMFQ) and the Human Givens Emotional Needs Audit (ENA). The findings suggest prevalence rates of mental health and wellbeing difficulties increase with age. Emotional needs as measured in the ENA were found to moderately correlation with total scores on the SMFQ. The ENA is proposed to be a measure schools could use to provide further insight into factors contributing to CYP's experience of mental health and wellbeing and possible areas for intervention.

#### Introduction

In the United Kingdom (UK), one in 10 children and young people (CYP) aged 5–16 experience clinically significant mental health difficulties (Green et al., 2005). More recent studies, although on a smaller scale to Green et al (2005), indicate higher rates (Fink et al., 2015; Sadler et al., 2018), suggesting that the number of CYP experiencing mental health difficulties is increasing. Along with increasing rates, some populations appear to be at greater risk of developing mental health difficulties. Adolescence is suggested as an age range where mental health rates appear to increase (Patalay & Fitzsimons, 2017). Other studies indicate that half of all mental health difficulties begin before the age of 14 (Kessler et al., 2007) and three quarters of life-long mental health difficulties occur before the age of 24 (Kessler et al., 2005). Adolescence can, therefore, be considered a critical life stage (Hagell, Coleman & Brooks, 2013) and a period of increased vulnerability in relation to the development of mental health difficulties (McLaughlin & King, 2015). The experience of mental health difficulties in CYP and adolescents is associated with school exclusions, self-harm, substance abuse, increased risk of suicide and gaining future employment (Clayborne, Varin & Colman, 2019). The prevalence rates and impact of mental health difficulties have resulted in CYP's mental health being recognised as a large public health challenge (Sadler et al., 2018).

There exists an ongoing challenge in meeting the mental health needs of CYP in England and internationally (Department of Health [DoH] & Department for Education [DfE], 2017). The proposals in the United Kingdom (UK) government's recent green paper on CYP's mental health highlight the role schools can play in meeting CYP's mental health needs (DoH & DfE, 2017). These focus on improving funding for frontline mental health services, training teachers to identify and support those experiencing problems, and incentivising schools to appoint a mental health lead; and represent a significant shift of responsibility for CYP's mental health onto schools. Although the DoH and DfE (2017) green paper considers schools as being well placed to identify and support CYP's mental health needs, there are concerns in relation to school's capacity to identify and support them. For example, school systems mainly target academic outcomes and attendance not mental health (Lereya, Patel, dos Santos & Deighton, 2019). This was reflected in a recent survey where only 3% of schools had policies in place regarding CYP's mental health (Brown, 2018). In relation to teachers, schools report limited staff capacity (Patalay et al., 2016), whilst teachers self-report feeling under too much pressure and already feeling overstretched to take on additional responsibilities in relation to CYP's mental health needs (O'Dowd, 2018). In addition to school's readiness to adopt additional responsibilities in relation to mental health, there are

concerns that CYP themselves are not seeking help for mental health difficulties (Wilson, Rickwood & Deane, 2007).

.....Where there is consensus, is in the position that school are well placed to play a role in the early identification of CYP at risk of mental health difficulties (Anderson et al., 2019). Through early identification, CYP at risk can be identified and interventions can be offered to address difficulties (DoH, & DfE, 2017). Universal screening, in which all CYP are screened and receive the same opportunities for potential early identification, is suggested as an appropriate first step for schools in understanding their CYP's mental health needs (Severson et al., 2007). Schools would also gain important indicators of mental health of populations and subgroups (e.g. adolescent girls) which may then be used in school improvement planning and policy development and provide evidence of outcomes beyond academic attainment and attendance (Humphrey & Wigelsworth, 2016). Screening is also considered a crucial step in moving away from current mental health systems which focus on individual problems rather than population-based preventive services (Gutkin, 2012) and towards more proactive, preventive efforts, rather than waiting for CYP to fail before addressing their needs (Albers, Glover, & Kratochwill, 2007). Screening CYP's mental health has been found to be enough to accurately identify those CYP at high risk of developing mental health difficulties (Dowdy et al., 2016). Adolescents are considered able reporters of their mental health, whereas a parent has a tendency to underestimate the difficulties a CYP might be experiencing (Kim, Choi, Ko & Park, 2018). Kim et al. (2018) suggest a significant number of adolescents, therefore are at risk of their symptoms not being recognised. This is a pertinent observation as, in the UK, 75% of CYP who experience mental health difficulties do not access the support they need (Kelvin, 2014).

In sum, given the current evidence suggesting increasing mental health difficulties prevalence rates and consequences for CYP and increased responsibilities on schools, the

present study investigates the prevalence of mental health difficulties in a sample of adolescents through universal screening. Furthermore, potential risk and protective factors were assessed through exploring CYP's mental health needs. The study has the potential to add to the current understanding of mental health difficulties in adolescents with regards to prevalence, populations and subgroups at greatest risk, and in identifying possible mental health needs which when met/ unmet may explain the observed prevalence rates.

#### **Methods**

#### Sampling and participant recruitment

The study was commissioned by a group of principal educational psychologists (PEPs) from the North West (NW) of England in conjunction with the host university, who sought to understand some of the factors affecting reported increases in prevalence rates. The PEPs approached secondary schools within their locality to take part in the study. Five schools who volunteered to participate represented a range of school types for sex, size, status (alternative provision, mainstream secondary) and Ofsted rating and collected data between June 2019 and January 2020. The full sample was 922 adolescents. In relation to gender, 49.9% identified as female, 46.5% identified as male and 3.6% identified as non-binary (combined "transgender" and "prefer not to say"). In relation to year groups, 31.1% were in year 7, 16.9% were in year 8, 32.2.% were in year 9, 13% were in year 10 and 6.4% were in year 11. In relation to ethnicity the sample had a lower proportion of participants classified as White British (53.1% vs national figures of 67%) and a higher proportion of Black participants (17.9% vs national figures of 6%).

#### Procedures

The purpose of the study was explained to school Special Educational Needs Co-ordinators (SENCos) and senior leaders. Parents were informed of the study through the school's normal

communication channels (text, email, letter, newsletters, social media) and asked to notify the school if they objected to their child participating. The survey was computer-based using the digital interface, Qualtrics (Qualtrics, Provo, UT). Pupils accessed information technology (IT) suites during form time and logged into the questionnaire. A participant information sheet (see appendix 6) and consent form (see appendix 7) were built into the computer-based questionnaire. Form tutors remained on site to support pupils in accessing the questionnaire and in answering any queries. Once students consented to the study, they answered some demographic questions and school information before completing two embedded mental health questionnaires (see appendix 8). The questionnaire took approximately 20 minutes for pupils to complete. Prior to the current study, a pilot study was undertaken in one secondary school in the NW England to develop the above protocol. Ethical approval was obtained from the university ethics committee (see appendix 5). Following participation, schools were sent an analytic report of their data explaining how these compared to the aggregated data of all participants.

#### Measures

#### Mental Health

The pupil's mental health was screened using the Short Mood and Feelings Questionnaire (SMFQ) (Angold et al., 1995) (see appendix 9). The SMFQ is a self-report scale comprising of 13 items derived from the original 33 item Mood and Feelings Questionnaire (MFQ) (Angold, et al.,1995). The SMFQ assess depressive symptoms in CYP (8 – 18 years of age). Items are presented as statements in relation to the previous two weeks, such as "I felt lonely" or "I didn't enjoy anything at all". Each item is rated on a 3-point Likert scale (0= "not true", 1 = "sometimes", and 2 = "True"). High levels of depressive symptoms among CYP are defined by a cut-off score of 8 or higher (Angold, et al., 1995). The SMFQ has been found to have high reliability ( $\alpha$  0.87) (Kuo, Stoep, & Stewart, 2005) and satisfactory criterion validity (r=.65

to.70) (Thabrew, Stasiak, Bavin, Frampton & Merry, 2018). However, as a result of an error translating the physical questionnaire into an electronic questionnaire the item "I felt I was no good anymore" was not included. For the purposes of analysis, a mean score for the 12 items was included and added to create a score for 13 items. The researcher justified this on the basis that a) the SMFQ is intended for screening purposes only and so is not diagnostic; b) the items selected to create the SMFQ from the original 30 item Moods and Feelings Questionnaire (MFQ) all measure affective and cognitive aspects of mental health and so a mean score could be justified; c) the SMFQ only produces a total score and so missing an item would not affect any subdomain scores; d) the results of the 12 item SMFQ were similar to recent studies completed with the correct 13 item SMFQ; e) although intended as a measure of depression, there are findings that the SMFQ has been unable to distinguish between adolescents with depression only from those who may also have anxiety or anxiety only (Kent, Vostanis & Feehan, 1997) which further emphasizes the limitations of the measure.

#### **Emotional Needs**

The extent to which pupils' emotional needs were met was assessed using the Emotional Needs Audit (ENA) (Human Givens Institute [HGI], 2006) (see appendix 10). The ENA aims to identify where the potential problems and distress in someone's life might be located through assessing the extent to which a person's emotional needs are being met (Griffin & Tyrell, 2003). The emotional needs/ areas covered are: security, attention, control, feeling part of wider community, privacy, emotional connection to others, sense of status, sense of competence and meaning (Griffin & Tyrell, 2003). If and when these emotional and/or physical needs are not met in healthy, balanced ways individuals may experience mental distress and develop mental illness (Griffin & Tyrell, 2003). The ENA was used in an earlier unpublished pilot study of 154 pupils in one secondary school (Waite, 2018). The pilot study found the emotional needs, with the exception of emotional connection to others,

significantly correlated with scores on the SMFQ. It was, therefore, considered that the ENA could be used in a larger study to provide data on factors that may be associated with mental health difficulties using this conceptualisation of mental health. The researcher also hypothesised that the ENA may provide information on possible areas for intervention which may have greater utility for schools than purely diagnostic data. It also potentially offers some explanatory power in investigating why CYP reporting high scores on the SMFQ might be experiencing emotional distress.

The ENA is a self-report scale comprising of 10 items. Items are presented as questions such as, "Can you obtain privacy when you need to?" or "Do you feel you receive enough attention?" Each item is rated on a 7-point Likert scale (1= "no", i.e. the need in unfulfilled to 7 = "yes", i.e. the need is fulfilled. The middle score indicates "sometimes"). Emotional needs are considered unmet if participants score  $\leq 3$  on any item area (HGI, 2006). The ENA has been found to have high internal consistency ( $\alpha$  0.84), satisfactory test-retest reliability (r=0.46), very high sensitivity (80%) and a good receiver operating characteristic (ROC) (0.81) (Tsaroucha, Kingston, Corp, Stewart, & Walton, 2012).

The sample for the current analysis was 787 with complete data for the SMFQ and 848 with complete data for the ENA.

#### Analysis

IBM SPSS Statistics 23 for Windows was used for all analyses. Descriptive statistics and frequencies were run in order to examine the distribution of data and check that the data fell within the expected range of answers according to the response sets on the questionnaire. Categorical data (gender, ethnicity, year group) are presented as numbers and percentages. Mean differences between groups (gender, year group) were analysed by ANOVA. Statistical analyses are presented as means. Due to a very small sample size (n=28) of non-binary

participants (those who identified as transgender of prefer not to say), mean differences were not statistically analysed as the findings would not be representative of the non-binary population and may also skew differences between gender and year groups. Correlations between SMFQ and individual ENA dimensions are presented as Pearson's correlation coefficients. All tests were two-tailed.

#### Results

The SMFQ mean scores by year group can be seen in Table 4. SMFQ sum scores were calculated to provide an indicator of severity of depressive symptoms with scores equal to or greater than 12 considered indicative of the experience of depressive symptoms at a clinical level (Thabrew et al., 2018). As can be seen in Table 4, mean scores for the SMFQ and percentage of participants experiencing depressive symptoms at or above the clinical cut off level remain relatively stable across years 7, 8 and 9 (ages 11-14). The ratio of participants experiencing depression at a clinical level increases from around 1 in 5 at year 7 (aged 11-12), to approximately 3 in 10 at year 10 (14-15 years) and over 4 in 10 at year 11 (15-16 years).

#### Table 4

Year Group	SMFQ Mean	SMFQ SD	Above SMFQ threshold (≥12)
7	7.23	6.10	19.07%
8	7.02	5.57	18.38%
9	7.22	5.98	15.04%
10	8.92	6.53	30.1%
11	11.86	8.32	46.3%

Descriptive	statistics	of the	SMFQ	by year	· group
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There was a statistically significant main effect for year group [F(4, 777)=8.086, p=<0.001], with a small effect size( $\eta_p^2$ =.04, Cohen, 1988). Post-hoc comparisons using the Tukey HSD test indicated that the mean scores for the year 7, 8 and 9 groups were

significantly (p=.01) different from the year 11 group. The results indicate that the experience of depressive symptoms increase with age with year 11 participants reporting significantly higher mean scores than their year 7, 8 and 9 counterparts.

The mean SMFQ scores by gender can be seen in Table 5. The mean scores indicate that, on average, those participants identifying as non-binary report higher levels of depressive symptoms which are close to the clinical thresholds. Female mean scores are observed to be higher than male mean scores. The ratio of female participants experiencing depressive symptoms at a clinical level is over 1 in 5, for male participants it is approximately 3 in 20 and for participants identifying as non-binary the ratio is over 4 in 10.

# Table 5Descriptive statistics of the SMFQ by gender

Gender	SMFQ Mean	SMFQ SD	Above SMFQ	
			threshold ( $\geq 12$ )	
Female	8.34	6.28	23.53%	
Male	6.71	5.86	16.05%	
Non-Binary	11.92	8.71	48.28%	

There was a statistically significant main effect for gender [F(1, 777)=26.710, p=<0.001], with a small effect size ( $\eta_p^2=.03$ , Cohen, 1988). The results indicate that the experience of depressive symptoms is significantly higher for female participants versus their male counterparts.

There was a significant interaction effect for year group and gender [F(4, 777)=2.665, p=<0.05], with a small effect size ( $\eta_p^2=.01$ , Cohen,1988). The findings indicate that year 11 participants and being female significantly increases the experience of depressive symptoms.

To explore whether the ENA could be considered to measure constructs of depression and therefore be used to identify areas for intervention, the two measures were analysed to see if there was a relationship between the measures. See Table 6.

ENA (Emotional Needs)	SMFQ	
	071.1.1	
Security	371**	
Receive attention	447**	
Give attention	207**	
Sense of autonomy and control	528**	
Feeling part of a wider community	378**	
Privacy	334**	
Emotional intimacy	228**	
Status	390**	
Competence	476**	
Meaning	337**	
** <i>p</i> < 0.01.		

 Table 6

 Correlation between the ENA and SMFQ

The relationship between emotional needs (as measured by the ENA) and depressive symptoms (as measure by the SMFQ) was investigated using Pearson product-moment correlation coefficient. There was a large (Cohen 1988), negative correlation between the SMFQ and sense of control [r=-.528, p=0.01], with high levels of depressive symptoms associated with lower levels of feeling in control. There was a medium (Cohen, 1988), negative correlation between the SMFQ and the emotional needs; security [r=-.371, p=0.01]; receive attention [r=-.447, p=0.01]; feeling part of a wider community [r=-.378, p=0.01]; privacy [r=-.334, p=0.01]; status [r=-.390, p=0.01]; competence [r=-.476, p=0.01]; and meaning [r=-.337, p=0.01], with higher with high levels of depressive symptoms associated with lower levels of security, receiving attention, feeling part of a wider community, privacy, status, competence and sense of meaning. There was a small (Cohen, 1988), negative correlation between the SMFQ and the emotional needs; give attention [r=-.207, p=0.01]; and emotional intimacy [r=-.228, p=0.01], with higher levels of depressive symptoms associated with lower levels of giving attention and emotional intimacy with another person.

Having found support for the hypothesis that the ENA measures constructs of

depression, mean scores for emotional needs by year group (see table 7) and gender (see table

8) were calculated to identify any possible points for intervention.

1	5	2.2 0	1			
ENA (Emotional Needs)	Year 7 Mean	Year 8 Mean	Year 9 Mean	Year 10 Mean	Year 11 Mean	
Security	5.42	5.46	5.41	4.92	4.66	
Receive attention	5.40	5.25	5.48	4.64	4.99	
Give attention	5.75	5.58	5.55	5.17	5.16	
Sense of control	5.34	5.28	5.04	4.46	4.23	
Feeling part of a wider community	5.10	4.82	4.76	4.08	3.74	
Privacy	5.64	5.56	5.81	5.24	5.06	
Emotional	5.28	5.16	5.20	4.78	4.78	
intimacy Status	5.07	4.94	4.93	4.43	4.31	
Competence	5.51	5.64	4.97	4.46	4.32	
Meaning	4.96	4.82	4.62	4.18	4.33	

Table 7

Descriptive statistics of the ENA by year group

There was a statistically significant main effect for year group for the emotional needs of; security [F (4, 840)=5.277,p<0.001], with a small effect size ( $\eta_p^2$ =.025, Cohen, 1988); receive attention [F (4, 838)=5.940, p<0.001], with a small effect size ( $\eta_p^2$ =.028, Cohen, 1988); give attention [F (4, 833)=4.359, p<0.01], with a small effect size ( $\eta_p^2$ =.021, Cohen, 1988); sense of control [F (4, 831)=8.976, p=<0.001, with a small effect size ( $\eta_p^2$ =.041, Cohen, 1988); feeling part of a wider community [F (4, 832)=9.655, p<0.001], with a small effect size ( $\eta_p^2$ =.044, Cohen, 1988); privacy [F (4, 836)=3.958, p<0.01], with a small effect size ( $\eta_p^2$ =.019, Cohen, 1988); status [F (4, 821)=4.690, p<0.001], with a small effect size

( $\eta_p^2$ =.022, Cohen, 1988); competence [*F* (4, 831)=15.073, *p*<0.001], with a moderate effect size ( $\eta_p^2$ =.068, Cohen, 1988); and meaning [*F* (4, 831)=4.347, *p*<0.01], with a small effect size ( $\eta_p^2$ =.020, Cohen, 1988). No significant main effects were found for year group for the emotional need of emotional intimacy.

Post-hoc comparisons using the Tukey HSD test indicated that in relation to: security the mean scores were significantly different (p=0.05) for age groups year 7, 8 and 9 from the year groups 10 and/or 11; receive attention the mean scores were significantly different (p=0.01) for age groups year 7 and 9 from the year group 10; give attention the mean scores were significantly different (p=0.01) for age groups year 7 and 10; control the mean scores were significantly different (p=0.01) for age groups year 7 and 8 from the year groups 10 and/or 11; feeling part of the community the mean scores were significantly different (p=0.05) for age groups year 7, 8 and 9 from the year groups 10 and/or 11; status the mean scores were significantly different (p=0.05) for age groups year 7 and 9 from the year group 10 and year group 7 and 11; competence the mean scores were significantly different (p=0.01) for age groups year 7, 8 and 9 from the year groups 10 and/or 11; and meaning the mean scores were significantly different (p=0.01) for age groups year 7 and 9 from the year group 10 and year group 7 and 11; competence the mean scores were significantly different (p=0.01) for age groups year 7, 8 and 9 from the year groups 10 and/or 11; and meaning the mean scores were significantly different (p=0.01) for age groups year 7 and year group 10. No post-hoc significant differences were found between the year groups for the emotional need of privacy.

The mean scores and significant differences for the ENA are similar to the SMFQ in that scores for either measure appear relatively stable across years 7, 8 and 9. At year 10 a number of significant differences can be observed In ENA mean scores for individual emotional needs suggesting that in year 10 the extent to which participants' emotional needs were being met declined significantly.

ENA (Emotional Needs)	Female	Male	
Security	5.27	5.37	
Receive attention	5.18	5.39	
Give attention	5.60	5.48	
Sense control	4.88	5.24	
Feeling part of a wider community	4.62	4.85	
Privacy	5.61	5.58	
Emotional intimacy	5.34	4.94	
Status	4.82	4.94	
Competence	5.03	5.29	
Meaning	4.61	4.78	

**Table 8**Descriptive statistics of the ENA by gender

*Note.* Children and young people who identified as non-binary are not included for analysis due to small sample size.

There was a statistically significant main effect for gender for the emotional needs of; receive attention [F (1, 838)=4.616, p<0.05], with a small effect size ( $\eta_p^2$ =.032, Cohen, 1988); sense of control [F (1, 831)=10.657, p=<0.001, with a small effect size ( $\eta_p^2$ =.013, Cohen, 1988); feeling part of a wider community [F (1, 832)=9.790, p<0.01], with a small effect size ( $\eta_p^2$ =.012, Cohen, 1988); emotional intimacy [F (1, 835)=5.375, p<0.05], with a small effect size ( $\eta_p^2$ =.022, Cohen, 1988); competence [F (1, 831)=11.065, p<0.001], with a small effect size ( $\eta_p^2$ =.013, Cohen, 1988); and meaning [F (1, 831)=3.982, p<0.05], with a very small effect size ( $\eta_p^2$ =.005, Cohen, 1988). No significant main effects were found for the main effects of gender for the emotional need of security, give attention, privacy, and status.

The female participants' mean scores for the emotional need of emotional intimacy with others is significantly higher than the males' mean scores. Although not significant, female participants also had higher mean scores for the emotional needs of give attention and privacy, indicating that females felt that their needs in all three areas were better met than those of the males. The male participant mean scores for the emotional needs of receiving attention, control, feeling part of the wider community, competence and meaning are all significantly higher than the female mean scores. Although not significant, male participants also had higher mean scores for the emotional needs' security and status.

There was a significant interaction effect for year group and gender for the emotional need of security; [*F*(4, 840)=2.535, *p*=<0.05], with a small effect size ( $\eta_p^2$ =.012, Cohen,1988).

#### Discussion

The findings reported in the current study indicate that average levels of self-reported mental health difficulties increase significantly between years 9 (14-15 years of age) and 11 (16-17 years of age). The findings also indicate that more generally, female pupils (around 24%) are at higher risk of meeting clinical thresholds than their male counterparts (16%). The average levels of mental health difficulties in the current study are higher than those reported in previous studies (see Patalay & Fitzsimmons, 2017), this may be a result of the current study's methodology of using self-report at every year group. Previous studies, such as Patalay and Fitzsimmons (2017), often use parental reports below the age of 14. The high levels of mental health difficulties found at year 11 (around 46% of CYP above the SMFQ clinical threshold) support previous research which indicates, trajectories of mental health difficulties peak in mid-to-late adolescence, towards the ages of 15-17 years of age (Ferro et al., 2015).

It has been suggested that possible explanations for the observed increase in depressive symptoms self-reported during adolescence is due to social, psychological and biological changes undertaken by CYP during the adolescence stage of development (Thapar et al. 2012). Factors associated with increases in mental health prevalence over the adolescent period include; decline in parental relationships (Sheeber et al., 2007); intensified experience of emotions (Allen & Sheeber, 2008); increased academic pressure (Hutchings & Kazmi, 2015); reduced sleep (Smaldone, Honig & Byrne (2007); and increased social media use (Kushlev, Proulx & Dunn, 2016). In relation to factors associated by gender, female adolescents have been found to report lower satisfaction with their appearance, health, friendships and how they use their time (Children's Society, 2015); higher levels of loneliness (Brooks et al., 2015) and are more likely to experience violence and abuse in relationships (Barter, Aghtaie & Larkins, 2015).

In the current study, adolescents' self-reported experience of depressive symptoms was found to be associated with the extent to which their emotional needs were met (ENA). This finding was expected as Human Givens theory can be considered to integrate biological, psychological and social factors in relation to a person's mental health and wellbeing (Griffin & Tyrell, 2003). The results from the ENA generally show a relatively stable period between years 7, 8 and 9 before declining significantly in years 10 and 11 with significant differences between genders.

It is beyond the scope of the current study as to what factors may have contributed to the decline in the extent to which CYP emotional needs are being met and why female adolescents report generally lower levels than male counterparts. The findings do, however highlight specific areas for targeted intervention. For example, CYP's sense of competence and control appears to significantly decline in years 10 and 11. Years 10 and 11 are a time of high academic pressure from the completion of high stakes exams. Existing literature suggests 13% of CYP in years 10 and 11 can be classified as highly anxious in relation to academic assessments (Putwain, 2008). The end of year 11 also represents a challenging period of change for adolescents. For example, the transition to adulthood, further education (FE), employment or training (Hayton, 2009). During this period adolescents are also developing increasingly independent relationships and moving towards independent living (Hayton 2009). Research exploring the mental health of adolescents who progress through FE and into Higher Education (HE) (universities) suggests increased prevalence rates of mental

health difficulties (Thorley, 2017). This is in response to increasing academic demands and pressures to achieve high grades (Thorley, 2017). In comparison, it is suggested that adolescents who transfer to full-time work, apprenticeships, or vocational college courses experience mental health gains (Symonds et al., 2016). This could be inferred to suggest adolescents' experience of the education system and its high stakes and academic pressure is a key contributor to the mental health and wellbeing of adolescents.

In hypothesising a link between mental health and high stakes exam pressure, it could be inferred that the year 11 CYP in the current study may have been experiencing low selfefficacy and academic self-concept. Putwain (2019) suggests control and competence may be related and argues that feelings of competence have a basis in self efficacy, and academic self-concept. Control is the belief that one can exert an influence over learning tasks and outcomes (and perceptions of learning and one's learning skills form the basis of control (Putwain, 2019). Within the current study, it could be hypothesised that early intervention during year 9, targeting domains of competence (e.g. self-efficacy, academic self-concept) may increase scores on the ENA elements of competence and control. This may also reduce the experience of depressive symptoms and act as a protective factor against depressive symptoms in year 11. However, this suggestion would require future longitudinal rigorous research?

#### Limitations

The use of self-report only data is a limitation of the current study and may have been a factor in the high prevalence rates reported. The use of self-report only data was made in response to findings that children as young as seven years old are able to report on their own mental health (Sharp, Goodyer & Croudace, 2006), the research being conducted in a context of increasing recognition of the United Nations Rights of the Child, and its emphasis on

CYP's voice being actively sought and valued and the reported low agreement levels between different reporters of CYP's mental health (Cheng et al., 2018). The use of an online questionnaire may have also contributed to the number of incomplete data entries. Had the questionnaire been in the form of pen and paper, with CYP handing completed questionnaires into school staff there may have been a higher number of participants completing the questionnaire. The online questionnaire was also missing one item from the SMFQ, although a rationale has been provided for still including the data it remains a limitation. There are also limitations in relation to the relatively small-scale of the research, small number of year 11 pupils and non-binary pupils. This makes it difficult to draw conclusions and generalise findings to a wider population.

#### **Implications for practitioners**

The findings from the current paper indicate a need for practitioners to consider the mental health needs of older secondary age pupils such as those in years 10 and 11. In considering the existing research and the findings that years 10 and 11 are significant periods, there is a need for policy makes to consider the extent to which high stakes exams and academic pressure may be contributing to the phenomenon of increased mental health difficulties in adolescents. The ENA offered a possible explanation in the self-reports of declining senses of control and competence. It can be suggested that practitioners consider using the ENA as a tool for whole school mental health screening. The ENA correlated with self-reports of depression and as such provided possible explanations as to why the adolescents may have been experiencing symptoms of depression. The ENA also provided a clear link between assessment and intervention in highlighting control and competence as clear areas for targeted intervention within the participants of the current research.

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## Paper 3: The dissemination of evidence to professional practice Introduction

This paper begins with an explanation of the concepts of evidence-based practice and practicebased research, followed by a brief discussion in relation to effective dissemination of research. The paper will conclude with a discussion regarding the implications of papers 1 and 2, and the proposed strategy for the dissemination and impact of this research.

#### Evidence-based practice and practice-based evidence

The American Psychological Association (APA,2006) defines evidence-based practice (EBP) as "The integration of the best available research with clinical expertise in the context of patient characteristics, culture, and preferences" (p.273). The purpose of EBP is explained as "to promote effective psychological practice and enhance public health by applying empirically supported principles of psychological assessment, case formulation, therapeutic relationship, and intervention" (APA, 2006, p. 273). It is considered that by following empirically supported principles and integrating the best available research, the likelihood of inconsistencies between practitioners and services is reduced (Dunsmuir, Brown, Iyadurai & Monsen, 2009).

The APA (2006) model of evidence-based practice is also known as the three-legged stool, in which each leg (best research available, clinical expertise and patient characteristics) is considered necessary for competent effective practice (Roberts, Blossom, Evans, Amaro & Kanine, 2017). Roberts et al (2017), however, highlight that the stool is "unbalanced" (p. 917) due to the discrepancy between the amount of research attention clinical expertise and patient characteristics receives in comparison to research conducted on psychological measures and treatments. There is also a long-standing criticism of EBP, in that it overly values randomised controlled trials (RCTs) (Webb, 2001) and systematic reviews (Clegg, 2005). Although Clegg (2005) argues that this over valuing is in response to the need for professionals to keep pace with change, it does result in reductionist and positivist models of practice (Clegg, 2005).

Reductionist and positivist models of EBP do not necessarily lend themselves well to applied psychology as there is an assumption within RCTs of a one size fits all (Fox, 2011). Specific psychological treatments/ assessments which may have proved effective in clinical trials may, in practice, require practitioner judgement (Lilienfeld et al., 2013) and consideration of the individual client (Fox 2011).

Psychologists, as suggested by Spring (2007) have three different relationships with research. They can firstly conduct research and therefore contribute directly to an evidence base. Secondly, they can systematically review and synthesise research for evidence users; and thirdly, they are consumers of research and so consider and implement research within their own practice. Practice-based research as opposed to evidence-based, provides opportunities for practitioners to exercise greater choice and decision-making, unlike tightly controlled trials. The benefit of practice-based research is that the sample taken is as it happens in practice, therefore, it can be considered to have high external validity due to its generalisability to the population (Fishman, 2000). In relation to the role of an educational psychologist (EP), practice-based research can be observed in practitioners implementing research-based approaches within settings and monitoring their impact as to add to the evidence base (Woods, McArdle & Tabassum, 2014). EPs, as suggest by Belar and Perry (1992), "embody a research orientation in their practice and a practice relevance in their research" (p.72). Thus EPs, through their relationship with research, can be considered to be strengthening their evidence base and moving their profession forwards (Fox, 2011).

EPs are considered to work within fast-paced and messy worlds which are challenging environments in which to link recommended approaches for the problems under consideration (Cameron, 2006). In this reality, Cameron (2006) suggests EPs, rather than considering a one size fits all approach to the problem under consideration, apply a problem-solving protocol to represent the most likely explanation of the problem. The focus here, as suggested by Cameron (2006), is to find a best fit to enable the practitioner to generate an intervention plan drawing on research. EPs are, therefore, required to make professional judgements based upon their knowledge, skills and research (British Psychological Society [BPS], 2005). EPs, as above, evidence this through the application of a problem-solving protocol (Cameron, 2006).

In conclusion, EPs engage in EBP and can be considered as modern scientificpractitioners because they: often handle complex and multifaceted problems (Kelly, Woolfson and Boyle, 2008); utilise psychological skills, knowledge and understanding through the functions of consultation, assessment, intervention, research and training (Fallon, Woods & Rooney, 2010); are systematic in their approach to problem solving (Monsen, Graham, Fredrickson and Cameron, 1998); integrate multiple streams of evidence into an intervention process (Juriševič, Lazarová, & Gajdošová, 2019); and utilise theoretical models to inform their practice (Cameron, 2006).

One of the scientific-practitioner functions as described by Fallon et al (2010) is assessment. Evidence-based assessment (EBA) has been defined as the use of "research and theory to guide the selection of constructs to be assessed for a specific assessment purpose, the methods and measures to be used in the assessment, and the manner in which the assessment process unfolds" (Hunsley & Mash, 2007, p. 30). At the initial stage, assessment measures are assessed for evidence in relation to validity, reliability and utility. Frameworks, taxonomies or criteria often used to evaluate the scientific quality of measures such as those proposed by Terwee et al (2007) and Glover and Albers (2007). As per the 'three-legged stool' of EBP, measures are often evaluated for their accessibility and diversity to ensure patient and cultural characteristics are included. By adopting empirically supported measures in the assessment processes, the possibility of error which may negatively impact upon decision-making is reduced and scientific thinking is maximised (Lilenfeld et al., 2012). Within the field of mental health, the successful implementation of EBA measures is also suggested to depend upon issues of burden, financial cost (Deighton et al., 2014), social validity, practitioner skill and scope and specificity of measures (Humphrey & Wigelsworth, 2016). Paper one, therefore, aims to evaluate possible EBA measures for mental health and considers implementation considerations alongside empirical evidence for the measures. EPs as scientific practitioners, are considered to be uniquely positioned to deliver EBP within mental health to support children and young people's (CYP) mental health needs (Shernoff et al., 2017). Paper two has two aims firstly to provide research regarding the mental health and emotional needs of secondary age pupils. Secondly, to demonstrate both an assessment process and selection of measures which could be adopted to identify areas for intervention to support CYP's mental health needs within school systems.

#### **Dissemination of research**

Within public health, research findings are argued to not effectively translate into day-to-day practice (Balas & Boren, 2000). This can be observed within clinical and community practices where the estimated time for research findings to be integrated into practice is around 17 years (Balas & Boren, 2000). In addition, Woolf (2008) suggests only a small percentage of research conducted is eventually integrated into policy and/or practice. One of the key reasons highlighted for the gap between research evidence and its use in policy and/or practice is dissemination (Turale, 2011). Dissemination can be understood as a "planned process that involves consideration of target audiences and the settings in which research findings are to be received" (Wilson, Petticrew, Calnan & Nazareth, 2010, p. 2). Freemantle and Watt (1994) suggest as well as receiving research findings, as suggested by Wilson et al. (2010), the target audience needs to accept and utilise research findings in order for

dissemination to be effective. As a consequence, dissemination and implementation research often overlap and can be described using interchangeable terms (Rabin & Brownson, 2017).

The most frequently reported method of dissemination used by researchers is publishing research in academic journals (Brownson et al., 2013; Tabak et al., 2014). Disseminating through academic journals is considered to communicate to the widest possible audience and to make research available to practitioners indefinitely (Edwards, 2015). The second most frequently reported method of dissemination is presenting at academic conferences (Brownson et al., 2013; Tabak et al., 2014). Through presenting research evidence at conferences, it is considered that the findings are disseminated quickly (Edwards, 2015). Conferences, Edwards (2015) argues, also offer the advantage that they are frequented by leaders in the relevant field. Therefore, research evidence is more likely to be adopted into policy and/or practice (Edwards, 2015). Other commonly-used methods of dissemination include seminars, workshops, meetings, press releases and media interviews (Wilson et al., 2010). Critics of dissemination through academic journals only consider the approach to be passive and unfocussed and as such ineffective in relation to changing practice (Gagnon, 2011). It is suggested that disseminating through journals is largely ineffective because the integration of research evidence into policy and/or practice does not happen spontaneously (Lehoux et al., 2005). Rather effective dissemination of research into policy and/or practice requires an active approach such as face-to-face interactions with end users (LaRocca et al., 2012).

In order for dissemination to be an active process and to achieve an impact, it can be argued that it requires planning (Harmsworth & Turpin, 2000). In addition, Harmsworth and Turpin (2000) suggest the consideration of how the findings may be disseminated should be made before the research is undertaken. Planning for dissemination can be broadly

understood in relation to decisions regarding where and when any research findings should be disseminated, what should be communicated and how it should be presented (Wallace, Brown & Hilton, 2014). To support planning for dissemination there are numerous possible models, theories and frameworks which researchers can utilise. For example, Tabak et al (2012) report 61 possible frameworks for dissemination. However, Zoellner and Porter (2017) highlight challenges in understanding and selecting a framework for dissemination due to the frameworks being developed within specific specialist areas; some frameworks focus more on implementation than dissemination and there is a lack of common language across frameworks. The Wilson et al (2010) review of frameworks identified three common theories which underpinned the 28 dissemination frameworks they included in their results: persuasive communication matrix, diffusion and social marketing. Persuasive communication matrix is concerned with five variables: 1) source of communication; 2) message to be communicated; 3) channels of communication; 4) characteristics of the audience; and 5: characteristics of the setting (McGuire, 1969). Diffusion includes three stages: 1) adoption; 2) implementation; 3) institutionalisation (Rogers, 2003). Social marketing was described by Wilson et al (2010) as marketing and advertising principles in promoting research.

In the Wilson et al (2010) review one of the frameworks for dissemination included was by Harmsworth, Turpin, Rees and Pell (2001). The Harmsworth et al (2001) framework was developed to support educational development projects in creating effective dissemination strategies. Within the Wilson et al (2010) review, Harmsworth et al's (2001) framework was considered to be underpinned by three variables of McGuire's (1969) persuasive communication matrix: 1) message to be communicated 2) channels of communication: and 3) audience. Harmsworth et al (2001) conceptualised dissemination as the "delivering and receiving of a message, the engagement of an individual in a process and the transfer of a

process or product" (Harmsworth et al., 2001, p.3) and proposed a three level process. The first level, 'dissemination for awareness', entails increasing the target audience's awareness of the research findings. At the first level, the hope would be for many people to become aware of the research's outcomes even if, at the time, they do not require a detailed knowledge of the research. The second level, 'dissemination for understanding', involves the direct targeting of audiences who may benefit from the research and to develop their understanding of the research findings and implications. The third level, 'dissemination for action', is where the least number of people would be reached. At the third level the dissemination is concerned with a process of change in which the target audience may change policy/ practice as a result of the research. For this to occur, these audiences will require relevant skills, knowledge and/or understanding of the research in order to enact change. Harmsworth et al (2001) suggested dissemination of research is most likely to pass through each of the three stages in turn.

# A summary of the policy/practice/research development and implications from the research at; the research site, organisational level, professional level

The thesis comprised of a literature review and a quantitative study. The literature review, paper 1, evaluated broad measures of children and young people's mental health and wellbeing. Measures were evaluated in relation to implementation characteristics, psychometric properties and the extent to which questionnaire items measured domains of mental health and wellbeing as defined by the National Institute of Clinical Excellence (NICE). The researcher aimed to make a contribution to knowledge through suggesting measures which could be adopted by schools and used in routine screening practices and to inform local intervention decision-making. The outcomes may also be of interest to EPs in relation to working at systems levels in schools to support evidence-based practice in relation to assessment, decision making and evaluating outcomes. Indeed, on the basis of the author's

supervisor presenting preliminary findings of paper 1 to trainee EPs, the author has already received an enquiry about a suitable measure for evaluating whole-school practice in relation to mental health.

The quantitative study, paper 2, investigated the mental health and emotional needs of secondary age pupils in schools from the North West. The findings contribute to the expanding knowledge in relation to at risk groups (female pupils), contribute new knowledge in relation to older CYP declining mental health and emotional needs and the possible use of the Emotional Needs Audit (ENA) as a tool to assess mental health but also identify areas for intervention. The researcher aimed to develop and demonstrate, in school settings, a protocol for completing whole school screening for mental health and emotional needs and to provide schools with rich data. The aim of school screening programs would be to provide school with evidence-based assessment data to target emotional needs-based interventions with particular at-risk groups and to inform universal interventions based upon local data. The protocol and measures used may also be of interest to EPs in relation to working at the systems level and supporting whole school approaches to mental health and wellbeing.

The following section examines the implications of the research at the research site, organisational level, and a wider professional level.

#### **Research Site**

The findings from the literature review have the potential to impact upon schools' practice. There has been growing and substantive research evidence for mental health provision in schools (Humphrey & Wiglesworth, 2016) and increasing expectation through government policy (Department of Health [DoH] & Department for Education [DfE], 2017). However, schools have continued to prioritise academic attainment in what Bonell et al

(2014) considers a zero-sum game. One of the key areas highlighted by government for as a role for schools in supporting CYP's mental health is in early identification of mental health needs (DoH & DfE, 2017). However, schools typically lack systems to target mental health outcomes (Lereya et al., 2019). The literature review concludes with four suggested measures which could easily be adopted (e.g. free to acquire, easy to find), have high quality implementation characteristics (e.g. readability), have good psychometric properties (e.g. validity) and whose items are considered to measure constructs of mental health as defined by NICE (2008). Through narrowing the burgeoning field of mental health measures to four recommended measures, school staff are less likely to be overwhelmed by the choices available to them. The review also provides information to schools of possible measures which focus on particular constructs of mental health (e.g. social, psychological and/or emotional). This gives schools the ability to make select measures which they may feel are more relevant to their location and priorities. For example, if a school wanted to focus on social aspects of mental health and interventions, they may choose a measure which was not suggested for general mental health screening but had a high percentage of items tapping social aspects of mental health.

The quantitative study described in paper 2 has implications for schools involved in the research through the findings and in relation to being involved in a protocol for screening pupils' mental health. In relation to the findings, it is suggested that aggregated data from EBA provide schools with a clear understanding of their CYP's needs, informs decision-making and can be used to gain information in relation to program or intervention effectiveness (Sander, Everts & Johnson, 2011). The findings from the Short Moods and Feelings Questionnaire (SMFQ) can be considered to provide clarity to schools on the needs of their CYP and to highlight particular at-risk vulnerable groups (e.g. female pupils, years 10 and 11 pupils) who may have previously been unknown. The findings from the ENA can be

considered to support the decision-making by schools in relation to adopting interventions across levels of systems. For example, data from the ENA suggests year 10 pupils may benefit from intervention targeting their sense of control. The ENA data also suggests year 10 female pupils may benefit from a group intervention targeting their sense of competence. Through being involved in data gathering, the participating schools had to make local decisions on how to screen their populations. The participating schools all followed a suggested protocol which the researcher developed during a pilot study (Waite, 2018). CYP were organised by form groups to access the school's IT suites over a number of weeks and completed the electronic questionnaire during one form time with their form tutor onsite to support any issues which may have arisen/ existed (e.g. IT issues, supporting any CYP with any special educational needs (SENs). Through being directly involved in the data gathering process and planning how to gather the data, it can be argued that the schools have experienced the development and implementation of a system to assess CYP's mental health - a key implication given suggestions that a lack of existing systems is a key barrier in schools implementing EBA in relation to mental health (Lereya et al., 2019).

#### **Organisational Level**

The quantitative study was commissioned by a group of principal educational psychologists (PEPs) from the North West (NW) of England in conjunction with the host university. The PEPs approached the host university to commission wide scale research into the mental health needs of CYP within the NW region. In meetings between the host university and PEPs, the Human Givens approach (HG) and use of the ENA was discussed as a potential paradigm for evaluating CYP's mental health and needs. The research findings highlight that the CYP in the NW are self-reporting similar prevalence rates for mental health difficulties to those reflecting the national picture (Patalay & Fitzsimmons, 2017). These findings may inform policy and practice at the organisational level as they show clear need for PEPs to consider how their educational psychology services (EPS) might support CYP's mental health in the NW region. The contribution to new knowledge from the research is the findings that in years 10 and 11 the prevalence rates appear to increase significantly, whilst the extent to which the CYP's emotional needs are met also declines. The PEPs commissioned the research to gain a better understanding of the needs of CYP within the NW specifically which could be used to then inform policy/practice at a regional level. The research findings may, therefore, impact upon decision-making at the EPS level in relation to local authority priorities and areas for the EPSs to develop systemic level interventions. For example, the EPSs may conduct further research into adolescence CYP's sense of control and competence and develop group level interventions for schools. This would be further evidence of EPSs engaging in practice-based research which may also add to the growing evidence base for EPs work in supporting CYP's mental health needs.

#### **Professional level**

Black et al (2014) suggests EPs' ability to implement EBP is limited by their time to implement change, explore ideas and put them into practice. In addition, Black et al (2014) suggest the time needed to research measures in settings where EPs work, is a timeconsuming process which may further impede an EP's ability to implement EBA. Papers 1 and 2 provide research on potential EBA in relation to mental health which EPs could readily use within their practice. This could be in the form of either their direct assessments work in relation to mental health or in their work supporting school systems. Paper 2, potentially, has an impact on EP practice in relation to EPs' unique contribution to the continuum of mental health services from prevention to intervention at both the setting and group level. The use of the ENA provides a theoretical framework to consider how CYP's emotional needs being met or unmet may impact upon their self-reported mental health. The findings from the ENA suggest there are particular, at risk, vulnerable groups who may benefit from intervention at the group level. EPs may be considered well placed to support schools in adopting evidence based interventions which may support these particular at risk groups.

Within dissemination and implementation research of mental health interventions there are also reported limitations regarding the effectiveness of interventions when they are implemented in real-world settings. Schoenwald and Hoagwood (2001) suggest this may in part, be due to the function of the social context in which interventions occur. The research findings from paper 2, conducted in a real-world setting, provide EBA data which could be used by EPs in relation to data-based decision making (Shernoff et al., 2016) to inform interventions. This would be of great interest and value to schools as it has been suggested the majority of schools report using interventions which have no evidence base (Vostanis et al., 2013).

A strategy for promoting and evaluating the dissemination and impact of the research In considering possible dissemination frameworks and strategies, as suggested by Zoellner and Porter (2017), many of the frameworks are developed within specialist areas (e.g. health). The Harmsworth et al (2001) framework was developed to support educational development projects in creating effective dissemination strategies. It could, therefore, be considered that the Harmsworth et al (2001) framework may be well suited to the dissemination of papers 1 and 2.

#### Dissemination for awareness

The first stage of dissemination for awareness, as above, concerns itself with sharing the research findings with a large number of people. At the initial stage, paper 1 and 2 would be published in academic journals. The target journal for paper 1 would be Emotional and Behavioural Difficulties (see appendix 1). This journal aims to contribute to readers understanding of social, emotional and behavioral difficulties to influence intervention and

policies. The audience for the journal is wide and includes teachers, EPs, clinical psychologists, researchers and academics. In addition, members of the Social, Emotional and Behavioural Association (SEBDA) receive the journal as part of their membership to SEBDA. The journal is, therefore, considered to be well aligned with the intended audience for paper 1. The target journal for paper 2 would be Pastoral Care in Education (see appendix 4). This journal aims to contribute to contemporary issues in education such as emotional development, care of students, and whole school approaches. The journal's target audience is all teachers, professionals, researchers and academics with interest in education and care of pupils. The journal is, therefore, considered to be well aligned with the intended audience for paper 2.

The current context of mental health in schools is very much at the front of public policy, therefore, it could be expected that there will be numerous EPs who would become aware of the research through searching for journals on mental health EBP in schools. Although there would be no set opportunity for interaction between any reader and the researcher, journal submissions include the researcher's contact information. Therefore, there is a possibility of interactions with a large audience. It would also be the intention to promote any resultant publications through the research supervisor's ResearchGate account and Twitter feed, two fora which encourage and promote more direct interaction about published research. During the conceptualisation of paper one and two, consultations were conducted with other researchers in the field of mental health and EBP. Discussions were held regarding possible future collaborations and the possibility of resubmitting revised articles to prestigious journals to appeal to a larger audience. In addition, it has been suggested that dissemination can involve others with particular skills and/or resources to further enhance the dissemination of research (Garforth, 1998).

At the initial stage, dissemination could also be planned through presenting at conferences (e.g. NW Educational Psychology CPD Conference) and/or facilitating workshops based upon the research findings and implications. This would facilitate communicating the research findings to EPs across the NW region in which the research occurred and allow for greater interaction between the researcher and the audience than the above journals. For example, presentations typically allocate time at the end for question and answers, which may facilitate discussions.

#### Dissemination for understanding

The second stage of dissemination for understanding would involve targeting audiences that may benefit from the research and to provide a deeper understanding of the research findings and implications. Due to the commissioning process of paper two, the intention is to present the research to the PEPs in the NW region who commissioned the study. This would provide an opportunity to discuss the findings in relation to prevalence rates and how they compare to the national picture, but also, to provide a deeper understanding of the implications of the data from the ENA. It would be hoped that the PEPs, as commissioners, would then take the research to their EPSs and develop local practice to implement mental health screening in secondary schools through their EP teams.

At a local authority level (LA), where the researcher is currently completing a placement, there is an employed advisory teacher for social, emotional and mental health (SEMH). Their role is to support schools across the LA in understanding and supporting children's mental health and wellbeing. In relation to paper one, discussions have been held with the SEMH advisory teacher and their line manager regarding ways to support the implementation of EBA in schools. In addition, and as suggested by Garforth (1998), they

may be engaged to support the dissemination and implementation of the research in the LA due to the researcher's lack time and resources.

#### Dissemination for action

The third and final stage of Harmsworth et al's (2001) model is dissemination for action. At this stage the researcher would intend to share the research at Special Educational Needs Co-ordinator (SENCo) cluster meetings within the LA the trainee EP practices. The use of SENCo clusters would support the communication of the research findings and also create opportunities to provide training on implementation. The proposals set out in the UK government's recent green paper (DoH & DfE, 2017) call upon schools to create mental health champions in school. It could be considered that through training key members of staff through the SENCo clusters would support schools in delivering against this key proposal. Furthermore, one of the criticism in relation to the gap between research and practice in school mental health is the over attention on content development and the lack of attention of the translation of content into the context of schools (Hoover, 2018). By taking an active role through the functions of consultation and training, schools and key school staff may be supported in translating the findings from papers 1 and 2 into the respective schools unique and dynamic contexts.

Due to the schools being supported by the TEP within an allocation model, the researcher would also be able to work at a systemic level within individual settings to implement mental health screening in secondary schools within the LA. The intention would be to gather data at a local level following the research protocol developed in paper two to promote EBP within the LA in relation to mental health. This would then provide a local evidence base which could be disseminated more widely across the LA. The intention would

then be for universal screening to be the base for future research into interventions linked to emotional needs.

#### **Evaluating impact**

The impact of the dissemination can be evaluated in relation to the impact at the NW region level and at a local level with the LA where the researcher is completing their placement. In addition, there could be impact on Human Givens theory and practice. At the NW region level, the impact can be evaluated in the adoption of the EBA and research protocols exemplified for universal screening of mental health with secondary schools in the NW region This may be observed in a second research commission by the PEPs. One of the limitations of paper 2 was the sample size which limited the level of analysis which could be performed. The PEPs would likely be interested in data which considered other characteristics (e.g. ethnicity, family dynamics). In order for a greater level of analysis a larger sample size would be needed. Paper 2 may, therefore, be seen as providing the protocol for a follow up study.

At a local level, the impact can be evaluated in relation to schools within the LA adopting EBA when measuring domains of SEMH and in addition, the implementation of mental health screening in secondary schools. Briesch, Chafoulease and Chaffee (2018) suggest around 2% of schools engage in universal screening of mental health. Therefore, a local impact measure may involve targeting a percentage of secondary schools that engage in annual universal screening. This may be achieved through a research commission from the trainee EPs LA using a strategic sample of the LA secondary schools.

An additional impact of paper 2 may be considered in relation to its contribution of Human Givens theory into practice. At the present time, there is little research in relation to Human Givens in schools and with school age children. It could be considered that paper 2 exemplifies a potential way Human Givens theory can be applied into practice within education and school settings.

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#### Appendices

## Appendix 1: Journal of Emotional and Behavioural Difficulties Guidelines

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## Appendix 2: Review framework for evaluation of mental health measures



#### Review framework for evaluation of mental health measures

Measure:

Analysis	Criterion	Score	R1	R2	Agree %	R1	R2	Agree %
Administration	Readability	21						
Details/ Utility	(Flesch reading ease scores,	0						
of measures	Hartley (2016)).							
	2 = 90+ (reading age 10-11 years or							
	younger)							
	1 = 80 – 90 (reading age 11-12)							
	0 = ≤79 (reading age 12+)							
	Age range	21						
	2 = cover all 5 years of secondary	0						
	school							
	1 = covers 3-4 secondary school							
	years							
	0 = 1 – 2 secondary school years							
	Ease of availability	1 0						
	1= download easily available							
	0= Request copy from publisher							
	Administration manual/ protocol	1 0						
	available							
	1= Yes							
	0= No							
	Scoring/ interpretation manual	1 0						
	available							
	1 = Yes							
	0 = No							
	Total	Max			Mean			Mean
		7			%			%
					agree			agree

Analysis	Criterion	Score	R	1	R2	Agree %	R1	R2	Agree %
Psychometric	Evidence of UK norms	1 0							
Properties	1= Yes								
	0= No								
	Evidence of Internal Consistency at or above .70 (Hunsley & Mash (2005). 2 = total scores and all subscales 1= total scores only 0= below 0.7	2 1 0							
	Construct Validity - Confirmatory Factor Analysis shows strong	1 0							

results - at least CFI≥ .95 and RMSEA< .05 1 = Yes 0 = No				
Response scales 2 = 5-7 scales and all labelled 1 = <5 or >7 scales or scales partially labelled 0 = no scale or yes/no scale	2 1 0			
External validity – Evidence available that measure has had its reliability tested 1= Yes 0= No	1 0			
Total	Max 7	Mean % agree		Mean % agree

Analysis	Criterion	Score	R1	R2	Agree %	R1	R2	Agree %
Content	% of items which measure at least one of the three domains identified by NICE. emotional wellbeing, psychological wellbeing and social wellbeing	%						
	% of items measure psychological wellbeing liking most parts of one's own personality, being good at managing the responsibilities of daily life, having good relationships with others, and being satisfied with one's own life)	%						
	% of items measure social wellbeing positive functioning and involves having something to contribute to society (social contribution), feeling part of a community (social integration), believing that society is becoming a better place for all people (social actualization), and that the way society works makes sense to them (social coherence)	%						
	Total				Mean %			Mean %
					agree			agree

NICE domains of social and emotional wellbeing	NICE definitions/ descriptions of domains	Possible other definitions/ descriptions of domains
Emotional Wellbeing	Experience of happiness.	Feelings of: Contentment, cheerful, pleasure, joy, satisfaction.
	Feel Confident.	Feelings of Sureness, assurance.
	Not feeling depressed.	Feelings of: Unhappiness, sadness, of being down, miserable, dejected, low, despondent.
Psychological Wellbeing	Feelings of autonomy in one's life.	Sense of Independence, self-sufficiency, self-rule. Able to make own mind up about things, feel have choices.
	Feelings of control in one's life.	feelings of being in charge, self-efficacy. Sense of power and/or influence over one's life,
	Problem solving skills.	Able to find/ think of possible solutions, able to produce a plan, can spend time thinking before acting.
	Resilience.	Ability to "bounce back", Ability to cope with normal stresses of life.
	Attentiveness.	Ability to: concentrate, attend, focus, finish tasks.
	Sense of involvement with others.	Sense of participation in activities with others and/o belonging. There are people in your life you can ask for help.
Social Wellbeing	Ability to have good relationships with others.	Positive relationships with others. Having friends, feeling close to other people. Feeling loved/ care for by others.
	Ability to avoid disruptive behaviours.	Awareness of the impact of one's behaviour on others. Ability to follow school/home rules,
	Ability to avoid delinquency.	Not involved in crime or law-breaking activities.

# Appendix 3: Crib sheet to aid item evaluation against NICE domains of mental health

## **Appendix 4: Journal of Pastoral Care in Education Guidelines**

## About the Journal

*Pastoral Care in Education* is an international, peer-reviewed journal publishing highquality, original research. Please see the journal's Aims & Scope for information about its focus and peer-review policy.

Please note that this journal only publishes manuscripts in English.

Pastoral Care in Education accepts the following types of article: original articles.

Articles of a theoretical nature, and those reporting research or engaging in scholarly debate, are always welcome. However, articles which suggest practical ideas for improving what schools do are equally welcome. The journal encourages teachers, parents, governors and students who have not previously written for publication to share their experiences and their views with others. If you have an idea for an article, please contact the editor who will happily give advice on how this might be developed. The Editor also welcomes proposals for special issues.

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## **Preparing Your Paper**

## Structure

Your paper should be compiled in the following order: title page; abstract; keywords; main text introduction, materials and methods, results, discussion; acknowledgments; declaration of interest statement; references; appendices (as appropriate); table(s) with caption(s) (on individual pages); figures; figure captions (as a list).

## Word Limits

Please include a word count for your paper.

A typical paper for this journal should be between 6000 and 8000 words , inclusive of references, footnotes, endnotes.

## Style Guidelines

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Any spelling style is acceptable so long as it is consistent within the manuscript.

Please use single quotation marks, except where 'a quotation is "within" a quotation'. Please note that long quotations should be indented without quotation marks.

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## Checklist: What to Include

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- 2. Should contain an unstructured abstract of 250 words.
- 3. Graphical abstract (optional). This is an image to give readers a clear idea of the content of your article. It should be a maximum width of 525 pixels. If your image is narrower than 525 pixels, please place it on a white background 525 pixels wide to ensure the dimensions are maintained. Save the graphical abstract as a .jpg, .png, or .tiff. Please do not embed it in the manuscript file but save it as a separate file, labelled GraphicalAbstract1.
- 4. You can opt to include a video abstract with your article. Find out how these can help your work reach a wider audience, and what to think about when filming.
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#### **Appendix 5: Confirmation of Ethical Approval**



The University of Manchester

Ref: 2018-4634-7332

#### 29/10/2018

Dear Mr Michael Waite, , Dr Cathy Atkinson Study Title: Emotional needs and mental health of Year 9 pupil in NW england

#### Environment, Education and Development School Panel PGR

I write to thank you for submitting the final version of your documents for your project to the Committee on 24/10/2018 14:37. I am pleased to confirm a favourable ethical opinion for the above research on the basis described in the application form and supporting documentation as submitted and approved by the Committee.

Please see below for a table of the titles, version numbers and dates of all the final approved documents for your project:

Document Type	File Name	Date	Version
Consent Form	Privacy Notice UoM	07/06/2018	1
Letters of Permission	DBS Cert	07/06/2018	1
Additional docs	Emotional-Needs-Audit	07/06/2018	1
Additional docs	MFQ Child Self-Report - Short	07/06/2018	1
Consent Form	Appendix B Consent Form Thesis V1	24/09/2018	1
Participant Information Sheet	Appendix A PIS Thesis V1	24/09/2018	1
Participant Information Sheet	Appendix A PIS Thesis V1	24/09/2018	1
Additional docs	Data Man Plan	24/09/2018	1
Default	Emotional-Needs-Audit	24/10/2018	1
Default	MFQ Child Self-Report - Short	24/10/2018	1
Default	Recruitment info sheet for principal educational psychologists	24/10/2018	1
Additional docs	Revisions to Ethics Applications	24/10/2018	1

This approval is effective for a period of five years and is on delegated authority of the University Research Ethics Committee (UREC) however please note that it is only valid for the specifications of the research project as outlined in the approved documentation set. If the project continues beyond the 5 year period or if you wish to propose any changes to the methodology or any other specifics within the project an application to seek an amendment must be submitted for review. Failure to do so could invalidate the insurance and constitute research misconduct.

You are reminded that, in accordance with University policy, any data carrying personal identifiers must be encrypted when not held on a secure university computer or kept securely as a hard copy in a location which is accessible only to those involved with the research.

For those undertaking research requiring a DBS Certificate: As you have now completed your ethical application if required a colleague at the University of Manchester will be in touch for you to undertake a DBS check. Please note that you do not have DBS approval until you have received a DBS Certificate completed by the University of Manchester, or you are an MA Teach First student who holds a DBS certificate for your current teaching role.

#### Reporting Requirements:

You are required to report to us the following:

<u>Amendments</u>
 <u>Breaches and adverse events</u>

We wish you every success with the research.

Yours sincerely,

inon 1000

waternerey

Dr Kate Rowlands

Environment, Education and Development School Panel PGR

Environment, Education and Development School Panel PGR School for Environment, Education and Development Humanities Bridgeford Street 1.17 The University of Manchester Manchester

M13 9PL

Email: PGR.ethics.seed@manchester.ac.uk

#### **Appendix 6: Participant Information Sheet**



#### The Mental Health and Emotional Needs of Secondary Age Pupils in the North West of England

#### Participant Information Sheet (PIS)

This PIS should be read in conjunction with The University privacy notice

You are being invited to take part in a research study aiming to explore year 9 pupils mental health and emotional wellbeing. Before you decide whether to take part, it is important for you to understand why the research is being conducted and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Please ask if there is anything that is not clear or if you would like more information. Take time to decide whether you wish to take part. Thank you for taking the time to read this.

#### Who will conduct the research?

Michael Waite, Trainee Educational Psychologist, Doctorate in Educational and Child Psychology, University of Manchester.

#### What is the purpose of the research?

This study aims to:

- Find out whether secondary age pupils in the North West (NW) of England report good or poor mental health.
- Find out whether secondary age pupils in NW England are having their emotional needs met or un met.
- Find out whether there are specific emotional needs which, when met, can be linked to good mental health.
- Find out whether there are specific individual and school features which impact mental health and emotional needs.

#### Why have I been chosen?

Secondary schools throughout the NW have been chosen to take part in the study. Your school recognised the importance of its pupils' mental health and wellbeing and has volunteered to take part. Your entire school is being invited to take part in the study.

#### What would I be asked to do if I took part?

You would be asked to fill in an online questionnaire about your emotional wellbeing and emotional needs anonymously. You will also be asked to provide personal details such as your gender and ethnicity. Completion of the questionnaire should take no more than 15 minutes.

#### What will happen to my personal information?

To undertake the research project, we will need to collect the following personal information/data about your:

- Gender.
- Ethnicity.
- Family living arrangements.
- Siblings, whether you have any and if so how many.
- The school you attend.
- The year group you are in.

Only the research team will have access to this information.

We are collecting and storing this personal information in accordance with the General Data Protection Regulation (GDPR) and Data Protection Act 2018 which legislate to protect your personal information. The legal basis upon which we are using your personal information is "public interest task" and "for research purposes" if sensitive information is collected. For more information about the way we process your personal information and comply with data protection law please see our Privacy Notice for Research Participants.

The University of Manchester, as Data Controller for this project, takes responsibility for the protection of the personal information that this study is collecting about you. In order to comply with the legal obligations to protect your personal data the University has safeguards in place such as policies and procedures. All researchers are appropriately trained, and your data will be looked after in the following way:

The research team at the University of Manchester will have access to your questionnaire data. The questionnaire data will be stored anonymously. All anonymous data will be stored securely on an encrypted drive at the University of Manchester and analysed by Michael Waite. Data, including your consent form will be archived at the University of Manchester for a period of five years and then destroyed. Summaries of the study's outcomes will be sent to your school and made available to you if you wish to read it. Data will be used to inform future project reports and journal publications

You have a number of rights under data protection law regarding your personal information. For example, you can request a copy of the information we hold about you. This is known as a Subject Access Request. If you would like to know more about your different rights, please consult our privacy notice for research and if you wish to contact us about your data protection rights, please email <u>dataprotection@manchester.ac.uk</u> or write to The Information Governance Office, Christie Building, University of Manchester, Oxford Road, M13 9PL. at the University and we will guide you through the process of exercising your rights.

You also have a right to complain to the Information Commissioner's Office, Tel 0303 123 1113

#### Will my participation in the study be confidential?

Your participation in the study will be kept confidential to the study team and those with access to your personal information as listed above. All data will be anonymised, and individual participants' responses will not be identifiable by the research team within the dataset. This ensures that the reporting of any data is done in such a way that individuals cannot be readily identified

#### What happens if I do not want to take part or if I change my mind?

It is up to you to decide whether to take part. If you do decide to take part, you will be given this information sheet to keep and be asked to complete on online consent form. If you decide to take part, you are still free to withdraw at any time during the questionnaire without giving a reason and without detriment to yourself. However, it will not be possible to remove your data from the project once it has been anonymised and forms part of the dataset as we will not be able to identify your specific data. This does not affect your data protection rights.

#### Will my data be used for future research?

When you agree to take part in a research study, the information about your health and care may be provided to researchers running other research studies in this organisation. The future research should not be incompatible with this research project and will concern education and health. These organisations may be universities, NHS organisations or companies involved in health and care research in this country or abroad. Your information will only be used by organisations and researchers to conduct research in accordance with the <u>UK Policy Framework for Health and Social Care Research</u>.

This information will not identify you and will not be combined with other information in a way that could identify you. The information will only be used for the purpose of health and care research, and cannot be used to contact you regarding any other matter or to affect your care. It will not be used to make decisions about future services available to you.

#### Will I be paid for participating in the research?

No. Your school will plan the completion of the questionnaire to ensure minimal disruption to your education.

#### What is the duration of the research?

If you take part, you will complete one questionnaire which will take approximately 15 minutes to complete.

#### Where will the research be conducted?

The research will be conducted in your school during your normal school hours.

#### Will the outcomes of the research be published?

Findings will be collated to form the basis of an academic paper drafted by the researchers for publication in an educational psychology journal (e.g. Educational Psychology in Practice).

#### Who has reviewed the research project?

The project has been reviewed by the University of Manchester Research Ethics Committee Ref: 2018-4634-7332

#### What if I want to make a complaint?

If something goes wrong or you wish to make a complaint, please contact:

Researcher

Michael Waite, A6.5, Ellen Wilkinson Building, Oxford Road, University of Manchester.

Email: michael.waite@postgrad.manchester.ac.uk

or

**Research Supervisor** 

Dr Cathy Atkinson Room, A6.5, Ellen Wilkinson Building, Oxford Road, University of Manchester.

Email: <a href="mailto:cathy.atkinson@manchester.ac.uk">cathy.atkinson@manchester.ac.uk</a>

#### What if I want to make a complaint?

#### Minor complaints

If you have a minor complaint, then you need to contact the researcher in the first instance.

Michael Waite, A6.5, Ellen Wilkinson Building, Oxford Road, University of Manchester.

Email: michael.waite@postgrad.manchester.ac.uk

#### Formal Complaints

# If you wish to make a formal complaint or if you are not satisfied with the response you have gained from the researchers in the first instance, then please contact

The Research Governance and Integrity Manager, Research Office, Christie Building, University ofManchester,OxfordRoad,Manchester,M139PL,byemailing:research.complaints@manchester.ac.ukor by telephoning 0161 275 2674.

#### What Do I Do Now?

If you have any queries about the study or if you are interested in taking part, then please contact the researcher(s)

Michael Waite, A6.5, Ellen Wilkinson Building, Oxford Road, University of Manchester.

Email: <u>michael.waite@postgrad.manchester.ac.uk</u>

This Project Has Been Approved by the University of Manchester's Research Ethics Committee [Ref: 2018-4634-7332]

## **Appendix 7 : Participant Consent Form**



#### The Mental Health and Emotional Needs of Secondary age Pupils in the North West of England

#### **Consent Form**

If you are happy to participate, please complete and sign the consent form below

	Activities	Initials
1	I confirm that I have read the attached information sheet for the above study and have had the opportunity to consider the information and ask questions and had these answered satisfactorily.	
2	I understand that my participation in the study is voluntary and that I am free to withdraw at any time without giving a reason and without detriment to myself. I understand that it will not be possible to remove my data from the project once it has been anonymised and forms part of the data set. I agree to take part on this basis	
3	I agree to the use of my responses to the questionnaire.	
4	I agree that any data collected may be published in anonymous form in <b>academic books, reports or journals</b>	
5	I agree to take part in this study	

#### **Data Protection**

The personal information we collect and use to conduct this research will be processed in accordance with data protection law as explained in the Participant Information Sheet and the <u>Privacy Notice for Research Participants</u>.

Name of Participant

Signature

Date

Name of the person taking consent Signature

Date

[Your consent form will be stored electronically alongside your responses to the questionnaire by the research team]

# Appendix 8: Electronic Questionnaire Preview of SMFQ and ENA

Close Preview	Sestart :	Survey	<b>Ö</b> ~					Published ~	< ~
The following questions judgement, how you have				-	ing recently	y. Rate, in ye	our		
If a sentence was not true If a sentence was only so If a sentence was true a 1. I felt unhappy or miserable. 2. I didn't enjoy anything at all. 3. I felt so tierd i just sat around and did	ometimes true, bout you most o	check SOM	IETIMES. check TRUI	E. Nometimes		True O O		<ul> <li>The following questions are about you might have been feeling or acting in recently. Rate, in your judgement, you have been feeling or acting in past two weeks.</li> <li>If a sentence was not true about you check NOT TRUE.</li> <li>If a sentence was only sometimes true, check SOMETIMES.</li> <li>If a sentence was true about you not the time, check TRUE.</li> </ul>	cting , how n the you, s
nothing. Close Preview	Restart	t Survey	<b>☆</b> →					Draft ~	K V
Rate, in your judgemen	t, how well the	following ne	eds are bei	ng met in ye	our life			••••• ?	100% 🚥 •
now, on a scale of one			not met at al	I, and 7 me	ans being v	very		Rate, in your judgement, how we	II the
well met), by ticking the	appropriate bo	2	3	4	5	6	7	following needs are being met in life now, on a scale of one to seven	your
1. Do you feel securi in all major areas of your life (such as, home, school/work, environment)?	e	0	0	0	0	0	0	<ul> <li>(where 1 means not met at all, an means being very well met), by ticking the appropriation</li> </ul>	
2. Do you feel you receive enough attention?	0	0	0	0	0	0	0	1. Do you feel secure in all major areas of your life (such as, home, school/work,	
<ol> <li>Do you think you give other people enough attention?</li> </ol>	0	0	0	0	0	0	0	environment)?	^

```
Child Self-Report
```

#### MOOD AND FEELINGS QUESTIONNAIRE: Short Version

This form is about how you might have been feeling or acting **recently**.

For each question, please check (✓) how you have been feeling or acting *in the past two weeks*.

If a sentence was not true about you, check NOT TRUE. If a sentence was only sometimes true, check SOMETIMES. If a sentence was true about you most of the time, check TRUE.

Score the MFQ as follows: NOT TRUE = 0 SOMETIMES = 1

TRUE = 2

To code, please use a checkmark ( $\checkmark$ ) for each statement.	NOT TRUE	SOME TIMES	TRUE
1. I felt miserable or unhappy.			
2. I didn't enjoy anything at all.			
3. I felt so tired I just sat around and did nothing.			
4. I was very restless.			
5. I felt I was no good anymore.			
6. I cried a lot.			
7. I found it hard to think properly or concentrate.			
8. I hated myself.			
9. I was a bad person.			
10. I felt lonely.			
11. I thought nobody really loved me.			
12. I thought I could never be as good as other kids.			
13. I did everything wrong.			

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The Emotional Needs How well are your innate emotional nee Nature has programmed all of us with physical and emotion	
	eds being met?
'human givens' that cannot be avoided. How stressed we are needs are being met, and how well we deal with the situatio in your judgement, how well the following emotional needs a now, on a scale of one to seven (where 1 means not met at al well met), by ticking the appropriate boxes.	e depends on how well our on when they are not. Rate, are being met in your life
	NO SOMETIMES YES
1. Do you feel secure in all major areas of your life (such as your home, work, environment)?	1 2 3 4 5 6 7
2. Do you feel you receive enough attention?	1 2 3 4 5 6 7
3. Do you think you give other people enough attention?	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$
4. Do you feel in control of your life most of the time?	1 2 3 4 5 6 7
5. Do you feel connected to some part of a wider community?	1 2 3 4 5 6 7
6. Can you obtain privacy when you need to?	1 2 3 4 5 6 7
7. Do you feel an emotional connection to others? For instance, do you have an intimate relationship	1 2 3 4 5 6 7
in your life, one where you are totally physically and emotionally accepted for who you are by at least one person (this could be a close friend)?	
8. Do you feel you have status that is acknowledged?	1 2 3 4 5 6 7
9. Are you achieving things and feeling competent in at least one major area of your life?	1 2 3 4 5 6 7
10. Are you being mentally and/or physically stretched in ways which give you a sense that life is meaningful?	1 2 3 4 5 6 7
- If your scores are mostly low, you are more likely to be suf	ffering stress symptoms.
- If any need is scored 3 or less this is likely to be a major st	-
- Even if only one need is marked very low it can be enough seriously effect your mental and emotional stability.	n of a problem to
Stress, anxiety, anger, depression and addiction are the result not being met, either due to environmental factors, harmful of of imagination (worrying). People do not have mental health innate needs are being met in balanced, healthy ways. By hi	conditioning or a misuse problems when their