

**Maltese Secondary School Teachers' Knowledge and Perceptions of Child and  
Adolescent Mental Health Difficulties.**

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**ABSTRACT**

Mental health difficulties are the leading cause of disability, impairment and mortality in children and adolescents, and are experienced by an increasing number of young individuals. Yet, a considerable proportion of mental health difficulties are never recognised and treated. Educators have thus emerged as key figures to assist in the identification and referral of such students. This study utilised a quantitative methodology to explore Maltese secondary school teachers' attitudes towards mental health difficulties and students with such difficulties, their knowledge of common mental health difficulties, and their awareness of services assisting such students. An online questionnaire was constructed and answered by 156 teachers (36 males, 120 females). Results indicated that teachers generally held positive attitudes towards mental health and students with related difficulties, as well as a good understanding of risk factors for these conditions and the areas negatively impacted by them. Females in the sample had more positive attitudes, and an inverse correlation with age was also noted. However, teachers also reported poor appraisal of their perceived knowledge of mental health difficulties as well as of training related to mental health issues. Moreover, while theoretical knowledge appeared to be relatively good, some teachers attributed management of mental health difficulties to be solely in the hands of students, and they were less knowledgeable about practical components of different conditions (notably suicide) including their identification, and how and to which services to refer students for help. The findings lead to recommendations for relevant preparation of educators regarding mental health difficulties in students in initial teacher education and further in-service training. Wider research on teacher support for student with such difficulties is also suggested.

*Keywords:* Teacher Mental Health Literacy, Adolescent Mental Health, Depression, Anxiety, Mental Health Services, Attitudes and Perceptions

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## **Chapter 1: Introduction**

### **1.1 Chapter Overview**

This introductory chapter provides a succinct overview of the different aspects which define the study being carried out with further elaboration being provided in the respective chapters to follow. Primarily, this chapter portrays a preliminary depiction of the factors and realities underlying the study, followed by the purpose of the research and the questions it seeks to address. A note on the rationale behind the choice of research topic is also presented as well as an overview of the methodological process utilised. Finally, the layout of the dissertation in its entirety is also highlighted.

### **1.2 Preamble and rationale behind the choice of research topic**

Mental health difficulties are the leading cause of disability and mortality in young people and result in significant impairment across different areas of functioning (Koning et al., 2019; World Health Organisation, 2013a). However, a large proportion of children and adolescents with mental health difficulties are never identified and ultimately, do not receive treatment (Sheldrick et al., 2011). As a result, many children and adolescents face these difficulties without appropriate intervention, possibly leading to notable difficulties in their ability to learn, engage with others, and achieve goals which results in an overall poor quality of health and wellbeing (Koning et al., 2019). Given the high prevalence of such difficulties, the low rates of identification and intervention, and the disruption caused to a young person's day-to-day life, the need to explore pathways to alleviate this scenario was deemed to be essential by the researcher.

In an attempt to accomplish this, teachers have emerged as seminal entities in the researcher's mind as having the potential to allay these difficulties and ameliorate the quality

of life of children and adolescents impacted by mental health struggles. Children spend around half of their day in close contact with educators, and might think of teachers as role models, friends, and trusted confidants (Keiler, 2018; Roxå & Marquis, 2019; Venkataraman et al., 2019b). Due to this, as well as teachers' frequent observation of students across different activities, educators are in an optimal position to identify mental health difficulties in students at critical stages to ensure that they are directed to appropriate intervention. Teachers are also identified as key components of mental health care which are grossly underutilised, leading to a significant source of untapped potential within a system that is in desperate need of additional resources (Saxena & Setoya, 2014). Hence, teachers can form an integral part of mental health care provision if they are offered support and training to carry out this role (Pereira et al., 2014).

Prior to this, however, it is important for stakeholders and decision makers to have a clear indication of where teachers stand with regards to their training related to mental health difficulties and their level of mental health literacy. This can allow for the elicitation of what assistance is necessary to allow teachers to maximize their potential of safeguarding student mental health. Following this, evidence-based programmes can be tailor made to suit the identified needs and hence, to allow teachers to carry out this much needed role in an effective manner.

The choice of research topic has therefore emerged from an awareness of these realities impacting young individuals and as an attempt to provide much needed insight into teachers' knowledge, attitudes, and beliefs about mental health difficulties in students. It is then hoped that such insight can lead to the implementation of necessary protocols aimed at enabling teachers to contribute towards bettering student mental health.

The researcher is also a strong believer in addressing inequalities in health and education in young people and hopes to play a part in ensuring that these crucial aspects of children's lives can be prioritised. Having worked within different school contexts, the researcher is also aware of the salience and repercussions of mental health challenges in students and thus, wishes to assist in bringing about positive change through this research.

### **1.3 Aim of Study and Main Research Questions**

This research, therefore, aims to explore secondary school teachers' knowledge, attitudes, and beliefs about commonly experienced child and adolescent mental health difficulties. In doing so, the study seeks to evaluate Maltese teachers' level of mental health literacy built on the conceptualization of the topic as given by Jorm et al. (1997). Based on this, this research aims to explore secondary school teachers': ability to identify common mental health difficulties; beliefs regarding risk factors and the impacts of mental health difficulties on different areas of functioning; attitudes towards mental health and students with mental health difficulties; and knowledge about local mental health services available for children and adolescents.

In order to explore teachers' mental health literacy, the following research questions were adopted:

- 1) What are secondary school teachers' attitudes, beliefs, and perceptions of young people's mental health difficulties and about students with such difficulties?
- 2) How knowledgeable are secondary school teachers about the most common mental health difficulties found in children and adolescents?

3) How aware are secondary school teachers about appropriate avenues of referral when faced with young people who might be experiencing mental health difficulties?

Based on literature on the greatest prevalence of mental health difficulties and the peak age of onset (Danielson et al., 2018; Ghandour et al., 2019; Michaud & Fombonne, 2005), these research questions are posed in relation to depression and anxiety disorders in adolescents who are in secondary school.

#### **1.4 Brief Methodological Overview**

A quantitative approach is utilised in this research to maximise the possibility of obtaining an account of Maltese secondary school teachers' attitudes, knowledge, and perception relevant to the research questions. This allows for findings to be more easily accessible, and to facilitate decision making efforts for relevant authorities in line with conclusions drawn from this research (Gray, 2018).

To this end, an online survey constructed by the researcher was distributed among 156 secondary school teachers in Malta working in state, church, and independent schools. Data was collected over a period of 3 months and was analysed using IBM's Statistical Package for the Social Sciences (SPSS 27).

#### **1.5 Layout of Study**

This initial chapter has introduced the dissertation and provided an overview of what the research entails. Following this, chapter 2 presents a review of pertinent literature as well as previous research relevant to the research topic. Chapter 3 contains the methodological considerations for this research including the design of the research, the theoretical and

philosophical underpinnings, sampling strategy, the data collection tool, and the data collection and analysis processes. Following this, the results obtained from data analysis are provided in chapter 4 which are later discussed in the subsequent chapter. Chapter 6 concludes the study with a summary of findings, the strengths and limitations of the study, the potential uses of the study, and suggestions for future research in the area.

## Chapter 2: Literature Review

### 2.1 Introduction

This chapter presents seminal research pertaining to teachers' mental health literacy and literature related to teachers' perceptions, knowledge and attitudes towards child and adolescent mental health. Research examining the local scenario shall also be included alongside a critical overview of the relevant areas.

### 2.2 Mental Health Literacy

**2.2.1 Definition.** Mental health literacy (MHL) is a construct which evolved from research carried out in the field of health literacy (HL). HL is defined as “people’s knowledge, motivation and competences to access, understand, appraise, and apply health information in order to make judgments and take decisions in everyday life concerning healthcare, disease prevention and health promotion to maintain or improve quality of life” (Sørensen et al., 2012, p.3). HL has warranted ample attention due to its correlation with positive health outcomes (DeWalt et al., 2004), with the WHO stating that HL is an even better predictor of positive health outcomes than other factors commonly considered to be pivotal including educational attainment, socio economic status, and racial and cultural factors (World Health Organisation, 2013b). MHL has been relatively under-researched when compared to HL with initial research on the area being carried out by Jorm and colleagues in 1997. Compared to HL, MHL has shown to be poorer among the general population as people tend to be significantly more knowledgeable about physical health than mental health (Wickstead & Furnham, 2017). In addition, a study by Bonabi et al., (2016) also posits that this lack of knowledge and awareness also results in less attempts at help-seeking and as a

result, poorer prognosis for mental health issues. This was also noted in the local context in the European health literacy survey carried out in 2014 where 45% of Maltese respondents displayed difficulties in obtaining information and seeking assistance regarding common mental health difficulties such as depression (Pelikan & Ganahl, 2017).

In essence, MHL is built on three main principles: recognition, attitudes, and knowledge. One of the initial definitions given by Jorm and colleagues (1997) states that MHL is “knowledge and beliefs about mental disorders which aid in their recognition, management or prevention” (Jorm et al., 1997, p.1). They further specify that MHL includes “the ability to recognize specific disorders; knowing how to seek mental health information; knowledge of risk factors and causes, of self-treatments, and of professional help available; and attitudes that promote recognition and appropriate help-seeking” (Jorm et al., 1997, p.1). MHL is also a leading aspect of health promotion efforts in various areas including schools, hospitals, and workplaces (Kobau et al., 2011).

**2.2.2 Importance of teacher Mental Health Literacy.** Adolescence is a pivotal point of development when it comes to mental health since most mental health difficulties initially present themselves during this period (Kessler et al., 2005; Khan, 2016). Hence, strategies aimed at identifying such difficulties and facilitating access to early intervention for adolescents are of paramount importance to safeguarding wellbeing, development, learning, and attainment, while also improving the prognosis of any mental health disorder (Koning et al., 2019). To achieve this, the involvement and contribution of different professionals and community structures is required to facilitate a wider and more accurate identification of issues at an appropriate stage as highlighted in the WHO 2013-2020 comprehensive mental health action plan (Saxena & Setoya, 2014).

Given that young people spend around half of their day at school under the observation of educators, teachers are in a unique and privileged position to enact this role. In fact, teachers can be an essential resource in the provision of, and access to mental health care. Despite this, the involvement of teachers in the management of mental health difficulties in children and adolescents is still an area which is greatly neglected (Venkataraman et al., 2019b). Furthermore, in order to enact this role, teachers need adequate knowledge of mental health in children and adolescents; a component which is rarely emphasised during training and professional development (Pereira et al., 2014). This results in teachers being under-equipped to recognise and assist with related difficulties.

For many adolescents, teachers serve multiple roles alongside being educators. This might include the function of role model, friend, and a secure source of attachment (Keiler, 2018; Roxå & Marquis, 2019). Moreover, through establishing a good level of rapport, they can leave significantly positive impacts on students' lives (Reinke et al., 2011). This allows them the possibility of detecting difficulties at a prodromal, and more-manageable stage prior to more serious co-morbid difficulties presenting themselves (Venkataraman et al., 2019b). Maximising this potential would however require teachers to be aware of what to look out for and how to best assist as necessary.

Moreover, a study by Miller et al., (2018) demonstrated how teacher mental health literacy is positively correlated with mental health literacy among adolescents. Hence, having teachers who are well informed and adequately knowledgeable about mental health allows adolescents to also be able to recognise presenting symptoms and early signs of the need for assistance. This is particularly important given that many adolescents struggle to understand and come to terms with the turbulence associated with pubertal development and as a result, leave potentially serious difficulties unaddressed (Radez et al., 2020; Wisdom et al., 2006).

Thus, having teachers who are not only knowledgeable about common mental health difficulties but also self-care strategies, avenues of referral, treatment options, and services available, can allow for easier access to support, a decrease in stigma and misconceptions about mental health difficulties, and an environment in which adolescents can feel more comfortable expressing themselves and their concerns (Radez et al., 2020). In addition, having teachers who are knowledgeable about mental health allows them the opportunity to empower impacted students who might be struggling to feel understood and who feel unworthy of seeking assistance (Johnson et al., 2010). Given the often-lengthy waiting lists for access to services as well as the limited time and resources available for each child, teachers can also bridge the gap and potentially make up for the multiple lacunae present in mental health service provision (Atkins et al., 2002; Lynn et al, 2003).

**2.2.3 Mental Health Literacy in Teachers.** Despite the importance of teachers having a good level of MHL, research shows that teachers are frequently unable to identify symptoms of depression and anxiety among students (Dwyer et al., 2006). This highlights the need to evaluate teachers' strengths and weaknesses in this regard and to offer assistance accordingly. Research exploring MHL in Portuguese schools showed that even when teachers were able to identify mental health issues in vignettes, they lacked overall mental health literacy skills (Almeida et al., 2017). This study also identified the need to provide training to help teachers navigate the present climate of mental health issues featured most commonly in students, and for them to be included within mental health care in a more direct manner. An additional study exploring mental health literacy in teachers of children with parents who have mental health difficulties similarly showed that, while teachers might be able to identify difficulties in their students, they feel uncertain regarding how to offer support and how to carry out their jobs effectively (Bruland et al., 2017). Harsch and colleagues (2018) also

concur with this sense of uncertainty and the lack of overall knowledge about how to intervene and offer assistance in educators.

A significant contributor to these deficits is the minimal training provided to teachers during their professional education. In a study exploring teachers' needs when it comes to supporting student mental health in the United Kingdom, Shelemy et al. (2019) highlighted the lack of training teachers receive in relation to mental health, and also identified the need for teachers to be trained on how to provide early intervention support for struggling students while not taking on the role of therapist. This study also showed how important it is for teachers to receive training that is ultimately practical, specific, and mindful of the limitations that teachers and the school setting have. They also expressed the wish for such training to be provided by experts in the field while also being offered resources that could be used in school settings. This was particularly emphasised given that teachers reported having limited access to support and supervision from mental health professionals who could provide a consultative role within classrooms.

An additional study focusing on Australian schools by Cefai and Cooper (2017) similarly highlights teachers' desire to have additional education about social and emotional difficulties in children as well as mental health promotion. Teachers who participated in this study further highlight the importance of assisting educators in building meaningful and healthy relationships with students who might be facing challenges related to mental health since, despite not being mental health professionals, teachers play a very important role in this regard for their students. Linking these findings to the local context, Askell-Williams and Cefai (2014) carried out research about Australian and Maltese teachers' perspectives and beliefs about their contributions towards mental health promotion in schools. This study showed that while teachers seemed to be receptive and have a positive attitude towards

mental health promotion, a substantial number felt unsure about their capability to carry out this role due to their perceived need to be supported to develop more in this field. This study also provides one of the only sources of information about this topic in the local context to date, making it evident how greatly under-researched MHL in teachers truly is.

### **2.3 Perceptions and Attitudes towards mental health – the role of stigma**

**2.3.1 Definition of stigma.** Goffman (1963) describes stigma as a label imposed on individuals which is greatly demeaning, and which reduces the worth of said individual as though they were tainted or less than whole. Dudley (2000) adds that these negative views are attributed to individuals whose characteristics are deemed to be different or inferior to what is seen as the norm by society. This poses significant hindrances to feeling as though one belongs, and their chances of success and life satisfaction. Stigma can arise from numerous socio-cultural factors and can be present in a multitude of areas including ethnicity, personal identity, religious beliefs, and health. Amongst these areas, mental health is one of the most rife with stigma (Corrigan & Watson, 2002). This carries several repercussions for those with mental health difficulties and those close to them.

**2.3.2 Impact of mental health stigma on students.** A search of studies related to the impact of mental health stigma on children and adolescents revealed a paucity of relevant literature, with most studies instead focusing on stigma among adults seeking employment. The limited studies that are available do however agree that the impacts of mental health stigma can be greatly detrimental to student wellbeing in a biopsychosocial manner.

It is important to keep in mind that individuals who face mental health difficulties experience limitations related to the symptomatology of the mental health difficulties they are experiencing, alongside the significant challenges related to stigma itself (Corrigan &

Watson, 2002). The cumulative impact of these stressors presents an additional source of difficulty and can lead to a worsening of symptoms, and the development of new mental health challenges. Hence, alongside the other impacts that it has, stigma can act as a catalyst for the poor prognosis of mental health difficulties (Corrigan & Watson, 2002).

Focusing more specifically on the direct impacts of stigma, individuals who experience prejudice and who are stereotyped into harmful depictions of the mentally ill (such as being dangerous, unstable, violent etc.) are denied opportunities which can improve one's quality of life. For instance, public stigma has been shown to manifest in being denied access to services, being coerced into taking decisions against one's volition, being segregated, and being thought of as incapable of success and achievement (Corrigan & Watson, 2002). In turn, stigmatized individuals often begin to internalise the views of those around them and might begin to experience self-stigma and discredit their own worth (Mukolo et al, 2010). This can lead to a low sense of self-efficacy, an external locus of control, and a mentality defined by beliefs of inferiority and feeling as though one is a burden (Martin, 2010).

In students, this is linked to greater predispositions to being bullied, poor academic performance, lack of social support from peers, and challenges with seeking initial employment. Stigma also leads to issues related to independence, and long-term disadvantages related to socio-economic status and accessing further education (Koruk, 2017; Mann et al., 2004). In fact, students with mental health difficulties are the cohort least likely to complete their studies, surpassing all other disabilities (Cavallaro, 2005; Martin, 2010; Moisey, 2004).

Being bullied and having very few friends has also been shown to lead to impoverished wellbeing in children and adolescents, which can give rise to more serious mental health difficulties including self-harm and suicidality (Ford et al., 2017). During adolescence, students can also experience great distress over difficulties in forming initial romantic relationships as a result of stigma. These difficulties can persist into adulthood and influence an individual's ability to form and maintain healthy relationships, and to seek social support when needed (Elkington et al., 2013). Individuals who experience stigma are also less likely to access mental health services as well as having low adherence to treatment provided (Henderson et al., 2013). As a result, students who have to deal with their challenges in secrecy and isolation are also more easily overwhelmed and unable to cope with the social, developmental, and academic demands placed upon them. This can manifest in difficulties with concentration and attention, memory, health behaviours, weight and appetite, sleep patterns, chronic fatigue, irritability, and a greater likelihood of experiencing psychosomatic difficulties including headaches and gastrointestinal issues (Mulvey et al., 2017; Sumter & Baumgartner, 2016). Exacerbating this, research shows that students who manage to access higher education are also not likely to disclose their difficulties and in turn, not receive appropriate emotional and academic support (Martin, 2010). This highlights how difficulties related to mental health in students persist across different life-stages.

Finally, it is also important to note that stigma is not instigated exclusively by other students or teachers. Literature shows that adults who are given vignettes of children and adolescents exhibiting emotional and behavioural difficulties were likely to react negatively towards them, and to also agree to utilise punitive measures to correct the hypothetical child (Mukolo et al., 2010). They are also more likely to distance themselves from the child and their family, blame the parents for the child's difficulties, and to approve of more severe

treatment methods to ensure that the issue is rectified (Pescosolido et al., 2007). These attitudes and beliefs also play a role in stifling a child's potential and instilling a negative label on the child that can persist throughout their lives. Hence, it is important to not only develop mental health awareness in professionals, but rather, society as a whole.

**2.3.3 Teachers' perceptions and attitudes towards mental health.** Teachers' perceptions and attitudes towards mental health difficulties can play a large role in student mental health (Breuer, 2016). Teachers are frequently looked up to by their students and hence, their beliefs and behaviours have the potential to shape students' perspectives (Keiler, 2018; Roxå & Marquis, 2019). This also occurs in relation to mental health. As a result, teachers impact the way students perceive themselves, as well as the way other students view and interact with classmates who are experiencing difficulties with mental health (Martin, 2010). This is important to keep in mind since mental health difficulties can result in ostracizing, bullying, and a worsening of difficulties for students if mental health literacy is low in the school environment (Townsend et al., 2015).

A study by Breuer (2016) exploring high school teachers' perception of mental health difficulties in students shows that teachers who do not perceive mental health difficulties to be of concern were also not likely to refer students to receive psychological support. This can have detrimental impacts on students given that teachers are often the initial source of identification and referral for students to receive intervention (Marsh, 2005). Conversely, psychological openness, or an individual's acknowledgement of the importance of psychological problems and their treatment, was linked with a higher probability of ensuring that students are able to access assistance in Breuer's study. This study also showed a significant negative relationship between teacher stigma towards mental health difficulties and the likelihood of students receiving appropriate support (Breuer, 2016).

Fortunately, limited research shows that generally, stigmatizing views are rarely held by teachers, even in the absence of specific mental health training. Research also shows that even in instances where stigma is low, additional educational intervention further reduces stigma and fosters positive attitudes and mental health promoting behaviours in teachers (Cautillo, 2018). These findings are however not generalizable in populations where mental health is commonly downplayed with a study carried out in India showing that up to 50% of students with mental health difficulties drop out of school due to lack of professional assistance (Malhotra & Patra, 2014; Venkatamaran et al., 2019a). This highlights the important role played by culture when it comes to acceptance and help seeking behaviour in relation to mental health. By extension, this also shows the importance of targeting societal mental health awareness and literacy to allay the presence of stigma and prejudice in educational settings.

## **2.4 Child and adolescent mental health**

**2.4.1 Definition of mental health.** In 2005, the World Health Organisation (WHO) issued an overhauling reconceptualisation of mental health in an effort to shift focus away from pathology and the seemingly interchangeable definition of mental health as “mental illness” (Herrman, Saxena & Moodie, 2005). This new definition notes that mental health is: “a state of wellbeing in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community” (Herrman, Saxena & Moodie, 2005, p. 60). This definition widens our understanding of what mental health encompasses and amalgamates various aspects of day-to-day life within the sphere of mental health including personal satisfaction, social functioning, occupational performance, learning, recreational activities etc. (Manderscheid et al., 2010). In line with this, mental health should not be looked at as a

black or white construct, but rather as a spectrum of many shades of grey onto which every individual falls (Galderisi et al., 2015). Furthermore, also central to the World Health Organisation's beliefs, is that prioritising wellness and mental health is a fundamental part of looking after one's health, and that physical and mental health are equally important aspects of being healthy. Reflecting this belief, a reclassification of what "health" entails was also made in the organisation's constitution to move past the limiting bio-medical view of health which merely centred around physiological functioning. Their chosen definition of health based on a biopsychosocial framework is: "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity." (World Health Organisation, 2020, p. 1)

**2.4.2 Mental health in children and adolescents.** Mental health and related concerns are not exclusive to adults. Children and adolescents' health and wellbeing are also significantly impacted by the state of their mental health, and research shows that the earlier the recognition and treatment of mental health difficulties, the better the long and short-term prognosis (Koning et al., 2019). Furthermore, this is also a life-stage which is paramount to the long-term wellbeing of an individual, and failure to safeguard mental health in this population can have significant repercussions (Kessler et al., 2005; Koning et al., 2019). Despite this, several individuals incorrectly believe that these issues do not apply to non-adults. Children and adolescents as well as their caregivers also face difficulties in identifying potential mental health difficulties, partially due to the overlap with emotional turbulence associated with pubertal development (Radez et al., 2020; Wisdom et al., 2006). Apart from this, parents might not have the knowledge and awareness to spot behavioural signs and other signals in their children which could signify concern related to mental health (Royal Children's Hospital, 2017). This is of particular concern given that mental disorders,

especially neuro-psychiatric conditions, are the leading cause of disability in children, and are also one of greatest sources of mortality (World Health Organisation, 2013a). In addition, the current climate resulting from COVID-19 has presented additional cause for concern given preliminary research indicating that mental health issues in children and adolescents have increased during the pandemic period (Racine et al., 2020).

Mental health difficulties in children are typically classified as internalizing (depression, anxiety, psychosomatic complaints etc.) or externalizing (behaviour that challenges, attention-deficit/hyperactivity disorder, oppositional defiant disorder, conduct disorder etc.) (Achenbach et al., 2016). In children, the latter are more commonly seen as the target of intervention by caregivers and teachers due to the challenges these difficulties pose for people around the affected child. Internalising difficulties on the other hand, can be significantly more challenging to notice, and can be mistaken for being personality characteristics of an individual as opposed to an issue causing significant distress and impairment. Despite this, they are still of great detriment to the well-being of the individual (Ahenabch et al., 2016).

**2.4.3 Adverse impacts of poor child and adolescent mental health.** Safeguarding mental health in children and adolescents has been associated with a myriad of positive outcomes (Howell et al., 2013). However, children and adolescents experiencing challenges related to mental health are at risk of several adverse outcomes. This includes professional challenges, a greater tendency to resort to health compromising behaviours such as drug use and unsafe sex practices, early mortality, issues with the criminal justice system, self-harm, challenges forming and maintaining healthy relationships, socio-economic hardships, a worsening of present mental health difficulties, and the development of new and potentially

more severe mental health difficulties (Bellis et al., 2013; Gilgoff et al., 2020; Mwachofi et al., 2020; Pinto et al., 2014).

Focusing more specifically on education and the school environment, research shows that the link between mental health difficulties and challenges impacting learning is substantial and can result in poor performance in standardized tests, school refusal and truancy, difficulties interacting and engaging with peers, having a negative attitude towards school and learning, and an overall lower likelihood of academic success (Suldo et al., 2013). Mental health related challenges to learning and educational attainment can also result in notable hindrances to positive life-long outcomes. Furthermore, Roeser et al. (1998) note how the interaction of symptoms related to mental health difficulties as well as the challenges faced in the school environment synergistically increase the likelihood of early school leaving without obtaining any qualifications. They also note that this results in professional and social disadvantages which can increase the likelihood of experiencing further mental health issues while simultaneously limiting the individual's ability to ameliorate their negative life circumstances in the future. Consequently, an individual might struggle to attain and develop their maximum potential and experience related positive outcomes including life satisfaction, financial stability, and a better quality of life (Roeser et al., 1998).

Hence, it is evident that mental health of children and adolescents must be prioritised for optimal development and to improve life-long conditions of living. Adults who experienced good mental health during their formative years and more positive childhood experiences are shown to experience lower rates of mental health difficulties and are also less likely to require social and emotional support services (Bethell et al., 2019). Thus, it is in the interest of safeguarding the fundamental rights of children to ensure that utmost effort is made in a systemic manner to see that care can be accessed by all in need. It is only by doing

so that we are able to ascertain that the health of children and adolescents is safeguarded and that they are provided with the necessary conditions to experience an overall good quality of life (Shastri, 2009).

#### ***2.4.4 Prevalence and epidemiology of child and adolescent mental health***

***difficulties.*** The World Health Organisation (2013a) estimates that 10-20% of all children experience mental health issues. Mental health difficulties in children and adolescents have been found to contribute to significant biopsychosocial challenges and profound day-to-day functional impairment (Koning et al., 2019). Furthermore, despite children regularly accessing primary care services, mental health problems are often under-recognised, with nearly half of the children with mental health difficulties not being correctly identified (Sheldrick et al., 2011). Hence, the quoted figures are potentially only a portion of the actual degree of occurrence.

In a publication by the Centre for Mental Health in London, Khan (2016) states that the 11-15 age range encompasses the peak period for the development of initial mental health issues, and Kessler et al. (2005) similarly highlight how more than half of mental health issues present themselves before the age of 14 and persist across the lifespan. This presents a sound rationale as to why strategies aimed at identifying such difficulties and facilitating access to early intervention for this population are of paramount importance to safeguarding wellbeing, development, learning, and attainment while also improving the prognosis of any mental health disorder in the long-term (Koning et al., 2019).

Research also indicates that adolescent females experience overall significantly higher rates of mental health difficulties compared to males (Van Droogenbroeck, Spruyt & Keppens, 2018). This difference is particularly prevalent in depression, anxiety and eating

disorders as well as self-harm, suicidal ideation, and suicide attempts (Afifi, 2007; Hawton, 2002; Sadlet et al., 2018; Van Droogenbroeck, Spruyt & Keppens, 2018). In addition, a study on trends in antidepressant prescription in children in the UK between 2000 and 2015 showed that females were two to three times more likely to be prescribed antidepressants than males (Sarginson et al., 2017). This study also concluded that the rates of antidepressant prescription and usage had increased significantly over the years, particularly among older adolescent females.

On the other hand, adolescent males have a higher incidence of completing suicide which can be partially explained by the lethality of methods utilised by males compared to females; the latter being more likely to resort to self-poisoning and self-mutilation, as opposed to the higher likelihood of strangulation, use of fire-arms, and jumping from extreme heights shown in males (Hepp et al., 2011; Miranda-Mendizabal et al., 2019). In addition, adolescent males are also more likely to engage in high-risk behaviours and to have behavioural difficulties including substance misuse, unsafe sex practices and conduct disorder (Rice et al., 2018). Males are also more frequently diagnosed with neurodevelopmental disorders such as ADHD and autism spectrum disorder, although this might be a result of different presentations across genders and mental health professionals being less able to recognise these conditions in females (May et al., 2019).

Transgender and gender non-conforming adolescents show the highest incidence of mental health difficulties across all mental health issues and present significantly elevated rates of emotional distress, suicidal ideation, self-harm, body image issues, poor levels of social support, and difficulties related to educational attainment (Becerra-Culqui et al., 2018). In line with this, research carried out on transgender youth accessing services at gender clinics showed that 35% showed symptoms of depression in the clinically significant range,

and that half of participants had experienced suicidal ideations (with a third of all participants having also attempted suicide) (Olson et al., 2015).

In-depth local figures of prevalence are currently unavailable, but research is presently underway to obtain this data by ACAMH (The Association for Child and Adolescent Mental Health) Malta and are anticipated to be available in 2021. Limited data is available through an international study carried out across 42 countries by the World Health Organisation in 2016 in partnership with HSBC (Inchley et al., 2016). This study revealed that Maltese children and adolescents from all age groups were more likely to state that they are feeling low or nervous than the average adolescent from other countries. In addition, these feelings were noted to increase considerably with age and were noted to be more prevalent in females. Furthermore, according to a report published by the United Nations (Gromada et al., 2020), Malta ranked 34<sup>th</sup> out of 41 countries in overall child well-being (worse than 33 other countries) and 28<sup>th</sup> out of 34 (worse than 27 other countries) countries when looking at mental well-being specifically, with only 70% of adolescents aged 15 reporting high life satisfaction. Malta also placed 24<sup>th</sup> out of 41 (rated higher than 23 other countries) countries in suicide among youths aged 15 to 19 with a suicide rate of 6.8 per 100,000 adolescents (compared to Greece with a rate of 1.4 at 1<sup>st</sup> place and Lithuania with a rate of 18.2 at 41<sup>st</sup>).

**2.4.5 Common mental health difficulties in adolescents.** The Centers for Disease Control and Prevention note that ADHD, behaviour problems, anxiety, and depression are the most diagnosed mental health difficulties in children who are 2 to 17 years old (Danielson et al., 2018; Ghandour et al., 2019). They also note that rates of anxiety and depression increase significantly with age, particularly in adolescents in the 12 to 17 age-bracket (Ghandour et al., 2019). Michaud and Fombonne (2005) note similar findings when focusing on mental health in adolescents, with depression, anxiety, conduct disorder, substance misuse, and

eating disorders being listed as the most frequently occurring. Furthermore, figures from 2018 by the National Health Services (NHS) in the United Kingdom also list emotional disorders (primarily anxiety and depression) and behavioral disorders (mainly oppositional defiant disorder) as the most prevalent in adolescents (Sadler et al., 2018). They also point towards the drastically increasing rates of eating disorders as well as body dysmorphic disorder, particularly in females.

A personal criticism of findings issued by primary health agencies such as those mentioned previously is that the approach they take towards mental health displays bio-medical orientations. As a result, literature points almost exclusively towards diagnosable mental disorders when observing mental health with a significant underrepresentation of other significant quality of life factors related to mental health in a biopsychosocial manner. This could include social functioning, socioeconomic difficulties, family violence, adjustment, attachment, quality of life, etc. As a result, the voice of the child/adolescent and the lived experience feels lost in the rigorous search for illness and disorder.

**2.4.6 Risk Factors.** The quality of one's mental health and the development of potential mental health difficulties is a complex and non-linear process. Several factors can play a role in worsening one's mental health as well as making one more susceptible to experiencing mental health difficulties in the first place (Wille et al., 2008). Taking a biopsychosocial stance to understanding this process allows for a multi-faceted breakdown of these contributing factors.

From a psychosocial perspective, research over the last 20 years has focused on the presence of adverse childhood experiences (ACE) and the significant implications they have on life-long health outcomes. In essence, ACE can be thought of as potentially traumatic

aspects that children are exposed to, or experience during their development which influence and threaten safety and stability (Felitti, 1998). These include: experiencing any form of abuse (physical, emotional, sexual), being emotionally or physically neglected, living with and potentially caring for individuals with mental illness, experiencing domestic violence, having a household family member with substance use disorder, experiencing divorce, or having a household member incarcerated (Felitti, 1998). Experiencing these factors can influence an individual at a neuro-anatomical level, making them more likely to experience stress, perceive neutral situations as threatening, reduce the body's ability to regulate emotions, and influence the functioning of numerous bodily systems. This can also influence neurotransmitter activity, executive functioning, memory, learning and pain response (Siegel, 2012; Sherin & Nemeroff, 2011). In turn, ACE significantly increase the likelihood of individuals developing substance use disorder, engaging in high risk behaviours and unsafe sex practice, experiencing emotional distress, reduce an individual's ability to cope by using healthy and appropriate methods, negatively impact one's ability to form and maintain healthy relationships, heighten the risk of suicidal ideation and suicidality, and increase the likelihood of developing depression, anxiety, post-traumatic stress disorder, conduct disorder, and personality disorders (Cattane et al., 2017; Hughes et al., 2017; Muniz et al., 2019; Mwachofi et al., 2020; Ott et al., 2016; Sherin & Nemeroff, 2011).

Apart from ACE, research highlights additional risk factors for poor adolescent mental health. At a biological level, genetic predispositions as well as neurophysiological deficits can have a significant impact on one's mental health (Cirulli et al., 2009, Newman et al., 2016). Furthermore, individuals with chronic physical illness have a significantly higher chance of experiencing poor mental health, particularly during childhood and adolescence (Karukivi & Haapasalo-Pesu, 2017). Trauma sustained to the brain can also have an impact

on behaviour, cognition and emotional functioning in individuals and their caregivers (Chan et al., 2009) as well as prenatal factors including developmental issues, maternal substance use, and toxin exposure (Newman et al., 2016). Having a mental health difficulty also increases the likelihood of experiencing additional comorbid mental health difficulties in a graded and cumulative manner (Plana-Ripoll et al., 2019). Furthermore, other factors that can be thought of as risk factors for poor child and adolescent mental health particularly related to the school environment include: having learning difficulties, being bullied, not having supportive and present care-givers/teachers, and a poor schooling environment (Schulte-Körne, 2016). Finally, experiencing trauma or significant loss, having a disability, and being part of a minority group (ethnic, sexual, religious etc.) are also significant risk factors associated with poor mental health (Kaminer et al., 2005; Maxey & Beckert, 2016; Vega & Rumbaut, 1991).

**2.4.7 Protective Factors.** On the other hand, a number of additional factors provide a protective function for one's mental health and might simultaneously allay mental health difficulties and lead individuals to feel a sense of well-being and to be able to function well in their day-to-day lives (Wille et al., 2008).

From an attachment and parenting perspective, having a secure attachment with a caregiver who ensures that the child feels safe, protected, and has the necessary resources is an important protective factor for child mental health (Moretti & Peled, 2004). In addition, the use of positive parenting strategies and modelling of good stress management, coping, and resilience skills have also been found to be very beneficial (Rodriguez et al., 2014; Ryan et al., 2017). Furthermore, having healthy social connections with other children, feeling a sense of belonging and acceptance, having a healthy outlet for emotional expression, and

engaging with a community are also important protective factors (Stirling et al, 2015; Wille et al., 2008).

Focusing on the school environment, having teachers who demonstrate acceptance of individuality, understanding, and a belief in a child's abilities to succeed can be very helpful for a child's sense of self-worth and agency (Galanti et al., 2016; Ulug et al., 2016).

Educational attainment acts as one of the most important tools to help young people improve the trajectory of their lives and their living conditions and hence, aiding adolescents to achieve their goals offers life-long benefits while allowing them to feel a sense of accomplishment and life satisfaction (Suldo et al., 2006). In addition, the provision of a school environment conducive to learning which also allows for extracurricular activities such as sports and leisurely hobbies is also very important to safeguard children and adolescents' well-being (Garcia Bacete et al., 2014). Finally, offering early intervention and preventative mental health services to youngsters including: psychosocial skills training, psychoeducation, teaching coping and resilience skills, and professional intervention if necessary, offers important tools to help child and adolescent mental health from a primary, secondary and even tertiary prevention perspective (Das et al., 2016).

It is therefore evident that teachers and the school environment have the potential to act as essential factors which can safeguard child mental health, and which might offset a number of inequalities and adversities that some students have been exposed to. Thus, it is paramount that the mental health literacy of teachers be understood and bolstered to ensure that children can benefit from these potential benefits and as a result, thrive and develop in a healthy manner.

## **2.5 Conclusion**

In conclusion, this chapter has presented an overview of literature related to teachers' knowledge, attitudes, and perceptions of mental health difficulties, as well as the mental health challenges commonly experienced by children and adolescents. While analysing different studies, it was apparent that this topic, despite being of great importance, has not been explored in sufficient detail in the local context. In addition, despite more research being carried out in recent years, international research also does not provide a rigorous understanding of these factors in tandem. Furthermore, multiple studies seemed to apply a bio-medical understanding of mental health which is apparent through the methodologies utilised in various studies as well as the reported outcomes. Therefore the present study intends to address this lacuna by providing a more holistic and biopsychosocial overview of child and adolescent mental health as understood by Maltese secondary school teachers through an exploration of: attitudes and perceptions of mental health issues and students with these difficulties, knowledge about said difficulties and their implications on student wellbeing, and awareness of interventions and services that can be accessed by students with mental health difficulties.

The next chapter provides an overview of the methodology of this dissertation and a rationale for the decisions taken. The research design, data collection protocol, as well as the data collection tool shall be presented in detail and critically analysed in consultation with relevant literature.

## **Chapter 3: Methodology**

### **3.1 Introduction**

This chapter describes the methodological aspects of this research. This includes the primary aims and main research questions, and the rationale behind the study. The theoretical frameworks that inform the study as well as the researcher's self-reflexivity are also presented followed by an overview of ethical considerations. Finally, the data collection process, data collection tool, and data analysis are also explained in detail.

### **3.2 Aims and Research Questions**

The previous chapter provided evidence for the importance of mental health for adolescent development and how this can be greatly promoted by supportive and knowledgeable teachers. Based on this, this study explores secondary school teachers' knowledge, attitudes, and perceptions about common mental health difficulties experienced by children and adolescents. The approach taken towards understanding these factors shall be built on the notion of mental health literacy posited by Jorm et al. (1997). Based on this, this research aims to: assess teachers' ability to recognise presenting symptoms of common mental health difficulties and their knowledge of said conditions; evaluate their beliefs about risk and contributing factors of said difficulties; identify awareness of different avenues of referral to assist students; and to explore overall attitudes and beliefs about mental health difficulties.

The following research questions have thus been identified:

- 1) What are secondary school teachers' perceptions, attitudes, and understandings of young people's mental health difficulties and about students with such difficulties?
- 2) How knowledgeable are secondary school teachers about the most common mental health difficulties found in children and adolescents?
- 3) How aware are secondary school teachers about appropriate avenues of referral when faced with young people who might be experiencing mental health difficulties?

### **3.3 Theoretical and Philosophical Frameworks**

The main theoretical tenet underlying this study is that of mental health literacy as presented by Jorm and colleagues (1997). This depiction of mental health literacy and the multi-faceted components that act as its constituents inform the entire research process including the selection of research questions, the data collection tool, and the presentation and analysis of findings. In line with this, mental health literacy is not merely a matter of studying a textbook definition of different conditions, but a holistic process that incorporates one's subjective views about mental health, implicit and explicit beliefs including stigma, an understanding of symptomology and risk factors, and also the knowledge and ability to assist affected individuals to access help accordingly. This approach to mental health literacy thus allows for a dynamic understanding of the topic which is also mindful of the complex and intertwining realities underlying mental health and its understanding.

The researcher also views health and wellbeing as being a product of biological, psychological and social factors in line with a biopsychosocial approach to health as originally emphasized by Engel (1977). Therefore, the researcher upholds that by attending to

the psychological wellbeing of students, teachers are ultimately ensuring that children and adolescents can experience better health in order to optimise their ability to learn, socialise, pursue pleasurable activities, manage daily stressors, improve life-long outcomes, and experience a sense of wellness (Howell et al., 2013).

The study also subscribes to a post-positivism paradigm. Post-positivism can be conceptualized as a development and critique of positivism. Contrary to positivism which views reality as an objective construct that can be studied void of influence by the researcher's views and beliefs, post-positivism balances the belief of objectivity with a consideration of numerous biases, contexts, and personal values that impact all stages of the research process (Wagner et al., 2012). In doing so, post-positivism upholds a critical realism ontology which does not challenge the existence of an objective truth, but is simultaneously considerate of the researcher's personal contributions to its understanding. Hence epistemologically speaking, while an objective truth exists, its observation and study is ultimately imperfect as it is known through a lens which is tinted by the researcher, the methodological process, and the environment in which the study takes place (Creswell, 2014). As a result, the interpretation of findings is a crucial step worthy of reflection and consideration since despite the best of efforts, the research process is never value-free (Howell, 2013). The researcher is therefore constructing and painting a picture of knowledge and truth from their perspective (built on numerous beliefs, experiences, and preferences) and not merely documenting the laws of nature (Wagner et al., 2012).

This paradigm was chosen as it allows for a quantitative methodology while keeping in mind the importance of being aware of personal biases and remaining self-reflective throughout the research process. This was deemed to be important as the researcher is aware that his findings are ultimately contingent on his chosen theoretical approaches and

conceptualizations of the research topic which are embodied within the research design and the constructed data collection tool (Creswell, 2014). Thus, it is important to keep in mind the factors that have influenced the decisions taken by the researcher, the impact that these might have on the findings derived, and their interpretation. In line with this, the researcher's location of self and self-reflexivity is provided in the next section of the chapter.

A constructivist qualitative paradigm might also have been considered for this study with the aim of delving deeper into the subjective experiences and understandings which are explored more superficially with the current paradigm choice (Denzin & Lincoln, 2008). A preference for width over depth was however opted for to produce results which are more accessible for relevant authorities to bring about change (Gray, 2018). This is an important consideration given that this study is the first research of its kind locally and hence, providing a depiction of the overall scenario which might then instigate further research and investigation is particularly beneficial. The use of a mixed methods approach might also have been ideal to bolster the quality of findings, yet this was not feasible for the purposes of this research (Gutterman, 2020).

### **3.4 Location of Self within the research**

My previous work in school settings made me increasingly aware of challenges that students face within the school environment. Having experienced my own share of difficulties at school, I am cognizant of how difficult it can be to focus on education when one's internal and external environments provide numerous obstacles to success. On the other hand, as someone who has had the privilege of caregivers who prioritized my education, in conjunction with having minimal difficulties related to learning of my own, I am mindful that my struggles related to schooling pale in comparison to children who are not as fortunate.

Education has also acted as a tool which has allowed me to grow and derive great personal satisfaction while also facilitating my ability to lead a relatively advantaged life. In the interest of equal opportunities for all, I am thus concerned that other children might not be able to access their full potential and experience the same benefits allowed to me due to factors beyond their control.

Furthermore, as someone who fully embraces the role of advocacy associated with my profession, I place great importance in ensuring that children's rights are safeguarded and that children have the foundations upon which to develop into healthy adults. I feel especially strongly about this topic in relation to psychosocial issues which can at times go unnoticed by adults and which leave children at a significant disadvantage. My previous role as a psychology assistant in schools has allowed me to witness first-hand the devastating impacts that can result in students who find themselves in a daily battle with themselves and the world around them. As a result, mental health difficulties in children are issues which are particularly close to my heart. Being also aware that children are often helpless and voiceless when facing these difficulties, I am adamant about the importance of health and educational systems aiding in the detection of mental health difficulties and ensuring that proper care is accessible to all.

While I acknowledge that developments in this area require a great deal of input in a multidisciplinary and systemic manner, I feel that teachers are an especially important part of children's lives and hold the potential to bring about immeasurable positive change. Hence, I am of the belief that teachers should be assisted to reap the benefits allowed by their profession by acting as pivotal components of mental health care. This study has therefore emerged as an important topic of exploration for me to be able to assess the local scenario in this regard and to consequently identify how to best aid teachers to fulfil this role while

feeling supported and empowered. Having research that provides insight into teachers' mental health literacy and that can identify lacunae in training, skills, and knowledge is therefore essential. This is also an area which is of great personal and professional interest to me, and I hope to be able to contribute towards implementing the necessary changes that emanate from this research.

### **3.5 Participant Characteristics**

Following the peak age of onset and prevalence of mental health difficulties in young people (Kessler et al., 2005; Khan, 2016), the participants for this study were practicing teachers presently working in a secondary school setting. Data was gathered from 156 respondents - 36 males, and 120 females, in line with EUROSTAT 2018 figures on gender distribution among secondary school teachers in Malta. The sample included teachers from the three sectors of Maltese education, namely state, church and independent schools, with no exclusion criteria set for age, experience, qualification type, gender, or subject taught.

### **3.6 Research Design and Data Collection Procedure**

Data was collected using an online questionnaire which allows for several advantages over manual distribution. This includes expediting the data gathering process, reducing costs related to printing, mailing, transportation, etc., ensuring that responses collected are valid and by utilising mandatory field requirements, reducing logistical struggles for the researcher, and ultimately allowing for optimized data storage and analysis. An online questionnaire can also facilitate instantaneous dissemination through numerous distribution platforms and offers respondents the option of answering at their own convenience and with greater anonymity when compared to traditional pen-and-paper approaches (Evans & Mathur, 2005).

Online surveys are however not without their drawbacks. Primarily, certain strata of the population are excluded should they not make use of information technology or have access to the internet (Evans & Mathur, 2005). To attempt to counteract this, printed copies of the questionnaire were also available for distribution for individuals who might be interested, yet this option was ultimately not utilised given restrictions arising from COVID-19 and the resulting challenges related to physical distribution and gathering of data. By using an online data collection method, participants are also less able to clarify queries and uncertainties on the spot which can result in responses which are not representative of the desired construct being explored (Kilinc & Firat, 2017). In order to alleviate this, the researcher's contact information was provided to allow for an avenue of communication.

Different sampling methods were used to gather data throughout the research process due to the anticipated difficulty faced in gathering sufficient responses due to COVID-19 and the possible impacts on availability and willingness to complete the questionnaire. Purposive sampling was utilised by contacting selected individuals in different schools and asking them to disseminate the survey among colleagues. Purposive sampling involves the personal selection of participants based on particular criteria (Etikan, 2016). These individuals were chosen based on their position within the school, their proximity to the researcher, and their interest in the research topic. Purposive sampling was also used to improve the chances of gathering adequate responses from different school types (state, church, independent). A criticism to purposive sampling is however that the sample is not truly random and that an element of selection bias is present given the researcher's personal identification of individuals/respondents (Etikan, 2016).

Following this, the colleagues of the initially identified individuals were encouraged to further disseminate the questionnaire among colleagues and individuals who they deemed

might be interested in participating, thereby incorporating a snowball sampling strategy. The main disadvantage of this approach is that an individual's social network is more likely to be composed of similar individuals, potentially leading to a biased and less representative sample (Johnson, 2014). These limitations were however tolerated due to the anticipated boost that would be provided to dissemination and data collection from a population from which gathering adequate response rates was anticipated to be challenging (Sharma, 2017).

An online data collection method also allowed for the use of Maltese Facebook groups for teachers as a means of facilitating distribution. Nicholas and Rowlands (2011) posit that the use of social media as part of the research process carries numerous advantages and can hence be a powerful tool to aid researchers, most notably: the facilitation of distribution, the provision of a platform that allows for more direct and informal communication, and the possibility of dissemination along a particular individual's network of contacts (friends of a participant who shares the questionnaire) and not only that of the researcher. On the other hand, this approach adds an additional element of selection bias given that social media users include a far greater proportion of younger individuals who might be more comfortable using the internet technology (Alshaikh et al., 2014). Finally, the Malta Union of Teachers (MUT) was also contacted who assisted in the distribution of the survey among their members, thereby adding another layer of convenience sampling.

### **3.7 Data Collection Tool Construction Procedure**

Initially, ample effort was invested in finding a pre-existing measure that could be utilised in this study. Following consultation with a systematic review of assessments available related to mental health literacy by Wei and colleagues (2016), it was concluded that none of the listed measures were suitable for this study. It was therefore decided that the

data collection tool would be constructed by the researcher himself. To aid in this process, literature about questionnaire development for different purposes (Bai et al., 2018; Evans-Lacko et al., 2010; Tsang et al., 2017) was also referenced to guide optimal questionnaire construction and validation.

The items included in the data collection tool for different sections emerged following consultation with ample literature related to the different mental health difficulties included in the questionnaire, common public misconceptions about mental health difficulties, perceptions of individuals with mental health difficulties, and impacts of mental health difficulties on students. Following item-generation through literature review, a panel of 5 experts comprising of psychologists who work with children and adolescents were asked to evaluate the initial items. This was primarily attempted to ensure content and face validity of the items and to ascertain that the breadth and depth of the items were sufficient (Haynes et al., 1995). To improve this process, it might have been beneficial to see that the expert review panel was also stratified by certain characteristics, and that an assessment tool specifically used for expert evaluation would have been provided to the reviewers as opposed to a more informal method utilised during this questionnaire development. Nevertheless, the exercise was found useful and minor amendments were then applied in line with suggestions by the panel.

Cognitive testing was then utilised with 5 non-mental health professionals. This was aimed at ensuring that the language and format of the data collection tool was not riddled with jargon, complex concepts, items that could be misinterpreted etc. (Collins, 2003). As a result, collated data would be more valid since the data collection tool is more likely to measure the intended constructs. This process can also act as a form of piloting for the tool as it allows for issues to be highlighted and amended prior to mass distribution and is

highlighted as an essential step in questionnaire development (Collins, 2003). Similar to the previous criticisms for the expert review stage, it is recognised that a stratified sample of individuals participating in cognitive testing would have been desirable in conjunction with a larger sample of individuals consulted for this step.

### **3.8 The components of the Data Collection Tool**

Following the overview of the design and construction process, the different sections of the data collection tool and the intended constructs to be measured shall be described in this section. The data collection tool is included in the appendix section of this dissertation (See Appendix 2) and was estimated to require 10 minutes to complete in its entirety. Further information about different components of the data collection tool is also provided in the relevant and corresponding sections of the results chapter.

**3.8.1 Demographic Information.** Demographic information was collected to allow for better meaning making of the data obtained. This included factors such as gender, age range, years of teaching experience, teaching-related qualification obtained, subject taught, and type of school participants taught in (state, church, or independent).

#### **3.8.2 Depression**

**3.8.2.1 Attitudes and Perceptions about depression in students.** This component was assessed by providing a number of statements about students who might have depression and asking participants to indicate the degree to which they agree or disagree with the different statements (E.g. “Students with depression are a hinderance to learning for the rest of the class”, “Students with depression have a normal medical condition that requires treatment”, etc.). These statements centred around their feelings about students who might have depression in the classroom, their behaviour, the challenges they might pose to teaching,

and overall beliefs about the nature of depression. Through this section of the data collection tool attitudes about general mental health and potential presence of stigma can also be brought to light.

The format chosen was that of a 4-point rating scale ranging from strongly agree to strongly disagree. The use of 4-point rating scales requires respondents to differ from neutrality which can often end up being the default response for individuals answering 5-point Likert scale questions who do not wish to commit to either extreme or spend much time thinking about different items. On the other hand, the 4-point format can result in greater cognitive load for participants while also showing overall less reliability when compared to using 7, and 9-point options. The 4-point scale option is however, overall, less overwhelming for participants in surveys which are relatively long as was the case in this study (Chyung et al., 2017).

**3.8.2.1 Perceptions about Risk Factors and Impacts of Depression on students.** These components were assessed by listing different areas of functioning particularly pertinent to students and asking participants to indicate to what extent they believed depression to have a negative impact on these aspects (E.g. learning, homework completion, concentration, self-esteem, behaviour, social functioning, overall health etc.) on a 4-point rating scale ranging from strongly agree to strongly disagree. The same format was then utilised to ask participants to what extent they believed different factors to be possible risk factors for depression in students (E.g. Abuse, bullying, prolonged experience of stress, lack of spirituality, low intelligence, etc.). Through these statements, an overview of teachers' subjective beliefs about important risk factors and the effects of depression on students' day-to-day functioning can be obtained. Knowing this can provide insight as to what teachers deem to be of concern and what requires attention and intervention. Conversely, it can also

identify if important aspects which should warrant concern are not prioritised by teachers and hence, how to best approach bolstering mental health literacy in this population.

**3.8.2.3 Knowledge about depression and suicide.** This component was addressed by providing statements about depression (and suicide by extension) as it pertains to students with a focus on presenting symptomology, prevalence, at risk individuals etc. (E.g. “Depression affects almost all adolescents by the time they turn 18”, “Depression causes low moods and a loss of interest in previously enjoyable activities”, “Males are more likely to attempt suicide, but females are more likely to complete it”, etc.). Participants were then asked to indicate whether they agree or disagree with the statements. Through this use of a dichotomous response format, an inference of the objective knowledge of depression can be portrayed as opposed to merely measuring subjective attitudes and beliefs (Allen, 2017). Participants were then asked to rate how knowledgeable they felt about depression in students on a 4-point scale (ranging from not knowledgeable to very knowledgeable) in order to be able to compare whether their subjective perceptions of the knowledge they have on depression differs significantly from the objective depiction derived.

**3.8.2.4 Confidence in dealing with students with depression.** This component was assessed by asking how confident teachers felt about different aspects of dealing with students with depression and assisting them on a 4-point scale ranging from not confident to very confident (E.g. “Your awareness of strategies you can use to help students experiencing depression”, “Your awareness of school systems that provide help to students with depression”, “Your ability to notice symptoms of depression in your students” etc.).

**3.8.2.5 Perceived adequacy of training in depression.** This component was assessed through the use of a single item asking respondents to indicate whether they agreed

with the statement “I feel adequately trained to handle students with depression” on a 4-point scale (ranging from strongly disagree to strongly agree).

### **3.8.3 Anxiety**

**3.8.3.1 Attitudes and Perceptions about anxiety in students.** These components were assessed by providing a number of statements about students who might have anxiety and asking participants to indicate the degree to which they agree or disagree with the content of different statements (E.g. “Students with anxiety are exaggerating and just do not know how to handle stress”, “Students with anxiety have a normal medical condition that requires treatment”, etc.). The format chosen was that of a 4-point rating scale ranging from strongly agree to strongly disagree, similar to the corresponding section on depression. These statements centred around their feelings about students who might have anxiety in the classroom, their behaviour, the challenges they might pose to teaching, and overall beliefs about the nature of anxiety. Through this section of the data collection tool, attitudes about general mental health and potential presence of stigma can also be brought to light.

#### **3.8.3.2 Beliefs about Risk Factors and Impacts of anxiety on students.**

These components were assessed by listing different areas of functioning particularly pertinent to students and asking participants to indicate to what extent they believed anxiety to have a negative impact on these aspects (E.g. learning, homework completion, concentration, self-esteem, behaviour, social functioning, overall health etc.). The format used was identical to the corresponding section for depression described previously with a 4-point rating scale ranging from strongly agree to strongly disagree. The same format was then utilised to ask participants to what extent they believed different factors to be possible risk factors for anxiety in children and adolescents (E.g. Abuse, bullying, prolonged experience of

stress, lack of spirituality, low intelligence, etc.). Through these statements, an overview of teachers' subjective beliefs about important risk factors and the effects of anxiety on students' day-to-day functioning can be obtained.

**3.8.3.3 Knowledge about overall anxiety, panic disorder and social anxiety disorder.** This component was addressed by providing statements about anxiety (and panic disorder and social anxiety disorder by extension) overall, and as it pertains to students with a focus on presenting symptomatology, prevalence, at risk individuals etc. (E.g. "Breathing into a paper bag will help an episode of panic disorder to pass quicker", "Anxiety can cause restlessness and irritability", "Social anxiety disorder is primarily an issue of self-esteem", etc.). Participants were then asked to indicate if they agree or disagree with the statements as described for the corresponding section for depression previously. Participants were then also asked how knowledgeable they felt about anxiety in students on a 4-point scale (ranging from not knowledgeable to very knowledgeable) in order to be able to compare whether their subjective perceptions of the knowledge they have on anxiety differs significantly from the objective depiction derived.

**3.8.3.4 Confidence in dealing with students with anxiety.** This component was assessed by asking how confident teachers felt about different aspects of dealing with students with anxiety and assisting them on a 4-point scale ranging from not confident to very confident (E.g. "Your awareness of strategies you can use to help students experiencing anxiety", "Your awareness of school systems that provide help to students with anxiety", "Your ability to notice symptoms of anxiety in your students" etc.).

**3.8.3.5 Perceived adequacy of training in anxiety.** This component was assessed through the use of a single item asking respondents to indicate whether they agreed

with the statement “I feel adequately trained to handle students with anxiety” on a 4-point scale (ranging from strongly disagree to strongly agree).

#### **3.8.4 Local Mental Health Services.**

The final section of the data collection tool dealt with teachers' knowledge of local services that target children and adolescents with mental health difficulties, as well as their awareness of what such services do and how to make referrals to such services. This section consisted of first-person statements and required participants to indicate the degree to which they agreed on a 4-point rating scale ranging from strongly agree to strongly disagree (E.g. “I feel confident about making a referral if necessary and what information to include”, “Should I be faced with a student who might be experiencing mental health difficulties, I am aware of a point of contact to ask questions and clarify concerns prior to taking further action”, “I have been given sufficient information about such services as part of my professional training as a student or during continuous professional development”, etc.). Teachers were finally asked to list up to 5 of the services they are most informed about to be able to discern which local services are best known and which services are seldom mentioned.

#### **3.9 Validation of the data collection tool.**

To assess validity, the internal consistency of selected components of the tool which involved multiple responses per construct was calculated. Most constructs or components had an internal consistency of good or higher, while the attitudes components towards both depression and anxiety showed less favourable psychometric properties (See Table 1). A calculation of additional validity factors such as test-retest or inter-rater reliability would have been ideal to further ascertain the reliability of the data collection tool and hence, the

reliability of findings obtained (Rameshbhai Pater & Joseph, 2016). Therefore, this is an important area of improvement for further research exploiting the area.

*Table 1: Internal consistency of different multi-item constructs*

<b>Component of Assessment</b>	<b>Internal consistency (Cronbach's alpha)</b>
Attitudes towards Depression and students with Depression	0.56 (Poor)
Perceived Risk factors for Depression	0.84 (Good)
Areas perceived to be negatively impacted by Depression	0.92 (Excellent)
Attitudes towards Anxiety and students with Anxiety	0.51(Poor)
Perceived Risk factors for Anxiety	0.84 (Good)
Areas perceived to be negatively impacted by Anxiety	0.94 (Excellent)
Confidence in dealing with students with Depression	0.81 (Good)
Confidence in dealing with students with Anxiety	0.81 (Good)
Knowledge about available services	0.87 (Good)

### **3.10 Data Analysis Procedure**

Data analysis was carried out using the Statistical Package for Social Sciences (SPSS) version 27. Descriptive analysis was carried out to explore the distribution of different variables and to present the outcome of different areas assessed. This included the use of measures of central tendency (mean, median, standard deviation), response frequencies, and cross tabulations. Following this, bivariate correlational analysis was carried out to better understand the potential relationship between different variables and different areas of

assessment. Given that the data was not normally distributed, this involved the use of different non-parametric statistical tests included Mann-Whitney U tests, Kruskal-Wallis H Tests, and Spearman's Rho Tests. All analyses were carried out utilising a 0.05 alpha level of significance.

### **3.11 Ethical Considerations**

Ethical standards are a vital aspect of any psychological research and allow the researcher to obtain data in a manner that does not compromise participants' wellbeing (Drew et al., 2008). Hence, utmost attention was given to ensure that the research process was ethical and followed research guidelines highlighted by the American Psychological Association (2017). Prior to data collection, the research proposal was vetted by the Faculty Research Ethics Committee (FREC) to ensure that the ethical standards required by University of Malta were met (See Appendix 1). Following approval by FREC, data was collected from voluntary adults who are not classified as vulnerable individuals. Necessary permission was also obtained from Malta Union of Teachers to aid in dissemination of the data collection tool. Furthermore, before indicating whether participants consented to take part, the purpose of the research, brief rationale and content of the data collection tool were explained to allow potential participants the possibility of informed consent. As a result, participants were free to decline to take part in the research at any time and to have their data deleted. Anonymity was prioritised to ensure participants would avoid feelings of judgment or shame, and to also potentially reduce social desirability (Larson, 2018). In addition, demographic data required by participants was also minimal and collected solely in the interest of deriving more meaningful findings and to allow for a deeper understanding of the research topic. Participants were also provided with the researcher's contact information should they wish to ask questions prior to participation or if they had any queries or concerns

which required addressing. Finally, no sensitive items were included to further ensure that participant well-being is safeguarded.

### **3.12 Conclusion**

This chapter has presented the methodological considerations utilized to carry out this study with the purpose of gaining an accurate and representative depiction of the research topic. The data collection and data analysis processes were also presented as well as the steps underlying the data collection tool's construction and validation. The following chapter shall provide the findings for this study which shall be discussed in the subsequent chapter.

## Chapter 4: Results

### 4.1 Introduction

This chapter lists the main findings of the study and is structured following the three main research questions posited in the previous chapter. The results will include preliminary descriptive statistics which summarise and describe the sample and the measured variables, alongside correlational analysis to explore possible relationships between potentially related variables.

### 4.2 Demographic Variables

This section of analysis provides an overview of the demographic characteristics of the sample. The **gender distribution** of the 156 teachers consisted of 36 males (23%) and 120 females (77%), with no respondent selecting any alternative gender identities. As shown in Table 4.1, participants' ages were grouped among 5 **age range** categories: 20-29, 30-39, 40-49, 50-59, and 60 plus. The most common age range for males in the sample was 40-49 (36%), followed by 50-59 (25%), 30-39(22%), 20-29 (11%), and the 60 plus range (5%). Similarly, the most common age range for females was also the 40-49 range (35%) while the least common was 60 plus (3%). Aside from this, the remaining distribution of females across age ranges was not in congruence with male participants with the 30-39 range being second most common (30%), followed by 20-29 (19%) as third most common, and 50-59 (13%) as the fourth most common. As a result of the discrepancy between male and female teachers, female teachers also outnumbered males in every age range.

Table 4.1

*Descriptive Statistics: Gender and Age range Crosstabulation*

Gender		Age range					Total
		20-29	30-39	40-49	50-59	60+	
Male	<i>n</i>	4	8	13	9	2	36
	% within Gender	11.1%	22.2%	36.1%	25.0%	5.6%	100%
	% within Age range	14.8%	18.2%	23.6%	37.5%	33.3%	23.1%
Female	<i>n</i>	23	36	42	15	4	120
	% within Gender	19.2%	30.0%	35.0%	12.5%	3.3%	100%
	% within Age range	85.2%	81.8%	76.4%	62.5%	66.7%	76.9%
Total	<i>n</i>	27	44	55	24	6	156
	% within Gender	17.3%	28.2%	35.3%	15.4%	3.8%	100%

Teachers were also grouped according to **teaching experience** in 5 ranges: 0-4 years, 5-9 years, 10-14 years, 15-19 years, and 20 plus years. Table 4.2 shows the distribution of the sample across these categories, as well as the distribution of gender across ranges. The 20 plus years of teaching experience category encompasses the most respondents for both males and females (50% and 28% respectively) and includes 33% of the sample. The remaining ranges were relatively similar for male and female teachers with 0-4 years of experience emerging as the least common range.

Table 4.2

*Descriptive Statistics: Gender and Years of teaching Crosstabulation*

Gender		Years of teaching					Total
		0-4	5-9	10-14	15-19	20+	
Male	<i>n</i>	4	5	5	4	18	36
	% within Gender	11.1%	13.9%	13.9%	11.1%	50.0%	100%
	% within Yrs of teaching	19.0%	17.9%	16.7%	16.0%	34.6%	23.1%
Female	<i>n</i>	17	23	25	21	34	120
	% within Gender	14.2%	19.2%	20.8%	17.5%	28.3%	100%
	% within Yrs of teaching	81.0%	82.1%	83.3%	84.0%	65.4%	76.9%
Total	<i>n</i>	21	28	30	25	52	156
	% within Gender	13.5%	17.9%	19.2%	16.0%	33.3%	100%

Furthermore, the distribution of the **highest level of teaching related qualification** possessed by the teachers was also analysed. Responses provided by the sample fell into three categories: Bachelor's, Post Graduate Certification, and Master's level. Table 4.3 depicts the frequency of qualification levels across the sample and across gender. Overall, Bachelor's degrees and Postgraduate Certification were the most commonly possessed qualifications, both making up 35% of the sample respectively while a Master's degree was possessed by only 30% of teachers. Males were more likely to have a Bachelor's degree (39% of males) while females were more likely to possess either a Post Graduate Certificate or a Master's degree (36% and 30% of females respectively). Thus, 61% of males, and 66% of females had post graduate qualifications.

Table 4.3

*Descriptive Statistics: Gender and Qualification Level Crosstabulation*

Gender		Qualification Level			Total
		Bachelor's Degree	Post Graduate Certification	Master's Degree	
Male	<i>n</i>	14	12	10	36
	% within Gender	38.9%	33.3%	27.8%	100%
	% within Qual Level	25.5%	21.8%	21.7%	23.1%
Female	<i>n</i>	41	43	36	120
	% within Gender	34.2%	35.8%	30.0%	100%
	% within Qual Level	74.5%	78.2%	78.3%	76.9%
Total	<i>n</i>	55	55	46	156
	% within Gender	35.3%	35.3%	29.5%	100%

The penultimate demographic variable in this study was **area of teaching**. Responses were grouped into seven broader subject areas for ease of analysis

Subject Area	Subjects
Vocational	Home Economics, Health and Social Care, VET subjects
Humanity	History, Geography, Religion
Language	Maltese, English, French, Italian, German, Spanish, Arabic
SMT (Sciences, Mathematics, Technology)	Biology, Chemistry, Integrated Science, Physics, Mathematics, Computer Studies, ICT
Psychosocial	PSCD, Ethics, Guidance
Art	Drama, Art, Music
Financial	Business Studies, Accounts, Economics

As shown in Table 4.4, the most common subject area for males was SMT which made up 42% of males in the sample while the most common subject area for females was Languages (35%). As a result of the discrepancy between the number of males and females in the sample as well as the amount of individual subjects which make up each subject area, Languages was the most common subject area for the sample (33%), closely followed by SMT (30%).

Table 4.4  
*Descriptive Statistics: Gender and Subject area Crosstabulation*

		Gender						Total	
		Male			Female				
Subject area		<i>n</i>	% within Gender	% within Subject area	<i>n</i>	% within Gender	% within Subject Area	<i>n</i>	% within Sample
		Vocational		2	5.6%	28.6%	5	4.2%	71.4%
Humanity		5	13.9%	29.4%	12	10.0%	70.6%	17	10.9%
Language		9	25.0%	17.6%	42	35.0%	82.4%	51	32.7%
SMT		15	41.7%	31.9%	32	26.7%	68.1%	47	30.1%
Psychosocial		2	5.6%	9.5%	19	15.8%	90.5%	21	13.5%
Art		2	5.6%	28.6%	5	4.2%	71.4%	7	4.5%
Financial		1	2.8%	16.7%	5	4.2%	83.3%	6	3.8%

**School sector** made up the final demographic variable obtained. Responses were sorted into 3 categories: State, Church, and Independent. As shown in Table 4.5, state was the most common sector for both males (44%) and females (55%), while independent was the least common for both males (22%) and females (18%). Overall, 55% of the sample worked in a state school, 29% in a church school, and 19% in an independent school.

Table 4.5  
*Descriptive Statistics: Gender and Sector Crosstabulation*

Gender		Sector			Total
		State	Church	Independent	
Male	<i>n</i>	16	12	8	36
	% within Gender	44.4%	33.3%	22.2%	100%
	% within Sector	19.5%	26.7%	27.6%	23.1%
Female	<i>n</i>	66	33	21	120
	% within Gender	55%	27.5%	17.5%	100%
	% within Sector	80.5%	73.3%	72.4%	76.9%
Total	<i>n</i>	82	45	29	156
	% within Gender	52.6%	28.8%	18.6%	100%
	% within Sector	100%	100%	100%	100%

### 4.3 Attitudes, Beliefs and Perceptions

This section explores the first of the three main research questions underpinning this study. Further results which emerge from correlational analysis across variables pertaining to different research questions and related to this research question are provided in the final section of the chapter.

*Research Question 1: What are secondary school teachers' attitudes, beliefs, and perceptions of young people's mental health difficulties and about students with such difficulties?*

The analysis of this research question will explore: Teachers' attitudes about depression, anxiety, and students with the conditions; teachers' perception of influential risk factors for depression and anxiety; and areas of functioning teachers perceive to be most negatively impacted by depression and anxiety.

### **4.3.1 Depression.**

Participants' **attitudes towards depression and students who might have the condition** were assessed via 7 statements about students with depression (see Table 4.6). Each item required participants to indicate whether they agreed or disagreed against 4 response options (Strongly Disagree, Disagree, Agree, Strongly Agree). The categorical responses provided for these questions were given numerical coding to allow more detailed analysis as explained in Table 4.6.

Furthermore, given that Q2, Q4, Q5, and Q7 were negative statements (indicating negative attitudes), their coding included reverse scoring. By doing so, the mean of attitude scores of Q1 to Q7 yields a participant's overall attitude score whereby 1 demonstrates a very negative overall attitude, and 4 a very positive overall attitude towards depression and students with depression.

As shown in Table 4.6, the overall attitude score for depression (and students with depression) was substantially positive ( $M = 3.21$ ,  $Mdn = 3.29$ ,  $SD = 0.38$ ). The statement for which teachers showed the most positive attitude was Q3 ( $M = 3.85$ ,  $Mdn = 4$ ,  $SD = 0.51$ ) while the least positively scored statement was Q4 ( $M = 2.6$ ,  $Mdn = 3$ ,  $SD = 0.89$ ). Despite this, given that the mean and median scores still exceed 2.5 (mid/neutral value), responses for Q4 still demonstrate a positive attitude, albeit to a lesser extent than the other statements.

Table 4.6

*Descriptive Statistics: Mean, Median, and Standard Deviation of individual Attitudes Questions and Overall Attitude Score for Depression*

	<i>N</i>	Mean <sup>a</sup>	Median <sup>a</sup>	Std. Deviation <sup>a</sup>
Q1: Students with depression have a normal medical condition which requires treatment	156	3.06	3.00	0.77
Q2: They use depression as an excuse for laziness and bad behaviour	156	3.29	3.00	0.66
Q3: They require support and understanding	156	3.85	4.00	0.51
Q4: They need to help themselves and just get over it	156	2.60	3.00	0.89
Q5: They are a hindrance to learning for the rest of the class	156	3.21	3.00	0.72
Q6: They would benefit from extra help in class to ensure they are learning	156	3.35	3.00	0.67
Q7: If possible, I would prefer not to have a student with depression in my class	156	3.13	3.00	0.78
Overall Attitude Score for Depression	156	3.21	3.29	0.38

<sup>a</sup>Responses were scored from 1-4: Strongly Disagree = 1, Disagree = 2, Agree = 3, Strongly Agree = 4

Furthermore, **beliefs and perceptions about depression** were also assessed through **perceived risk factors** for depression, as well as through **perceived areas negatively impacted** in students' lives due to depression. These areas were assessed by providing respondents with different factors and areas of functioning and asking them to indicate to what extent they believed these to be significant against 4 response options (Strongly Disagree, Disagree, Agree, Strongly Agree). The categorical responses were given numerical coding to allow more detailed analysis as shown in Table 4.7 and Table 4.8. The mean score of numeric responses for each factor thus indicates how significant each factor is perceived by teachers whereby 1 demonstrates that it is not perceived to be a significant risk factor, and 4 that it is perceived to be very significant (2.5 is the mid/neutral point).

As Shown in Table 4.7, Abuse, Domestic Violence, Trauma, Bullying and Stress were perceived to be the most influential risk factors for depression ( $M \geq 3.5$ ,  $Mdn \geq 3.5$ ). Lack of Spirituality, having a Disability, having Diabetes, and Low Intelligence were perceived to be the least influential risk factors for Depression ( $M < 2.5$ ,  $Mdn < 2$ ).

Table 4.7

*Descriptive Statistics: Mean, Median, and Standard Deviation of Perceived Risk Factors for Depression*

	Mean <sup>a</sup>	Median <sup>a</sup>	Std. Deviation <sup>a</sup>
Stress	3.50	3.50	.50
Trauma	3.65	4.00	.49
Abuse	3.76	4.00	.43
Domestic Violence	3.67	4.00	.49
Poverty	3.01	3.00	.74
Poor Nutrition	2.92	3.00	.74
Lack of Spirituality	2.44	2.00	.91
Parents with Condition	3.08	3.00	.70
Diabetes	1.94	2.00	.65
Bullying	3.55	4.00	.50
Social Media	3.00	3.00	.68
Low Intelligence	1.91	2.00	.65
Substance	3.30	3.00	.63
Disability	2.40	2.00	.76

<sup>a</sup>Responses were scored from 1-4: Strongly Disagree = 1, Disagree = 2, Agree = 3, Strongly Agree = 4

Overall, Table 4.8 shows that all the areas provided were perceived to be substantially negatively impacted in students with depression ( $M \geq 3.29$ ,  $Mdn \geq 3$ ). Motivation, Energy, and Concentration were the areas which teachers perceived to be the most negatively impacted ( $M > 3.75$ ,  $Mdn = 4$ ), while Chance to Succeed was the least ( $M = 3.29$ ,  $Mdn = 3$ ).

Table 4.8

*Descriptive Statistics: Mean, Median, and Standard Deviation of Perceived Areas Negatively Impacted by Depression*

	Mean <sup>a</sup>	Median <sup>a</sup>	Std. Deviation <sup>a</sup>
Learning	3.67	4.00	.48
Memory	3.44	4.00	.63
Motivation	3.83	4.00	.40
Energy	3.77	4.00	.44
Appetite and Weight	3.53	4.00	.55
Sleep	3.64	4.00	.53
Concentration	3.76	4.00	.43
Socialisation	3.66	4.00	.48
Self esteem	3.81	4.00	.39
Behaviour and Cooperation	3.48	4.00	.61
Chance to Succeed	3.29	3.00	.71
Homework Completion	3.43	3.00	.60
Exam Performance	3.45	3.00	.59
Attendance	3.47	4.00	.62
Overall Health	3.55	4.00	.59

<sup>a</sup> Responses were scored from 1-4: Strongly Disagree = 1, Disagree = 2, Agree = 3, Strongly Agree = 4

#### 4.3.2 Anxiety

Participants' **attitude towards anxiety** and students who might have the condition was assessed via 7 statements (See Table 4.9). Each item required participants to indicate the degree to which they agreed against 4 response options (Strongly Disagree, Disagree, Agree, Strongly Agree). The categorical responses were given numerical coding to allow more detailed analysis as shown in Table 4.9.

Furthermore, given that Q2, Q4, Q5, and Q7 were negative statements (indicating negative attitudes), their coding included reverse scoring. By doing so, the mean of attitude scores of Q1 to Q7 yields a participant's overall attitude score whereby 1 demonstrates a very negative overall attitude, and 4 a very positive overall attitude towards anxiety and students with anxiety (2.5 being the mid/neutral point).

As shown in Table 4.9, the overall attitude towards anxiety and students with anxiety was substantially positive ( $M = 3.14$ ,  $Mdn = 3.14$ ,  $SD = 0.36$ ). Q3 showed the most positive attitude score from the 7 statements provided ( $M = 3.71$ ,  $Mdn = 4$ ,  $SD = 0.48$ ). Q1 and Q4 mean attitude scores were considerably lower than those of other statements, especially Q4 which was only marginally above the mid/neutral point of 2.5 ( $M = 2.56$ ,  $Mdn = 3$ ,  $SD = 0.87$ ).

Table 4.9

*Descriptive Statistics: Mean, Median, and Standard Deviation of individual Attitudes Questions and Overall Attitude Score for Anxiety*

	<i>N</i>	Mean <sup>a</sup>	Median <sup>a</sup>	Std. Deviation <sup>a</sup>
Q1: Students with anxiety have a normal medical condition which requires treatment	156	2.88	3.00	0.74
Q2: They are exaggerating and just do not know how to handle stress	156	3.17	3.00	0.69
Q3: They require support and understanding	156	3.71	4.00	0.48
Overall Attitude Score Anxiety	156	2.56	3.00	0.87
Q5: They are a hindrance to learning for the rest of the class	156	3.19	3.00	0.71
Q6: They would benefit from extra help in class to ensure they are learning	156	3.21	3.00	0.68
Q7: If possible, I would prefer not to have a student with anxiety in my class	156	3.29	3.00	0.75
Overall Attitude Score Anxiety	156	3.14	3.14	0.36

<sup>a</sup>Responses were scored from 1-4: Strongly Disagree = 1, Disagree = 2, Agree = 3, Strongly Agree = 4

Furthermore, **beliefs and perceptions about anxiety** were also assessed through **perceived risk factors** for anxiety, as well as through **perceived areas negatively impacted** in students' lives due to anxiety. These areas were assessed by providing different factors and

areas of functioning and asking to what extent respondents agreed these were significant against 4 response options (Strongly Disagree, Disagree, Agree, Strongly Agree). The categorical responses were given numerical coding to allow more detailed analysis as shown in Table 4.10 and Table 4.11. The mean score of numeric responses for each factor thus indicates how highly ranked each factor is by teachers whereby 1 demonstrates that it is not perceived to be significant, and 4 that it is perceived to be very significant (2.5 is the mid/neutral point).

Table 4.10 highlights Bullying, Domestic Violence, Abuse, and Trauma as the most highly rated perceived risk factors for anxiety by teachers in the sample ( $M > 3.5$ ,  $Mdn = 4$ ). Lack of Spirituality, Low Intelligence, and having Diabetes were rated as the least significant perceived risk factors for anxiety ( $M \leq 2.26$ ,  $Mdn = 2$ ).

Table 4.10

*Descriptive Statistics: Mean, Median, and Standard Deviation of Perceived Risk Factors for Anxiety*

	Mean <sup>a</sup>	Median <sup>a</sup>	Std. Deviation <sup>a</sup>
Stress	3.49	4	0.60
Trauma	3.53	4	0.55
Abuse	3.58	4	0.58
Domestic Violence	3.58	4	0.54
Poverty	2.92	3	0.81
Poor Nutrition	2.79	3	0.82
Lack of Spirituality	2.26	2	0.92
Parents with Condition	3.03	3	0.79
Diabetes	2.03	2	0.72
Bullying	3.61	4	0.49
Social Media	3.15	3	0.72
Low Intelligence	2.17	2	0.80
Substance	3.21	3	0.67
Disability	2.53	3	0.86

<sup>a</sup>Responses were scored from 1-4: Strongly Disagree = 1, Disagree = 2, Agree = 3, Strongly Agree = 4

As shown in Table 4.11, all of the areas provided were perceived to be substantially negatively impacted in students as a result of anxiety ( $M > 3$ ,  $Mdn \geq 3$ ). Self Esteem, Concentration, and Socialisation were deemed to be the areas most negatively impacted ( $M > 3.5$ ,  $Mdn = 4$ ), while Attendance, Homework completion, and Chance to Succeed were the areas least negatively impacted ( $M \leq 3.17$ ,  $Mdn = 3$ ).

Table 4.11

*Descriptive Statistics: Mean, Median, and Standard Deviation of Perceived Areas Negatively Impacted by Anxiety*

	Mean <sup>a</sup>	Median <sup>a</sup>	Std. Deviation <sup>a</sup>
Learning	3.48	4	.56
Memory	3.35	3	.66
Motivation	3.38	3	.67
Energy	3.36	3	.64
Appetite and Weight	3.30	3	.64
Sleep	3.54	4	.54
Concentration	3.55	4	.52
Socialisation	3.50	4	.60
Self Esteem	3.59	4	.55
Behaviour and Cooperation	3.32	3	.68
Chance to Succeed	3.03	3	.81
Homework completion	3.08	3	.72
Exam Performance	3.44	3	.59
Attendance	3.17	3	.71
Overall Health	3.33	3	.59

<sup>a</sup>Responses were scored from 1-4: Strongly Disagree = 1, Disagree = 2, Agree = 3, Strongly Agree = 4

#### 4.4 Knowledge of mental health difficulties

This section explores the second main research question and is sectioned by condition (Depression and Anxiety). Further results which emerge from correlational analysis across variables pertaining to different research questions and related to this research question are also provided in the final section of the chapter.

*Research Question 2: How knowledgeable are secondary school teachers about the most common mental health difficulties found in children adolescents?*

The analysis of this research question will explore: Teachers' subjective and objective knowledge of depression, anxiety, and related conditions in students; teachers' perceived adequacy of training in depression and anxiety; and teachers' confidence in their ability to recognise symptoms of depression and anxiety in their students and handle them appropriately (via appropriate referral, appropriate intervention, appropriate interaction etc.)

##### 4.4.1 Depression

Teachers' **subjective knowledge of depression** in students was assessed through a single item measure which asked teachers how knowledgeable they felt they were about depression in students. Possible responses included: Not Knowledgeable, Slightly Knowledgeable, Quite Knowledgeable, and Very Knowledgeable. The categorical responses provided for this item were given numerical coding to allow more detailed analysis as shown in Table 4.12.

By applying numerical coding, the mean derived from all respondents ( $N = 156$ ) allows for an understanding of the overall subjective knowledge of the sample whereby an overall mean of 1 would indicate a very poor level, and a mean of 4 a very good level of subjective knowledge (2.5 is the mid/neutral point). As shown in Table 4.12, the sample indicated that they believed that they had quite a low level of knowledge of depression ( $M = 2.17$ ,  $Mdn = 2$ ). In fact, the most common response for this question was “Slightly Knowledgeable” (60% of responses), and only 2.6% of participants indicated being very knowledgeable about depression. Furthermore, 12.8% indicated that they were not knowledgeable (See Table 4.13).

Table 4.12

*Descriptive Statistics: Mean, Median, and Standard Deviation of Subjective Knowledge of Depression*

N	156
Mean <sup>a</sup>	2.17
Median <sup>a</sup>	2
Std. Deviation <sup>a</sup>	.67

<sup>a</sup>Responses were scored from 1-4: Not Knowledgeable = 1, Slightly Knowledgeable = 2, Quite Knowledgeable = 3, Very Knowledgeable = 4

Table 4.13

*Descriptive Statistics: Response Frequencies for Subjective Knowledge of Depression*

	<i>n</i>	%
Not knowledgeable	20	12.8%
Slightly knowledgeable	93	59.6%
Quite knowledgeable	39	25.0%
Very knowledgeable	4	2.6%

Teachers' **objective knowledge of depression** (and related conditions) in students was assessed through 14 statements: 9 about depression in general, and 5 about suicide as shown in Table 4.14. Participants were asked to indicate if the statements were true or false and their responses were then scored, with correct answers being awarded 1 point and

incorrect responses 0. The total of correct scores from Q1 to Q14 provides teachers' overall level of objective knowledge of depression (and suicide) in students.

Table 4.14 shows that Q2 had the highest rate of correct responses and was in fact answered correctly by all participants ( $N = 156$ ,  $M = 1$ ,  $SD = 0$ ). Q4 and Q13 were most often answered incorrectly with a correct percentage of 35% and 42% respectively. Overall, the frequency of correct responses for questions relating to depression (Q1-Q9,  $M = 84\%$ ) was substantially higher than that of questions related to suicide (Q10-Q14,  $M = 66\%$ ). The mean total score for objective knowledge of depression (including suicide) was 11.1 out of a maximum score of 14. Thus, as shown in Table 4.15, the mean percentage score obtained by teachers was 79%. The lowest percentage score obtained by participants was 50%, while the highest was 100%.

Table 4.14

*Descriptive Statistics: Correct Percentage, Mean, and Standard Deviation of Objective Knowledge of Depression questions and Total Objective Knowledge of Depression Score*

	Correct Percentage	Mean	Std. Deviation
Q1: Depression causes low moods and a loss of interest in previously enjoyable activities	99.4%	0.99	0.08
Q2: Depression can cause feelings of guilt, worthlessness, and hopelessness	100%	1.00	0.00
Q3: Depression can make it difficult to complete day-to-day tasks such as eating, leaving the house, showering etc.	99.4%	0.99	0.08
Q4: Depression leads to a loss of touch with reality with the presence of hallucinations and delusions	35.3%	0.35	0.48
Q5: Depression manifests in the same way for different individuals	92.3%	0.92	0.27
Q6: Depression affects almost all adolescents by the time they turn 18	86.5%	0.87	0.34
Q7: Depression cannot occur in pre-pubertal children (less than 11 years old)	82.1%	0.82	0.38
Q8: Depression is always the result of a traumatic event	93%	0.93	0.26
Q9: Depression occurs mostly in males	93.6%	0.94	0.25
Q10: Males are more likely to attempt suicide, but females are more likely to complete it	59%	0.59	0.49
Q11: Those who attempt suicide always have an underlying depressive disorder	63.5%	0.63	0.48
Q12: Suicide ranks in the top 3 causes of mortality in adolescents	77.6%	0.78	0.42
Q13: Adolescents contemplating suicide will always provide clues and signs prior to the attempt	42.3%	0.42	0.50
Q14: Having one unsuccessful suicide attempt decreases the likelihood of a future attempt significantly	85.9%	0.86	0.35
Total Objective Knowledge of Depression Score		11.10	1.43

Table 4.15

*Descriptive Statistics – Measures of Central Tendency: Mean, Median, Standard Deviation, Minimum, and Maximum percentage scores for total Objective Knowledge of Depression*

<i>N</i>	156
Mean Percentage Score	79.26%
Median Percentage Score	78.57%
Std. Deviation	10.22
Minimum Percentage Score	50%
Maximum Percentage Score	100%

Teachers were also asked to evaluate the **perceived adequacy of training on depression** they had received. This required teachers to indicate if they agreed with the statement: “I feel adequately trained to handle students with depression”. Possible responses for this item included: Strongly Disagree, Disagree, Agree, Strongly Agree. The categorical responses were given numerical coding to allow more detailed analysis as shown in Table 4.16. The mean derived from the numerical coding of respondents’ answers ( $N = 156$ ) allows for an understanding of the overall perceived adequacy of training on depression whereby an overall mean of 1 indicates a very poor level, and a mean of 4 a very high level of perceived adequacy of training (2.5 is the mid/neutral point).

As shown in Table 4.16, overall teachers did not feel that their training was of a good level ( $M = 2.13$ ,  $Mdn = 2$ ). Most respondents (53%) indicated that they disagreed with the statement provided, with 18% strongly disagreeing. Less than 3% strongly agreed that they felt adequately trained to handle students with depression (See Table 4.17).

Table 4.16

*Descriptive Statistics: Mean, Median, and Standard Deviation of perceived Adequacy of Training on Depression*

<i>N</i>	156
Mean <sup>a</sup>	2.13
Median <sup>a</sup>	2
Std. Deviation <sup>a</sup>	.73

<sup>a</sup>Responses were scored from 1-4: Strongly Disagree = 1, Disagree = 2, Agree = 3, Strongly Agree = 4

Table 4.17

*Descriptive Statistics: Response Frequencies for perceived Adequacy of Training on Depression*

	<i>n</i>	%
Strongly disagree	28	17.9%
Disagree	83	53.2%
Agree	41	26.3%
Strongly disagree	4	2.6%

The final area assessed for this research question related to depression was teachers' **confidence in depression** regarding: their ability to recognise symptoms in students; their awareness of how to handle students with depression; their awareness of common methods of intervention; and their knowledge of school systems assisting such students. This was assessed through the provision of 4 statements related to the mentioned aspects and asking teachers to indicate how confident they felt about each of the areas (See Table 4.18).

Response options included: Not confident, Slightly confident, Quite confident, and Very Confident. These categorical responses were then coded numerically to allow more detailed analysis shown in Table 4.18. By applying numeric coding, the mean derived from all respondents ( $N = 156$ ) allows for an understanding of the overall confidence in depression score of the sample whereby an overall mean of 1 would indicate a very low level of confidence, and a mean of 4 a very high level of confidence (2.5 is the mid/neutral point).

As shown in Table 4.18, Q3 was the lowest rated statement related to confidence ( $M = 1.88$ ,  $Mdn = 2$ ,  $SD = 0.83$ ). In addition, the mean score for all questions indicates a relatively low level of confidence, with Q4 being the only question having a mean above the mid/neutral (albeit very marginally so -  $M = 2.52$ ,  $Mdn = 3$ ,  $SD = 0.85$ ). The overall confidence score for depression across questions among the sample of teachers was also low ( $M = 2.21$ ,  $Mdn = 2.25$ ,  $SD = 0.64$ )

Table 4.18

*Descriptive Statistics: Mean, Median, and Standard Deviation of individual Confidence Questions and Overall Confidence Score for Depression*

	<i>N</i>	Mean <sup>a</sup>	Median <sup>a</sup>	Std. Deviation <sup>a</sup>
Q1: Your ability to notice symptoms of depression in your students	156	2.41	2.00	0.67
Q2: Your awareness of strategies you can use to help students experiencing depression	156	2.04	2.00	0.82
Q3: Your knowledge of common treatment methods for depression in students	156	1.88	2.00	0.83
Q4: Your awareness of school systems that provide help to students with depression	156	2.52	3.00	0.85
Overall Confidence Score Depression	156	2.21	2.25	0.64

<sup>a</sup> Responses were scored from 1-4: Not Confident = 1, Slightly Confident = 2, Quite Confident = 3, Very Confident = 4

#### 4.4.2 Anxiety

Teachers' **subjective knowledge of anxiety** in students was assessed through a single item which asked teachers how knowledgeable they felt about anxiety in students. Possible responses included: Not Knowledgeable, Slightly Knowledgeable, Quite Knowledgeable, and

Very Knowledgeable. The categorical responses provided were given numerical coding to allow more detailed analysis as shown in Table 4.19.

By applying numerical coding, the mean derived from all respondents ( $N = 156$ ) allows for an understanding of the overall subjective knowledge of the sample whereby an overall mean of 1 indicates a very poor level of subjective knowledge, and a mean of 4 a very good level of subjective knowledge (2.5 is the mid/neutral point). As shown in Table 4.19, the sample indicated having a lower level of knowledge of anxiety ( $M = 2.37$ ,  $Mdn = 2$ ). In fact, the most common response for this question was "Slightly Knowledgeable" (48% of responses), and only 1.9% of participants indicated being very knowledgeable about anxiety. Furthermore, 8.3% indicated that they were not knowledgeable (See Table 4.20).

Table 4.19

*Descriptive Statistics: Mean, Median, and Standard Deviation of Subjective Knowledge of Anxiety*

$N$	156
Mean <sup>a</sup>	2.37
Median <sup>a</sup>	2
Std. Deviation <sup>a</sup>	.66

<sup>a</sup> Responses were scored from 1-4: Not Knowledgeable = 1, Slightly Knowledgeable = 2, Quite Knowledgeable = 3, Very Knowledgeable = 4

Table 4.20

*Descriptive Statistics: Response Frequencies for Subjective Knowledge of Anxiety*

	$n$	%
Not knowledgeable	13	8.3%
Slightly knowledgeable	75	48.1%
Quite knowledgeable	65	41.7%
Very knowledgeable	3	1.9%

Teachers' **objective knowledge of anxiety** (and related conditions) in students was assessed through 16 statements: 7 about anxiety in general, 5 about panic disorder, and 4

about social anxiety as shown in Table 4.21. Participants were asked to indicate if they believed the statements to be true or false and their responses were then scored, with correct answers being awarded 1 point and incorrect responses 0. The total of correct scores from Q1 to Q16 provides teachers' overall level of objective knowledge of anxiety (including panic disorder, and social anxiety) in students.

Table 4.21 shows that Q1 had the highest rate of correct responses and was in fact answered correctly by all participants ( $N = 156$ ,  $M = 1$ ,  $SD = 0$ ). Q4, Q9, Q12, and Q16 were most often answered incorrectly with a correct percentage of 40%, 43%, 48%, and 33% respectively. Overall, the frequency of correct responses for questions relating to general anxiety (Q1-Q7,  $M = 84\%$ ) was the highest, followed by social anxiety (Q13-Q16,  $M = 72\%$ ), and with panic disorder scoring least (Q8-Q12,  $M = 61\%$ ). The mean total score for objective knowledge of anxiety (including panic disorder, and social anxiety) was 11.8 out of a maximum score of 16. Thus, as shown in Table 4.22, the mean percentage score obtained by teachers in the sample was 74%. The lowest percentage score obtained by participants was 38%, while the highest was 100%.

Table 4.21

*Descriptive Statistics: Correct Percentage, Mean, and Standard Deviation of Objective Knowledge of Anxiety questions and Total Objective Knowledge of Anxiety Score*

	Correct Percentages	Mean	Std. Deviation
Q1: Anxiety can cause persistent worry, unease, and nervousness	100%	1.00	.00
Q2: Anxiety can cause restlessness and irritability	96.7%	.97	.18
Q3: Anxiety can cause digestive issues, difficulties with breathing, and heartbeat alterations	99.4%	.99	.08
Q4: Anxiety leads to a loss of touch with reality with hallucinations and delusions	39.7%	.40	.49
Q5: Anxiety is more common in males than females	93.6%	.94	.25
Q6: Anxiety does not occur in pre-pubescent children (less than 11 years old)	91.7%	.92	.28
Q7: Almost all adolescents will experience an anxiety disorder by the time they turn 18	68%	.68	.47
Q8: Panic attacks often result in the person fainting	70.5%	.71	.46
Q9: Breathing into a paper bag will help a panic attack to pass faster	43.6%	.44	.50
Q10: Panic attacks always have an identifiable trigger	55.8%	.56	.50
Q11: Panic attacks often last for an hour	85.2%	.85	.36
Q12: Panic attacks can easily be mistaken for a heart attack	48.1%	.48	.50
Q13: Social anxiety disorder is a medical term for very shy people	77.6%	.78	.42
Q14: Social anxiety disorder is a rare mental health condition	84%	.84	.37
Q15: Social anxiety disorder sufferers fear other people judging them poorly	93%	.93	.26
Q16: Social anxiety disorder is primarily a self-esteem issue	33.3%	.33	.47
Total Objective Knowledge of Anxiety Score		11.80	1.79

Table 4.22

*Descriptive Statistics – Measures of Central Tendency: Mean, Median, Standard Deviation, Minimum, and Maximum percentage scores for total Objective Knowledge of Anxiety score*

<i>N</i>	156
Mean	73.76%
Median	75%
Std. Deviation	11.21
Minimum	37.50%
Maximum	100%

Teachers were also asked about the **perceived adequacy of training on anxiety** they had received. This required teachers to indicate if they agreed with the statement: “I feel adequately trained to handle students with anxiety”. Possible responses included: Strongly Disagree, Disagree, Agree, Strongly Agree.

The categorical responses were given numerical coding to allow more detailed analysis as shown in Table 4.23. The mean derived from the numerical coding of all answers ( $N = 156$ ) allows for an understanding of the overall perceived adequacy of training on anxiety whereby an overall mean of 1 would indicate a very poor level, and a mean of 4 a very high level of perceived adequacy of training (2.5 is the mid/neutral point).

As shown in Table 4.23, teachers did not feel that their training was of a very good level ( $M = 2.38$ ,  $Mdn = 2$ ,  $SD = 0.79$ ). The most common response by teachers indicated that they disagreed with the statement provided (41%), and 13.5% stated that they strongly disagreed. Less than 6% of the sample indicated that they strongly agreed, and that they thus felt adequately trained to handle students with anxiety (See Table 4.24).

Table 4.23

*Descriptive Statistics: Mean, Median and Standard Deviation of perceived Adequacy of Training on Anxiety*

<i>N</i>	156
Mean <sup>a</sup>	2.38
Median <sup>a</sup>	2
Std. Deviation <sup>a</sup>	.79

<sup>a</sup> Responses were scored from 1-4: Strongly Disagree = 1, Disagree = 2, Agree = 3, Strongly Agree = 4

Table 4.24

*Descriptive Statistics: Response Frequencies for perceived Adequacy of Training on Anxiety*

	<i>n</i>	%
Strongly Disagree	21	13.5%
Disagree	64	41.0%
Agree	62	39.7%
Strongly Agree	9	5.8%

The final area assessed for this research question related to anxiety was teachers' **confidence in anxiety** regarding: their ability to recognise symptoms in students; their awareness of how to handle students with anxiety; their awareness of common methods of intervention; and their knowledge of school systems assisting such students. This was assessed through 4 statements related to the mentioned aspects and asking teachers to indicate how confident they felt about each of the areas (See Table 4.25).

Response options included: Not confident, Slightly confident, Quite confident, and Very Confident. These categorical responses were then coded numerically to allow more detailed analysis as shown in Table 4.25. By applying numeric coding, the mean derived from all respondents ( $N = 156$ ) allows for an understanding of the overall confidence in anxiety score of the sample whereby an overall mean of 1 would indicate a very low level, and a mean of 4 a very high level of confidence (2.5 is the mid/neutral point).

As shown in Table 4.25, Q3 was the lowest rated statement ( $M = 2.08$ ,  $Mdn = 2$ ,  $SD = 0.82$ ).

In addition, the mean score for all questions indicates a relatively low level of confidence, with Q1 and Q4 being the only question having a mean above the mid/neutral albeit very marginally so (2.55 and 2.54 respectively). The overall confidence score for anxiety across questions among the sample of teachers was also low ( $M = 2.37$ ,  $Mdn = 2.25$ ,  $SD = 0.64$ ).

Table 4.25

*Descriptive Statistics: Mean, Median, and Standard Deviation of individual Confidence Questions and Overall Confidence Score for Anxiety*

	<i>N</i>	Mean <sup>a</sup>	Median <sup>a</sup>	Std. Deviation <sup>a</sup>
Q1: Your ability to notice symptoms of anxiety in your students	156	2.55	3.00	.76
Q2: Your awareness of strategies you can use to help students experiencing anxiety	156	2.30	2.00	.76
Q3: Your knowledge of common treatment methods for anxiety in students	156	2.08	2.00	.82
Q4: Your awareness of school systems that provide help to students with anxiety	156	2.55	3.00	.88
Overall Confidence Score Anxiety	156	2.37	2.25	.64

<sup>a</sup>Responses were scored from 1-4: Not Confident = 1, Slightly Confident = 2, Quite Confident = 3, Very Confident = 4

#### 4.5 Knowledge of services

This section explores the final research question. Further results which emerge from correlational analysis across variables pertaining to different research questions and related to this research question are also provided in the final section of the chapter.

*Research Question 3: How aware are secondary school teachers about appropriate avenues of referral when faced with young people who might be experiencing mental health difficulties?*

The analysis of this research question will explore: Teachers' confidence in their awareness of services, their knowledge about the specific services available, the number of services they were aware of, and the most commonly mentioned services across the sample.

##### 4.5.1 Confidence in awareness of services

Teachers' **confidence in awareness of services** was assessed through a single item which asked teachers to indicate how confident they felt about their awareness of services that target young individuals with mental health difficulties. Possible responses for this question included: Not Confident, Slightly Confident, Quite Confident, and Very Confident. The categorical responses provided for this item were given numerical coding to allow more detailed analysis as shown in Table 4.26.

By applying numerical coding, the mean derived from respondents ( $N = 156$ ) allows an understanding of the overall confidence in awareness of mental health services for young people of the sample whereby an overall mean of 1 would indicate a very low level of confidence, and a mean of 4 a very high level of confidence (2.5 is the mid/neutral point). As shown in Table 4.26, the sample indicated having a relatively low level of confidence ( $M =$

2.47,  $Mdn = 2$ ,  $SD = 0.77$ ). In fact, the most common response was “Slightly Confident” (43% of responses), and only 8% of participants indicated being very confident. Furthermore, 9% indicated that they were not confident (See Table 4.27).

Table 4.26

*Descriptive Statistics: Mean, Median and Standard Deviation of Confidence in Knowledge of Services*

<i>N</i>	156
Mean <sup>a</sup>	2.47
Median <sup>a</sup>	2
Std. Deviation <sup>a</sup>	.77

<sup>a</sup>Responses were scored from 1-4: Not Confident = 1, Slightly Confident = 2, Quite Confident = 3, Very Confident = 4

Table 4.27

*Descriptive Statistics: Response Frequencies for Confidence in Knowledge of Service*

	N	Percent
Not Confident	14	9%
Slightly Confident	67	42.9%
Quite Confident	63	40.4%
Very Confident	12	7.7%

#### 4.5.2 Knowledge about available services

Participants' **knowledge about available services** for young individuals with mental health difficulties was assessed via 6 statements as shown in Table 4.28. Each item required participants to indicate the degree to which they agreed against 4 response options (Strongly Disagree, Disagree, Agree, Strongly Agree). The categorical responses provided for these questions were given numerical coding to allow more detailed analysis as shown in Table 4.28.

By applying numerical coding, the mean of knowledge scores of Q1 to Q6 yields a participant's overall knowledge score whereby 1 demonstrates a poor level, and 4 a very

good level of knowledge of mental health services for young individuals (2.5 being the mid/neutral point). The highest mean was noted for Q5 ( $M = 3.0$ ,  $Mdn = 3$ ,  $SD = 0.77$ ) while the lowest mean was obtained for Q2 ( $M = 2.3$ ,  $Mdn = 3$ ,  $SD = 0.76$ ). Overall, the mean across statements, and hence the overall knowledge of services by the sample was slightly above the mid value of 2.5 ( $M = 2.7$ ,  $Mdn = 2$ ,  $SD = 0.63$ ) indicating a neutral to a somewhat good level of knowledge of services.

Table 4.28

*Descriptive Statistics: Mean, Median, and Standard Deviation for of individual Knowledge of Services Questions and Overall Knowledge of Services Score*

	Mean <sup>a</sup>	Median <sup>a</sup>	Std. Deviation
Q1: I am aware of the route of referral to access such services for my students	2.9	3	.77
Q2: I have been given sufficient information about such services as part of my professional training as a student or during continuous professional development	2.3	2	.76
Q3: I am knowledgeable about making a referral if necessary and what information to include	2.6	3	.87
Q4: I am aware of sources of information about services that assist young people with mental health difficulties and how to access them if necessary	2.5	3	.78
Q5: Should I be faced with a student who might be experiencing mental health difficulties, I am aware of a point of contact to ask questions and clarify concerns prior to taking further action	3.0	3	.79
Q6: I am knowledgeable about different mental health professionals and their work and specialisations	2.9	3	.91
Overall Knowledge of Services Score	2.7	2	.63

<sup>a</sup>Responses were scored from 1-4: Strongly Disagree = 1, Disagree = 2, Agree = 3, Strongly Agree = 4

### 4.5.3 Specific Services

Following an evaluation of teachers' **knowledge of services**, participants were then asked to list up to 5 mental health services for young individuals they were aware of. These responses were filtered to eliminate invalid entries and a total number of services mentioned between 0 and 5 was then calculated. Table 4.29 shows that the average number of services mentioned was 2.76 with a median of 3 valid responses ( $SD = 1.81$ ). Furthermore, 17% of the sample was unable to mention a single service and 28% was able to mention the maximum of 5 services. In fact, the most common number of valid responses ( $n = 44$ ) in the sample was 5 services (See Table 4.30).

Table 4. 29

*Descriptive Statistics: Mean, Median, and Standard Deviation of Number of Services Mentioned*

<i>N</i>	156
Mean	2.76
Median	3.00
Std. Deviation	1.81

Table 4.30

*Descriptive Statistics: Response Frequencies for Number of Services Mentioned*

Valid Responses	<i>n</i>	Percent
0 Services	26	16.7%
1 Service	17	10.9%
2 Services	27	17.3%
3 Services	29	18.6%
4 Services	13	8.3%
5 Services	44	28.2%

Table 4.31 demonstrates the specific services mentioned in descending order by *n*. Richmond Foundation emerged as the most frequently mentioned service followed by Counsellors and School Guidance Services.

Table 4.31

*Descriptive Statistics: Services Mentioned sorted by n*

Service	<i>n</i>
Richmond Foundation	52
Counsellor	50
School Guidance	44
Psychologist	38
Kellimni.com	29
Agenzija Appogg	28
Child and Young People's Services (CYPS)	22
Psychiatrist	14
Psychotherapist	13
School Psychosocial Team	12
Healthcare Centres	11
Agenzija Sedqa	10
ACAMH	10
YPU	9
Dar Kenn Ghal Sahhtek	8
Child Development and Assessment Unit (CDAU)	7
Caritas	7
Social Worker	6
Supportline179	6
Mater Dei Psychiatric Unit	6
Agenzija Zghazagh	6
PSCD Teachers	5
Child and Adolescent Psychiatric Emergency Services (CAPES)	5
Family Doctor	4
Priest/Spiritual Director	4
Willingness	3
Youth in Focus	3
Student Services	3
Learning Support Zone	3
Crisis Intervention Team	2
Youth Worker	2
Tigdid	1
Maia Psychology Centre	1
Anti-Bullying Team	1
YMCA	1
CBT Clinic	1
Polaris	1
Hand in Hand	1

## 4.6 Correlational Analysis

This section of the chapter focuses on analyses between relevant variables to identify whether a statistically significant correlation exists to obtain a deeper understanding of the research questions and the research topic as a whole. The correlations are presented with a focus on further exploring the relation between different variables and:

- Demographics
- Attitudes towards Depression and Anxiety
- Perceived Training Adequacy
- Knowledge of Mental Health Issues
- Confidence regarding Mental Health issues

The level of significance used throughout these analyses to gauge significance against was 0.05 ( $p = 0.05$ ).

### 4.6.1 Tests of Normality

Before carrying out analysis, specific variables were assessed to identify whether the data was normally distributed to select the appropriate statistical tests to utilise. Table 4.32 shows One-Sample Kolmogorov-Smirnov Test outputs for the variables included in correlational analysis. All of the variables were shown to not be normally distributed ( $p$ -value of all variables was less than the 0.05 value of significance) and hence, non-parametric tests are utilised for all analyses.

Table 4.32

*Test of Normality: One-Sample Kolmogorov-Smirnov Test*

	Test Statistic	Asymp. Sig. (2-tailed)
Gender	.477	.00
Age range	.191	.00
Years of teaching	.203	.00
Qualification level	.232	.00
Overall Attitude Score Depression	.101	.001
Perceived Adequacy of Training Depression	.285	.00
Objective Knowledge of Depression	.153	.00
Subjective Knowledge of Depression	.326	.00
Overall Confidence Score Depression	.124	.00
Overall Attitude Score Anxiety	.123	.00
Perceived Adequacy of Training Anxiety	.240	.00
Objective Knowledge of Anxiety	.127	.00
Subjective Knowledge of Anxiety	.276	.00
Overall Confidence Score Anxiety	.118	.00
Confidence in Knowledge of Services	.249	.00
Overall Knowledge of Services Score	.092	.003
Number of Services Mentioned	.174	.00

#### 4.6.2 Demographics

##### *Gender*

Mann-Whitney tests were carried out to identify potential correlations between gender and other variables as seen in Table 4.33. Out of these variables, a statistically significant correlation ( $p < 0.05$ ) was noted in the following:

- 1) Gender and Overall Attitude Score for Depression ( $U = 1607.5, p = 0.02$ ): Overall Attitude Score for depression was higher for females ( $M = 3.24, Mdn = 3.29, SD = 0.39$ ) than males ( $M = 3.11, Mdn = 3.14, SD = 0.34$ ). Thus, female teachers in the sample had more positive attitudes towards depression and students with depression.

2) Gender and Overall Attitude Score for Anxiety ( $U = 2079.5$ ,  $p = 0.02$ ): Overall Attitude Score for anxiety was higher for females ( $M = 3.18$ ,  $Mdn = 3.14$ ,  $SD = 0.38$ ) than males ( $M = 3.04$ ,  $Mdn = 3$ ,  $SD = 0.27$ ). Thus, female teachers in the sample had more positive attitudes towards anxiety and students with anxiety.

Table 4.33

*Correlational Analysis: Mann-Whitney Test for Gender as the grouping variable*

	Mann-Whitney U	Z	Asymp. Sig. (2-tailed)
Overall Attitude Score Depression	1607.5	-2.34	.02
Objective Knowledge of Depression	1819.5	-1.46	.14
Subjective Knowledge of Depression	2121	-0.19	.85
Overall Confidence Score Depression	1924	-1.00	.32
Perceived Adequacy of Training Depression	2036.5	-0.57	.57
Overall Attitude Score Anxiety	1616.5	-2.31	.02
Objective Knowledge of Anxiety	1826	-1.42	.15
Subjective Knowledge of Anxiety	2140	-0.09	.92
Overall Confidence Score Anxiety	2079.5	-0.34	.73
Perceived Adequacy of Training Anxiety	1915.5	-1.11	.27
Overall Knowledge of Services Score	1924.5	-0.995	.32
Number of Services Mentioned	1960	-0.86	.39

### *Age ranges*

Kruskal Wallis tests were carried out to identify potential correlations between age of respondents and other variables as seen in Table 4.34. Given the low number of individuals in the 60 + range ( $n = 6$ ), this category was collapsed and amalgamated with the 50-59 range thereby creating a new category of 50 +. Out of these variables, a statistically significant correlation ( $p < 0.05$ ) was noted in the following:

1) Age Ranges and Overall Attitude Score for Depression ( $H(3) = 8.91$ ,  $p = 0.03$ ): On average, the 20-29 range showed the highest overall attitude score for depression and hence the most positive attitude towards depression and students with depression ( $M$

= 3.32, mean rank = 92.3). This was followed by 30-39 ( $M = 3.31$ , mean rank = 88.4), 40-49 ( $M = 3.13$ , mean rank = 71.2), and finally the 50+ range ( $M = 3.12$ , mean rank = 64.9). This also shows that there was a negative relationship between age and attitude score for depression. The discrepancy is most apparent when comparing the 20-39 with the 40 and over range.

2) Age Ranges and Overall Attitude Score for Anxiety ( $H(3) = 12.89$ ,  $p = 0.01$ ):

On average, the 20-29 range ( $M = 3.25$ , mean rank = 91.6) showed the highest overall attitude score for anxiety and hence, the most positive attitude towards anxiety and students with anxiety. This was followed by 30-39 ( $M = 3.23$ , mean rank = 90.7), 40-49 ( $M = 3.09$ , mean rank = 86.4), and finally the 50+ range ( $M = 3$ , mean rank = 83.9). This also shows that there was a negative relationship between age and attitude score for anxiety. The discrepancy is most apparent when comparing the 20-39 with the 40 and over range. This correlation was also meaningful at a 0.01 level of significance.

3) Age Ranges and Objective Knowledge of Anxiety Score ( $H(3) = 10.66$ ,  $p = 0.01$ ):

On average, the 20-29 range ( $M = 12.3$ , mean rank = 91.4) showed the highest overall objective knowledge of anxiety score and hence, were the most objectively knowledgeable about anxiety. This was followed by 30-39 ( $M = 12.31$ , mean rank = 90.7), 40-49 ( $M = 11.49$ , mean rank = 70.5), and finally the 50+ range ( $M = 11.13$ , mean rank = 63.7). This also shows that there was a negative relationship between age and objective knowledge for anxiety. The discrepancy is most apparent when

comparing the 20-39 with the 40 and over range. This correlation was also meaningful at a 0.01 level of significance.

Table 4.34

*Correlational Analysis: Kruskal Wallis Test for Age Range as the grouping variable*

	Kruskal-Wallis H	df	Asymp. Sig.
Overall Attitude Score Depression	8.91	3	.03
Objective Knowledge of Depression	2.96	3	.40
Subjective Knowledge of Depression	2.15	3	.54
Overall Confidence Score Depression	2.46	3	.48
Perceived Adequacy of Training Depression	4.65	3	.20
Overall Attitude Score Anxiety	12.89	3	.01
Objective Knowledge of Anxiety	10.66	3	.01
Subjective Knowledge of Anxiety	1.53	3	.68
Overall Confidence Score Anxiety	1.34	3	.72
Perceived Adequacy of Training Anxiety	.21	3	.98
Overall Knowledge of Services Score	.25	3	.97
Number of Services Mentioned	.73	3	.87

### *Years of Teaching Experience*

Kruskal Wallis tests were carried out to identify potential correlations between years of teaching experience and other variables as seen in Table 4.35. Out of these variables, no statistically significant correlation was identified ( $p < 0.05$ ). Hence the score of all the variables listed were not noted to vary significantly across different age ranges.

Table 4.35

*Correlational Analysis: Kruskal Wallis Test for Years of Teaching as the grouping variable*

	Kruskal-Wallis H	df	Asymp. Sig.
Overall Attitude Score Depression	1.33	4	.86
Objective Knowledge of Depression	5.16	4	.27
Subjective Knowledge of Depression	5.65	4	.23
Overall Confidence Score Depression	4.78	4	.31
Perceived Adequacy of Training Depression	7.32	4	.12
Overall Attitude Score Anxiety	4.54	4	.34
Objective Knowledge of Anxiety	4.90	4	.30
Subjective Knowledge of Anxiety	4.66	4	.32
Overall Confidence Score Anxiety	2.19	4	.70
Perceived Adequacy of Training Anxiety	2.25	4	.69
Overall Knowledge of Services Score	1.78	4	.78
Number of Services Mentioned	1.10	4	.89

### *Qualification Level*

Kruskal Wallis tests were carried out to identify potential correlations between qualification level and other variables as seen in Table 4.36. Out of these variables, the only statistically significant correlation ( $p < 0.05$ ) was:

1) Qualification Level and Number of services mentioned ( $H(2) = 7.35, p = 0.02$ ):

Teachers with a Post Graduate Certification had a mean rank of 91.6 and thus mentioned substantially greater numbers of services than those with Master's Degrees and Bachelor's Degrees whose mean ranks were 72.79 and 70.17 respectively.

Table 4.36

*Correlational Analysis: Kruskal Wallis Test for Qualification level as the grouping variable*

	Kruskal-Wallis H	df	Asymp. Sig.
Overall Attitude Score Depression	2.91	2	.23
Objective Knowledge of Depression	.66	2	.72
Subjective Knowledge of Depression	1.26	2	.53
Overall Confidence Score Depression	.10	2	.61
Perceived Adequacy of Training Depression	2.16	2	.34
Overall Attitude Score Anxiety	1.88	2	.39
Objective Knowledge of Anxiety	.58	2	.75
Subjective Knowledge of Anxiety	2.02	2	.36
Overall Confidence Score Anxiety	1.88	2	.39
Perceived Adequacy of Training Anxiety	3.81	2	.15
Overall Knowledge of Services Score	.15	2	.93
Number of Services Mentioned	7.53	2	.02

***Sector***

Kruskal Wallis tests were carried out to identify potential correlations between sector and other variables as seen in Table 4.37. Out of these variables, no statistically significant correlation was identified ( $p < 0.05$ ). Hence the score of all the variables listed were not noted to vary significantly across different sectors.

Table 4.37

*Correlational Analysis: Kruskal Wallis Test for Sector as the grouping variable*

	Kruskal-Wallis H	df	Asymp. Sig.
Overall Attitude Score Depression	2.16	2	.34
Objective Knowledge of Depression	1.58	2	.45
Subjective Knowledge of Depression	1.19	2	.55
Overall Confidence Score Depression	.81	2	.67
Perceived Adequacy of Training Depression	4.02	2	.13
Overall Attitude Score Anxiety	1.32	2	.52
Objective Knowledge of Anxiety	.42	2	.81
Subjective Knowledge of Anxiety	.17	2	.92
Overall Confidence Score Anxiety	.26	2	.88
Perceived Adequacy of Training Anxiety	2.30	2	.32
Overall Knowledge of Services Score	.12	2	.94
Number of Services Mentioned	1.75	2	.42

***Overall Findings for Demographic Variables***

From the correlational analyses carried out across demographic variables and other variables, statistically significant correlations were noted in the following variable pairings:

- 1) Gender and Overall Attitude Score for Depression ( $p = 0.02$ )
- 2) Gender and Overall Attitude Score for Anxiety ( $p = 0.02$ )
- 3) Age Ranges and Overall Attitude Score for Depression ( $p = 0.03$ )
- 4) Age Ranges and Overall Attitude Score for Anxiety ( $p = 0.01$ )
- 5) Age Ranges and Objective Knowledge of Anxiety Score ( $p = 0.01$ )
- 6) Qualification Level and Number of Services Mentioned ( $p = 0.02$ )

#### ***4.6.3 Attitudes towards Depression and Anxiety***

The relationship between attitudes towards depression and attitudes towards anxiety (and students with the conditions) was analysed using multiple Spearman's Rho tests. These tests were used to compare each item in the respective scales with the corresponding item in the alternative scale (Attitudes towards Depression Q1 and Attitudes towards Anxiety Q1, Attitudes towards Depression Q3 and Attitudes towards Anxiety Q3, etc.). Q2 for attitudes towards depression and attitude towards anxiety were not compared given that they varied between scales unlike the other statements. Following this, the relationship between overall attitude score for Depression and Anxiety was also explored. As shown in Table 4.38, all of the pairings showed a statistically significant relationship at the 0.01 level of significance. The relationship between all pairings is also shown to be positive with varying effect sizes (Cohen, 2013):

Large or strong positive relationship ( $R_s > 0.5$ ): Q1 pairings ( $R_s = 0.54$ ), Q4 pairings ( $R_s = 0.77$ ), Q5 pairings ( $R_s = 0.51$ ), Q7 pairings ( $R_s = 0.61$ ), and Overall Attitude Score pairings ( $R_s = 0.61$ )

Medium or moderate positive relationship ( $R_s = 0.30 - 0.49$ ): Q6 pairings ( $R_s = 0.34$ )

Small or weak positive relationship ( $R_s = 0.10 - 0.29$ ): Q3 pairings ( $R_s = 0.23$ )

Table 4.38

*Correlational Analysis: Multiple Spearman's Rho for corresponding attitudes questions for Depression and Anxiety, and Overall Attitude for Depression and Anxiety.*

Spearman's rho	DepAttitudeQ1	Correlation Coefficient	AnxAttitudeQ1 .54
		Sig. (2-tailed)	<.001
Spearman's rho	DepAttitudeQ3	Correlation Coefficient	AnxAttitudeQ3 .23
		Sig. (2-tailed)	<.001
Spearman's rho	DepAttitudeQ4	Correlation Coefficient	AnxAttitudeQ4 .77
		Sig. (2-tailed)	<.001
Spearman's rho	DepAttitudeQ5	Correlation Coefficient	AnxAttitudeQ5 .51
		Sig. (2-tailed)	<.001
Spearman's rho	DepAttitudeQ6	Correlation Coefficient	AnxAttitudeQ6 .34
		Sig. (2-tailed)	<.001
Spearman's rho	DepAttitudeQ7	Correlation Coefficient	AnxAttitudeQ7 .61
		Sig. (2-tailed)	.001
Spearman's rho	Overall Attitude Score Dep	Correlation Coefficient	Overall Attitude Score Anx .61
		Sig. (2-tailed)	<.001

#### **4.6.4 Perceived Training Adequacy**

The relationship of perceived training adequacy of a condition was analysed with overall confidence score, objective knowledge, and subjective knowledge for the respective conditions. The nature of the relationship and its effect size (Cohen, 2013) are also explored.

### *Depression Training Adequacy*

As shown in Table 4.39, the following correlations were noted to be statistically significant for perceived depression training adequacy following the use of multiple Spearman Rho's tests:

1) overall confidence score for depression ( $R_s = 0.53, p = < 0.01$ ): A large or strong positive relationship significant at a 99% confidence interval.

2) subjective knowledge score for depression ( $R_s = 0.57, p < 0.01$ ): A large or strong positive relationship significant at a 99% confidence interval.

No statistically significant relationship between perceived depression training adequacy and objective knowledge of depression.

Table 4.39

*Correlational Analysis: Multiple Spearman Rho's for Perceived Depression Training Adequacy*

			Overall Confidence Score Depression
Spearman's rho	Perceived Adequacy of Training Depression	Correlation Coefficient	.53
		Sig. (2-tailed)	<.001
			Objective Knowledge of Depression
Spearman's rho	Perceived Adequacy of Training Depression	Correlation Coefficient	.13
		Sig. (2-tailed)	.11
			Subjective Knowledge of Depression
Spearman's rho	Perceived Adequacy of Training Depression	Correlation Coefficient	.57
		Sig. (2-tailed)	<.001
			Overall Attitude Score Depression
Spearman's rho	Perceived Adequacy of Training Depression	Correlation Coefficient	.1
		Sig. (2-tailed)	.2

*Anxiety Training Adequacy*

As shown in Table 4.40, the following correlations were noted to be statistically significant for perceived anxiety training adequacy following the use of multiple Spearman Rho's tests:

- 1) overall confidence score for anxiety ( $R_s 0.60, p < 0.01$ ): A large or strong positive relationship which is significant at a 99% confidence interval.
- 2) subjective knowledge score for anxiety ( $R_s 0.59, p < 0.01$ ): A large or strong positive relationship which is significant at a 99% confidence interval.

No statistically significant relationship between perceived anxiety training adequacy and objective knowledge of anxiety.

Table 4.40

*Correlational Analysis: Multiple Spearman Rho's for Perceived Depression Training Adequacy*

			Overall Confidence Score Anxiety
Spearman's rho	Perceived Adequacy of Training Anxiety	Correlation Coefficient	.60
		Sig. (2-tailed)	<.001
			Objective Knowledge of Anxiety
Spearman's rho	Perceived Adequacy of Training Anxiety	Correlation Coefficient	-.09
		Sig. (2-tailed)	.25
			Subjective Knowledge of Anxiety
Spearman's rho	Perceived Adequacy of Training Anxiety	Correlation Coefficient	.59
		Sig. (2-tailed)	<.001
			Overall Attitude Score Anxiety
Spearman's rho	Perceived Adequacy of Training Anxiety	Correlation Coefficient	.15
		Sig. (2-tailed)	.07

**4.6.5 Knowledge of Mental Health Issues**

Correlational analyses between different forms of knowledge for Depression and Anxiety were carried out using Spearman's Rho tests with the following pairings:

Objective Knowledge of Depression and Subjective Knowledge of Depression (Table 4.41): The relationship was not statistically significant ( $p = 0.12$ ).

Objective Knowledge of Depression and Objective Knowledge of Anxiety (Table 4.42): The relationship was statistically significant at a 99% confidence interval and is medium or moderately positive ( $R_s = 0.3$ ,  $p < 0.01$ ).

Objective Knowledge of Anxiety and Subjective Knowledge of Anxiety (Table 4.43): The relationship was not statistically significant ( $p = 0.4$ ).

Objective Knowledge of Depression and Subjective Knowledge of Anxiety (Table 4.44): The relationship was statistically significant at a 99% confidence interval and is large or strongly positive ( $R_s = 0.55$ ,  $p < 0.01$ ).

Table 4.41

*Correlational Analysis: Spearman's Rho for Objective Knowledge of Depression Score and Subjective Knowledge of Depression Score*

		Subjective Knowledge of Depression	
Spearman's rho	Objective Knowledge of Depression	Correlation Coefficient	.12
		Sig. (2-tailed)	.15

Table 4.42

*Correlational Analysis: Spearman's Rho for Objective Knowledge of Depression Score and Objective Knowledge of Anxiety Score*

		Objective Knowledge of Anxiety	
Spearman's rho	Objective Knowledge of Depression	Correlation Coefficient	.30
		Sig. (2-tailed)	<.001

Table 4.43

*Correlational Analysis: Spearman's Rho for Objective Knowledge of Anxiety Score and Subjective Knowledge of anxiety Score*

		Subjective Knowledge of Anxiety	
Spearman's rho	Objective Knowledge of Anxiety	Correlation Coefficient	-.07
		Sig. (2-tailed)	.40

Table 4.44

*Correlational Analysis: Spearman's Rho for Subjective Knowledge of Depression Score and Subjective Knowledge of Anxiety Score*

		Subjective Knowledge of Anxiety	
Spearman's rho	Subjective Knowledge of Depression	Correlation Coefficient	.55
		Sig. (2-tailed)	<.001

#### **4.6.6 Confidence in Mental Health issues**

Correlational analyses to evaluate the relationship between overall confidence score for depression/ anxiety, and other potentially related variables were carried out using Spearman's Rho tests with the following pairings:

Overall Confidence Score for Depression and Objective Knowledge for Depression score (Table 4.45): The correlation was not statistically significant ( $p = 0.86$ ).

Overall Confidence Score for Depression and Subjective Knowledge for Depression (Table 4.46): The correlation was noted to be statistically significant at a 99% confidence interval ( $p < 0.01$ ) and is a strong or largely positive relationship ( $R_s = 0.63$ )

Overall Confidence Score for Anxiety and Objective Knowledge for Anxiety (Table 4.47): The correlation was not statistically significant ( $p = 0.56$ ).

Overall Confidence Score for Anxiety and Subjective Knowledge for Anxiety (Table 4.48): The correlation was noted to be statistically significant at a 99% confidence interval ( $p < 0.01$ ) and it is a strong or largely positive relationship ( $R_s = 0.64$ ).

Overall Confidence Score for Depression and Overall Confidence Score for Anxiety (Table 4.49): The correlation was noted to be statistically significant at a 99% confidence interval ( $p < 0.01$ ) and it is a strong or largely positive relationship ( $R_s = 0.66$ ).

Confidence about how to identify symptoms, refer, intervene, and relate with students with depression/ anxiety was not correlated with teachers' objective knowledge in the respective condition.

Table 4.45

*Correlational Analysis: Spearman's Rho for Confidence in Depression Score and Objective Knowledge of Depression Score*

		Objective Knowledge of Depression
Spearman's rho	Overall Confidence Score Depression	.01
	Correlation Coefficient	
	Sig. (2-tailed)	.86

Table 4.46

*Correlational Analysis: Spearman's Rho for Confidence in Depression Score and Subjective Knowledge of Depression Score*

		Subjective Knowledge of Depression	
Spearman's rho	Overall Confidence Score Depression	Correlation Coefficient	.63
		Sig. (2-tailed)	<.001

Table 4.47

*Correlational Analysis: Spearman's Rho for Confidence in Anxiety Score and Objective Knowledge of Anxiety Score*

		Objective Knowledge of Anxiety	
Spearman's rho	Overall Confidence Score Anxiety	Correlation Coefficient	-.05
		Sig. (2-tailed)	.56

Table 4.48

*Correlational Analysis: Spearman's Rho for Confidence in Anxiety Score and Subjective Knowledge of Anxiety Score*

		Subjective Knowledge of Anxiety	
Spearman's rho	Overall Confidence Score Anxiety	Correlation Coefficient	.64
		Sig. (2-tailed)	<.001

Table 4.49

*Correlational Analysis: Spearman's Rho for Confidence in Depression Score and Confidence in Anxiety Score*

		Overall Confidence Score Anxiety	
Spearman's rho	Overall Confidence Score Depression	Correlation Coefficient	.66
		Sig. (2-tailed)	<.001

#### ***4.6.7 Knowledge of Services***

The relationship between different variables related to knowledge of services targeting mental health difficulties in young individuals were analysed using Spearman Rho tests with the following pairings:

Confidence in Knowledge of Services and Knowledge about available Services Score (Table 4.50): The correlation was noted to be significant at a 99% confidence interval ( $p < 0.01$ ) and the relationship between the variables is large or strongly positive ( $R_s = 0.7$ ).

Confidence in Knowledge of Services and Number of Services Mentioned (Table 4.51): The correlation was noted to be significant at a 99% confidence interval ( $p < 0.01$ ) and the relationship between the variables is a medium or moderately positive one ( $R_s = 0.35$ ).

Knowledge about available Services and Number of Services Mentioned (Table 4.52): The correlation was noted to be significant at a 99% confidence interval ( $p < 0.01$ ) and the relationship between the variables is a medium or moderately positive one ( $R_s = 0.41$ ).

Table 4.50

*Correlational Analysis: Spearman's Rho for Confidence in Knowledge of Services and Knowledge of Services*

		Knowledge about available Services Score	
Spearman's rho	Confidence in Knowledge of Services	Correlation Coefficient	.70
		Sig. (2-tailed)	< 0.01

Table 4.51

*Correlational Analysis: Spearman's Rho for Confidence in Knowledge of Services and Number of Services Mentioned*

		Number of Services Mentioned	
Spearman's rho	Confidence in Knowledge of Services	Correlation Coefficient	.35
		Sig. (2-tailed)	< 0.01

Table 4.52

*Correlational Analysis: Spearman's Rho for Knowledge of Services and Number of Services Mentioned*

		Number of Services Mentioned	
Spearman's rho	Knowledge about available Services Score	Correlation Coefficient	.41
		Sig. (2-tailed)	< 0.01

#### 4.7 Conclusion

This chapter has presented the findings of the research and provided an analysis of results at a descriptive and bivariate correlational level in relation to the 3 main research questions underlying the study. These findings are discussed in further detail in the next chapter to provide a more in depth understanding of results and to make comparisons with existing literature related to the different research questions.

## Chapter 5: Discussion

### 5.1 Introduction

This chapter provides a discussion of the results of the study. It is structured by research question, and provides a more detailed interpretation of findings in light of existing literature and personal reflections.

### 5.2 Attitudes, Beliefs, and Perceptions

This section discusses findings related to teachers' attitudes, beliefs, and perceptions regarding mental health issues in children as well as students who encounter such difficulties and thus focuses on the first research question: *What are secondary school teachers' attitudes, beliefs, and perceptions of young people's mental health difficulties and about students with such difficulties?*

**5.2.1 Overall Attitudes towards mental health difficulties and students with mental health difficulties.** Overall, the attitude of the sample towards depression and students with depression was quite positive as evidenced by a mean attitude score of 3.21 across the sample whereby 4 is the maximum and 1 is the minimum. Similar findings were noted for anxiety with a mean overall attitude score of 3.14. Furthermore, a strong positive relationship was noted between the two attitudes indicating that teachers who had more positive attitudes for one condition were likely to have a positive attitude for the other. These are important findings given that teachers' perceptions and attitudes towards mental health difficulties can play a large role in student mental health as well as self-perception (Breuer, 2016). Previous research similarly shows that generally, teachers held positive beliefs and attitudes in relation to mental health difficulties in students (Kamel et al., 2020; St-Onge & Lemyre, 2017).

The lowest rated statement for depression was Q4 ( $M = 2.6$ : “They need to help themselves and just get over it). Similar findings were noted for anxiety where Q4 was also one of the lowest rated statements in addition to Q1 ( $M = 2.88$ : “Students with anxiety have a normal medical condition which requires treatment”). This corresponds with a common misconception noted in the Australian National Survey of Mental Health Literacy and Stigma (Reavley & Jorm, 2011) centring around the belief held by many that anxiety is not a real illness.

The lower scores for Q4 for both depression and anxiety also demonstrates a belief in a considerable portion of the sample that mental health difficulties are a matter of personal deficit, and that a lack of improvement is possibly to be blamed on the impacted student. The Australian National Survey of Mental Health Literacy and Stigma (Reavley & Jorm, 2011) also lists this as another common misconception about anxiety centring around the idea that people with anxiety could snap out of it if they pleased. The implications of such a stance can be quite detrimental on students at various levels, including hindering disclosure of their issues in the first place, as well as the connotations of stigmatization that this carries (Karam, 2019). It can also result in self-blame which is noted to be a significant factor influencing the development and prognosis of psychopathology. Hence, such an attitude can ultimately lead to poor outcomes in students who are made to feel personally responsible for being depressed (Zahn et al., 2015). Should students with depression already experience a label of being lazy and not completing their work, their self-stigma and sense of self-worth might be additionally negatively impacted which also has further implications on overall well-being by extension (Moses, 2009).

Females in the sample were noted to have more positive overall attitudes towards both depression and anxiety than males ( $M = 3.24$  vs  $M = 3.11$  for depression;  $M = 3.18$  VS  $M = 3.04$  for anxiety) to statistically significant degrees. A systematic review on gender differences in attitudes towards individuals with mental health issues in western countries (Holzinger et al., 2012) showed that no correlation was present between these variables and hence, the findings of this sample of teachers are not in line with previous literature. A smaller study (Connery & Davidson, 2006), however, noted that males showed a more negative attitude towards depression than females, thereby presenting mixed overall findings in relation to gender differences and attitudes about mental health. Busby Grant et al. (2015) also report that males were more likely to hold stigmatizing views towards anxiety. Despite the statistically significant difference noted in the results, males in the sample still held a very positive attitude towards depression and, hence, there is still only minor variation between male and female teachers in the sample.

Furthermore, it was noted that there was a negative correlation between age and attitude score for both depression and anxiety, indicating that younger teachers had an overall more positive attitude towards mental health difficulties and students with such difficulties in the sample. This was especially noticeable when comparing the 20-39 range ( $M = 3.32$  for depression;  $M = 3.24$  for anxiety) with the 40 + range ( $M = 3.13$  for depression;  $M = 3.05$  for anxiety). Similar findings were noted by Connery and Davidson (2006) who concluded that increasing age was negatively correlated with overall attitude towards depression in the general public. Possibly, this might be a result of educational efforts to reduce stigma around mental health issues which have become more prominent in recent years and which younger individuals are hence more likely to have been exposed to (Hampson et al., 2017).

Contrasting research by Venkataraman et al. (2019) however notes that lower age was

correlated with higher levels of stigma towards mental illness in secondary school teachers. This study was however carried out in India and thus, the impact of culture can be seminal in making sense of these findings.

The attitudes towards depression and anxiety were not noted to vary across qualification levels in this sample of teachers. Losinski et al. (2015) similarly note that teacher education level was not a determining factor of attitudes towards individuals with mental health difficulties. This could possibly indicate that additional training that teachers receive might include little to no input on mental health as part of the main learning objectives, or that training is not inclusive of sufficient reflexive exploration of the area (thereby ignoring the impact of personal attitudes, bias, and beliefs).

**5.2.2 Perceived Risk Factors.** Overall, items highly rated as potential risk factors by teachers in the sample were in line with research indicating that a good level of awareness is present on this aspect of mental health (Dabkowska & Dabkowska-Mika, 2015; Elovainio et al., 2015; Felitti, 1998; Ford et al., 2017; Gluschkoff et al., 2017; Newman et al., 2016). This finding has positive implications, as teachers who are well aware of potential risk factors might be better able to identify and assist at-risk students at an earlier stage (Daniszewski, 2013). In particular these included trauma, abuse, stress, domestic violence, having parents with the condition, bullying, and substance abuse. The lowest rated risk factors for both depression and anxiety were lack of spirituality, low intelligence, having a disability, and having diabetes.

A systematic review of the role of spirituality (and religious factors) in depression by Bonelli and Koenig (2012) highlights how the majority of studies analysed (67% of 178 studies) do in fact conclude that spirituality is a potent protective factor. Despite this, the lack

of spirituality is not in itself directly a risk factor. Moreira Almeida et al. (2006) also report similar findings in relation to spirituality and mental health. The lower mean score of this item ( $M = 2.4$  for depression;  $M = 2.26$  for anxiety - midpoint = 2.5) depicts a level of uncertainty in this area within the sample of teachers and it is possible that the positive or protective aspect of spirituality might easily lead to the assumption that a lack of spirituality posits a risk factor for mental health difficulties. This might partially be related to the strong influence of religion in Maltese society and the exposure that individuals have to it, especially throughout their early years.

Low intelligence has indeed been associated with depression through complex mechanisms. Zammit et al. (2005) as well as Schaefer et al. (2019) note that a correlation is present between low IQ and depression. Melby et al. (2020) also report that low intelligence is a considerable risk factor for anxiety. Teachers in the sample were however less aware of the heightened risk for mental health difficulties present in students with low intelligence given their very low rating of this item ( $M = 1.91$  for depression;  $M = 2.17$  for anxiety). This might possibly be the result of a desire to avoid further stigmatizing or devaluation of such children and an effort to see the potential, and not the deficits of such children. While such a stance is important to ensure that all students are given support on a psychosocial and practical level, it is nonetheless important to be attentive to this risk factor for the purpose of preventative observation.

Having a disability and as well as having chronic health conditions are also substantial risk factors for poor mental health. This is particularly pertinent in relation to depression for younger individuals (Hsieh et al., 2020; Karukivi & Haapasalo-Pesu, 2017; Verhoof et al., 2013). For instance, adolescents with diabetes are shown to experience longer episodes of clinically significant depression, to be more likely to be hospitalized, and to have

more suicidal ideation (Jaser, 2010; Stewart et al., 2005). Diabetes is also linked to significant psychological strain and elevated rates of anxiety alongside other mental health conditions (Doric et al., 2018). Teachers' lower ranking for these factors might demonstrate a view whereby physical and mental health are separate as opposed to a more holistic biopsychosocial stance. As a result, it is perhaps difficult for teachers to understand the pathways through which a diagnosis of a physical health condition or a life-long disability impacts psychological wellbeing and social functioning.

**5.2.3 Perceived Areas negatively impacted by mental health difficulties.** All of the areas listed were generally rated to be impacted negatively by depression and anxiety by teachers in the sample to substantial extents ( $M \geq 3.29$ ,  $Mdn \geq 3$  for depression;  $M \geq 3.03$ ,  $Mdn \geq 3$  for anxiety). The areas provided are indeed all key aspects of day-to-day functioning which can potentially be greatly hampered by the presence of depression and anxiety (Erath et al., 2007; Khurshid et al., 2015; Luby, 2009; Mendlowicz & Stein, 2000; Roeser et al., 1998; Suldo et al., 2013). Therefore, teachers in the sample showed a good understanding of these factors in relation to mental health difficulties and how students might be affected in various areas apart from experiencing the main symptoms associated with different conditions. This is a positive finding which might suggest that teachers are more likely to be understanding and supportive of students with depression and anxiety which can be a strong protective factor against poor prognosis (Cattley, 2004; Shokeen, 2017).

Responses also demonstrated that overall, the vast majority of the sample were able to identify numerous aspects of day-to-day life relevant to young individuals and to learning in particular that would be stifled due to poor mental health. It is thus more likely that teachers would be better able to identify depression and anxiety in students based on changes in behaviour and performance, even if the main diagnostic symptoms might not be very evident.

This is important given how children can attempt to hide and dismiss their difficulties at the cost of impoverished overall wellbeing out of fear or shame (Ferguson et al., 1999). Having teachers who are understanding of the impacts of mental health difficulties on different areas related to learning and school might also allow them to be more supportive. By extension, students are also more likely to seek help and to feel less shame (Radez et al., 2020; Johnson et al., 2010).

### **5.3 Knowledge of Mental Health Difficulties**

This section of the chapter discusses findings related to teachers' subjective and objective knowledge of depression and anxiety, as well as their perception of the adequacy of training they have received in this regard. Thus, this section focuses on the second research question: *How knowledgeable are secondary school teachers about the most common mental health difficulties found in children and adolescents?*

**5.3.1 Subjective Knowledge.** An assessment of how knowledgeable teachers in the sample felt about depression and anxiety showed that overall teachers perceived themselves to have relatively little knowledge ( $M = 2.17$  for depression;  $M = 2.37$  - theoretical minimum = 1, theoretical maximum = 4, mid-point = 2.5). In fact, the vast majority of the sample (60%) indicated that they felt they were only slightly knowledgeable about depression. One in eight respondents also indicated that they felt they were not knowledgeable at all. Furthermore, almost 50% indicated that they felt they were only slightly knowledgeable about anxiety. These perceptions did not vary across gender, age ranges, teaching experience, qualification level, nor sector of teaching indicating that this view is relatively similar across all teachers in the sample.

These findings correspond with those of Harsch et al. (2018) and Reinke et al. (2011) and thus indicate that the local scenario is similar to the international one in this regard. A lack of perceived knowledge about mental health in teachers was also noted to negatively impact their confidence in their ability to identify symptoms, make referrals, relate with impacted students, and to intervene accordingly to a large degree at a statistically significant level in the sample. This in turn might have negative repercussions on student wellbeing from a preventative standpoint, but also due to not receiving assistance at more manageable stages of their difficulties once these are noticed (Johnson et al., 2010; Radez et al., 2020). Hence, it is evident that teachers do not feel sufficiently able or competent to carry out their potential role in mental health care of students to satisfactory or appropriate levels. This is unfortunate given the large contribution teachers can offer in this regard as highlighted by the WHO in the 2013-2020 comprehensive mental health action plan (Saxena & Setoya, 2014).

**5.3.2 Objective Knowledge.** Objective knowledge of depression (including suicide), and anxiety (including panic disorder and social anxiety) was noted to be quite high with the mean percentage score on this scale being almost 80% for depression, and 75% for anxiety. The large majority of the sample were able to correctly identify typical diagnostic symptoms of general depression and anxiety, the idiosyncratic nature of the conditions, the increased likelihood of depression and anxiety in females, and the impacts on day-to-day tasks among others. This is in line with findings by Ozabaci (2010) who concludes that teachers are generally able to make correct inferences and effective attempts at diagnosis of depression about vignette cases of students with mental health difficulties due to their generally good ability of recognising symptoms and manifestations of the condition. Headley and Campell (2013) also conclude that teachers are able to identify symptoms of anxiety and to discern “normal” anxiety from excessive anxiety and its presentations.

On the other hand, a considerable number of teachers mistook positive symptoms of schizophrenia as a sign of depression and anxiety including experiencing delusions and hallucinations. This finding corresponds with research examining mental health literacy by Reavley and Jorm (2011) which notes how misunderstood schizophrenia is compared to other mental health issues and how it is frequently the cause of confusion in the general public. It was also noted that knowledge pertaining to suicide in adolescents was considerably lower than that of general depression with a mean percentage score difference of almost 20%. For instance, most teachers in the sample mistakenly believed that adolescents contemplating suicide always provide clues prior to the attempt. A significant portion of the sample were also confused about gender trends in suicide such as females being more likely to attempt suicide, and males being more likely to complete it. This is concerning given the fact that suicide is the one of the highest causes of mortality in young individuals (Bilsen, 2018), as well as the relatively high rate of suicide noted in youth locally compared to other countries (Gromada et al., 2020). Research examining teachers' knowledge of facts and myths about depression by Macdonald (2004) noted that teachers tended to struggle with general information questions about suicide but had relatively high knowledge of clinically significant information including gender difference, behaviour prior to attempt etc. Hence, findings from the sample of Maltese teachers contrast this data which might potentially indicate a greater need for training in this practical regard. This lack of information might be related to the fact that in Malta, there is a "long-standing, unwritten arrangement" by the media not to report suicide incidents and the resulting silence and stigma that emerges on the topic (Vella, 2014).

Furthermore, knowledge pertaining to general anxiety in adolescents was higher than that of panic disorder (with a mean correct percentage score difference of around 10%). The

discrepancy between general anxiety and social anxiety was substantial with a difference in mean correct percentage score of almost 25%. Common mistaken beliefs about panic disorder held by the majority of the sample included the belief that breathing into a paper bag is an effective intervention to assist someone who is having a panic attack, and a lack of awareness that a panic attack can easily be mistaken as a heart attack by the individual. This might be the result of a lack of awareness of the physiological effects of different mental health conditions, particularly anxiety which is noted to have a significant impact in this regard (Celano et al., 2016). This once again hints at a biomedical conceptualisation of health whereby the link between physical and mental functioning is not given consideration. The most commonly mistaken response for social anxiety by the sample of teachers was the belief that social anxiety is simply an issue of low self-esteem as opposed to a valid mental health condition. As a result, it is likely to be ignored as a normal part of being a teenager and being self-conscious. This echoes findings noted about certain negative attitudes towards anxiety presented earlier and the belief by a substantial portion of the sample that anxiety is not a condition warranting attention and possibly intervention.

Objective knowledge of depression (including suicide) was not noted to vary across different demographic variables which indicates a relatively similar distribution within the sample. Objective knowledge of anxiety and related conditions was however noted to vary to a statistically significant degree across different age ranges with younger participants having higher levels of objective knowledge. The discrepancy is most apparent when comparing the 20-39 range with the 40 and over range. Similar to the hypothesis presented when discussing attitudes towards anxiety, this might be a result of mental health education efforts becoming more prominent in recent years and which younger individuals are hence more likely to have been exposed to (Hampson et al., 2017). It is however unclear why a similar correlation was

not noted in depression. Possibly, public education and awareness of depression (and especially suicide) is less than that of anxiety as a result of greater stigma associated with the conditions.

As stated previously, subjective or perceived knowledge was not significantly correlated with teachers' objective knowledge of neither depression nor anxiety. Confidence in depression and anxiety were also not correlated with objective knowledge of the respective conditions. These findings indicate that teachers might potentially be undermining their knowledge when it comes to mental health difficulties or alternatively, that the measure for objective knowledge was too easy and not as ecologically valid. It is also important to note that knowledge of facts and theory of a condition is not the same as feeling knowledgeable, competent, and equipped to deal with depression or anxiety in vivo which poses an additional plausible explanation for these findings.

**5.3.3 Adequacy of Training about mental health difficulties.** Overall, teachers in the sample indicated that they did not feel they were given an adequate level of training in depression and handling students with depression, with most teachers (53%) indicating that they disagreed that training was adequate, and almost 20% indicating that they strongly disagreed. Similar findings were noted for anxiety with 41% disagreeing that training was adequate and 15% of teachers strongly disagreeing. This demonstrates a general understanding among teachers in the sample that they are lacking in support and training at educational as well as professional development stages of their careers. This perception of inadequacy of training was also not noted to vary across either demographic variable, including teaching experience and qualification level, which thus posits that adequate training remains an issue not exclusive to new and inexperienced teachers. Pereira et al. (2014) similarly state that this component is often overlooked and under emphasised in teacher

preparation programmes and professional training. An overview of the local curriculum for the present standard of education and entry level qualification for teachers in training (Masters in Teaching and Learning) similarly reveals little to no attention to mental health difficulties in students across study units. The study by Cefai and Cooper (2017) focusing on Australian schools also highlights this perceived deficit in teachers and a self-admitted desire for assistance in this regard. Hence, the local context matches international research in this respect.

This poor rating of training in different mental health difficulties might also be a core factor influencing the low perceptions and confidence teachers have in their knowledge of depression and anxiety, and of their ability to interact, intervene, and assist when necessary. This is unfortunate, since a substantial number of teachers feel that they have an important role to play in ameliorating student mental health, yet feel unable and afraid to do so both locally and internationally (Askell-Williams & Cefai, 2014). Given the relatively high objective knowledge scores for both depression and anxiety, it is thus apparent that teachers struggle more with the application of theory and lack training about mental health as applied to the classroom and real-life scenarios. Thus, training should ideally prioritise this aspect.

Perceived adequacy of training in depression and anxiety were also not noted to correlate with objective knowledge of either condition in the sample which might indicate that the overall relatively higher scores in objective knowledge were not a result of training received, but as a result of other factors such as personal interest and research, media, etc.

#### **5.4 Awareness of Services**

This section of the chapter shall discuss findings related to teachers' confidence in their awareness of available services and their knowledge about these services and thus

focuses on the third research question: *How aware are secondary school teachers of appropriate avenues of referral when faced with young people who might be experiencing mental health difficulties?* Specific services mentioned by teachers are also discussed.

**5.4.1 Confidence in awareness of Services and Knowledge about Services.** Overall, the data obtained about teachers' confidence in their awareness of available services for young individuals with mental health difficulties shows that there was a significant degree of hesitancy and a lack of strong opinion towards either polarity. In fact, the mean score of 2.47 is almost the exact same value as the midpoint of the response range where 1 indicates the lowest level of confidence and 4 the highest. Due to this, the overview obtained of teachers when it comes to this factor makes it difficult to make meaningful conclusions of with 52% indicating a level of confidence above the neutral point, and 48% below. However, the fact that almost half the sample feel that their level of confidence about these services is less than appropriate is a figure of concern due to the negative repercussions this might have on help-seeking behaviours in students as well as their ability to feel supported. These findings correspond with Shelemy et al. (2019) who note that several teachers feel insecure and unconfident in their ability to assist students with difficulties (including where to direct them for professional assistance, how to make referrals, etc.) This perception was also found to be substantially accurate given the moderately positive and statistically significant correlation shown between teachers' perceived confidence in their awareness of available services and the number of services they were able to identify.

In particular, results indicate that there is a lack of awareness about how to make an appropriate referral, and about where to gain more information about different services. Several teachers also felt that they were given insufficient information on such services either during their academic training or during continuous professional development. This once

again corroborates with the findings noted by Shelemy et al. (2019). Thus, the highlighted areas of concern indicate there seems to be a considerable need for teachers to be given information about how services operate with a focus on how to make a referral, and what to include in it as this might not always be obvious to teachers. It might also be helpful for an official list of services to be made available for teachers to assist them in identifying how to best help their students in conjunction with more information about what the different services provide and how they might be helpful for different students in different circumstances. This might be a useful topic of focus for further professional development for practicing teachers, as well as for teachers who are still at a student teacher level as part of their training.

**5.4.2 Specific Services.** The mean number of services which provide assistance to young individuals with mental health difficulties mentioned by teachers in the sample was 2.76. The maximum number of services that teachers were allowed to mention was 5. The fact that more than 80% of teachers were able to mention at least 1 valid service is an encouraging finding. However, it is also of concern that 20% could not mention even one service. Moreover, knowledge of specific services does not necessarily result in knowledge of how to help students access said services or of what the service entails. This could thus lead to inappropriate referrals and hence ineffective intervention which might in turn further make students facing mental health difficulties feel hopeless and defeated.

Services most frequently mentioned included NGOs, school support services, different professionals, private clinics, community services, and mental health facilities. This range is a positive finding as it allows for children from different backgrounds and with different needs to access services which best fit the unique situation of the child. These might include socioeconomic status; parental interest, willingness, and involvement; the wish for

greater anonymity; the option of more frequent interventions at a time and place that best suits the child's needs; etc. In general, knowledge of school services seemed to be the highest, together with a number of more popular NGOs such as Richmond Foundation and Kellimni.com. From anecdotal and personal experience, these services are frequently featured in local media, and this seems to have been effective in making them more memorable. Future research might examine the manner in which teachers became aware of such services and by extension, the best method of marketing lesser-known services for the benefit of teachers and students alike.

### **5.5 Elicited profile of strengths and areas of growth of the sample**

Based on the results obtained from this study, a general profile of teachers in the sample in terms of their mental health literacy and its facets can be elicited. This is presented below according to areas of strengths noted in participants, as well as areas in need of further development. This can be helpful in assisting relevant authorities to tailor training and interventions for teachers related to mental health literacy with a focus on evidence based identified needs, and a consideration of the resources and strengths already possessed by teachers which can be utilised to reap further benefits.

Table 2: *Strengths and Areas of Growth of the sample*

<b>Strengths</b>	<b>Areas of Growth</b>
Overall positive attitudes towards depression, anxiety and students experiencing these difficulties.	A potentially harmful belief that mental health difficulties can be overcome by sheer will of the individual and that anxiety is not a valid condition requiring intervention.

<p>Good level of awareness of risk factors for depression and anxiety.</p>	<p>A general lack of awareness of the link between physical and mental health and the intersection of physical health, disability, and mental health.</p>
<p>A relatively good level of objective knowledge of depression and anxiety</p>	<p>Low level of perceived knowledge and confidence regarding depression and anxiety and how to interact with students with these conditions, how to make appropriate referrals, and how to best assist such students.</p>
<p>A good understanding of the main features of depression and anxiety and how these can impact different areas of functioning including learning.</p>	<p>Some misconceptions and confusion between depression and anxiety, and some of the positive symptoms of schizophrenia.</p>
<p>Apart from some mistaken and potentially harmful beliefs held by some teachers about the nature of mental health difficulties, most teachers demonstrated an attitude of inclusion towards students facing mental health difficulties and an evident desire to be of support to such students.</p>	<p>A mistaken belief that students contemplating suicide will always provide clues and signs, and mistaken ideas about suicide trends and tendencies across genders.</p>
<p>A good level of awareness of existing services targeting mental health needs of young individuals including NGOs, governmental services, private clinics etc.</p>	<p>Low perceived adequacy of training regarding mental health at various stages of teachers' professional careers.</p>
<p>A clear desire by teachers to assist students to the best of their abilities, and to improve their capability to do so.</p>	<p>A lack of knowledge about what different services provide and how to refer students to them.</p>

## 5.6 Reflections and criticisms

In line with the post-positivism paradigm, a degree of reflection on the overall findings is important to have a more meaningful overview of data. It also assists in providing context and perspective to ground findings and simultaneously highlights points of further consideration.

The time during which this research was carried out was naturally characterised by COVID-19 which greatly impacted teachers and their motivation and willingness to take part in research. As a result, more so than ever, it is worth questioning the characteristics of respondents and whether the data obtained is a filtered collation of teachers interested in the area of mental health who might have more favourable attitudes towards such difficulties. Furthermore, this might impact the knowledge they possess about different conditions as well as about available services due to the personal interest they might have, and the self-motivated learning they would thus have engaged in.

In addition, the discrepancies noted between different conditions provides rationale for more cautious interpretation of findings and the importance of not making general statements. For instance, suicide was noted to be a greater source of misinformation and uncertainty for teachers as evidenced by the lower scores obtained for objective knowledge pertaining to it. This was especially evident when looking at the relatively similar findings noted across the other conditions. This raises queries about additional differences that might be present across conditions including teachers' reported attitudes towards mental health and whether the positive findings noted in this chapter are due to including conditions which are relatively mild and common (depression and anxiety) compared to more severe mental health issues such as psychosis or severe eating disorders. Had this research been carried out with a

focus on conditions carrying significant stigma, fear, and discomfort, results might have been significantly different. Hence, findings reported must be interpreted specifically for depression and anxiety, and are not necessarily representations of teachers' overall attitudes and beliefs about mental health difficulties in students.

The choice of focusing on conditions based on degree of occurrence in the study might have also resulted in the relatively high objective knowledge scores obtained, and the discrepancy between this and teachers' perceptions of knowledge they have about mental health difficulties in students. It might also explain the relatively high objective knowledge score despite the poor rating of the adequacy of training received in mental health. Thus, this once again might demonstrate that teachers' knowledge when it comes to mental health might be more domain specific and the positive findings reported must be interpreted with caution. By extension, this poses queries about how students dealing with more complex and uncommon conditions might be viewed, approached, and treated by teachers compared to students with depression and anxiety. This is especially pertinent if such difficulties might be more disruptive and externalised such as conduct disorder or ADHD. It is also important to consider that the high objective knowledge scores can additionally be inflated as a result of the true/false response format which would result in a base correct probability of 50%. Therefore, making sweeping statements about teachers' mental health literacy based on any findings in this study would be erroneous, and dismissive towards the complexity of mental health and the lived experiences of students facing related challenges.

## **5.7 Conclusion**

This chapter has provided a discussion of the main findings of the research. Similarities and contrasts with past studies were explored to give additional context to

findings and to allow for potential explanations and deeper understanding of them. The implications of the results on teachers and students alike were also hypothesized while also incorporating elements central to the local context as a backdrop to some of the findings. The next section of this dissertation shall be the concluding chapter which will provide an overview of findings, the strengths and limitations of the research, suggestions for future research, and the applications of findings.

## **Chapter 6: Conclusion**

### **6.1 Introduction**

This concluding chapter recapitulates the research aims, methodological considerations, and main findings. Furthermore, this chapter highlights some of the limitations of the research process while discussing the potential uses and implications of findings. Finally, suggestions and recommendations for future research in the area, as well as considerations aimed at improving the quality of this study are outlined.

### **6.2 Summary of Study and Findings**

This study has explored secondary school teachers' knowledge, attitudes, and perceptions of common child and adolescent mental health difficulties. In doing so, teachers' mental health literacy as applied to depression and anxiety was examined in line with the definition and constituents of mental health literacy posited by Jorm and colleagues (1997).

Utilising a quantitative methodology, an online survey was constructed by the researcher in consultation with relevant literature and local professionals in the field to assess mental health literacy. These included: attitudes towards depression and anxiety and students with these conditions, teachers' perceptions of risk factors for depression and anxiety, areas perceived to be negatively impacted by depression and anxiety, subjective knowledge of depression and anxiety, objective knowledge of depression and anxiety, teachers' confidence in their ability to handle and interact students with depression and anxiety appropriately, perceived adequacy of training received regarding depression and anxiety in students, awareness of different existing services which help young individuals with mental health difficulties, and knowledge of the specific services.

This survey was distributed using primarily purposive and convenience sampling among 156 secondary school teachers from different schools. The sample consisted of 36 males and 120 females (in line with gender distribution of the population according to EUROSTAT 2018) across 3 school sectors (state, church, independent). Data was analysed using the Statistical Package for the Social Sciences (SPSS) version 27 by examining the distribution and frequencies of variables, the correlation between different pairings of variables, as well as the relation between different facets of mental health literacy and particular demographic characteristics. A succinct overview of findings noted in the study for the three main research questions proposed is presented in the table below.

Table 3: *Summary of findings for different research questions*

<p><b>Research Question 1: What are secondary school teachers' attitudes, beliefs, and perceptions of young people's mental health difficulties and about students with such difficulties?</b></p>
<p>Overall, teachers held positive attitudes towards depression and anxiety as well as students with such conditions. Females in the sample were noted to have more positive attitudes than males. Attitudes towards mental health were also inversely correlated with age. Teachers were also quite aware of salient risk factors for both anxiety and depression, as well as areas of daily functioning in students that would likely be affected by depression and anxiety.</p>
<p>Some misconceptions were noted in a portion of the sample regarding anxiety not being seen as a medical condition requiring treatment, as well as the belief that mental health issues are overcome through the will of the individual. A lack of awareness of the</p>

impact of physical health issues and disability on mental health was also present in a considerable portion of the sample.

**Research Question 2: How knowledgeable are secondary school teachers about the most common mental health difficulties found in children adolescents?**

Overall teachers demonstrated a rather negative appraisal of their knowledge of depression and anxiety, as well as their confidence in their ability to handle students with these conditions and to act accordingly to assist them. Teachers also rated the perceived adequacy of training received regarding both depression and anxiety as being quite poor. However, teachers in the sample displayed a good level of objective knowledge of depression and anxiety such as diagnostic symptoms. A lack of awareness was noted in more practical knowledge components including the misconception that students contemplating suicide would always leave clues prior to the attempt, and misinformation about gender tendencies related to suicide. Several teachers also showed a lack of awareness of the physiological and psychosomatic symptoms of anxiety and panic attacks, and a considerable portion of the sample also displayed confusion between depression and anxiety and the positive symptoms of schizophrenia.

Many teachers also felt that they did not feel confident in their ability to deal with students with mental health difficulties including knowing about how to make referrals, knowing what strategies can be used in the classroom, and in their ability to recognise symptoms in students at earlier stages despite knowing the theoretical and diagnostic symptomatology.

The discrepancy between different domains of knowledge assessed also demonstrates that teachers require more applicable and practical training to assist them to bridge the gap between theoretical knowledge and real-life application of their roles within mental health care in students. Depression (and suicide) was noted to be a larger source of confusion and concern for teachers than anxiety.

**Research Question 3: How aware are secondary school teachers of appropriate avenues of referral when faced with young people who might be experiencing mental health difficulties?**

Overall teachers in the sample expressed a somewhat good level of knowledge of the existence of different services. The vast majority of teachers were able to mention 1 or more services targeting young individuals with mental health difficulties and responses across the sample included a range of categories including NGOs, governmental services, private clinics, and school services. Despite this, teachers also stated that despite being aware of the existence of different services, they were not certain about what different services provided and how they could be accessed by their students if necessary.

### **6.3 Implications and Usefulness of Findings**

The results obtained from this study firstly allow for an overview of this research topic which is pertinent given the dearth of pre-existing literature on a local and international level. Having a better understanding of the local scenario can also assist the development of strategies aimed at safeguarding children's health and wellbeing from a primary and secondary prevention standpoint while allowing for evidence-based practice for health promotion efforts. This allows for more cost-effective, useful, and specific intervention for

students at risk (Kobau et al., 2011). The findings listed above can also be useful in the hands of relevant authorities who devise the training teachers receive at a student-teacher stage, as well as fully fledged professionals.

In particular, it is evident that teachers would benefit from practical training about how to interact and intervene with students facing mental health difficulties. As shown by the polarity of findings about teachers' confidence when it came to mental health services, teachers would also benefit from being better informed about the different services available and their expertise, and how these services might be accessed. As a result, having teachers with greater competencies in their ability to actively help students might lead to an increase in access to services by students while also allowing students with mental health difficulties to feel better understood (Saxena & Setoya, 2014).

In addition, providing opportunities which allow for consultation with professionals can also assist teachers to feel more supported. Furthermore, it would be helpful to provide educational opportunities to address common misconceptions and misunderstandings held by teachers about mental health difficulties in line with the findings of this research. These might include: gender tendencies for different conditions, allowing for a biopsychosocial understanding of mental health, challenging mistaken beliefs about suicide, addressing that mental health difficulties are valid and real conditions and not a result of personal weakness, differentiating between symptoms of different conditions such as schizophrenia and depression/anxiety, etc. Furthermore, teachers can also be assisted to explore and address personal biases and stigmatising attitudes with specifically delivered workshops, as well as through additional training on reflexive teaching.

Finally, this research provides a gateway and a foundation for future research on the area aimed at obtaining a more comprehensive understanding of the interplay between student, teacher, and mental health, and which measures might ultimately lead to a school environment that is not only conducive to learning but also to allowing students to thrive on a biopsychosocial level. Given the lack of alternatives, the constructed data collection tool can also provide the foundations for the creation of a more psychometrically sound instrument that can be utilised to better understand mental health literacy in teachers in a standardised and thus comparable manner. Despite its limitations, the constructed tool allows for an in-depth understanding of mental health literacy through a wide assessment of relevant variables while also including several components of assessment with good internal consistency including those of perceived risk factors for mental health difficulties, areas negatively impacted by depression and anxiety, confidence in dealing with students with mental health difficulties, and knowledge about available services.

#### **6.4 Limitations of Study**

Despite reaching its main aims of gaining a better understanding of the research topic in the local context, the research is not without its limitations. For instance, given the lack of a viable pre-existing assessment, components of the data collection tool utilised (which was constructed by the researcher) might not have had sufficiently strong psychometric properties to make their usage ideal. This was particularly evident for the items measuring attitudes towards depression and attitudes towards anxiety. Hence, findings cited in this study might not be an accurate depiction of the research topic in these areas due to an inability to invest enough time into the development and repeated improvement of the data collection tool (Gray, 2018). In addition to this, feedback about the contents of the data collection tool gathered from psychologists working in the field might have benefited from using a

standardised template to gather comments and suggestions as opposed to the relatively unstructured and informal style utilised.

Furthermore, findings would have been more generalisable and representative of the local scenario if a larger sample size and hence smaller margin of error were reached. Although the distribution of gender in the sample is roughly equivalent to the distribution within the population of teachers (EUROSTAT, 2018), additional stratification methods could have been utilised to ensure further representation of the teaching population including stratification by sector, age, area of teaching etc. (Tahersdoot, 2016). This was originally planned, but could not be seen through as a result of issues related to data collection due to COVID-19 and the impact on teachers' availability and willingness to take part in the study. This was further exacerbated by the rather lengthy and possibly tiresome nature of the survey. Therefore, the data collection tool might not have been well tailored to facilitate participation and data collection, and might have placed too much focus on comprehensive data gathering. A better balance of these factors would thus have been greatly beneficial.

Given the rather explorative focus of the study (despite utilising a quantitative methodology), the research might have benefited from allowing participants more room and opportunity to provide their opinions in the form of more open-ended questions. Thus, given the desired outcome of the study, a mixed methodology might have been more ideal (Gray, 2018). This might also have allowed for more useful findings about necessary changes which teachers wish to see in mental health education and awareness.

## **6.5 Recommendations for Future Research**

Future research in this area should seek to improve on the limitations of the study presented above. Firstly, the results of the questionnaire can be used for its further

development to ensure that a more psychometrically sound instrument is available for future research and for evaluation purposes. Additional validation measures might thus be carried out to ensure its reliability and validity including additional expert input and consultation with literature for better face and content validity, test-retest reliability, inter-rater-reliability etc. Factor analysis should also be carried out to fine tune and filter the items included for different components of assessment, and given the discrepancy noted between perceived and objective knowledge of different conditions, the items included in the latter would benefit from reconsideration.

In addition, several adjunct and complimentary research projects can assist to further bolster the findings derived from this research and to obtain a more comprehensive understanding of this topic. For instance, research might explore students' needs and wishes regarding mental health care from their schools and whether these needs are being met. In addition, exploring mental health literacy in students and their understanding and perceptions of mental health difficulties present within their cohort might allow for a better portrayal of how to best assist the youth of today, and whether the perceived needs of students as deemed by teachers and mental health care providers matches with the idiosyncratic narratives of present sociocultural realities lived by students.

Additionally, research should also explore teachers' attitudes towards playing a role in safeguarding student mental health, and which factors might prevent them from wanting to enact this function. By extension, teachers' beliefs regarding the importance of socioemotional health and its inclusion as part of mainstream education would also be worth exploring. This is especially pertinent in the present climate of COVID-19 and the resulting impact this has had on students' psychosocial health as a result of the changes and disruptions to their education (Merrill et al., 2021).

Furthermore, it would be beneficial to carry out different interventions aimed at bolstering mental health literacy in teachers and examining the impacts of the different interventions on teachers and students alike. Such studies could also then be used for further improvements and development of curricula on mental health literacy for use in initial teacher education.

## **6.6 Conclusion**

In conclusion, this dissertation has explored teachers' knowledge, attitudes and perceptions as applied to common mental health difficulties experienced by children and adolescents. Despite some of the limitations and challenges encountered throughout the research process, this dissertation has helped to shed light on an important and under researched part of our educational system in the hopes of understanding and ameliorating student mental health in an era where such difficulties are ever present (Ford et al., 2021).

It has been a privilege to further research in this area and to have been allowed the time and attention of so many educators who are so evidently passionate and invested in their students. I look forward to seeing the potential fruits of this research on a practical and applied nature, and as a future professional directly working within this field, I hope to utilise the knowledge I have acquired to improve student wellbeing to the best of my abilities.

### References

- Achenbach, T., Ivanova, M., Rescorla, L., Turner, L., & Althoff, R. (2016). Internalizing/Externalizing Problems: Review and Recommendations for Clinical and Research Applications. *Journal Of The American Academy Of Child & Adolescent Psychiatry*, 55(8), 647-656. <https://doi.org/10.1016/j.jaac.2016.05.012>
- Afifi M. (2007). Gender differences in mental health. *Singapore medical journal*, 48(5), 385–391.
- Allen, M. (2017). *The sage encyclopedia of communication research methods*. Thousand Oaks, CA: SAGE Publications, Inc doi: 10.4135/9781483381411
- Almeida, A., Pinheiro, P., Okan, O., Pereira, A., & Mesquita, E. (2017). Measuring Mental Health Literacy of Teachers: A Pilot Study. *International Journal of Case Studies*, 5(12), 35-40.
- Alshaikh, F., Ramzan, F., Rawaf, S., & Majeed, A. (2014). Social Network Sites as a Mode to Collect Health Data: A Systematic Review. *Journal Of Medical Internet Research*, 16(7), 171. doi: 10.2196/jmir.3050
- American Psychological Association. (2017). *Ethical principles of psychologists and code of conduct* (2002, amended effective June 1, 2010, and January 1, 2017). <https://www.apa.org/ethics/code/>

- Askell-Williams, H., & Cefai, C. (2014). Australian and Maltese teachers' perspectives about their capabilities for mental health promotion in school settings. *Teaching And Teacher Education, 40*, 61-72. <https://doi.org/10.1016/j.tate.2014.02.003>
- Atkins, M. S., Frazier, S. L., Adil, J. A., & Talbott, E. (2002). School-based mental health services in urban communities. In M. D. Weist, S.W. Evans, & N. A. Lever (Eds.), *Handbook of school mental health: Advancing practice and research. Issues in clinical child psychology*. New York: Kluwer Academic/Plenum.
- Azzopardi-Muscat, N., Priebe, S., Chisholm, D., Sammut, A., Grech, A., & Borg, A. et al. (2018). *Building Resilience Transforming Services A Mental Health Strategy for Malta 2020-2030* [Ebook]. Retrieved 7 September 2020, from [https://meae.gov.mt/en/Public\\_Consultations/MEH-HEALTH/Pages/Consultations/BuildingResilienceTransformingServicesAMentalHealthStrategyforMalta20202030.aspx](https://meae.gov.mt/en/Public_Consultations/MEH-HEALTH/Pages/Consultations/BuildingResilienceTransformingServicesAMentalHealthStrategyforMalta20202030.aspx).
- Banerjee, A., & Chaudhury, S. (2010). Statistics without tears: Populations and samples. *Industrial Psychiatry Journal, 19*(1), 60. <https://doi.org/10.4103/0972-6748.77642>
- Becerra-Culqui, T., Liu, Y., Nash, R., Cromwell, L., Flanders, W., & Getahun, D. et al. (2018). Mental Health of Transgender and Gender Nonconforming Youth Compared With Their Peers. *Pediatrics, 141*(5), e20173845. <https://doi.org/10.1542/peds.2017-3845>

- Bellis, M., Lowey, H., Leckenby, N., Hughes, K., & Harrison, D. (2013). Adverse childhood experiences: retrospective study to determine their impact on adult health behaviours and health outcomes in a UK population. *Journal Of Public Health, 36*(1), 81-91.  
<https://doi.org/10.1093/pubmed/fdt038>
- Bethell, C., Jones, J., Gombojav, N., Linkenbach, J., & Sege, R. (2019). Positive Childhood Experiences and Adult Mental and Relational Health in a Statewide Sample: Associations Across Adverse Childhood Experiences Levels. *JAMA pediatrics, 173*(11), e193007. Advance online publication.  
<https://doi.org/10.1001/jamapediatrics.2019.3007>
- Bilsen J. (2018). Suicide and Youth: Risk Factors. *Frontiers in psychiatry, 9*, 540.  
<https://doi.org/10.3389/fpsy.2018.00540>
- Bonabi, H., Müller, M., Ajdacic-Gross, V., Eisele, J., Rodgers, S., & Seifritz, E. et al. (2016). Mental Health Literacy, Attitudes to Help Seeking, and Perceived Need as Predictors of Mental Health Service Use. *The Journal Of Nervous And Mental Disease, 204*(4), 321-324. <https://doi.org/10.1097/nmd.0000000000000488>
- Bonelli, R., Dew, R., Koenig, H., Rosmarin, D., & Vasegh, S. (2012). Religious and Spiritual Factors in Depression: Review and Integration of the Research. *Depression Research And Treatment, 2012*, 1-8. <https://doi.org/10.1155/2012/962860>
- Breuer, C. (2016). *High School Teachers' Perceptions of Mental Health and Adolescent Depression* [Unpublished Doctorate Dissertation]. Walden.

- Bruland, D., Schulze, K., Harsch, S., Pinheiro, P., & Bauer, U. (2017). Mental health literacy of teachers and social workers: qualitative interviews and in-depths findings. *European Journal Of Public Health, 27*(3).  
<https://doi.org/10.1093/eurpub/ckx187.548>
- Busby Grant, J., Bruce, C., & Batterham, P. (2015). Predictors of personal, perceived and self-stigma towards anxiety and depression. *Epidemiology And Psychiatric Sciences, 25*(3), 247-254. <https://doi.org/10.1017/s2045796015000220>
- Cattane, N., Rossi, R., Lanfredi, M., & Cattaneo, A. (2017). Borderline personality disorder and childhood trauma: exploring the affected biological systems and mechanisms. *BMC psychiatry, 17*(1), 221. <https://doi.org/10.1186/s12888-017-1383-2>
- Cattley, G. (2004). The impact of teacher-parent-peer support on students' well-being and adjustment to the middle years of schooling. *Int. J. Adolesc. Youth 11*, 269–282. doi: 10.1080/02673843.2004.9747935
- Cautillo, N. (2018). *Examining Stigma Among Preservice Teachers Following the Completion of a Mental Health Literacy Course* [Unpublished Masters Dissertation]. Western.
- Cavallaro, T. (2005). *People with a disability in vocational education and training*. National Centre for Vocational Education Research.
- Cefai, C., & Cooper, P. (2017). *Mental Health Promotion in Schools: Cross-Cultural Narratives and Perspectives* (pp. 99-120). Sense Publishers.

- Celano, C. M., Daunis, D. J., Lokko, H. N., Campbell, K. A., & Huffman, J. C. (2016). Anxiety Disorders and Cardiovascular Disease. *Current psychiatry reports*, 18(11), 101. <https://doi.org/10.1007/s11920-016-0739-5>
- Chan, J., Parmenter, T., & Stancliffe, R. (2009). The impact of traumatic brain injury on the mental health outcomes of individuals and their family carers. *Australian E-Journal For The Advancement Of Mental Health*, 8(2), 155-164. <https://doi.org/10.5172/jamh.8.2.155>
- Cirulli, F., Laviola, G., & Ricceri, L. (2009). Risk factors for mental health: translational models from behavioural neuroscience. *Neuroscience and biobehavioral reviews*, 33(4), 493–497. <https://doi.org/10.1016/j.neubiorev.2009.01.006>
- Cohen, J. (2013). *Statistical Power Analysis for the Behavioral Sciences*. Elsevier Science.
- Collins, D. (2003). Pretesting survey instruments: An overview of cognitive methods. *Quality Of Life Research*, 12(3), 229-238. <https://doi.org/10.1023/a:1023254226592>
- s
- Connery, H., & Davidson, K. (2006). A survey of attitudes to depression in the general public: A comparison of age and gender differences. *Journal Of Mental Health*, 15(2), 179-189. <https://doi.org/10.1080/09638230600608818>
- Corrigan, P. W., & Watson, A. C. (2002). Understanding the impact of stigma on people with mental illness. *World psychiatry: official journal of the World Psychiatric Association (WPA)*, 1(1), 16–20.



- Dorić, A., Stevanović, D. i Knez, R. (2018). Anxiety and depressive disorders in children and adolescents suffering from diabetes mellitus. *Medicina Fluminensis*, 54 (2), 166-176. [https://doi.org/10.21860/medflum2018\\_198208](https://doi.org/10.21860/medflum2018_198208)
- Drennan, J. (2003). Cognitive interviewing: Verbal data in the design and pretesting of questionnaires. *Journal of Advanced Nursing*, 42, 57–63.
- Drew, C., Hardman, L., & Hosp, J. (2008). Ethical Issues in Conducting Research. *Designing And Conducting Research In Education*, 55-80. <https://doi.org/10.4135/9781483385648.n3>
- Dudley J. R. (2000). Confronting stigma within the services system. *Social work*, 45(5), 449–455. <https://doi.org/10.1093/sw/45.5.449>
- Elkington, K. S., Hackler, D., Walsh, T. A., Latack, J. A., McKinnon, K., Borges, C., Wright, E. R., & Wainberg, M. L. (2013). Perceived mental illness stigma, intimate relationships and sexual risk behavior in youth with mental illness. *Journal of adolescent research*, 28(3), 378–404. <https://doi.org/10.1177/0743558412467686>
- Elovainio, M., Pulkki-Råback, L., Hakulinen, C., Ferrie, J., Jokela, M., & Hintsanen, M. et al. (2015). Childhood and adolescence risk factors and development of depressive symptoms: the 32-year prospective Young Finns follow-up study. *Journal Of Epidemiology And Community Health*, 69(11), 1109-1117. <https://doi.org/10.1136/jech-2014-205352>

- Engel, G. (1977). The need for a new medical model: a challenge for biomedicine. *Science*, *196*(4286), 129-136.
- Epstein N. E. (2014). Multidisciplinary in-hospital teams improve patient outcomes: A review. *Surgical Neurology International*, *5*(7), S295-303. doi:10.4103/2152-7806.139612
- Erath, S. A., Flanagan, K. S., & Bierman, K. L. (2007). Social anxiety and peer relations in early adolescence: behavioral and cognitive factors. *Journal of abnormal child psychology*, *35*(3), 405–416. <https://doi.org/10.1007/s10802-007-9099-2>
- Etikan, I. (2016). Comparison of Convenience Sampling and Purposive Sampling. *American Journal Of Theoretical And Applied Statistics*, *5*(1), 1. doi: 10.11648/j.ajtas.20160501.11
- Evans, J.R., & Mathur, A. (2005). The value of online surveys. *Internet Research*, *15*, 195-219.
- Evans-Lacko, S., Little, K., Meltzer, H., Rose, D., Rhydderch, D., Henderson, C., & Thornicroft, G. (2010). Development and Psychometric Properties of the Mental Health Knowledge Schedule. *The Canadian Journal Of Psychiatry*, *55*(7), 440-448. doi: 10.1177/070674371005500707

- Felitti, V., Anda, R., Nordenberg, D., Williamson, D., Spitz, A., & Edwards, V. et al. (1998). Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults. *American Journal Of Preventive Medicine*, 14(4), 245-258. [https://doi.org/10.1016/s0749-3797\(98\)00017-8](https://doi.org/10.1016/s0749-3797(98)00017-8)
- Ferguson, T. J., Stegge, H., Miller, E. R., & Olsen, M. E. (1999). Guilt, shame, and symptoms in children. *Developmental Psychology*, 35(2), 347-357. <https://doi.org/10.1037/0012-1649.35.2.347>
- Ford, R., King, T., Priest, N., & Kavanagh, A. (2017). Bullying and mental health and suicidal behaviour among 14- to 15-year-olds in a representative sample of Australian children. *Australian & New Zealand Journal Of Psychiatry*, 51(9), 897-908. <https://doi.org/10.1177/0004867417700275>
- Ford, T., John, A., & Gunnell, D. (2021). Mental health of children and young people during pandemic. *BMJ*, 372(614). <https://doi.org/10.1136/bmj.n614>
- Franklin, C., Kim, J., Ryan, T., Kelly, M., & Montgomery, K. (2012). Teacher involvement in school mental health interventions: A systematic review. *Children And Youth Services Review*, 34(5), 973-982. <https://doi.org/10.1016/j.childyouth.2012.01.027>
- Frey, A., Lingo, A., & Nelson, C. M. (2011). Positive behavior support and response to intervention in elementary schools. In H. Walker, & M. K. Shinn (Eds.), *Interventions for achievement and behavior problems: Preventive and remedial approaches* (pp. 397-433). National Association for School Psychologists.

- Galanti, M., Hultin, H., Dalman, C., Engström, K., Ferrer-Wreder, L., & Forsell, Y. et al. (2016). School environment and mental health in early adolescence - a longitudinal study in Sweden (KUPOL). *BMC Psychiatry*, *16*(1). <https://doi.org/10.1186/s12888-016-0919-1>
- Galderisi, S., Heinz, A., Kastrup, M., Beezhold, J. and Sartorius, N. (2015). Toward a new definition of mental health. *World Psychiatry*, *14*(2), 231-233.
- García Bacete, F., Marande Perrin, G., Schneider, B., & Blanchard, C. (2014). Effects of School on the Well-Being of Children and Adolescents. *Handbook Of Child Well-Being*, 1251-1305. [https://doi.org/10.1007/978-90-481-9063-8\\_149](https://doi.org/10.1007/978-90-481-9063-8_149)
- Ghandour, R., Sherman, L., Vladutiu, C., Ali, M., Lynch, S., Bitsko, R., & Blumberg, S. (2019). Prevalence and Treatment of Depression, Anxiety, and Conduct Problems in US Children. *The Journal Of Pediatrics*, *206*, 256-267. <https://doi.org/10.1016/j.jpeds.2018.09.021>
- Gilgoff, R., Singh, L., Koita, K., Gentile, B., & Marques, S. (2020). Adverse Childhood Experiences, Outcomes, and Interventions. *Pediatric Clinics Of North America*, *67*(2), 259-273. <https://doi.org/10.1016/j.pcl.2019.12.001>
- Gluschkoff, K., Keltikangas-Järvinen, L., Pulkki-Råback, L., Jokela, M., Viikari, J., Raitakari, O., & Hintsanen, M. (2017). Hostile parenting, parental psychopathology, and depressive symptoms in the offspring: a 32-year follow-up in the Young Finns study. *Journal Of Affective Disorders*, *208*, 436-442. <https://doi.org/10.1016/j.jad.2016.11.002>

- Goffman, E. (1963). *Stigma: Notes on the management of spoiled identity*. Englewood Cliffs, N.J: Prentice-Hall.
- Gray, D. (2018). *Doing research in the real world*. London: Sage.
- Gromada, A., Rees, G., Chzhen, Y. (2020). Worlds of Influence: Understanding What Shapes Child Well-being in Rich Countries, Innocenti Report Card no. 16, *UNICEF Office of Research - Innocenti, Florence*.
- Guetterman, T. C. (2020). Qualitative, quantitative, and mixed methods research sampling strategies. *Education*. <https://doi.org/10.1093/obo/9780199756810-0241>
- Hampson, M., Watt, B., Hicks, R., Bode, A., & Hampson, E. (2017). Changing hearts and minds: The importance of formal education in reducing stigma associated with mental health conditions. *Health Education Journal*, 77(2), 198-211.  
<https://doi.org/10.1177/0017896917741327>
- Harsch, S., Bruland, D., Bittlingamy, U., Okan, O., & Bauer, U. (2018). Promoting teacher mental health literacy: Supporting children of parents with a mental health issue. *European Journal Of Public Health*, 28(1-4).  
<https://doi.org/10.1093/eurpub/cky213.841>
- Hawton, K. (2002). Deliberate self-harm in adolescents: self-report survey in schools in England. *BMJ*, 325(7374), 1207-1211. doi: 10.1136/bmj.325.7374.1207



- Howell, A., Keyes, C., & Passmore, H. (2013). Flourishing Among Children and Adolescents: Structure and Correlates of Positive Mental Health, and Interventions for Its Enhancement. *Research, Applications, And Interventions For Children And Adolescents*, 59-79. [https://doi.org/10.1007/978-94-007-6398-2\\_5](https://doi.org/10.1007/978-94-007-6398-2_5)
- Howell, K. E. (2013). *An introduction to the philosophy of methodology*. Los Angeles, CA: SAGE.
- Hughes, K., Bellis, M., Hardcastle, K., Sethi, D., Butchart, A., & Mikton, C. et al. (2017). The effect of multiple adverse childhood experiences on health: a systematic review and meta-analysis. *The Lancet Public Health*, 2(8), 356-366. [https://doi.org/10.1016/s2468-2667\(17\)30118-4](https://doi.org/10.1016/s2468-2667(17)30118-4)
- Inchley, J., Curie, D., Young, T., Samdal, O., Torsheim, T., & Augustson, L. et al. (2016). *Growing up unequal: gender and socioeconomic differences in young people's health and well-being* [Ebook]. World Health Organisation. Retrieved 27 August 2020, from <https://www.euro.who.int/en/publications/abstracts/growing-up-unequal.-hbsc-2016-study-20132014-survey>.
- Jaser S. S. (2010). Psychological problems in adolescents with diabetes. *Adolescent medicine: state of the art reviews*, 21(1), 138–xi.
- Johnson, C., Eva, A., Johnson, L., & Walker, B. (2010). Don't Turn Away: Empowering Teachers to Support Students' Mental Health. *The Clearing House: A Journal Of Educational Strategies, Issues And Ideas*, 84(1), 9-14. <https://doi.org/10.1080/00098655.2010.484441>

- Johnson, T. (2014). Snowball Sampling: Introduction. In *Wiley Stats Ref: Statistics Reference Online*. John Wiley & Sons. doi:10.1002/9781118445112.stat05720
- Jorm, A., Korten, A., Jacomb, P., Christensen, H., Rodgers, B., & Pollitt, P. (1997). "Mental health literacy": a survey of the public's ability to recognise mental disorders and their beliefs about the effectiveness of treatment. *Medical Journal Of Australia*, 166(4), 182-186. <https://doi.org/10.5694/j.1326-5377.1997.tb140071.x>
- Kamel, A., Haridi, H., Alblowi, T., Albasher, A., & Alnazah, N. (2020). Beliefs about students' mental health issues among teachers at elementary and high schools, Hail Governorate, Saudi Arabia. *Middle East Current Psychiatry*, 27(1). <https://doi.org/10.1186/s43045-020-00039-8>
- Kaminer, D., Seedat, S., & Stein, D. J. (2005). Post-traumatic stress disorder in children. *World psychiatry: official journal of the World Psychiatric Association (WPA)*, 4(2), 121–125.
- Karam, S. (2019). *Help Wanted: Investigating Help-Seeking Behaviour Among Post Secondary Students in Relation to Their Mental Health and WellBeing* [Unpublished Master's Dissertation]. Western University.
- Karukivi, M., & Haapasalo-Pesu, K. M. (2017). The predictive effect of medical illnesses for mental health care in adolescence: a register-based study. *Adolescent health, medicine and therapeutics*, 8, 95–98. <https://doi.org/10.2147/AHMT.S142980>

- Keiler L. S. (2018). Teachers' roles and identities in student-centered classrooms. *International journal of STEM education*, 5(1), 34.  
<https://doi.org/10.1186/s40594-018-0131-6>
- Kessler, R., Berglund, P., Demler, O., Jin, R., Merikangas, K., & Walters, E. (2005). Lifetime Prevalence and Age-of-Onset Distributions of DSM-IV Disorders in the National Comorbidity Survey Replication. *Archives Of General Psychiatry*, 62(6), 593. <https://doi.org/10.1001/archpsyc.62.6.593>
- Khan, L. (2016). *Missed Opportunities: A review of recent evidence into children and young people's mental health* [Ebook] (pp. 42-70). Centre for Mental Health. Retrieved 25 February 2020, from <https://www.crisiscareconcordat.org.uk/inspiration/centre-mental-health-missed-opportunities-review-recent-evidence-children-young-peoples-mental-health/>.
- Khurshid, s., Parveen, q., Yousuf, m., & Chaudhry, A. (2015). Effects of Depression on students' academic performance. *Sci.Int (Lahore)*, 27(2), 1619–1624.
- Kiliñç, H., & Firat, M. (2017). Opinions of Expert Academicians on Online Data Collection and Voluntary Participation in Social Sciences Research. *Kuram Ve Uygulamada Egitim Bilimleri*, 17, 1461.
- Kobau, R., Seligman, M. E., Peterson, C., Diener, E., Zack, M. M., Chapman, D., & Thompson, W. (2011). Mental health promotion in public health: perspectives and strategies from positive psychology. *American journal of public health*, 101(8), 1–9.  
<https://doi.org/10.2105/AJPH.2010.300083>

- Kobau, R., Seligman, M., Peterson, C., Diener, E., Zack, M., Chapman, D., & Thompson, W. (2011). Mental Health Promotion in Public Health: Perspectives and Strategies From Positive Psychology. *American Journal Of Public Health, 101*(8).  
<https://doi.org/10.2105/ajph.2010.300083>
- Koning, N., Büchner, F., Vermeiren, R., Crone, M., & Numans, M. (2019). Identification of children at risk for mental health problems in primary care—Development of a prediction model with routine health care data. *Eclinicalmedicine, 15*, 89-97.  
<https://doi.org/10.1016/j.eclinm.2019.09.007>
- Körük, S. (2017). The Effect of Self-Esteem on Student Achievement. *The Factors Effecting Student Achievement, 247-257*. [https://doi.org/10.1007/978-3-319-56083-0\\_15](https://doi.org/10.1007/978-3-319-56083-0_15)
- Larson, R. (2018). Controlling social desirability bias. *International Journal Of Market Research, 61*(5), 534-547. <https://doi.org/10.1177/1470785318805305>
- Luby J. L. (2009). Early childhood depression. *The American journal of psychiatry, 166*(9), 974–979. <https://doi.org/10.1176/appi.ajp.2009.08111709>
- Lynn, C. J., McKay, M. M., & Atkins, M. S. (2003). School social work: Meeting the mental health needs of students through collaboration with teachers. *Children & Schools, 25*(4), 197-209.
- Macdonald, M. (2004). Teachers' knowledge of facts and myths about suicide. *Psychological Reports, 95*(6), 651. <https://doi.org/10.2466/pr0.95.6.651-656>

- Malhotra, S., & Patra, B. N. (2014). Prevalence of child and adolescent psychiatric disorders in India: a systematic review and meta-analysis. *Child and adolescent psychiatry and mental health*, 8, 22. <https://doi.org/10.1186/1753-2000-8-22>
- Manderscheid, R. W., Ryff, C. D., Freeman, E. J., McKnight-Eily, L. R., Dhingra, S., & Strine, T. W. (2010). Evolving definitions of mental illness and wellness. *Preventing chronic disease*, 7(1), A19.
- Mann, M., Hosman, C., Shaalma, H., & Vries, N. (2004). Self-esteem in a broad-spectrum approach for mental health promotion. *Health Education Research*, 19(4), 357-372. <https://doi.org/10.1093/her/cyg041>
- Marsh, R. (2015). Identifying Students With Mental Health Issues. *Intervention In School And Clinic*, 51(5), 318-322. <https://doi.org/10.1177/1053451215606706>
- Martin, J. (2010). Stigma and student mental health in higher education. *Higher Education Research & Development*, 29(3), 259-274. <https://doi.org/10.1080/07294360903470969>
- Maxey, M., & Beckert, T. (2016). Adolescents with Disabilities. *Adolescent Research Review*, 2(2), 59-75. <https://doi.org/10.1007/s40894-016-0043-y>
- May, T., Adesina, I., McGillivray, J., & Rinehart, N. (2019). Sex differences in neurodevelopmental disorders. *Current Opinion In Neurology*, 32(4), 622-626. <https://doi.org/10.1097/wco.0000000000000714>

- Melby, L., Indredavik, M., Løhaugen, G., Brubakk, A., Skranes, J., & Vik, T. (2020). Is there an association between full IQ score and mental health problems in young adults? A study with a convenience sample. *BMC Psychology*, 8(1).  
<https://doi.org/10.1186/s40359-020-0372-2>
- Mendlowicz, M. V., & Stein, M. B. (2000). Quality of life in individuals with anxiety disorders. *The American journal of psychiatry*, 157(5), 669–682.  
<https://doi.org/10.1176/appi.ajp.157.5.669>
- Merrill, K., William, T., Joyce, K., Roos, L., & Protudjer, J. (2021). Potential psychosocial impact of COVID-19 on children: a scoping review of pandemics and epidemics. *Journal Of Global Health Reports*. <https://doi.org/10.29392/001c.18229>
- Michaud, P. A., & Fombonne, E. (2005). Common mental health problems. *BMJ (Clinical research ed.)*, 330(7495), 835–838. <https://doi.org/10.1136/bmj.330.7495.835>
- Miller, L., Musci, R., D'Agati, D., Alfes, C., Beaudry, M., Swartz, K., & Wilcox, H. (2018). Teacher Mental Health Literacy is Associated with Student Literacy in the Adolescent Depression Awareness Program. *School Mental Health*, 11(2), 357-363.  
<https://doi.org/10.1007/s12310-018-9281-4>
- Miranda-Mendizabal, A., Castellví, P., Parés-Badell, O., Alayo, I., Almenara, J., & Alonso, I. et al. (2019). Gender differences in suicidal behavior in adolescents and young adults: systematic review and meta-analysis of longitudinal studies. *International Journal Of Public Health*, 64(2), 265-283. <https://doi.org/10.1007/s00038-018-1196-1>

- Moisey, S. (2004,). Students with disabilities in distance education: Characteristics, course enrollment and completion, and support services. *Journal of Distance Education, 19* (1), 73-91.
- Moretti, M. M., & Peled, M. (2004). Adolescent-parent attachment: Bonds that support healthy development. *Paediatrics & child health, 9*(8), 551–555.  
<https://doi.org/10.1093/pch/9.8.551>
- Moses T. (2009). Stigma and self-concept among adolescents receiving mental health treatment. *The American journal of orthopsychiatry, 79*(2), 261–274.  
<https://doi.org/10.1037/a0015696>
- Mukolo, A., Heflinger, C. A., & Wallston, K. A. (2010). The stigma of childhood mental disorders: a conceptual framework. *Journal of the American Academy of Child and Adolescent Psychiatry, 49*(2), 92–198. <https://doi.org/10.1097/00004583-201002000-00003>
- Mulvey, K., Boswell, C., & Zheng, J. (2017). Causes and Consequences of Social Exclusion and Peer Rejection Among Children and Adolescents. *Report on emotional & behavioral disorders in youth, 17*(3), 71–75.
- Muniz, C., Fox, B., Miley, L., Delisi, M., Cigarran, G., & Birnbaum, A. (2019). The Effects of Adverse Childhood Experiences on Internalizing Versus Externalizing Outcomes. *Criminal Justice And Behavior, 46*(4), 568-589.  
<https://doi.org/10.1177/0093854819826213>

- Mwachofi, A., Imai, S., & Bell, R. (2020). Adverse childhood experiences and mental health in adulthood: Evidence from North Carolina. *Journal Of Affective Disorders*, 267, 251-257. <https://doi.org/10.1016/j.jad.2020.02.021>
- Newman, L., Judd, F., Olsson, C., Castle, D., Bousman, C., & Sheehan, P. et al. (2016). Early origins of mental disorder - risk factors in the perinatal and infant period. *BMC Psychiatry*, 16(1). <https://doi.org/10.1186/s12888-016-0982-7>
- Nicholas, D., & Rowlands, I. (2011). Social media use in the research workflow. *Information Services and Use*, 31(1-2), 61-83.
- Olson, J., Schrage, S., Belzer, M., Simons, L., & Clark, L. (2015). Baseline Physiologic and Psychosocial Characteristics of Transgender Youth Seeking Care for Gender Dysphoria. *Journal Of Adolescent Health*, 57(4), 374-380. <https://doi.org/10.1016/j.jadohealth.2015.04.027>
- Ott, M., Hunt, A., Muzzey, A., & Cope-Barnes, D. (2016). Adapting an Evidence-based Teen Pregnancy Prevention Program for Adolescents With Adverse Childhood Experiences. *Journal Of Adolescent Health*, 58(2), S35. <https://doi.org/10.1016/j.jadohealth.2015.10.083>
- Özabacı, N. (2010). The effectiveness of teachers to recognize the symptoms of depression for their depressive students. *Procedia - Social And Behavioral Sciences*, 2(2), 2371-2376. <https://doi.org/10.1016/j.sbspro.2010.03.339>
- Pelikan, J.M. & Ganahl, K. (2017). Measuring health literacy in general populations: Primary findings from the HLS-EU Consortium's health literacy assessment effort. In

R.A. Logan, and E.R. Siegel (eds) *Health literacy: New directions in research, theory and practice* (240), Amsterdam, Berlin and Washington, DC: IOS Press, 34-59

Pescosolido, B. A., Fettes, D. L., Martin, J. K., Monahan, J., & McLeod, J. D. (2007). Perceived dangerousness of children with mental health problems and support for coerced treatment. *Psychiatric services (Washington, D.C.)*, 58(5), 619–625.  
<https://doi.org/10.1176/ps.2007.58.5.619>

Pinto, A., Luna, I., Sivla, A., Pinheiro, P., Braga, V., & Souza, Â. (2014). Risk factors associated with mental health issues in adolescents: an integrative review. *Revista Da Escola De Enfermagem Da USP*, 48(3), 555-564. <https://doi.org/10.1590/s0080-623420140000300022>

Plana-Ripoll, O., Pedersen, C., Holtz, Y., Benros, M., Dalsgaard, S., & de Jonge, P. et al. (2019). Exploring Comorbidity Within Mental Disorders Among a Danish National Population. *JAMA Psychiatry*, 76(3), 259.  
<https://doi.org/10.1001/jamapsychiatry.2018.3658>

Racine, N., Cooke, J. E., Eirich, R., Korczak, D. J., McArthur, B., & Madigan, S. (2020). Child and adolescent mental illness during COVID-19: A rapid review. *Psychiatry research*, 292, 113307. Advance online publication.  
<https://doi.org/10.1016/j.psychres.2020.113307>

- Radez, J., Reardon, T., Creswell, C., Lawrence, P., Evdoka-Burton, G., & Waite, P. (2020). Why do children and adolescents (not) seek and access professional help for their mental health problems? A systematic review of quantitative and qualitative studies. *European Child & Adolescent Psychiatry* 30(2), 183–211. <https://doi.org/10.1007/s00787-019-01469-4>
- Rameshbhai Patel, H., & Joseph, J. (2016). Questionnaire Designing Process: A Review. *Journal Of Clinical Trials*, 6(2). <https://doi.org/10.4172/2167-0870.1000255>
- Reavley, N. J., & Jorm, A. F. (2011). Stigmatizing attitudes towards people with mental disorders: findings from an Australian National Survey of Mental Health Literacy and Stigma. *The Australian and New Zealand journal of psychiatry*, 45(12), 1086–1093. <https://doi.org/10.3109/00048674.2011.621061>
- Reinke, W. M., Stormont, M., Herman, K. C., Puri, R., & Goel, N. (2011). Supporting children's mental health in schools: Teacher perceptions of needs, roles, and barriers. *School Psychology Quarterly*, 26(1), 1–13. <https://doi.org/10.1037/a0022714>
- Rice, S., Purcell, R., & McGorry, P. (2018). Adolescent and Young Adult Male Mental Health: Transforming System Failures Into Proactive Models of Engagement. *Journal Of Adolescent Health*, 62(3), S9-S17. <https://doi.org/10.1016/j.jadohealth.2017.07.024>
- Rodriguez, E. M., Donenberg, G. R., Emerson, E., Wilson, H. W., Brown, L. K., & Houck, C. (2014). Family environment, coping, and mental health in adolescents attending therapeutic day schools. *Journal of adolescence*, 37(7), 1133–1142. <https://doi.org/10.1016/j.adolescence.2014.07.012>

- Roeser, R., Eccles, J., & Strobel, K. (1998). Linking the study of schooling and mental health: Selected issues and empirical illustrations. *Educational Psychologist*, 33(4), 153-176. [https://doi.org/10.1207/s15326985ep3304\\_2](https://doi.org/10.1207/s15326985ep3304_2)
- Roxå, T., & Marquis, E. (2019). Teachers interacting with students: an important (and potentially overlooked) domain for academic development during times of impact. *International Journal For Academic Development*, 24(4), 342-353. <https://doi.org/10.1080/1360144x.2019.1607743>
- Ryan, R., O'Farrelly, C., & Ramchandani, P. (2017). Parenting and child mental health. *London journal of primary care*, 9(6), 86–94. <https://doi.org/10.1080/17571472.2017.1361630>
- Sadler, K., Vizard, T., Ford, T., Goodman, A., Goodman, R., & McManus, S. (2018). *Mental Health of Children and Young People in England, 2017: Trends and Characteristics* [Ebook]. Retrieved 25 February 2020, from <https://digital.nhs.uk/data-and-information/publications/statistical/mental-health-of-children-and-young-people-in-england/2017/2017>.
- Sarginson, J., Webb, R., Stocks, S., Esmail, A., Garg, S., & Ashcroft, D. (2017). Temporal trends in antidepressant prescribing to children in UK primary care, 2000–2015. *Journal Of Affective Disorders*, 210, 312-318. <https://doi.org/10.1016/j.jad.2016.12.047>

- Schulte-Körne G. (2016). Mental Health Problems in a School Setting in Children and Adolescents. *Deutsches Arzteblatt international*, 113(11), 183–190.  
<https://doi.org/10.3238/arztebl.2016.0183>
- Sharma, G. (2017). Pros and cons of different sampling techniques. *International Journal of Applied Research* 2017; 3(7): 749-752
- Shastri P. C. (2009). Promotion and prevention in child mental health. *Indian journal of psychiatry*, 51(2), 88–95. <https://doi.org/10.4103/0019-5545.49447>
- Sheldrick, R., Merchant, S., & Perrin, E. (2011). Identification of Developmental-Behavioral Problems in Primary Care: A Systematic Review. *Pediatrics*, 128(2), 356-363.  
<https://doi.org/10.1542/peds.2010-3261>
- Shelemy, L., Harvey, K., & Waite, P. (2019). Supporting students' mental health in schools: what do teachers want and need?. *Emotional And Behavioural Difficulties*, 24(1), 100-116. <https://doi.org/10.1080/13632752.2019.1582742>
- Sherin, J. E., & Nemeroff, C. B. (2011). Post-traumatic stress disorder: the neurobiological impact of psychological trauma. *Dialogues in clinical neuroscience*, 13(3), 263–278.
- Shokeen, A. (2017). A study of mental health and social adjustment of senior secondary students. *Educ. Quest Int. J. Educ. Appl. Soc. Sci.* 8, 33–36. doi: 10.5958/2230-7311.2017.00006.X
- Siegel, D. (2012). *Developing Mind: How Relationships and the Brain Interact to Shape Who We Are* (2nd ed.). Guilford Press.

- Stewart, S. M., Rao, U., & White, P. (2005). Depression and diabetes in children and adolescents. *Current opinion in pediatrics, 17*(5), 626–631.  
<https://doi.org/10.1097/01.mop.0000176441.49743.ea>
- Stirling, K., Toumbourou, J., & Rowland, B. (2015). Community factors influencing child and adolescent depression: A systematic review and meta-analysis. *Australian & New Zealand Journal Of Psychiatry, 49*(10), 869-886.  
<https://doi.org/10.1177/0004867415603129>
- St-Onge, M., & Lemyre, A. (2017). Assessing Teachers' Attitudes Towards Students with Mental Health Disorders in 16 Postsecondary Institutions in Quebec. *International Journal of Disability, Development and Education, 65*(4), 459–474. doi:10.1080/1034912x.2017.1406068
- Suldo, S., Gormley, M., DuPaul, G., & Anderson-Butcher, D. (2013). The Impact of School Mental Health on Student and School-Level Academic Outcomes: Current Status of the Research and Future Directions. *School Mental Health, 6*(2), 84-98.  
<https://doi.org/10.1007/s12310-013-9116-2>
- Suldo, S., Riley, K., & Shaffer, E. (2006). Academic Correlates of Children and Adolescents' Life Satisfaction. *School Psychology International, 27*(5), 567-582.  
<https://doi.org/10.1177/0143034306073411>

- Sumter, S., & Baumgartner, S. (2016). Psychosomatic complaints in adolescence: Untangling the relationship between offline and online peer victimization, psychosomatic complaints and social support. *European Journal Of Developmental Psychology, 14*(4), 399-415. <https://doi.org/10.1080/17405629.2016.1215980>
- Taherdoost, H. (2016). Sampling Methods in Research Methodology; How to Choose a Sampling Technique for Research. *SSRN Electronic Journal*. doi: 10.2139/ssrn.3205035
- The Royal Children's Hospital. (2017). *RCH National Child Health Poll. Poll 8. Child mental health problems: Can parents spot the signs?* Available at: [https://www.rchpoll.org.au/wp-content/uploads/2017/10/RCH-National-Child-Health-Poll-Report\\_Poll-8\\_Final.pdf](https://www.rchpoll.org.au/wp-content/uploads/2017/10/RCH-National-Child-Health-Poll-Report_Poll-8_Final.pdf)
- Townsend, L., Musci, R., Stuart, E., Ruble, A., Beaudry, M., & Schweizer, B. et al. (2017). The Association of School Climate, Depression Literacy, and Mental Health Stigma Among High School Students. *Journal Of School Health, 87*(8), 567-574. <https://doi.org/10.1111/josh.12527>
- Tsang, S., Royse, C. F., & Terkawi, A. S. (2017). Guidelines for developing, translating, and validating a questionnaire in perioperative and pain medicine. *Saudi journal of anaesthesia, 11*(1), 80–89. [https://doi.org/10.4103/sja.SJA\\_203\\_17](https://doi.org/10.4103/sja.SJA_203_17)
- Ulug, M., Ozden, M., & Eryilmaz, A. (2011). The Effects of Teachers' Attitudes on Students' Personality and Performance. *Procedia - Social And Behavioral Sciences, 30*, 738-742. <https://doi.org/10.1016/j.sbspro.2011.10.144>

- Van Droogenbroeck, F., Spruyt, B., & Keppens, G. (2018). Gender differences in mental health problems among adolescents and the role of social support: results from the Belgian health interview surveys 2008 and 2013. *BMC Psychiatry, 18*(1). doi: 10.1186/s12888-018-1591-4
- Vega, W., & Rumbaut, R. (1991). Ethnic Minorities and Mental Health. *Annual Review of Sociology, 17*, 351-383. Retrieved August 31, 2020, from <http://www.jstor.org/stable/2083347>
- Vella, M. (2014). Should the media report suicides? No, says Institute of Journalists. *Maltatoday*. Retrieved from [https://www.maltatoday.com.mt/news/court\\_and\\_police/37847/should\\_the\\_media\\_report\\_suicides\\_no\\_says\\_institute\\_of\\_journalists#.YMdW2vkzZPY](https://www.maltatoday.com.mt/news/court_and_police/37847/should_the_media_report_suicides_no_says_institute_of_journalists#.YMdW2vkzZPY)
- Venkataraman, S., Patil, R., & Balasundaram, S. (2019a). Stigma toward mental illness among higher secondary school teachers in Puducherry, South India. *Journal of family medicine and primary care, 8*(4), 1401–1407. [https://doi.org/10.4103/jfmpc.jfmpc\\_203\\_19](https://doi.org/10.4103/jfmpc.jfmpc_203_19)
- Venkataraman, S., Patil, R., & Balasundaram, S. (2019b). The need for assessing mental health literacy among teachers: an overview. *International Journal Of Research In MedicalSciences, 7*(8), 3210. <https://doi.org/10.18203/2320-6012.ijrms20193422>

- Verhoof, E., Maurice-Stam, H., Heymans, H., & Grootenhuis, M. (2013). Health-related quality of life, anxiety and depression in young adults with disability benefits due to childhood-onset somatic conditions. *Child And Adolescent Psychiatry And Mental Health*, 7(1), 12. <https://doi.org/10.1186/1753-2000-7-12>
- Wagner, C., Kawulich, B., Garner, M., & Botha, A. (2012). *Doing social research: A global context* (pp. 51-61). New York: McGraw-Hill Higher Education.
- Wei, Y., McGrath, P. J., Hayden, J., & Kutcher, S. (2016). Measurement properties of tools measuring mental health knowledge: a systematic review. *BMC psychiatry*, 16(1), 297. <https://doi.org/10.1186/s12888-016-1012-5>
- Wickstead, R., & Furnham, A. (2017). Comparing Mental Health Literacy and Physical Health Literacy: An Exploratory Study. *Journal of Mental Health*, 26, 449-456.
- Wille, N., Bettge, S., & Ravens-Sieberer, U. (2008). Risk and protective factors for children's and adolescents' mental health: results of the BELLA study. *European Child & Adolescent Psychiatry*, 17(1), 133-147. <https://doi.org/10.1007/s00787-008-1015-y>
- Wisdom, J. P., Clarke, G. N., & Green, C. A. (2006). What teens want: barriers to seeking care for depression. *Administration and policy in mental health*, 33(2), 133-145. <https://doi.org/10.1007/s10488-006-0036-4>

World Health Organisation. (2013a). *Child and adolescent mental health*. Retrieved 20 August 2020, from [https://www.who.int/mental\\_health/maternal-child/child\\_adolescent/en/](https://www.who.int/mental_health/maternal-child/child_adolescent/en/).

World Health Organization. (2013b). *Health literacy: the solid facts*. Regional Office for Europe. Retrieved 2 September 2020, from <https://apps.who.int/iris/handle/10665/326432>

World Health organisation. (2020). *Basic documents: forty-ninth edition (including amendments adopted up to 31 May 2019)*. Geneva.

Zahn, R., Lythe, K. E., Gethin, J. A., Green, S., Deakin, J. F., Young, A. H., & Moll, J. (2015). The role of self-blame and worthlessness in the psychopathology of major depressive disorder. *Journal of affective disorders, 186*, 337–341. <https://doi.org/10.1016/j.jad.2015.08.001>

## Appendix A: FREC Ethical approval

Dear Justin Mangion,

Your ethics proposal with regards to your research titled *Maltese secondary school teachers' knowledge and perceptions of child and adolescent mental health difficulties* has been **approved**.

Faculty Research Ethics Committees are authorised to review and approve research ethics applications on behalf of the University of Malta, except in the case of sensitive personal data. In this regard, your ethics proposal **does not need to be sent to UREC**. Hence, **you may now start your research**.

Regards,



### Faculty Research Ethics Committee

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## Appendix B: Data Collection Tool

# Maltese secondary school teachers' child and adolescent mental health literacy

Dear educator, thank you for your interest in this questionnaire. My name is Justin Mangion and I am carrying out this research under the supervision of Prof Paul A. Bartolo as part of my Masters in Clinical Psychology at the University of Malta.

As a teacher, the important role you play in students' day-to-day lives goes well beyond curricula and assessments. Teachers are often the adults that children and adolescents have most contact with and with whom they feel safe and understood. As a result, teachers form unique relationships with students which place them in a position of great trust and privilege. This can allow teachers to have an essential role when it comes to student mental health needs. Given the vast array of other skills and competencies teachers are required to develop during their training, it is possible that this aspect is left with little to no attention. This can result in teachers feeling overwhelmed and unsure when it comes to dealing with and supporting students who might be experiencing mental health difficulties.

This questionnaire aims to look at secondary school teachers' attitudes, beliefs, and knowledge when it comes to child and adolescent mental health as well as local options of referral and assistance for those in need. By taking part in this research, you would be assisting me in understanding the local scenario when it comes to this topic and establishing educators' level of mental health literacy. In doing so, areas of growth can be identified in the hopes of assisting teachers and students alike.

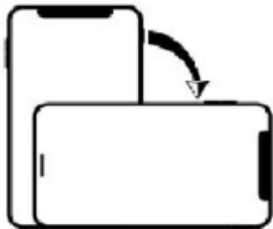
The questionnaire will take you 10 minutes of your time to complete and ensures that all data collected is anonymous and unidentifiable. While I am well aware of the demanding and hectic nature of your profession, your contribution would be greatly appreciated.


## 1. Consent \*

*Mark only one oval.*

- I would like to proceed with the questionnaire
- I do not wish to proceed with the questionnaire

## Mobile Users



When questions are followed by the following symbol: , utilising landscape mode will optimise mobile users' ability to answer selected items. If accessing this questionnaire on desktop, kindly disregard this message.

## Demographics

## 2. What is your gender? \*

*Mark only one oval.*

- Male
- Female
- Other
- Prefer not to say

---

3. What is your age? \*

*Mark only one oval.*

20-29

30-39

40-49

50-59

60+

4. How long have you been teaching? \*

*Mark only one oval.*

0-4 years

5-9 years

10-14 years

15-19 years

20 + years

5. What is the highest teaching-related qualification you possess? \*

*Check all that apply.*

Bachelor's Degree

Post Graduate Certification

Master's Degree

Doctorate degree

Other:  \_\_\_\_\_

6. What subject/s do you teach? \*

7. In which sector do you teach? \*


Mark only one oval.

- State School
- Church School
- Independent School

8. To what extent do you agree with the following statements about STUDENTS WITH DEPRESSION?  \*

Mark only one oval per row.

	Strongly Agree	Agree	Disagree	Strongly Disagree
Students with depression have a normal medical condition which requires treatment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
They use depression as an excuse for laziness and bad behaviour	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
They require support and understanding	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
They need to help themselves and just get over it	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
They are a hindrance to learning for the rest of the class	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
They would benefit from extra help in class to ensure they are learning	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If possible, I would prefer not to have a student with depression in my class	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

9. To what extent do you agree the following are possible RISK FACTORS for depression in adolescents?  \*

*Mark only one oval per row.*

	Strongly Agree	Agree	Disagree	Strongly Disagree
Prolonged experience of stress	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Traumatic experiences	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Abuse	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Exposure to domestic violence	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Poverty	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Poor nutrition	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lack of spirituality	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Having a parent with the condition	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Having diabetes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bullying	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Significant social media use	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Low intelligence	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Substance use	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Having a disability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

10. To what extent do you agree that having depression might **NEGATIVELY IMPACT** students':  \*

*Mark only one oval per row.*

	Strongly Agree	Agree	Disagree	Strongly Disagree
Ability to learn	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Memory	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Motivation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Energy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Appetite and Weight	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sleep	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Concentration	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Socialization	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Self-esteem	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Behaviour and Co-operation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Likelihood to succeed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Homework completion	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Exam performance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
School attendance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Overall Health	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

11. How knowledgeable do you feel about depression in students? \*

*Mark only one oval.*

- Not Knowledgeable
- Slightly Knowledgeable
- Quite Knowledgeable
- Very Knowledgeable

## 12. Do you agree with the following statements about DEPRESSION? \*

Mark only one oval per row.

	Agree	Disagree
It causes low moods and a loss of interest in previously enjoyable activities	<input type="radio"/>	<input type="radio"/>
It can cause feelings of guilt, worthlessness, and hopelessness	<input type="radio"/>	<input type="radio"/>
It can make it difficult to complete day-to-day tasks such as eating, leaving the house, showering etc.	<input type="radio"/>	<input type="radio"/>
It can lead to a loss of touch with reality with the presence of hallucinations and delusions	<input type="radio"/>	<input type="radio"/>
It manifests in the same way for different individuals	<input type="radio"/>	<input type="radio"/>
It affects almost all adolescents by the time they turn 18	<input type="radio"/>	<input type="radio"/>
It cannot occur in pre-pubertal children (less than 11 years old)	<input type="radio"/>	<input type="radio"/>
It is always the result of a traumatic event	<input type="radio"/>	<input type="radio"/>
It occurs mostly in males	<input type="radio"/>	<input type="radio"/>

13. Depression and suicide show strong links with one another. Do you agree with the following statements about SUICIDE? \*


*Mark only one oval per row.*

	Agree	Disagree
Males are more likely to attempt suicide, but females are more likely to complete it	<input type="radio"/>	<input type="radio"/>
Those who attempt suicide always have an underlying depressive disorder	<input type="radio"/>	<input type="radio"/>
Suicide ranks in the top 3 causes of mortality in adolescents	<input type="radio"/>	<input type="radio"/>
Adolescents contemplating suicide will always provide clues and signs prior to the attempt	<input type="radio"/>	<input type="radio"/>
Having one unsuccessful suicide attempt decreases the likelihood of a future attempt significantly	<input type="radio"/>	<input type="radio"/>

14. To what extent do you agree with the statement: "I feel adequately trained to handle students with depression"?


*Mark only one oval.*

- Strongly Disagree
- Disagree
- Agree
- Strongly Agree

15. How confident do you feel in:  \*


Mark only one oval per row.

	Very Confident	Quite Confident	Slightly Confident	Not Confident
Your ability to notice symptoms of depression in your students?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Your awareness of strategies you can use to help students experiencing depression?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Your knowledge of common treatment methods for depression in students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Your awareness of school systems that provide help to students with depression	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

16. To what extent do you agree with the following statement about STUDENTS WITH ANXIETY?  \*

Mark only one oval per row.

	Strongly Agree	Agree	Disagree	Strongly Disagree
They have a normal medical condition which requires treatment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
They are exaggerating and just do not know how to handle stress	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
They deserve support and understanding	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
They need to help themselves and just get over it	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
They are a hindrance to learning for the rest of the class	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
They would benefit from extra help in class to ensure they are learning	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If possible, I would prefer not to have a student with anxiety in my class	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel adequately trained to handle students with anxiety	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

17. To what extent do you agree the following are possible RISK FACTORS for anxiety in adolescents?  \*

Mark only one oval per row.

	Strongly Agree	Agree	Disagree	Strongly Disagree
Prolonged experience of stress	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Traumatic experiences	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Abuse	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Exposure to domestic violence	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Poverty	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Poor nutrition	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lack of spirituality	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Having a parent with the condition	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Having diabetes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bullying	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Significant social media use	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Low intelligence	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Substance use	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Having a disability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

18. To what extent do you agree that having anxiety might NEGATIVELY IMPACT students':  \*

Mark only one oval per row.

	Strongly Agree	Agree	Disagree	Strongly Disagree
Ability to learn	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Memory	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Motivation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Energy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Appetite and Weight	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sleep	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Concentration	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Socialization	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Self-esteem	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Behaviour and Co-operation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Likelihood to succeed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Homework completion	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Exam performance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
School attendance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Overall Health	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## 19. Do you agree with the following statements about ANXIETY? \*

Mark only one oval per row.

	Agree	Disagree
It can cause persistent worry, unease, and nervousness	<input type="radio"/>	<input type="radio"/>
It causes restlessness and irritability	<input type="radio"/>	<input type="radio"/>
It can cause digestive issues, difficulties with breathing and heartbeat alterations	<input type="radio"/>	<input type="radio"/>
It can lead to a loss of touch with reality with the presence of hallucinations and delusions	<input type="radio"/>	<input type="radio"/>
It is more common in males than females	<input type="radio"/>	<input type="radio"/>
It does not occur in pre-pubescent children (less than 11 years old)	<input type="radio"/>	<input type="radio"/>
Almost all adolescents will experience an anxiety disorder by the time they turn 18	<input type="radio"/>	<input type="radio"/>

## 20. Panic disorder is a type of anxiety disorder which can cause panic attacks in sufferers. Do you agree with the following statements about PANIC DISORDER? \*

\*

Mark only one oval per row.

	Agree	Disagree
Panic attacks often result in the person fainting	<input type="radio"/>	<input type="radio"/>
Breathing into a paper bag will help the episode to pass faster	<input type="radio"/>	<input type="radio"/>
Panic attacks always have an identifiable trigger	<input type="radio"/>	<input type="radio"/>
Panic attacks often last for an hour	<input type="radio"/>	<input type="radio"/>
Panic attacks can easily be mistaken for a heart attack	<input type="radio"/>	<input type="radio"/>

21. Social anxiety disorder is another type of anxiety disorder. Do you agree with the following statement about SOCIAL ANXIETY DISORDER? \*

*Mark only one oval per row.*

	Agree	Disagree
Social anxiety disorder is a medical term for very shy people	<input type="radio"/>	<input type="radio"/>
Social anxiety disorder is a rare mental health condition	<input type="radio"/>	<input type="radio"/>
Social anxiety disorder sufferers fear other people judging them poorly	<input type="radio"/>	<input type="radio"/>
Social anxiety disorder is primarily a self-esteem issue	<input type="radio"/>	<input type="radio"/>

22. How knowledgeable do you feel about anxiety in students? \*

*Mark only one oval.*

- Very Knowledgeable  
 Quite Knowledgeable  
 Slightly Knowledgeable  
 Not Knowledgeable

23. To what extent do you agree with the statement: "I feel adequately trained to handle students with anxiety"?


*Mark only one oval.*

- Strongly Disagree  
 Disagree  
 Agree  
 Strongly Agree

24. How confident do you feel in:  \*

*Mark only one oval per row.*

	Very Confident	Quite Confident	Slightly Confident	Not Confident
Your ability to notice symptoms of anxiety in your students?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Your awareness of strategies you can use to help students experiencing anxiety?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Your knowledge of common treatment methods for anxiety in students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Your awareness of school systems that provide help to students with anxiety	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

25. To what extent do you agree with the following statements:  \*

*Mark only one oval per row.*

	Strongly Agree	Agree	Disagree	Strongly Disagree
I feel confident in my awareness of services that target young people who are experiencing mental health difficulties	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am aware of the route of referral to access such services for my students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have been given sufficient information about such services as part of my professional training as a student or during continuous professional development	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel confident about making a referral if necessary and what information to include	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am aware of sources of information about services that assist young people with mental health difficulties and how to access them if necessary	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Should I be faced with a student who might be experiencing mental health difficulties, I am aware of a point of contact to ask questions and clarify concerns prior to taking further action	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am knowledgeable about different mental health professionals and their work and specialisations (psychiatrist, clinical psychologist, educational psychologist, counsellor, psychotherapist etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

26. Kindly list the services which help young people with mental health difficulties that you are aware of (maximum 5):

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27.

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28.

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29.

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30.

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Thank you for completing this questionnaire! Kindly click on the Submit button below to register your responses.