Emotional and Behavioural Difficulties Among Native Adolescents in the United Arab Emirates: Implications for Parenting Interventions

Amna Ali Al Falahi, BSc, MSc.

Thesis to be submitted to the University of Nottingham
for the degree of Doctor of Philosophy

August 2021

Abstract

While mental health considerations have taken the forefront in the United Arab Emirates (UAE) in recent years, there continues to be a paucity of research regarding emotional and behavioural difficulties experienced by native adolescents in the UAE. Such research is crucial for a few reasons. The negative impact of these difficulties affects various levels of society including the individual's educational outcomes, relationships, and health behaviours; families' coherence and functionality; and communal burden of disease. Without any systematic evaluation and objective consideration of the nature of such problems, interventions run the risk of being ineffective and onerous, deepening challenges and the stigma that often hinders help-seeking in these communities. To address the gap that exists in research and clinical practice, the overarching aim of this thesis is two-fold and includes identifying and understanding emotional and behavioural difficulties among native UAE adolescents and informing the development of a suitable intervention for parents, who are a key influencing factor and natural source of support for youth within such traditional and collectivistic cultures.

For this, three studies were undertaken and are outlined in the ensuing chapters. Theoretical and empirical explanations regarding emotional and behavioural difficulties and parenting interventions are outlined in **Chapter one**, including the literature on how adolescents' health and wellbeing are understood and evaluated, the factors that influence the development and maintenance of emotional and behavioural difficulties, the specific and central role of parents, parenting interventions that cater to the outlined issues, and implications for adolescents in the UAE. This background defines the need,

aims, and hypothesis of this thesis. **Chapter two** describes **study one** in which the reliability and validity of screening measures were examined by using the Revised Child Anxiety and Depression Scale, English version (RCADS-E), as a standardised comparison in piloting its Arabic translation (RCADS-A), and the Arabic adaptation of the Strengths and Difficulties Questionnaire (SDQ-A) with 40 native and bilingual (English and Arabic speaking) adolescents from a private school in the UAE. Both the Arabic measures had strong internal consistency, except for the depressive subscale of the RCADS-A among boys. Thus, findings indicated the suitability of the SDQ-A in identifying emotional and behavioural problems within this population. In addition to its brevity, breadth, and expansive norms, the appropriateness of the SDQ-A was supported by adequate internal consistency for the total score, and correlations with overall and disorder-specific constructs evaluated in the RCADS-E. These results led to the use of the SDQ-A in **study two (Chapter three),** wherein the prevalence of emotional and behavioural difficulties in a representative sample of 720 native adolescents from public schools in the UAE (response rate = 100%) was determined and the relationship between such difficulties and demographic and contextual factors were explored (**Study two, Chapter three).** The results demonstrated that emotional and behavioural difficulties existed at similar rates as those of normative populations and were influenced by gender, grade, affluence, and parental presence. Findings from study one and study two were important to draw an intervention plan for parents of UAE adolescents. Expanding on these findings, the **third study (Chapter four)** was undertaken to assess the effectiveness of online parenting programmes that promote effective parenting

to improve adolescents' quality of life and reduce symptoms of emotional and behavioural disorders. Only 16 papers reviewing 10 online parenting programmes were identified. These programmes were mostly focused on helping parents of adolescents with substance use problems and tended to use family systems theories. Despite evidence for improvements in relational factors corresponding with adolescent emotional and behavioural functioning, programmes using an attachment framework for emotional and behavioural difficulties were lacking and none were tailored to collectivistic cultures such as the UAE. Thus, **Chapter five** considers the overall findings, methodological issues, reflexive experiences, and implications of the three studies in an attempt to offer evidence-based suggestions for future research and next stages in adapting a suitable parenting intervention for the UAE context.

Publication and presentations arising from this thesis

Publication

Al Falahi, A., Glazebrook, C., & Shokraneh, F. (2019). The effectiveness of online parenting programmes in promoting parents' and adolescents' mental wellbeing: a systematic review protocol. *F1000Research, 8*(1842), 1842.

Presentation

Al Falahi, A., Glazebrook, C., & Daley, D. (2019). *Emotional difficulties in young people in UAE schools: psychoeducation for parents.* Poster presented at the School of Medicine 2019 Postgraduate Research Forum Day, The University of Nottingham.

Abbreviations

%	Percentage
ADHD	Attention deficit hyperactivity disorder
ANOVAs	Analysis of Variance(s)
B	Unstandardised beta
CBT	Cognitive Behavioural Therapy
CES-DC	Centre for Epidemiological Studies Depression Scale for Children
CIs	Confidence Interval(s)
d	Cohen's d
df	Degrees of freedom
ERP	Exposure with response prevention
FAS	Family Affluence Scale
HIV	Human Immunodeficiency virus
ICC	Intra-class correlation coefficient
M	Mean
MD	Mean Deviation
N	Sample size
NS	Not significant
OCD	Obsessive-compulsive disorder
OR	Odds Ratio
PiP	Partners in Parenting
r	Correlation coefficient
r^2	Coefficient of determination
RCADS	Revised Children's Anxiety and Depression Scale

RCADS-A	Revised Children's Anxiety and Depression Scale, Arabic version
RCADS-E	Revised Children's Anxiety and Depression Scale, English version
SDQ	Strength and Difficulties Questionnaire
SDQ-A	Strength and Difficulties Questionnaire, Arabic version
SDs	Standard Deviation(s)
UK	United Kingdom
US	United States of America
UAE	United Arab Emirates
WHO	World Health Organization
X^2	Chi-Square
α	Cronbach's alpha
GCC	Gulf Cooperation Countries
RCT	Randomised Controlled Trials

Acknowledgements

First and foremost, I would like to thank God, the Almighty, for His countless blessings and for giving me the strength, ability, and wisdom to undertake this research.

Secondly, I would like to thank my supervisors, Professor Cris Glazebrook, for her invaluable support, guidance, and encouragement throughout my PhD journey, and Dr. Farhad Shokraneh for explaining the systematic review processes step by step to me. I would also like to thank my friend and colleague, Dr. Clarice Mendonca, for always providing a listening ear and proofreading this thesis.

I am grateful for the financial support and scholarship I received from the Ministry of Presidential Affairs in the UAE and the ethical approval to conduct my studies granted by the Ministry of Education.

My deepest gratitude goes to the students from the UAE government schools who volunteered their time to take part in this research. Likewise, I am grateful for the numerous health professionals at Rashid Hospital and other mental health centres in Dubai whom I contacted about this topic, the review board at the University of Nottingham for granting the ethical approval for this research, and the trainers who helped me with each of my enquiries during these four years.

Finally, on a personal level, I would like to thank my dearest husband, Nabil, for his endless patience, understanding, and love, and my three beautiful children, Amal, Ahmad, and Asma, who, despite not knowing quite what I was doing throughout these four years, were continuously supportive and encouraging of my work.

Table of Contents

Table of Tables

Table of Figures

Table of Appendices

Chapter One: Introduction to Emotional and Behavioural Difficulties

Adolescents' mental health and development have received increased research attention since the 70s for a few reasons. Although the number of 10- to 19-year-olds has been increasing and is the largest it has ever been in recorded history (Patton et al., 2016), they currently account for only 16% of the global population, more than half of whom live in Asia (United Nations, 2019). Thus, adolescents are projected to enter an overwhelmed workforce as adults and caregivers of a relatively larger proportion of children and the elderly who will be dependent on them for sustenance. In addition to future prospects, the greatest burden of disease accounted for by the adolescents of today is attributed to mental disorders, substance use, and chronic illnesses (Patton et al., 2016). This shifts the spotlight onto the spectrum of emotional and behavioural difficulties experienced by this subset, factors that influence such issues, and associated interventions that may help prevent and alleviate them.

Furthermore, the long-term detrimental effects of emotional and behavioural difficulties have been well established across research efforts. According to the World Health Organization (WHO, 2021), 50% of emotional problems that are reported to be at clinically significant levels in adulthood are found to commence by the age of 14 years. In turn, adolescent-onset mood symptoms and disorders increase the risk and probability of behavioural problems associated with substance use, anxiety, and depression during adulthood (Copeland et al., 2015; Essau et al., 2018; Dekker et al., 2007; Hofstra et al., 2001; Johnson et al., 2018). Patalay et al. (2015) further asserted that general psychopathology represented an increased risk for psychiatric

disorders, regardless of whether symptoms were consistent between adolescence and adulthood. The emergence of emotional and behavioural difficulties during adolescence is also associated with poor psychosocial outcomes such as difficulties adjusting at work and within families, chronic stress, inefficient coping skills, and reduced life satisfaction by the age of 30 years (Essau et al., 2014).

These findings are particularly concerning when compared to problems that emerge during other developmental stages because they have graver effects (Essau et al., 2014) and progress into chronic and recurrent difficulties when left unacknowledged and untreated (Essau et al., 2018; Merikangas et al., 2010). This is true not only for adolescents themselves but also the system that surrounds and supports them, as well as the future generations whose health and development would in turn be influenced by these factors. Thus, understanding the historic and present-day experiences of adolescents, their needs, and ways to support them is a crucial consideration to improve their quality of life, reduce burden of disease, remit chronic adverse effects, and augment global sustainability goals towards health and wellbeing.

Developmental challenges and changes during adolescence

The adolescent years stand out as a formative period when physical growth peaks, making way for cerebral and social development. This sets the stage for growth and functioning across most dimensions, including biological, psychological, social, and vocational engagements. In some respects, new and refined abilities gained during these years justify the lowest rates of death and ill health, and the highest rates of vitality during the lifespan (Patton et al., 2016). Neuroscientific research over the past 20 years has

established that, after infancy, neurobiological changes triggered during adolescence are both the most extensive (laying the foundation for subsequent functioning of the central nervous and endocrinal systems; Larsen & Luna, 2018) and impactful (incurring long term effects across the remainder of a person's lifespan; Patton et al., 2016). Aligning with this, sexual maturity, emotional abilities, refined cognitive capacity, and identity exploration and formation occur alongside the dominance of peer and family influences, education and work transitions, civic engagement, and problem behaviours (Sawyer et al., 2018). However, while these developments are conducive to positive growth, they must be considered alongside the various pitfalls that are bound to occur with transitions, which are the hallmark of the adolescent years. This has only been recently recognised, leading to increased attention towards the needs of adolescents within public health policies across the globe (Patton et al., 2016).

Cognitively, the emergence of formal operational thought paves the way for increased critical thinking and independence (Larsen & Luna, 2018), generating greater defiance frequently witnessed and reported at this stage (Copeland et al., 2015) and risk-taking behaviours owing to the tempering of the brain's harm avoidance system relative to a vigorous reward system (Ernst et al., 2006). Thus, more so than adults, adolescents thrive on stimuli that are energising and demanding (Patton et al., 2016). Another notable corollary to abstract thought processes includes adolescents' increased attunement to others' emotional displays owing to the dominant influence of peers on social cognition (Patton et al., 2016). Thus, in the mind of the adolescent, peers replace family as the central social force. In this respect, neurobiological

findings link identity development to sociocultural factors, such that the motivation to be independent and maintain a stable identity is underlined by the processes of separation and individuation, and a referential shift towards peers (Sawyer et al., 2018). Thus, the need for belonging expressed through peer association make pop culture and social media an integral part of the adolescent experience (Boer et al., 2020).

Taken together, biopsychosocial changes during adolescence are compounded by rapid migratory, communication, economic, and environmental events that determine agency, nourishment, competence, health, and intimacy for the adolescents of today. Understanding these complexities is a critical step in identifying and serving their unique needs.

Definitions for emotional and behavioural difficulties and interventions

An issue commonly witnessed during the early stages of research across a given field is the indiscriminate use of synonymous terms or vague vocabulary when describing a target construct or phenomenon. This appears to be the case when reviewing literature pertaining to adolescents' emotional and behavioural difficulties. Depending on the framework adopted by journals and authors, the terms *disorders, difficulties, problems, illness,* and *issues* are used to denote the same construct of a departure from normative and effective functioning; the terms *psychological, psychiatric,* and *mental health* are used synonymously when indicating difficulties that pertain to the internal and external manifestation of human experience; and *intervention, treatment, and therapy* are used interchangeably to imply a response to reduce or remit noted phenomena. It is also not uncommon for the terms *mood disorder, anxiety,* and *depression,* to be used even when describing broad and more complex

phenomena. These nomenclative variations affect generalisability and hamper the advancement of scientific understanding. Furthermore, inconsistencies exist when defining and even acknowledging severity levels of the concerns in question. This is problematic as mental and behavioural health exist on a spectrum, with *mental wellbeing* denoting the functional and *disorders* signifying clinically significant difficulties. Not reflecting this in the language and focus of written scientific thought does little to accommodate presentations that either do not meet full criteria for a given disorder or do not adversely impair functioning. Considering subclinical difficulties is imperative to prevent exacerbation that may occur without appropriate attention and action.

In the spirit of reducing such variability, the term *emotional and behavioural difficulties* is used throughout this thesis when referring to the internal and external struggles experienced and manifested by adolescents, regardless of whether they are clinically significant or not. This includes any phenomenon that marks a deviation from normative ways of responding such that the reaction is internalised or externalised in disturbing or ineffective ways, regardless of whether it becomes impairing or maladaptive. For the sake of consistency and ease of understanding, the definition also subsumes the concepts of internalising and externalising difficulties, since the use of the term *internalising difficulties* corresponds with emotional problems such as anxiety and depression, and *externalising difficulties* indicates behavioural problems such as inattention, hyperactivity, and conduct problems. The terms *internalising* and *externalising* have been retained only when referring to constructs established within the screening measures. In these cases, the

constructs may be considered synonymous with emotional and/or behavioural difficulties as described here.

The term *intervention* is used to indicate any systematic effort undertaken in consideration of these difficulties including, but not limited to, psychoeducation, psychotherapy, medication, and support services. Adopting such definitions allows for a streamlined and comprehensive approach in studying the foundational, complex, and neglected aspects of emotional and behavioural difficulties among adolescents as well as the interventions that may be effective in preventing such issues from either escalating to debilitating levels or persisting past adolescence.

Adolescent emotional and behavioural functioning

The quality of adolescents' psychosocial environment significantly affects the development of emotional and social processing (Patton et al., 2016). Simultaneously, adolescents are particularly vulnerable to emotional and behavioural difficulties as hormonal and life changes can leave them more sensitive to their internal and external environments (Drzewiecki & Juraska, 2020). While better healthcare, nutrition, education, and technology have improved wellbeing, the current generation of adolescents suffers considerably in the face of several global crises, including youth unemployment, sedentary lifestyles, unstable family systems, global warming, and political conflicts (Patton et al., 2016). In a study by Goldbeck et al. (2007), overall, health, and family satisfaction decreased between the ages of 11 and 16 years across most domains. Given the lack of insight and awareness, hesitancy to access effective interventions, and unsatisfactory adaptation of interventions to their differential needs and context (O'Brien et al., 2016), clinically significant

emotional and behavioural problems among adolescents are on the rise globally, with an identified increase of about 4 million cases over the past two decades (Merikangas et al., 2011). This currently accounts for 16% of the global burden of disease (Global Burden of Disease Network, 2017).

It, therefore, comes as no surprise that emotional and behavioural difficulties account for the most common causes of disability and mortality among adolescents. Emotional difficulties, specifically depression and anxiety, are among the top 10 leading causes of disability across the world's adolescents (WHO, 2020). Anxiety has also been associated with psychosocial impairments, educational underachievement, and physical and cognitive dysfunction (Essau et al., 2001; Essau et al., 2014). In addition, unintentional injuries due to risky behaviours such as rash driving, driving under the influence of substances, water sporting, and physical and sexual violence disproportionately affect adolescents and are the leading cause of death and disability for this age group (WHO, 2020). A grimmer picture is depicted by the statistics surrounding suicidality, which accounts for the second most common cause for mortality, particularly among older teens whose suicide rates have increased dramatically by 7.9% in the UK between 2010 and 2017 (Bould et al., 2019). Self-harm also represents a significant problem, as illustrated in a study where 15% of 12- to 16-year-olds reported at least one self-harming incident (Stallard et al., 2013). The same study also found that such behaviours and associated thoughts were established between the ages of 12 and 13 years and persisted for at least a year in almost half of their community sample. Similarly, adolescent-onset drug and alcohol use have been linked with poor health and fitness outcomes, morbidity, mortality rates,

reduction in cognitive capacities (in some cases), sustenance of maladaptive coping skills, and an unhealthy lifestyle into latter years (Johnston et al., 2016).

While risky behaviours can be seen exclusively as a hallmark of behavioural difficulties among adolescents, they are often a manifestation of underlying emotional struggles. For example, a systematic review of suicide in depressive presentations revealed that increasingly severe depression, anxiety, and hopelessness (among other factors) increased the risk of suicide (Hawton et al., 2013). Similarly, Stallard et al. (2013) demonstrated associations between self-harm (both thoughts and behaviours) with reduced mood. Another study indicated that cigarette smoking was mutually dependent on depressive mood among females, and marijuana use was seen as an attempt to self-medicate against emotional pain (Wilkinson et al., 2016). Arbel et al. (2018) also concluded that risky behaviours co-occur with worrying thoughts and were predicted by previous-day worries among males. Thus, behavioural and emotional aspects of the adolescent experience, though often reviewed separately (Galambos & Leadbeater, 2000), go hand in hand.

Epidemiological reports have also consistently pointed out that the clinical presentations among adolescents are punctuated by comorbidities and symptomologies that exist across diagnostic labels. Compared to children and adults, adolescents with depression are 12 times more likely to also have anxiety, four to 11 times more likely to display disruptive behaviour, and three to six times more likely to have substance abuse problems (Wilkinson et al., 2016). Furthermore, several studies have identified a pattern of co-occurrence between anxiety and depression ranging between 30% to 75% of clinical cases

(Abbo et al., 2013; Dardas et al., 2018; Essau et al., 2000). Depression has also been frequently witnessed alongside other neuropsychiatric and behavioural disorders (Essau, 2003; Ford et al., 2003). Comorbid presentations are associated with greater severity of symptoms and suicidality (Essau et al., 2018; Kinyanda et al., 2011), delinquency, truancy, and aggression (Galambos & Leadbeater, 2000; Ligier et al., 2020).

Thus, emotional and behavioural difficulties among adolescents are multifaceted and likely to reduce the quality of life. As comorbidities increase and difficulties deepen across time due to lack of suitable interventions, poorer long-term outcomes and social and educational impairments are bound to compound these difficulties (Essau et al., 2014; Kinyanda et al., 2013; Nair et al., 2017).

Screening for emotional and behavioural difficulties

The increasing prevalence and gravity of emotional and behavioural difficulties demonstrated by adolescents have not translated to adequate and effective resolution. One of the major reasons for this is that adolescents are unable to access formal interventions due to lack of awareness, mistrust in the mental health profession, and stigma demonstrated by parenting figures (Patton et al., 2016). The issue of help-seeking can be resolved by screening and provision of education on the part of gatekeepers such as teachers, parents, and general medical practitioners. This requires reliable and valid diagnoses, both in terms of screening for subclinical difficulties and conceptualisation of clinical cases. However, the complexity of clinical presentations, cohort-specific factors that risk misdiagnosis (Kessler et al., 2008), reduced specificity and sensitivity given clinical judgment exercised without the use of

screening tools by paediatricians (Sheldrick et al., 2011), and dismissal of warning signs due to stigma and personal stress (Abera at al., 2015) are a few identified hurdles to accurate clinical diagnosis. These become particularly problematic for behavioural difficulties among minorities, those from developing countries, and non-native English speakers, all of whom have lower exposure to Western psychological thought (Brown & Wissow, 2010; Liang et al., 2016; Merten et al., 2017). These errors may be attributable to an overlap between normative and pathological problem behaviours (O'Brien et al., 2016), contextual appraisal of affect and activity fluctuations across time (Shirtcliff & Essex, 2008; Tsai et al., 2015), biased appraisal of emotional and behavioural problems by caregivers (Reardon et al., 2017), and awareness levels (Eisenberg et al., 2009; Rickwood et al., 2007).

Using standardised screening tools for prevention, treatment planning, and assessing response to interventions may be a cost-effective and viable solution to these barriers. These tools can be made effective when methodological and interpretive accuracy, and issues therein, are considered. For example, diagnostic screeners are specific and sensitive to the constructs they assess for, but their accuracy and scope is limited in the face of comorbid diagnoses that often have overlapping features and the general complexity of presenting problems. This was noted in a systematic review of screeners for depression among adolescents, wherein it was concluded that the use of such tools is likely reliable but the use of clinical cut-offs may result in overdiagnosis. (Stockings et al., 2015). This is also the case with the exclusive use of anxiety scales which diminishes their utility for accurate diagnosis despite appreciable psychometric properties (Spence, 2018).

The limitations noted above may be better accounted for with broad-based screening measures. Deighton et al. (2014) identified 11 such measures that are often used by clinicians for screening and progress assessments and could be completed by parents and children. All these measures had sound psychometric properties, used a 3-point Likert scale, and had a normative base that allowed for discrimination between clinical and non-clinical cases. Furthermore, three of the reviewed measures (Achenbach System of Empirically Based Assessment, the full form of the Beck Youth Inventory, and the Behavior Assessment System for Children) were long and accessible only through a fee-based license. Measures such as the Strengths and Difficulties Questionnaire (SDQ) was found to be useful in screening and assessing change over time. In another review of four self-report measures for clinical purposes by Wolpert et al. (2014), the SDQ stood out as being broader, briefer, and sensitive, with the largest pool of normative evidence, while the 47-item Revised Children's Anxiety and Depression Scale (RCADS) was found to have the greatest sensitivity in identifying and distinguishing between various anxiety and depressive disorders. Both measures were also found to be useful across a few Caucasian communities and psychometric properties of translated versions met expectations consistently. In addition, combining the four original SDQ scales of difficulties into two broader scales (externalising and internalising problems) made its utility extendable for screening clinical cases as well as understanding the needs of those who do not meet full criteria for clinical disorders, as demonstrated with a representative sample of 18,222 adolescents in the UK (Goodman et al., 2010).

While each measure reviewed across these two papers was found to have limitations and strengths that applied to different patient populations, none were empirically evaluated for item- and cluster-level biases across diverse populations. In a study evaluating the internal structure and measurement invariance of the SDQ across 3,012 12- to 17-year-old students from England, France, Germany, Ireland, and Spain, the five-factor model was supported across the countries, though 11 of the 25 items were found to be noninvariant cross-culturally (Ortuño-Sierra et al., 2015). Furthermore, an item analysis revealed that 11 of the 25 items on the SDQ were noninvariant, indicating that, while the SDQ remains a good measure for screening, comparison of SDQ data across cultures must be undertaken cautiously. These findings were somewhat supplemented by a review of the use of the SDQ across countries beyond Europe, specifically Australia, Bangladesh, Brazil, Canada, Gaza, Pakistan, Thailand, and Yemen (Woerner et al., 2004). Just as the original SDQ was found to be useful for screening in Australia, its Portuguese and Urdu translations used across geographical and socioeconomic subsections of the Brazilian population and in Pakistan, respectively, was deemed to be psychometrically valid. While the Thai translation of the instrument was riddled with response inconsistency, a subsequent adaptation of the language rendered appreciable effectiveness. Similarly, the American adaptation used in Canada was found to be useful for screening and charting clinical progress.

In terms of the self-report version of the RCADS, the original six-factors that distinguished various anxiety and depression scales were confirmed across 3,908 adolescents from Brazil, Bulgaria, Croatia, Indonesia,

Montenegro, Nigeria, Palestinian Territories, Philippines, Portugal, Romania, and Serbia while controlling for differences in age, gender, religion, and family affluence across these countries (Stevanovic et al., 2017). Item-level analyses revealed that ten out of the 47 items across five of the six scales (specifically separation anxiety, social phobia, generalised anxiety, obsessive-compulsive disorder, and depressive disorders) demonstrated non-invariance. However, the noted variability did not ascribe to a fixed pattern that was consistent across cultures, indicating that such differences were independent of cultural or linguistic differences and likely attributable to other extraneous variables. Thus, screening measures such as the RCADS and the SDQ are useful, and their implementation must be carefully assessed before being extended to populations that do not traditionally use them.

Another noteworthy factor when considering these measures is the source of information. While parent and teacher reports render significant insight into younger children's functioning, solitary reliance on these versions of screening measures for adolescents has consistently been cautioned within the literature. Weak agreement between parent and adolescent reports (Weems et al., 2011) can be attributable to various factors including reduced contact and dependency on caregivers (which decreases the latter's awareness of the adolescent's covert cognitions, emotions, and behaviours), mental health problems experienced by caregivers that reduces their objectivity (Fjermestad et al., 2017), stigma, and stereotyping (Spence, 2018).

While there is evidence indicating the widespread use of patient-reported measures in clinical settings for the purposes of monitoring and service feedback, less is known in the way of screening. Even in these settings,

their inappropriate use (such as the use of measures designed for adults) and misinterpretation is found to have adverse effects on service satisfaction, with erroneous conclusions impairing accurate identification and intervention (Wolpert et al., 2014). Non-English-speaking communities may be at a disadvantage and bear the brunt of such issues. Deighton et al., (2014) were unable to find any evidence for the implication of ethnic, regional, or socio-economic diversity on the utility of self-report measures. Thus, while these tools demonstrate much promise, competent and appropriate implementation is needed to maintain their utility.

Influencing factors

The complexity of screening and assessment also extends to the conceptualisation of emotional and behavioural difficulties that are influenced by a confluence of personal, cultural, and filial factors that vary across individuals, groups, and time. Starting with adolescents themselves, age and gender are found to be the strongest personal predictors of emotional and behavioural wellbeing (examples include Vanchindorj et al., 2017; Datta et al., 2018; Patalay et al., 2015).

Specifically in terms of age, a study of young people in Year 7 (11–12 years) and Year 9 (13–14 years) recruited from 97 secondary schools in the UK (n = 28,160) assessed their levels of emotional and behavioural difficulties using the self-report SDQ (Deighton et al., 2019). Eighteen per cent of the sample scored above the abnormal threshold of emotional difficulties with Year 9 pupils at greater risk (OR = 1.38, CIs 1.3–1.47) compared to Year 7. A similar percentage of adolescents scored in the abnormal range for conduct problems (18%) with older adolescents at increased risk (OR 1.18, CIs 1.11–

1.26); however, the age effect was less pronounced. Similarly, Datta et al. (2018) found a greater incidence of emotional and behavioural difficulties using the self-reported SDQ measure among adolescents (10–12 years) compared to children (6–9 years) across a paediatric hospital and orphanage in Kolkata, India. Older age was consistently found to increase the risk of emotional and behavioural difficulties across 693 urban and rural adolescents aged 13 to 17 years in Gujrat, India, and 5220 11- to 18-year-olds in public schools across China (Wang et al., 2014). In contrast, Amstadter et al. (2011) and Vanchindorj et al. (2017) found that younger age was an independent predictor of greater emotional difficulties reported by parents in community studies of 1,368 Vietnamese and 2,250 Mongolian adolescents aged 11 to 18 years, respectively. This may reflect the fact that parents have greater insight into the emotional difficulties of younger adolescents. In the former study, conduct problems were unrelated to age.

More consistently, females unequivocally have a greater bias in developing emotional problems (Atoum et al., 2018; Emam et al., 2016; Mohammadi et al., 2013; Vanchindorj et al., 2017; Wang et al., 2014). Deighton et al. (2014) found that girls were nearly three times more likely to score above the cut-off for emotional problems in the abnormal range but nearly half as likely as boys to score in the abnormal range for conduct problems. There were no differences in rates of peer problems, but girls were significantly less likely to score above the threshold for attentional and hyperactivity problems, and few studies supported a higher prevalence of conduct problems among boys (Atoum et al., 2018; Datta et al., 2018; Emam et al., 2016; Khamis, 2018; Patalay et al., 2015). Hormonal changes in female

brains have been correlated with depressive processes (Copeland et al., 2019; van Noordenet al., 2010) and emotional and conduct problems are thought to increase with age among girls (Khamis, 2018). An explanation for why girls experience emotional problems earlier and more frequently than their male counterparts may lie in the pubertal differences between genders. Earlier onset of puberty in girls compared to boys likely means that they grapple with physical, social, and emotional changes earlier on, such that the relative lack of opportunity to develop adequate insight and coping skills leaves them prone to distress during these years (Patton et al., 2016). Similarly, girls who mature earlier are more susceptible to emotional problems than others, likely owing to discrepancies between their (earlier) biological development and latent emotional and cognitive abilities, as well as reduced developmental commonality with same-aged peers (Negriff & Susman, 2011).

Alongside these naturally occurring variables, emotional difficulties and risky behaviours are consistently found to be associated with insecure peer relationships. This may be particularly salient for adolescents in the post-industrial internet age, for whom the frequency and scope of connectivity with peers is far more intense and leads to greater impact of social contagion for emotional and behavioural experiences, especially as they pertain to harming behaviours such as interpersonal violence, self-harm, and suicide (Patton et al., 2016). Thus, while peer connectivity, imitation, and knowledge can be protective, it has also led to increased violence, substance use initiation and persistence, and risky sex, depending on the quality and content of such interactions.

This is illustrated in a longitudinal study involving 3964 English teenagers between the ages of 12 and 16 years, where thoughts and acts of self-harm were found to be more likely in the context of unfulfilling relationships with peers (Stallard et al., 2013). Victimisation through bullying was also found to increase self-harming thoughts and intentions. In a similar vein, symptoms of hyperactivity, emotional, and conduct problems among a cross-sectional sample of 665 Lebanese teenagers, were found to be significantly higher among those who were either subject to bullying or would bully others themselves (Khamis, 2015). Furthermore, those who were identified as being both bullies and victims (indicative of difficulties regulating and managing social relationships) were more likely to report greater emotional and peer problems compared to those bullies who had never been bullied and victims who never resorted to bullying others. Similarly, difficulties in peer relationships were more pronounced among those involved in bullying, and relational difficulties increased the risk of mental health problems in a sample of 693 high school students in the Indian state of Gujrat (Nair et al., 2017). The same study also noted that having friends and spending time with them was a protective factor that decreased the odds of high SDQ scores. Furthermore, maintenance of opportunities to interact with friends was thought to underlie the greater prevalence of prosocial behaviours among rural adolescents. These findings corroborate with the reduction of self-harm risk observed among students who had a greater sense of belongingness in schools in parts of England (Stallard et al., 2013). This protective influence appears to extend to instrumental communal connections as well, as seen in a Vietnamese community sample of adolescents that reported fewer emotional and

behavioural difficulties with greater endorsement of cultural beliefs and religious practices (Amstadter et al. 2011). Taken together, studies cumulatively indicate an inverse relationship between emotional and behavioural difficulties and healthy social functioning.

The sentiment of security and sharedness that may accompany social experiences may be partly reflected in the role of family affluence and associated access to various resources in psychosocial wellbeing that has been highlighted in a few studies. Poverty, traumatisation, and educational deprivation during adolescent years predict adverse outcomes particularly in the face of unprecedented changes witnessed in the past few decades (Patton et al., 2016). In systematically reviewing 55 English and German studies published between 1990 and 2011 regarding the link between socioeconomic status and mental health among children and adolescents (Reiss et al., 2013), a majority of the studies (n = 52) demonstrated more mental health problems with chronic lower socioeconomic status, and an increase in the risk of mental health disorders by double to triple for those who were economically deprived. Similarly, Amstadter et al.'s (2011) findings indicated a reduced likelihood of difficulties with increased wealth and perceived socioeconomic status in Vietnamese homes. Similar findings were noted among cross-sectional Chinese (Wang et al., 2013) and Indian (Nair et al., 2017) samples from rural areas which were known to be more affected by poverty and lack of adequate resources. Even in Uganda, adolescents who lived in permanent (block) houses (synonymous with better economic resources), as opposed to less-stable huts, were found to function better emotionally, with fewer reports of depressive and anxious symptoms (Abbo et al., 2013; Kinyada et al., 2013).

Though significant differences in emotional and behavioural difficulties were also noted between urban and rural Mongolian adolescents aged 11 to 18 years (Vanchindorj et al., 2017), the valence of this association was unclear. Reduced mental health trends due to economic deprivation were also reflected through other indicators, including free school meals (indicative of low household income status) given to eligible adolescents in English schools (Deighton et al., 2019), and parental unemployment as seen in Gazan (Thabet et al., 2000), Lebanese (Khamis, 2018), and Ugandan (Abbo et al., 2013; Kinyada et al., 2013) adolescents. Yet another source of evidence comes from a large-scale study with 23,477 public school students in Years 7 and 8 in England, wherein free school meals and economic deprivation were correlated with greater general psychopathology and behavioural problems (Patalay et al., 2015). Thus, greater stress and problems experienced by adolescents in the face of economic, social, and academic deprivation, across spheres, may be seen as an artefact of the lack of stable contextual resources that are required for optimal development.

In this regard, family systems (one of the primary and intimate settings within which adolescents develop) also emerge as a critical determinant of emotional and behavioural difficulties among adolescents, across sociocultural and economic contexts. While peer relationships take the forefront during adolescent years, families continue to be influential though the quality of filial relationships may be markedly different in response to developmental changes noted in the previous sections (Patton et al., 2016). Khamis (2018) noted reduced emotional problems among girls and fewer conduct problems among both girls and boys experiencing positive family environments. Premature or

early transition into adult tasks such as independent living, marriage, and parenting are associated with unstable family environments and structure indicating a context-triggered inability to rely on parents and schools (developmental scaffolds). This is clearly demonstrated in greater risky behaviours, suicidality, substance use, depression, and eating disorders seen in non-intact and stressed families (Patton et al., 2016).

As noted by Kinyada et al. (2013), adolescents who lived with both their parents in an intact family were least likely to report depressive symptoms compared to those who lived with either or neither parent. These findings were replicated in a corresponding study focusing on anxiety disorders with a similar sample of Ugandan children and adolescents (Abbo et al., 2013). Adolescents who were not living with their parents and those who were raised by grandparents and non-relatives had the worst outcomes. These findings may have important implications and require further support given that family structures are becoming increasingly diverse and (though most adolescents live in intact homes) it is not uncommon to encounter single-parent and joint-family households due to increased rates of parental separation, instability, marital discord, migration, and death due to disease, particularly in developing countries (Sawyer et al., 2018). In a study comparing children and adolescent outpatients living with their parents and those living in orphanages in India, difficulties assessed across all domains (emotional, hyperactivity, conduct, and peer relationships) were significantly higher for those who were not cared for by their parents (Datta et al., 2018). Behavioural problems, particularly conduct issues, were twice as prevalent within the orphaned group. Thus, these results indicate that the detrimental

effect of parental absence is undeniable, even when other caregivers take on the parental role.

Parenting adolescents

Not only is the presence of both parents important, but also the provision of a nurturing environment through parenting behaviours and parent-adolescent relationships. Findings pertaining to the impact of parenting on adolescent emotional and behavioural functioning are robust and etiologically linked to both nature and nurture. While genetic heritability posed significant risk and tendencies towards emotional and behavioural symptoms (Hannigan et al., 2018; Yap & Jorm, 2015), parenting behaviours and stressors have smaller but more causative and sustaining effects (Hicks et al., 2009). This is corroborated by greater difficulties witnessed in the context of punitive parenting (Hecker et al., 2016; Nair et al., 2017), impaired filial relationships (Goldbeck et al., 2007; Kinyanda et al., 2013; McLeod et al., 2016; Wang et al., 2014), and intergenerational conflict (Bi et al., 2018; Rengasamy et al., 2013). More specifically, stable parent-adolescent interactions and effective communication practices are protective and beneficial to adolescents (Haverfield & Theiss, 2017; Yap et al., 2016), and emotional and verbal maltreatment increase vulnerability to depressive behaviours and aggression, respectively (Hecker et al., 2016; Wright et al., 2009). The implication of the latter in traditional cultures where harsh discipline is the norm, is less understood, with very few studies (e.g., Gershoff et al., 2012; Hecker et al., 2016) indicating continuity with other research.

The health of parent-child relationships can be understood in terms of the relative degree of cohesion and conflict. As illustrated in a sample of 633

Chinese adolescents in grades seven through 11, while conflicts between parents and adolescents occur at a similar rate regardless of parenting style, their intensity is greater among dyads with neglectful or authoritarian parents who do not communicate warmth compared to other parents and the needs of their children (Bi et al., 2018). Not surprisingly, cohesion was most commonly reported among those whose parents were both warm and responsive, and levels of cohesion were found to decrease with reduced warmth.

The characteristic of parent-adolescent interactions and relationships may be understood through theories on attachment. These theories assume a typological framework that classifies individuals into secure, insecure-ambivalent, insecure-avoidant, and insecure-disorganised forms of attachment based on their levels of anxiety and avoidance (Bowlby, 1978). Given that attachment figures serve as the secure base for children to explore relationships and develop their own template to engage with their social world, secure attachment styles are conducive to better relational functioning and overall quality of life (Ainsworth et al., 2015). Thus, those who are securely attached to their caregivers during the early stages of their lives are more likely to be better at problem-solving and managing their stress and emotions later on in their lives (Karreman & Vingerhoets, 2012). Securely attached children also tend to form more functioning relationships and can effectively navigate social situations compared to others, while insecure and avoidant attachment styles during the adolescent years served as a risk factor for relationship difficulties, dissatisfaction, and incompetence in later years (Arslan et al., 2012).

While attachment theories and practices focus on young children most often, their application to the adolescent context is equally important, and even more needed, given the fact that their seeming autonomy and strife for independence leads to changes in adolescents' relationship with their parents and may be (erroneously) interpreted as them not needing significant and ongoing parental support and attachment. This may be particularly so when parents struggle to manage these changes, as it predicts adolescent struggles (Patton et al., 2016). Not only does monitoring and supervision continue to be essential for optimal development, but also parents' management of their own emotions continues to serve as a reflective template that adolescents rely on, and greatly affect risk reduction and adjustment, as seen in a study on maternal effects on adolescent-onset depression (Schwartz et al., 2014). In support of this, longitudinal findings from a study involving 52 self-harming adolescents (Glazebrook et al., 2015), those who were insecurely attached to their mothers and peers tended to relapse into self-harming behaviours, while securely attached teenagers demonstrated improvements in problem-solving and were less likely to relapse over a six-month period. The findings of this study indicate that providing a safe and supportive context for meaningful participation in age-appropriate activities allows for the formation of stable decision-making processes and the sense of agency needed to carry out the responsibilities that lie ahead. Thus, secure attachment to parents can be healing and enables ongoing growth, even with a looming history of problematic behaviours and emotional dysregulation.

Given that attachment styles are formed based on the parent-child relationship, the nature of parenting plays a crucial role. Parenting behaviours

differ in terms of how responsive and controlling parents are when interacting with their children and can therefore be categorised into authoritative, permissive, authoritarian, and uninvolved parenting styles (Baumrind, 1971). Among the four parenting styles, authoritarian parenting (the most demanding style) has been consistently associated with insecure attachment and negative outcomes (Zeinali et al., 2011), while authoritative parenting (characterised by high levels of both demandingness and responsiveness) has received the most support for the development of well-adjusted individuals in a diversity of cultures, though the endorsement of disciplinarian strategies in traditional cultures may dilute these findings (Doinita & Maria, 2015; Pinquart, 2016; Sahithya et al., 2019). Cohesion between parents and adolescents was also noted to be the strongest for authoritative parenting, followed by permissive parental behaviours, and that adolescents' perception of their parents as reliable authority figures improved their bond (Bi et al., 2018). Thus, parents serve as the secure base for their children to navigate the terrain of adolescent development and such dynamics are optimal when responsivity is expressed appropriately and alongside strictness.

It is, therefore, not surprising that authoritative parenting has been associated with greater prosocial behaviours and fewer emotional problems and risky behaviours among adolescents compared to authoritarian and neglectful parenting styles, as seen in a sample of 462 US Mexican adolescent and parent dyads across seven years (Carlo et al., 2018), 236 12- to 18-year-old Pakistani adolescent and parent dyads (Fatima et al., 2020), and 300 teenagers from public and private schools in Lahore, Pakistan (Rizvi & Najam, 2015). There is also some emergent research in developed countries,

such as Spain, that has demonstrated reduced emotional and behavioural difficulties for permissive parenting styles (which are warm and less demanding) compared to authoritative dispositions (Lorence et al., 2019; Perez-Gramaje, 2020). These findings place emphasis on the role of warmth and responsiveness in adjustment processes.

Parenting interventions

For parents of troubled adolescents, provision of such a supportive environment may be impeded by reduced perceived competency, emotional intelligence, and parenting self-efficacy, as demonstrated among 130 Italian families among whom increased academic, emotional, and behavioural problems correlated with reduced self-efficacy and poorer parent-adolescent relationships (Steca et al., 2011). This indicates a need for supporting them either through the assistance of trained professionals or systemic programs and is particularly suited to collectivistic contexts where the onus of social development is assumed to a greater extent by parenting figures. Psychosocial treatments involving parents have been found to improve outcomes when treating substance use problems (Allen et al., 2016), and inclusion of parents in treatment leads to longer-lasting maintenance of gain for mood disorders and risky behaviours (Dardas et al., 2018; Yap et al., 2016). Thus, the prevention and treatment of emotional and behavioural difficulties in adolescence is most effective through a multidimensional approach that involves and even focuses on parents.

Parent focused interventions are designed to either improve parenting behaviours or parent-adolescent relationships, through the development of awareness, understanding, and efficacy. Research also suggests that

psychoeducation for parents regarding parenting behaviours and the developmental challenges faced by adolescents, and corresponding needs may be instrumental in improving adolescents' emotional wellbeing and quality of life (George et. al., 2018). Structurally, successful programmes designed for parents of adolescents who use substances were designed to last for a minimum of 12 single-hour sessions that are conducted face-to-face with both parents and their adolescents, most of whom were either in schools or residential spaces (Allen et al., 2016). The theoretical orientation, target of intervention, sample composition, and measurement of outcomes appeared to be vastly different across depression-focused interventions, making it challenging to establish associated facts that could inform further efforts (Dardas et al., 2018). Similar reviews for parenting programmes focused on emotional and behavioural issues were lacking. Such diversity and gaps in programming are likely because most of these programs are geared towards specific symptoms, clusters, or diagnoses as opposed to targeting a broader gamut of difficulties.

These shortcomings may be compensated for through broad-based programmes that are focused on parent-adolescent attachment relationships as the bedrock for growth and healing. The 10-week Connect group intervention (Moretti et al., 2017) is a fitting example of an effective, attachment-based programme for parents and caregivers of adolescents with emotional and behavioural problems. The programme focuses on establishing and nurturing healthy attachment dynamics such as reflection, affect regulation, sensitivity, and mutuality. It adopts a strengths-based, trauma-informed approach in providing psychoeducation and skill development. The Connect programme

was found to be effective in reducing internalising and externalising behaviours among adolescents, and improving attachment security, positivity, and parental monitoring (Moretti et al., 2012). Growth trajectories and the level of improvement was greatest among 487 adolescents in British Columbia, and Canada, who had severe behavioural problems prior to their parents' (n = 682) participation in the programme as compared to milder or sub-clinical issues (Pasalich et al., 2021). Furthermore, those with moderate or low levels of problems also improved, though at slower rates. Other research demonstrated that affect regulation was associated with reductions in parent-reported difficulties, that changes in behavioural problems were found to correspond with reduced attachment avoidance, and emotional problems were associated with attachment anxiety in a sample of 540 adolescents with identified clinical and sub-clinical difficulties in the UK (Moretti et al., 2015). Such programmes, therefore, indicate much scope for application in community and clinical settings.

However, the availability and accessibility of such parenting programmes is a consistent issue regardless of the type of treatment. The feasibility and adaptation of such programs within and across diverse communities are also unclear and require further investigation. Financial barriers and resource limitations may be overcome with the adaptation of established programmes to online platforms or the development of similar online interventions. This may be particularly useful in increasing accessibility and help-seeking in traditional nations like the United Arab Emirates (UAE), where mental health services are limited and underdeveloped and those in need of help may be less inclined to invest in mental health services or help

beyond their families and close circles. Studies evaluating computer-based interventions with adolescents (e.g., Wright et al., 2018) suggest that they are effective and can bring about long-term gains in symptom remission, quality of life, and emotional wellbeing. Less is known about whether using online delivery methods are similarly effective for parent-focused interventions. This may be a suitable possibility given the centrality of digital and broadband technologies in disseminating information and widening outreach.

Implications for the UAE

The UAE is an Arab nation in the Middle East that stands out for its remarkably rapid economic progress and internationalisation despite seemingly insignificant natural resources. The economic and developmental vision of the country's founding fathers and their successors has supported its expansion from primary maritime and desert farming practices to a key and wealthy expatriate destination, turning it into a global village teaming with opportunity. Even though the residential population has been ranked twentieth on the happiness index worldwide (United Nations, 2015), psychological issues have been one of the top five national concerns since 2016 (Gulf News, 2016). While steady progress continues to be made in terms of developing systems that can support the needs of the population, there continues to be a dire lack of mental health services and service providers (Haque & Al Kindi, 2015). This stands as one of the main challenges for the country, especially in the face of prevalence rates.

Given the saturation of the mental health system and lack of research, understanding of mental health issues across the population is largely lacking. There is some research from the late 90s and early 2000s that indicates the

presence of mood and psychiatric disorders among the local population to be between 7% to 38% (Abou-Saleh et al., 2001; Daradkeh et al., 2005; Ghubash et al., 1992). There has also been more focused research indicating a 43% prevalence of mood and conduct problems reported among children during general consultations, with anxiety and depression being the most common diagnoses (Eapen et al., 1998). Across these studies, mood symptoms were more prevalent and severe among female samples, large family sizes, filial discord, and family history of psychiatric problems. While research pertaining to adolescent populations in neighbouring Arab regions has become more commonplace (e.g., Emam, 2012; El-Keshky & Emam 2015; Thabet et al., 2000), similar efforts in the UAE are yet to be realised.

In addition, current interventions used in the country rely heavily on those established in and for Western countries that differ from the Arab, Muslim, and relatively family-oriented landscape of the UAE culture. The validity and utility of these interventions for international populations and ways of conceptualising emotional experiences have repeatedly been criticised in multi-cultural research (Al-Darmaki & Sayed, 2009; Al Mualla, 2011; Marsella, 2011). This deepens the stigma that is prevalent in such communities that demarcate psychological practice as opposing religious sentiments and values (Ahammed, 2015; Lambert & Pasha-Zaidi, 2011; Zolezzi et al., 2018). As investigated by Eapen and Garbash (2004), less than 40% of the local community had reported an interest and willingness to seek professional help for their identified emotional problems. For these reasons there have been endorsements within the literature towards bottom-up approaches that seek to understand the ground reality so as to develop

ecologically valid help paradigms (e.g., Ahammed, 2015; Lambert, 2008). Resistance to seeking help for the younger population of children and adolescents may further exacerbate given the tendency for Arab cultures to minimise or dismiss the presence of emotional and behavioural difficulties within this population (Dwairy & Achoui, 2006). Despite this, increased exposure to and awareness of Western conceptualisations of psychological functioning in recent years may facilitate help-seeking behaviours. The collectivistic framework that informs the values of the local community and their value of filial privacy and autonomy also make family-based interventions and online interventions more suitable.

Rationale

The UAE represents a unique culture in which the prevalence, antecedents, consequences, and treatment of mental health conditions may be different to that of the Western world. Though high rates of emotional and behavioural problems have been reported or estimated in the Gulf Cooperation Council (GCC) countries over the past 20 years (Abou-Saleh et al., 2001; Daradkeh et al., 2005), research corresponding to adolescents from these regions has been largely neglected (Al-Darmaki & Yaaqeib, 2015). It is a well-known fact that prevention and early intervention are key to reducing the damaging effects of psychological problems during adolescence (for a review, see Johnson et al., 2018). Despite this, most continue to shy away from seeking professional help owing to various factors such as stigma, lack of awareness, difficulty accessing available help, and inadequate or overwhelmed resources (O-Brien et al., 2016; Zolezzi et al., 2018).

Therefore, this introductory chapter was written to outline the existing research on rates of emotional and behavioural difficulties among adolescents across different cultures, factors influencing the development of such difficulties and their impact on psychosocial outcomes. This serves as the background to inform an understanding of parental involvement and the need for supportive interventions to help parents support their adolescent children.

These considerations are deemed imperative for a few reasons. Emotional and behavioural difficulties among adolescents are multi-layered and can have a pervasive impact across micro and macro levels of society. Their negative impact on adolescent development, physical health, and subsequent chronic and recurring effects on adult functioning (Hofstra et al., 2001; Scholten et al., 2013) imply the need for identification, prevention, and early intervention for such disorders to reduce such effects and improve functioning. From a systemic level, understanding the prevalence and profile of emotional and behavioural difficulties among UAE adolescents and their influencing factors would also help inform and develop interventions and policies, reduce disease burden, and enhance emotional, economical, and occupational wellbeing at a macro level. This is particularly the case given that the community in the UAE is underserved and lacks the level and choice of interventional supports that are known to be beneficial for parents (and, by extension, adolescents) in developed countries. In summary, there is a need to address adolescent emotional and behavioural functioning. Research in UAE populations is very limited and therefore further research could address this gap in understanding.

Aims of this thesis

The overall aim of this dissertation is to formulate a suitable intervention for parents of adolescents with emotional and behavioural difficulties based on the identification and understanding of such difficulties among native adolescents in the UAE, psychological theory and an evaluation of existing research. This aim was realised through three studies (described across corresponding chapters in this dissertation) that were carried out in succession, with each subsequent study building off of the previous. The aims of these studies are as follows::

1. To identify a suitable screening measure for emotional and behavioural difficulties among native adolescents in the UAE. For this, the reliability and validity of two screening measures, namely the Arabic translation of the Revised Child Anxiety and Depression Scale (RCADS-A) and the Arabic adaptation of the Strengths and Difficulties Questionnaire (SDQ-A) were evaluated against the standard of the English version of the Revised Child Anxiety and Depression Scale (RCADS-E) using data from 40 native and bilingual (English and Arabic speaking) adolescents at a randomly selected private school in the UAE (**Chapter Two**).
2. To ascertain the prevalence of emotional and behavioural difficulties among UAE adolescents. The second study was therefore conducted with 720 native adolescents from public schools in the UAE (**Chapter Three**).
3. To evaluate the effect of influencing factors such as gender, affluence, and family structure, on emotional and behavioural difficulties among

UAE adolescents. Data from the same sample of 720 native UAE adolescents was used in this regard (**Chapter Three**).

4. To understand the efficacy of online parent-focused interventions to reduce emotional and behavioural difficulties among adolescents. A systematic review of available programs was undertaken with this in mind (**Chapter Four**).
5. To make recommendations for the development of an online intervention to support parents of adolescents in the UAE who may be at risk for emotional and behavioural difficulties. The framework and content of such a program is proposed in the last chapter of this dissertation (**Chapter Five**).

Chapter 2: Examining the Reliability and Validity of Screening Tools for Emotional and Behavioural Difficulties Among Native UAE Adolescents

At the clinical level, emotional and behavioural difficulties have a significant negative impact on adolescents, evidenced by the fact that depression and anxiety tend to have chronic and recurring courses (Essau et al., 2018; Scholten et al., 2013). Specifically, adolescent-onset anxiety was particularly found to be associated with a negative course and outcomes more so than if symptoms emerged during childhood, including poorer adjustment, life satisfaction, filial relationships, coping skills, and greater chronic stress (Essau et al., 2014). Similarly, depression experienced during adolescent years is found to be associated with poor academic performance (Stockings et al., 2015), increased risk for substance use (Wilkinson et al., 2016), suicidal ideation (Ayyash-Abdo, 2002), attempts and related behaviours, and reduced life satisfaction (Goldbeck et al., 2007). (See Chapter 1 for a more in-depth discussion) Given these difficulties experienced at an early developmental stage, the risk of sustained disability and lack of effective coping resources at later stages of life is greater and have a significant negative impact on the development of youth, even into adulthood. From a community perspective, this also has serious implications on the social and economic wellbeing of populations as it increases the disease burden on society.

Timely intervention and prevention of emotional and behavioural difficulties must therefore be preceded by assessment and screening efforts that effectively identify symptoms within the adolescent population, even at subclinical levels. This is particularly so for neglected populations, such as native adolescents in the UAE, considering the evidence of high rates of

emotional and behavioural difficulties in adolescents across developing and developed countries (see Chapter 1 for an overview). Thus, there is a need to first identify the nature and extent of emotional and behavioural difficulties within this population. Since the primary language of communication is Arabic (native UAE adolescents come from an Arabic background and likely study in Arabic-speaking public schools), it becomes important to identify an appropriate Arabic measure or an adaptation of an existing measure to Arabic.

Two such measures have been identified in this regard. The self-report version of the Strengths and Difficulties Questionnaire (SDQ) has been used extensively across countries and with various samples to screen and identify emotional and behavioural difficulties among 11- to 17-year-olds (Woerner et al., 2004). It was found to be a valid and reliable screening tool for this age group (Kuhn et al., 2017) and is easy to complete. An Arabic translation of the SDQ (SDQ-A) has also been validated across a few regions including Yemen (Alyahri & Goodman, 2006), Gaza (Thabet et al., 2000), and Saudi Arabia and Oman (El-Keshky & Emam, 2015). The total scores and the emotional difficulties subscale of the SDQ-A correlate well with separate measures of anxiety and depression (Ayyash-Abdo et al., 2016). Though the SDQ-A may seem like the ideal screening tool for emotional and behavioural difficulties among native UAE adolescents, its broad focus increases the risk of reducing sensitivity to clinical conditions.

In this regard, there is some evidence to suggest that there may be advantages to using condition-specific measures as they tap into core or underlying pathologies that manifest in overt emotional and behavioural displays (Mulhern et al., 2014). The Revised Child Anxiety and Depression

Scale—Short Form (RCADS) is such a measure that has been used extensively to screen for anxiety and depression in adolescent populations. It has been found to be reliable and valid (Chorpita et al., 2011) and is consistent with the DSM-IV criteria of anxiety and depressive disorders when assessed using data from 1,641 school students (Chorpita et al., 2000). These findings have been replicated among clinical youth samples (Chorpita et al., 2005) and Australian adolescents (de Ross et al., 2002). The RCADS was also found to be internally consistent and concurrently valid with the Children's Depression Inventory and the Revised Children's Manifest Anxiety Scale (Chorpita et al., 2005). A more recent study by Stevanovic et al. (2016) demonstrated that a meagre proportion of the RCADS items were non-invariant when comparing two or more cultures, indicative of its cross-cultural validity and aptness for use with adolescents across non-Western or non-American cultures. Though the short form of the RCADS has been adapted and translated into several languages, there is no available Arabic version. Therefore, the psychometric properties of the Arabic translation of the measure would need to be established and its suitability for use with UAE adolescents would need to be ascertained.

Aims

The study aimed to establish the reliability and validity of the RCADS-A (short form) and the SDQ-A (youth self-report) and therefore ascertain their suitability in screening for emotional and behavioural difficulties among native adolescents in the UAE.

Methods

Design

A within-participants design was implemented to compare the reliability and validity of the RCADS-A and the SDQ-A against the RCADS-E in a sample of bilingual (English and Arabic) students from a private UAE school.

Participants and recruitment

Bilingual (English and Arabic) students from grades seven through 10 of a mixed-sex, private, English-medium school in the UAE, were recruited to the study. The school was selected randomly through an automated system from among the private schools registered with the Ministry of Education in the UAE. Students in the target classes were eligible to participate if 1) the student rated themselves as proficient in reading both Arabic and English, 2) the student received the parent information sheet (Appendix A) and opt-out slip (Appendix B) to take home to the parent, 3) the parent did not opt their adolescent out of the study, 4) the student was present on the day of data collection, and 5) the student provided their assent to participate. The target sample size was 40 with five boys and five girls sampled from each year group.

Measures

Revised Child Anxiety and Depression Scale—short form (RCADS)

The RCADS (Chorpita et. al. 2000) is a well-established measure to screen for emotional disorders in children and adolescents. The measure comprises 25 items that assess the frequency of symptoms of anxiety and depression and give a score for total anxiety (15 items) and depression (10

items). Items are rated on a 4-point Likert scale from 0 (“never”) to 3 (“always”). Chorpita et al. (2005) found that it had good internal consistency (Cronbach’s alpha ranging between .78 and .88, one-week test-retest coefficients). The 25-item short-form correlates highly with the original 47-item version and had satisfactory internal consistency with alpha coefficients ranging from .68 to .83 (Ebesutani et al., 2012). Concurrent validity has been established with the Children’s Depression Inventory and with the Revised Children’s Manifest Anxiety Scale. For this study, the shorter version of the RCADS was translated to Arabic (RCADS-A) by a bilingual (English/Arabic) clinical psychologist and then translated back into English by a second bilingual (English/Arabic) clinical psychologist. The Arabic translation (RCADS-A) was then adjusted accordingly.

The Strengths and Difficulties Questionnaire (SDQ) self-report

The SDQ (Goodman, 1997) is a widely used screening questionnaire for emotional and behavioural difficulties in young people aged two to 17 years. The SDQ consists of 25 items that assess emotional problems, conduct problems, hyperactivity and inattention, peer relationship problems and pro-social behaviour. Items are rated as not true, somewhat true, and certainly true. Four subscales (peer problems, emotional problems, hyperactivity and inattention, and conduct disorders) are combined to produce a total difficulties score. Peer problems and emotional problems can be combined to produce total internalising problems. The concurrent and discriminant validity of the measure have been shown to be good (Goodman, 2001). The measure has also been shown to be capable of discriminating between mentally healthy and unhealthy adolescents (Goodman et al., 1998). This study used the Arabic self-

report version (SDQ-A) for those aged between 11 and 17 years, which has been tested for its validity with Arabic speaking youth in Yemen (Alyahri & Goodman, 2006). Results suggested that the measure was reliable with subscales scores for internal consistency ranging from .77 to .89. It was also deemed to be useful for investigating childhood behavioural and emotional disorders in clinical settings. Similar findings were consistently reported across two Arabic cultures by El-Keshky and Emam (2015). The Arabic SDQ was also found to demonstrate good concurrent validity with other measures of emotional disorders including the Lebanese version of the Center for Epidemiological Studies Depression Scale for Children (CES-DC) and the Spence Children's Anxiety Scale (Ayyash-Abdo et al., 2016).

Ethics

Ethical approval was obtained from the Ethical committee at the Ministry of Education in the UAE on 6th March 2018 (Appendix C) and from the School of Medicine's Division of Psychiatry & Applied Psychology's Research Ethics Sub-Committee (0199; Appendix D) on 14th June 2018. All parents were informed about the study and given the opportunity to remove their child from it by returning a signed opt-out form. Informed verbal assent was elicited from the students themselves. While the research packet was distributed to the students through a representative of the school as per requirements of the Ministry of Education, access to the completed forms and data was maintained exclusively by the researcher throughout the process. All questionnaires were anonymous and paired by the participant's study number. The completed forms were stored in a locked cabinet in the researcher's office, accessible only by the researcher.

Procedure

It is mandated that all communication and data collection procedures within educational institutes in the UAE are conducted through the Ministry of Education and in collaboration with the researcher(s). Thus, after they had completed their ethical review for this study, the ministry provided a list of 15 private schools registered with them as a data collection site and that were known to have bilingual (Arabic and English speaking) students on their roster. From these, the ministry randomly selected one school in the emirate of Dubai through a computerised algorithmic system.

One week prior to data collection all eligible adolescents at the participating school were given a participant information sheet and opt-out form by their respective teachers to take home to their parents. Adolescents whose parents had not opted out of the study within the one-week period were provided with a unique study number and asked to complete the RCADS-E and provide a few demographic details (Appendix E). At the end of this period, participants were invited to complete the RCADS-A and the SDQ-A in class during a time coordinated by the school, the Ministry of Education, and the researcher.

Analysis

Data were analysed using IBM SPSS Statistics 22 (IBM Corporation, 2017). Cronbach's alpha was calculated to establish reliability (internal consistency) for the SDQ-A, the RCADS-A, and the RCADS-E. Interclass correlation coefficients were used to calculate agreement between the RCADS-A and the RCADS-E for total score, and anxiety and depression subscales. Pearson correlations were used to determine the association

between all three measures. The Kappa statistic was calculated to determine the agreement between possible clinical diagnosis of emotional difficulties on the SDQ-A and scores above 90th percentile on the RCADS-A and the RCADS-E.

Results

No parents withdrew their child from the study and all participating students (20 boys and 20 girls) were present on both data collection days, accounting for 100% recruitment and follow-up rates. As seen in Table 1, all measures had moderate to good internal consistency as measured by Cronbach's alpha except for the RCADS-A depression scale where consistency was poor for boys (α = .387).

Table 1

Internal consistency (Cronbach's alphas) for scales and subscales

	Girls (n = 20)	**Boys (n = 20)**	**Total (n = 40)**
RCADS-E			
Total	.90	.76	.86
Depression	.74	.57	.67
Anxiety	.88	.79	.84
RCADS-A			
Total	.89	.68	.83
Depression	.83	.39	.70
Anxiety	.81	.69	.75
SDQ-A			
Total	.52	.69	.60
Emotional	.62	.66	.64
Internalising problems	.61	.66	.63

All data were normally distributed. Means and SDs for the measures are shown in Table 2. There were no significant gender differences in mean scores for any of the outcome measures.

Table 2

RCADS-E, RCADS-A, and SDQ-A scores summary

	Boys (n = 20)	Girls (n = 20)	Total (n = 40)
RCADS-E t-scores			
Depression (SD)	51.20 (9.10)	48.79 (10.92)	50.00 (10.00)
Anxiety (SD)	50.99 (8.85)	49.01 (11.16)	50.00 (10.00)
Total (SD)	51.20 (8.03)	48.79 (11.73)	50.00 (10.00)
RCADS-A t-scores			
Depression (SD)	50.58 (7.31)	49.41 (12.29)	50.00 (10.00)
Anxiety (SD)	50.05 (9.06)	49.95 (11.09)	50.00 (10.00)
Total (SD)	50.29 (7.56)	49.71 (12.16)	50.00 (10.00)
SDQ-A Means			
Emotional problems (SD)	4.00 (2.53)	3.46 (2.32)	3.73 (2.41)
Internalising problems	7.50 (3.69)	6.76 (3.35)	7.13 (3.49)
(SD)	22.00 (5.76)	21.52 (5.09)	21.76 (5.37)
Total Difficulties (SD)			

Relationship between the RCADS-E, RCADS-A, and the SDQ-A

Table 3

Correlation between the RCADS-A, RCADS-E, and SDQ-A

	Internalising Problems (SDQ-A)	Emotional Difficulties (SDQ-A)	Total Difficulties (SDQ-A)
Anxiety			
RCADS-A	.476**	.625***	.522**
RCADS-E	.568**	.612***	.586***
Depression			
RCADS-A	.558**	.486**	.604***
RCADS-E	.521**	.468**	.560***
Total			
RCADS-A	.572**	.643***	.624***
RCADS-E	.620**	.630***	.650***

*p < .05 ** p < .01 ***p < .001

As seen in Table 3, higher RCADS-E anxiety scores were strongly correlated with total SDQ-A scores ($r = .586$, $p < .001$), SDQ-A emotional problems scores ($r = .612$, $p < .001$), and SDQ-A internalising scores ($r = .568$, $p < .001$). The RCADS-A anxiety scores were strongly associated with SDQ-A emotional problems scores ($r = .625$, $p < .01$) and total SDQ-A scores ($r = .522$, $p < .01$) and moderately correlated with SDQ-A internalising problems

scores ($r = .476$, $p < .01$). Higher RCADS-E depression scores were strongly correlated with total SDQ-A scores ($r = .560$, $p < .001$), and SDQ-A internalising scores ($r = .521$, $p < .01$), and moderately associated with SDQ-A emotional problems scores ($r = .468$, $p < .01$). Higher RCADS-A depression scores were moderately associated SDQ-A emotional problems subscale ($r = .486$, $p < .01$), and strongly correlated with the SDQ-A internalising problems ($r = .558$, $p < .01$) and total ($r = .604$, $p < .001$) subscales. RCADS-E total scores were strongly correlated with total SDQ-A scores ($r = .650$, $p < .001$), SDQ-A emotional problems scores ($r = .630$, $p < .001$) and SDQ-A internalising problems scores ($r = .620$, $p < .001$). RCADS-A total scores were strongly associated with total SDQ-A scores ($r = .624$, $p < .01$), SDQ-A emotional problems scores ($r = .643$, $p < .001$), and SDQ-A internalising problems scores ($r = .572$, $p < .01$).

Agreement between total RCADS-E, total RCADS-A, and total SDQ-A

Clinical caseness for the RCADS-A, RCADS-E, and SDQ-A was measured using a cut-off score below 80% to indicate normal caseness, between 80–90% to indicate borderline clinical caseness, and above 90% to represent abnormal clinical caseness (see Table 4).

Table 4

Clinical Caseness for the RCADS-A, RCADS-E and SDQ-A total scores (n = 40)

	Normal	**Borderline**	**Abnormal**
RCADS-E Total (%)	32 (80%)	4 (10%)	4 (10%)
RCADS-A Total (%)	32 (80%)	4 (10%)	4 (10%)
SDQ-A Total (%)	29 (72.5%)	7 (17.5%)	4 (10%)

Total SDQ-A scores identified a similar proportion of probable clinical cases (10%), but the SDQ-A yielded a slightly higher proportion of borderline cases (17.5%). There was moderate agreement between the total RCADS-A and total RCADS-E scores (ICC = .634, CIs = 0.41–0.79). Four students were above the borderline cut-off for clinical caseness on the RCADS-A and four on the RCADS-E with a moderate agreement for caseness classification (normal/borderline/abnormal; Weighted Kappa = .5, CIs = 0.17–0.824, p < .001). The percentage agreement was 77.5%.

Table 5

Percentage agreement between RCADS-E and RCADS-A for caseness

RCADS-A caseness	**RCADS-E caseness**		
	Normal	Borderline	Abnormal
Normal	28 (70%)	3 (7.6%)	1 (2.5%)
Borderline	4 (10%)	0 (0%)	0 (0%)
Abnormal	0 (0%)	1 (2.5%)	3 (7.5%)

There was a weak agreement between the total SDQ-A caseness (normal/borderline/abnormal) and the RCADS-A (Weighted Kappa = .312, p < .05). However, there was a 70% agreement between clinical caseness categories (Table 5).

Table 6

Percentage agreement for caseness between RCADS-A and SDQ-A

SDQ-A	**RCADS-A caseness**		
	Normal	Borderline	Abnormal
Normal	26 (65%)	2 (5%)	1 (2.5%)
Borderline	4 (10%)	1 (2.5%)	2 (5%)
Abnormal	2 (5%)	1 (2.5%)	1 (2.5%)

In addition, the agreement between the clinical caseness (normal/borderline/abnormal) for the total SDQ-A and the total RCADS-E

was also weak (Weighted kappa = .312, CIs = 0.34–0.589, p = .018;), but the percentage agreement for caseness was acceptable at 65% (Table 6).

Discussion

In summary, the purpose of this chapter was to identify an appropriate Arabic measure of emotional and behavioural problems by evaluating their validity and reliability in identifying such difficulties at varying levels. Initially, it was felt that an Arabic version of the RCADS would be most appropriate to identify emotional and behavioural difficulties in adolescents in the UAE. As there was no Arabic version available, the English version of the RCADS was translated and back-translated for use in this study. The primary aim of the study was to establish the reliability and concurrent validity of the RCADS-A by comparing it with the already validated Arabic version of the SDQ and the English version of the RCADS. A second aim was to explore whether a widely used, broad-based measure of emotional and behavioural difficulties such as the SDQ-A would offer any advantages over the RCADS. For this pilot study, 40 Emirati students between grades seven and 10 were recruited from a private English-medium school in the UAE.

Missing value analysis revealed a few missing items in the RCADS-A, the RCADS-E, and the SDQ-A data sets. There were six missing values in the RCADS-E measure, one missing value in the RCADS-A measure, and a total of four missing values in the SDQ-A measure. Missing values were imputed using the mean average method. It is worth noting that students appeared to face greater difficulties when answering the RCADS-A version rather than the SDQ-A version as was evidenced in the frequent need for clarifications that was sought for the RCADS-A questions; no clarification was sought for the

SDQ-A. This could be one of the reasons why the RCADS-A has the lowest score of the missing values.

The results indicated that the internal consistency for total scores on the RCADS-A, the RCADS-E, and the SDQ-A measures were strong. The consistency measures for boys and girls on the measures were also strong and broadly comparable except for the RCADS-A (α = .387) and the RCADS-E (α = .567) depression scales for boys, both of which depicted weaker internal consistency. The weak internal consistency of the RCADS-A depression measure in boys supported the use of the SDQ-A measure which had acceptable internal consistency across males and females. A broader measure would arguably be more sensitive to emotional and behavioural difficulties in boys (Emam et al., 2016; Khamis, 2018; Patalay et al., 2015; Stevanovic et al., 2017; Woerner et al., 2004).

The results indicated that the total SDQ-A scores were strongly correlated with total RCADS-A (r = .624) and RCADS-E (r = .650), and the RCADS-A depression (r = .604) scores. In addition, the total SDQ-A scores were strongly correlated with the RCADS-A anxiety scale (r = .522), the RCADS-E anxiety scale (r = .586), and the RCADS-E depression scale (r = .560). In addition, the scores of the SDQ-A emotional problems measure were strongly correlated with the RCADS-A and the RCADS-E anxiety scales (r = .612) but moderately correlated with the RCADS-A (r = .486) and the RCADS-E (r = .468) depression scales. Finally, there were moderate correlations between the SDQ-A internalising problems and the RCADS-A anxiety measure (r = .476) and strongly correlated with the RCADS-A

depression measure (r = .558) and the RCADS-E depression measure (r = .521).

Taken together, it can be concluded that the participants in the study had low levels of emotional difficulties. Using the RCADS-E with these bilingual students revealed that 80% of students fell in the normal range with four students (10%) having borderline emotional difficulties and four (10%) having definite difficulties. There was good agreement between the English and Arabic versions of the RCADS. In addition, the SDQ-A revealed that 72.5% of the students fell in the normal range with seven students (17.5%) falling in the borderline range with four (10%) having definite difficulties. There was an acceptable percentage agreement between the SDQ-A and the RCADS-A and RCADS-E. The SDQ missed one abnormal case and two borderline cases as identified by the RCADS-A but potentially identified additional borderline cases.

Based on the analysis, the SDQ-A has a number of advantages. To begin with, it gives a wider profile of difficulties and uses very simple language. A validated Arabic version is available and has proven to be efficient in identifying clinical caseness and differentiating between the community sample and the psychiatric sample of students with a high rate of accuracy which suggests strength in the accuracy of measurement of the SDQ-A (Alyahri & Goodman, 2006). De Vries et al. (2018) tested the South African SDQ version and found that the SDQ could be reliably used to measure the clinical caseness of emotional and behavioural difficulties in the country. The authors did note that the SDQ was feasible to respond to and recommended the generation of country-specific cut-off scores. The research also indicated

that various sub-scales of the SDQ had good internal consistency. Furthermore, it was observed by the present researcher that the SDQ-A was easy to understand by the respondents of this study while the RCADS-A was not. The SDQ-A has been validated and is available and tested in prior research. Although, internal consistency was higher in the RCADS-A compared to the SDQ-A (with the exception of the depression scale in boys), the SDQ subscales have fewer items (n = 5) which tends to reduce alpha. In addition, total SDQ assesses externalising and internalising problems so we might expect lower alphas compared to the RCADS which focuses on internalising problems (anxiety and depression). In addition, the questions are worded much more simply in the SDQ-A and the instrument has only three Likert choices whereas the RCADS-A has longer sentences and four response options. Thus, the SDQ-A is easy to administer and complete in comparison to the RCADS-A. Wolpert et al. (2014) have noted that "the SDQ has the greatest evidence for norms so is most likely to be able to be used for comparison" (p. 68).

Based on these results, it is deemed advantageous to use a broad-based measure such as the SDQ-A for the evaluation of emotional and behavioural disorders in UAE adolescents, since the RCADS-A did not have acceptable internal consistency across all subscales and gender, making it unsuitable to use the measure in the context of boys with depression. In this regard, it would be better to use a broad-based measure that includes both emotional and behavioural problems. However, in this bilingual sample, the RCADS-A correlated strongly with the RCADS-E, and the strong correlation with the

SDQ-A demonstrated good concurrent validity for the RCADS-A suggesting that it might be useful in clinical practice.

Strengths and limitations

The excellent response rate was a strength of this study that helped draw appropriate conclusions. Use and comparison of the Arabic measures with the RCADS-E also lend to the robustness of the study design, allowing for accurate interpretation of noted strengths. Despite these strengths, the study is limited by a lack of qualitative sources of data verification, given the observations made when collecting data and reviewing response sets. Incorporating a structured clinical interview and other methods of diagnostic clarification would have supplemented the evaluation of the validity of these measures.

Conclusion

The RCADS-A appeared to be an acceptable translation, though with some concern over internal consistency for boys. The Arabic version of the SDQ was found to be acceptable and reliable, in addition to it correlating appreciably with the English and Arabic versions of the RCADS. Taken together, the SDQ-A seems to be acceptable for use with a community sample of UAE adolescents.

Chapter 3: Emotional and Behavioural Difficulties Among Native Adolescents in the UAE: Prevalence and Influencing Factors

The preceding chapter established the reliability and validity of the Arabic self-report version of the Strengths and Difficulties Questionnaire (SDQ-A) with native adolescents from the United Arab Emirates (UAE). Specifically, concurrent validity was supported by strong correlations between the total SDQ-A scores and those of the Arabic and English versions of the Revised Children's Anxiety and Depression Scale (RCADS-A and RCADS-E, respectively), as well as the depression sub-scale of the RCADS-A. The internal consistency of the SDQ-A was adequate for both boys and girls, while the depression subscale of the RCADS-A had poor internal consistency for boys. The SDQ-A was determined to be a suitable measure of emotional and behavioural difficulties for UAE adolescents, given its breadth, brevity, and simple language and response options.

The Strengths and Difficulties Questionnaire (SDQ), in its various translations and reporting versions (i.e., self, parent, teacher), has been widely used to identify emotional and behavioural difficulties across countries. However, among developing nations, the measure has been used mostly with vulnerable adolescents, such as those suffering from HIV/AIDS, orphans, and adolescents exposed to war, violence, or substance abuse (Hoosen et al., 2018); and those who have been displaced from their homes due to war or natural disasters (Karadag & Ogutlu, 2021). Only a few studies have been based on self-reported data from normative (non-clinical) samples. For example, in Hoosen et al.'s (2018) scoping review of the application of the SDQ for children and adolescents in African countries, only 32 of the

identified 54 studies published between 1997 and 2017 used the self-report version of the SDQ (35 samples). Even among these, effect sizes varied (Chronbach's alphas between .1 to .8) and internal consistency was reported in only 14 publications. Furthermore, no SDQ scores were reported in the review and only two of the included studies (Atilola et al., 2013; Hecker et al., 2016) reported SDQ self-report scores in community (normative) adolescent samples.

Scoping Review

Thus, a scoping review of the use of the SDQ in collectivistic cultures (specifically those in Africa and Asia) was conducted to understand the prevalence of emotional and behavioural difficulties among normative adolescents from these regions, particularly given known differences in emotional and behavioural experiences and appraisals between these cultures and their more individualistic counterparts (Ortuño-Sierra et al., 2015; see Chapter 1). Studies published since 2005 with self-reported SDQ data obtained from adolescents were sought. Search terms were as follows:

Adolescent/ OR Adolescence/ OR (Adolescen* OR Teen* OR Young OR Youth*) OR Prevalence/ OR Rate of/ OR SDQ/ OR Strengths AND Difficulties AND Questionnaire/ OR Total AND Difficulties/ AND Asia/ OR Africa/ OR MENA/ OR Middle AND East/ OR GCC

A total of 63 studies were identified. Seven papers met the inclusion criteria and were retained for review. As seen in Table 7, six Asian cultures were investigated, including adolescents from China (Wang et al., 2014), India and Indonesia (Atilola et al., 2013), Iran (Mohammadi et al., 2013), Jordan (Atoum et al., 2018), and Oman (Emam et al., 2016). Across the reviewed

studies, the rates of total difficulties in the possible clinical caseness range varied greatly from 9% among Tanzanian adolescents (Hecker et al., 2016) to 80% in Nigeria (Atilola et al., 2013). This might be a corollary of the diversity of cultures within this cohort. Compared to the UK norms (Youth In Mind, 2014) which suggest that around 10% of adolescents will score in the abnormal range indicating possible clinical caseness, reported rates were higher among adolescents in India, Serbia, Nigeria, and Turkey (Atilola et al., 2013) and Oman (Emam et al., 2016); comparable among those in Indonesia (Atilola et al., 2013), Mongolia (Vanchindorj et al., 2017), and Iran (Mohammadi et al., 2013); and lower in Tanzania (Hecker et al., 2016), China (Wang et al., 2014), and Jordan (Atoum et al., 2018). Thus, these findings, both in terms of prevalence and variability, cannot be reliably extrapolated to other cultures within the same region, such as the UAE.

Furthermore, the influence of demographic factors such as age and gender evaluated across the reviewed studies was mixed. While younger Mongolian adolescents indicated more emotional problems, hyperactivity, peer problems, and lesser prosocial behaviours (Vanchindorj et al., 2017), older adolescents in China were found to have greater emotional and behavioural difficulties than their younger peers (Wang et al., 2014). Gender differences were similarly varied. Total difficulties were greater among girls than boys in India, Serbia, Nigeria, Turkey, Indonesia (Atilola et al. 2013), Jordan (Atoum et al., 2018), Iran (Mohammadi et al., 2013), and Mongolia (Vanchindorj et al., 2017); and lower in China (Wang et al., 2014). Higher rates of emotional problems were reported among girls in China (Wang et al., 2014), Iran (Mohammadi et al., 2013), Jordan (Atoum et al., 2018), Mongolia

(Vanchindorj et al., 2017), and Oman (Emam et al., 2016), and lower conduct problems were noted among girls compared to boys in China (Wang et al., 2014) and Oman (Emam et al., 2016). Atoum et al. (2018) and Emam et al. (2016) demonstrated greater hyperactivity and peer problems among Jordanian and Omani boys, respectively.

Contextually, reduced parental presence, migration, parental discord, or separation for indefinite or extended periods of time (Canetti et al., 2000; Smeekens et al., 2012; Zhao et al., 2017), and lower socioeconomic status (Philipp et al., 2018; Ravens-Sieberer et al., 2008) have consistently been associated with increased emotional and behavioural difficulties. Among the included studies of the scoping review, Wang et al. (2014) found greater emotional and behavioural difficulties among adolescents living in single-parent or non-intact households compared to those who lived with both parents. Vanchindorj et al.'s (2017) results suggested that affluence affected emotional and behavioural difficulties, though the nature of this influence is unclear.

The results of the scoping review suggest that, among those identified in the database, relatively few studies (seven out of 63) have used the SDQ self-report questionnaire specifically as a screening tool to explore mental health in community adolescent samples in collectivistic cultures and developing countries. As shown in the Hoosen et al. (2018) review, although the SDQ-self-report has been widely used, the focus has been on populations with significant risk factors for emotional and behavioural difficulties such as HIV or exposure to war or parental separation. Exploring adolescent mental health in community settings such as schools is key to understanding support

needs and appropriate preventive strategies, particularly in countries where culturally sensitive adolescent mental healthcare is limited. A tool like the SDQ will also allow the researcher to characterise the profile of typical difficulties, explore gender differences, and identify protective factors and those factors which increase the risk of emotional and behavioural difficulties.

Aims

This study aimed to determine the prevalence of emotional and behavioural difficulties among adolescent UAE nationals aged 12–19 years. It also aimed to identify the influence of socio-demographic factors on these difficulties.

Table 7

Summary of Studies Using the Self-Report SDQ with Normative Adolescent Samples in Asia and Africa (n = 7)

Authors	Context	Sample Age	SDQ Scales Included	Rate of Prevalence
Atilola et al. (2013)	India, Serbia, Nigeria, Turkey, Indonesia	13–19 years	Total difficulties, emotional problems, conduct problems, hyperactivity problems, peer problems, prosocial behaviours	29% of adolescents from India, 28% from Serbia, 80% from Nigeria, 42% from Turkey, and 19% from Indonesia indicated clinical caseness for total difficulties. Conduct and emotional problems were the most prevalent followed by peer problems.
Atoum et al. (2018)	Jordan	14–16 years	Total difficulties, emotional problems, conduct problems, hyperactivity problems, peer problems, prosocial behaviours	11.7% demonstrated clinical caseness for total difficulties, 14.2% for emotional problems, 12.5% for conduct problems, 7.5% for hyperactivity problems, and 5.7% for peer problems. Girls reported greater total, emotional, and hyperactivity difficulties, and boys reported greater peer problems.
Emam et al. (2016)	Oman	12–16 years	Total difficulties, emotional problems, conduct problems, hyperactivity problems, peer problems, prosocial behaviours	32.1% demonstrated clinical caseness for total difficulties, 29.2% for emotional difficulties, 13.8% for conduct problems, 17.4% for hyperactivity, 20.2% for peer problems. Girls reported more emotional difficulties ($t = 4.23$, $p < .001$) but higher levels of prosocial behaviours ($t = 6.19$, $p < .001$), and boys reported higher conduct ($t = 2.74$, $p < .01$) and peer problems ($t = 3.83$, $p < .001$). There were no gender differences on the hyperactivity and total difficulty scales.

Hecker et al. (2016)	Tanzania	6–15 years	Internalising problems	9% and 8% reported clinical caseness for emotional symptoms peer problems, respectively.
Mohammadi et al. (2013)	Iran	12–17 years	Total difficulties, emotional problems, conduct problems, hyperactivity problems, peer problems, prosocial behaviours	14.26% reported clinical caseness for total difficulties, 8.09% for emotional problems, 24% for conduct problems, 13.95% for hyperactivity problems, 7.25% for peer problems, and 5.76% for social problems. Girls reported greater emotional difficulties than boys.
Vanchindorj et al. (2017)	Mongolia	11–17 years	Total difficulties, emotional problems, conduct problems, hyperactivity problems, peer problems, prosocial behaviours	16.3% reported clinical caseness for total difficulties, 10.0% for emotional symptoms, 10.2% for conduct disorders, 18.8% for hyperactivity, and 14.6% for interpersonal relationships. Gender, age, family environment, and living areas also influenced these adolescents' emotional well-being.
Wang et al. (2014)	China	11–18 years	Total difficulties	10.7% demonstrated clinical caseness for total difficulties. Boys reported significantly greater total difficulties than girls, and girls reported greater emotional problems.

Methods

Participants and Recruitment

Participants in this study were male and female adolescents in grades seven, eight, and nine who were attending public schools in the UAE where the language of instruction was Arabic. To obtain a representative sample, recruitment efforts were focused within the most populous and economically distinct *Emirates* (cities) of Dubai, Sharjah, and Ajman, according to the recommendations of the Ministry of Education in the UAE. The ministry maintained a list of 15 Arabic-speaking, public schools that indicated an interest in participating in the study. Of these, the researcher randomly selected one boys' and one girls' school from each of the three Emirates using the ministry's automated randomising system, with a target to recruit 40 students each from grades seven, eight, and nine based on the following criteria: 1) the student's consenting parent did not opt their child out of the study, 2) the student was present on the day of data collection, and 3) the student assented to participate. Each school sent participant information sheets (Appendix F) and an opt-out form (Appendix B) to parents of 45 boys and 45 girls from each grade level who were randomly selected (i.e., 40 participants and 5 alternates each to account for absence or parental opt-out). The study was carried out on an exam day to minimise absenteeism.

No parent returned the opt-out form. One boy from the Dubai school was substituted with another boy on the day of the study based on the school counsellor's recommendation and another boy in Dubai was absent, requiring a replacement. As shown in Figure 1, 720 adolescents (360 boys and 360 girls)

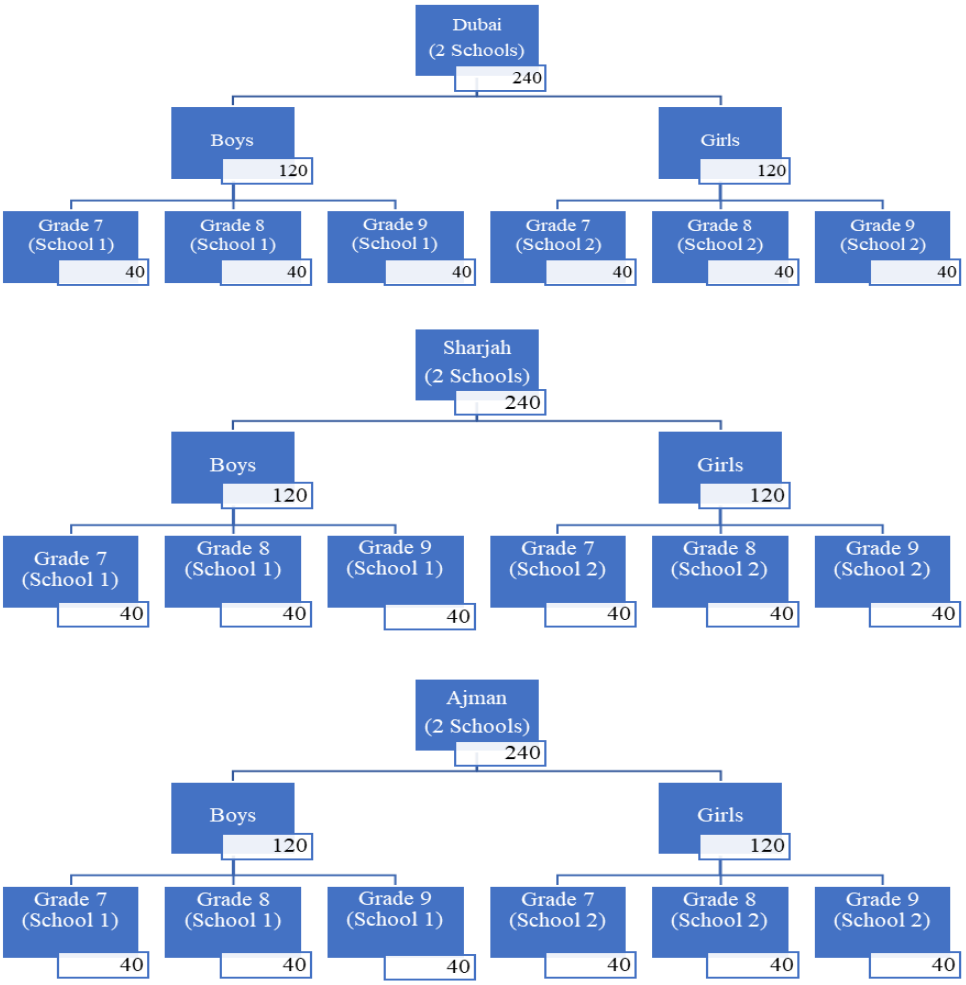
from six schools completed the questionnaire, accounting for 100% of the target recruitment.

Justification of sample size

Assuming 20% prevalence of possible or probable emotional difficulties as assessed by the SDQ (Goodman, 1997), it was estimated that a minimum sample of 246 participants was needed to detect the presence of emotional and behavioural difficulties within 5% precision and with 95% power (95% confidence intervals). However, to obtain an accurate determination of the prevalence of emotional and behavioural difficulties in sub-group analyses of males and females the UAE's Ministry of Education set the target sample size at 720 adolescents.

Figure 1

Distribution of Participants from Schools in Dubai, Sharjah, and Ajman



Materials

The Strengths and Difficulties Questionnaire (SDQ)

The SDQ (Goodman et al., 1998) is a widely used screening questionnaire for emotional difficulties in young people aged two to 17 years. It consists of 25 items that are rated by teachers, parents, and/or young people as ‘not true’, ‘somewhat true’, and ‘certainly true’. These items are distributed across five subscales—peer problems, emotional problems, hyperactivity, conduct problems, and prosocial behaviours—of which the first four are combined to produce a total difficulties score with higher scores indicating greater difficulty. The emotional problems and peer problems subscales have also been combined into the internalising subscale, and the conduct problems

and hyperactivity subscales make up the externalising subscale (Goodman & Goodman, 2009). The concurrent and discriminant validity of the questionnaire was found to be good (see Chapter 3) (Goodman et al., 1998; Goodman, 2001).

This study used the self-report Arabic version of the SDQ (SDQ-A) for adolescents aged 11 to 17 years (Alyahri & Goodman, 2006; Youth in Mind, 2018). SDQ-A scores were categorised as normal, borderline, and abnormal based on scores obtained by 80%, 10%, and 10% of scores from the normative sample of the original English version of the measure, respectively (Youth in Mind, 2014). Scores in the abnormal range were considered to have possible clinical caseness. The reliability and validity of the SDQ-A were deemed satisfactory across studies. Specifically, its subscales' internal consistency ranged from .77 to .89 in a study with Arabic-speaking youth in Yemen (Alyahri & Goodman, 2006) and .40 to .76 when used with an Omani sample (Emam et al., 2016). As reported in the preceding chapter, the SDQ-A demonstrated robust psychometric properties when piloted with 40 bilingual Emirati students in grades seven through 10 from private schools in the UAE. The SDQ-A's overall internal consistency ($\alpha = .60$) was higher than that of the RCADS and total scores correlated strongly ($r = .65$) with those of the well-validated RCADS-E (Chorpita et al., 2005). The internal consistency of the SDQ-A subscales was also comparable across genders and with all corresponding scales on the RCADS-A and RCADS-E, except the depression scales ($\alpha_{RCADS\text{-}A} = .387$, $\alpha_{RCADS\text{-}E} = .567$).

For the present study, the internal consistency of the SDQ-A scales was acceptable for total difficulties ($\alpha = .71$), internalising problems ($\alpha = .63$),

externalising problems (α = .59), emotional problems (α = .69), and prosocial behaviour (α = .73). The scales for conduct problems (α = .48), hyperactivity (α = .39), and peer problems (α = .21) displayed unacceptably low internal consistency.

Demographic Data

A questionnaire was developed in Arabic to gather basic demographic data (grade, age, and gender) along with parents' education levels and occupation and family composition. Age categories were included (e.g., 16+) to avoid stigmatising older students, given that it is not uncommon for students to be held back in the lower grades multiple times if they do not meet academic standards in the UAE.

Family Affluence Scale (FAS)

The FAS (Hobza et al., 2017) is a 6-item measure with scores ranging from 0 to 13 (see scoring details in Table 8). Higher values indicate greater affluence. The measure has been validated and commonly used to identify the socio-economic status of children and adolescents (Kehoe & O-Hare, 2010). Hobza et al. (2017) demonstrated a strong correlation (r = .77) with disposable income in the 14 regions across the Czech Republic. When evaluated in a sample of 5,876 11- to 15-year-olds in Beijing, China, the measure was found to have moderate internal reliability (Chronbach's alpha = .58) and test-retest reliability (ICC > .75; Liu et al., 2012). The measure was also validated using a cross-section sample of 17,545 Canadian students from Grades seven through 12 (Boudreau & Poulin, 2009). Given its use in previous literature and its validation across a number of cultures, this measure was therefore deemed appropriate for use in this study.

Table 8

Scoring details of the Family Affluence Scale

Questions	Possible Answers
1. Does your family own a car or another motorised vehicle?	No = 0 Yes, one = 1 Yes, two or more = 2
2. Do you have your own bedroom?	No = 0 Yes = 1
3. How many computers (including laptops and tablets, not including game consoles and smartphones) does your family own?	None = 0 One = 1 Two = 2 More than two = 3
4. How many bathrooms (room with a bath/shower or both) are there in your home?	None = 0 One = 1 Two = 2 More than two = 3
5. Does your family have a dishwasher?	No = 0 Yes = 1
6. How many times did you and your family travel out of the UAE for a holiday/vacation last year?	Never = 0 Once = 1 Twice = 2 More than twice = 3

Note. Hobza et al. (2017)

Ethics

This study was dually approved by the Ethical Committee at the Ministry of Education in UAE (Appendix C) on 6th March 2018 and the School of Medicine's Division of Psychiatry & Applied Psychology's Research Ethics Sub-Committee (0199; Appendix D) on 14th June 2018. All parents were informed about the study through a participant information sheet that was sent out by the schools. They were also given the opportunity to remove their child from the study by returning a signed opt-out form. Informed verbal assent was elicited from the students whose parents did not opt them out. All questionnaires were anonymous and paired by the participant's study number. The completed forms and data were maintained

exclusively by the researcher throughout the process and stored in a locked cabinet in the researcher's office, accessible only by the researcher.

Procedure

One week prior to data collection, all adolescents in the targeted classes were given a participant information sheet with a description of the study and what they can expect through participation (Appendix F). They were asked to take this to their parents together with an opt-out slip to allow parents to withdraw their child from the study. Two days prior to the study the assigned teachers confirmed with the students that they had given the information sheet to their parents. Teachers stressed that if their parents wished to withdraw their participation from the study, the included opt-out slip (Appendix B) must be returned. Data collection took place between December 2018 and April 2019. On the day of data collection, students gathered in the targeted classes were reminded of the purpose of the study and confidentiality of their data. When invited to participate, they were told that participation was voluntary and that they could withdraw at any point before submitting the completed questionnaires. They were also informed that their data could not be revoked following submission of their responses, given that these were anonymously completed. A research packet (Appendix G) was used to facilitate data collection. This included a cover sheet (on which participants indicated their assent to participate by ticking off a checkbox), the SDQ-A, an Arabic demographic questionnaire, and the FAS. The assigned teacher under the supervision of the researcher provided the research packet to all adolescents who met the inclusion criteria. Data collection took place at the end of a lesson right before the midday break and took no more than 20

minutes per sitting. Adolescents who did not consent to participate in the survey or who had been withdrawn from the study remained in the classroom and were given a parallel survey made up of crosswords and puzzles to avoid embarrassment or undue effects of standing out before their participating peers in the classroom. Questionnaires were collected from each class in a sealed envelope labelled only with the school's name and class number. Teachers were given a form to record the response rate in their assigned class. The researcher did not have access to any participant names. Unbeknown to them prior to submission of the questionnaires, all adolescents present in the classroom on the day of assessment were given a small stationery gift, regardless of whether they took part in the study. They were also provided with the contact number of the researcher (a qualified clinical psychologist) if the questionnaires raised any concerns.

Analysis and data storage

The anonymous questionnaires were stored in a locked cabinet in the researcher's office. Data were entered into SPSS and stored securely on a computer accessible only to the researcher. SPSS version 25.0 (IBM Corp., 2017) was used to calculate descriptive statistics, to assess the prevalence of emotional and behavioural difficulties, and to explore the effects of gender, age, grade, family structure, and family affluence on SDQ-A scores. Depending on the analysis, scores from each scale of the SDQ-A were coded 0 (normal), 1 (borderline), and 2 (abnormal); or 0 (non-caseness) and 1 (clinical caseness). The family structure variable was also recoded in a dual-parent home variable so that living with both parents was coded 1 (yes) and living with one or no parents was coded 0 (no). Pearson's correlations were used to

explore univariate associations between variables. Multiple linear regression analyses were conducted for total difficulties, emotional problems, internalising problems, and prosocial behaviours, with age, gender, grade, family affluence and dual-parent home as independent factors. Chi-square and odds ratios were computed to examine relationships involving categorical variables. T-tests and one-way ANOVAs were conducted to identify group differences in the mean scores of the SDQ-A. Although Kolmogorov-Smirnov tests suggested that the SDQ-A scores were not normally distributed, parametric tests were used as they are considered most appropriate for large sample sizes (> 200) (Fagerland, 2012).

Results

No parents opted their adolescents out of the study and all participants agreed to take part giving a sample of 720 adolescents. There was only one reported absence on the day of the survey. Most of the participants (73.3%) were over 14 years old and 50% were female. In public schools in the UAE, students are allowed to progress through grades based on successful completion of the curriculum rather than age and only 19.2% of young people in grade 7 were under 14 years of age with 45% being over 16 years old (Table 9).

Table 9

Age and Grades distribution

	Grade 7 (n = 240)	Grade 8 (n = 240)	Grade 9 (n = 240)	Total (n = 720)
12 years old	21 (8.8%)	49 (20.4%)	8 (3.3%)	78 (10.8%)
13 years old	25 (10.4%)	40 (16.7%)	31 (12.9%)	96 (13.3%)
14–15 years old	81 (33.8%)	85 (35.4%)	102 (42.5%)	268 (37.2%)
16 and above	109 (45.4%)	63 (26.3%)	88 (36.7%)	260 (36.1%)

Missing	4 (1.7%)	3 (1.3%)	11 (4.6%)	18 (2.5%)

As seen in Table 10, most participants lived with both their parents and reported having an average of 5.7 siblings (SD = 3.14). Most of the participants' fathers were employed and mothers were not. Most participants reported that they were not sure of their parents' educational background. The remaining reported either a high school diploma or graduate training, and few indicated middle school as their parents' most recent education. There were no missing values for FAS scores. The mean FAS score of the sample was 9.7/13 (SD = 2.54). Of the three Emirates, adolescents in Dubai reported the highest mean (M = 10.18, SD = 2.45), followed by those in Sharjah (M = 9.77, SD = 2.47) and Ajman (M = 9.15, SD = 2.60). Univariate ANOVA showed significant differences between these means ($F = 10.11$, $p < .001$), and post hoc findings demonstrated significantly lower levels of family affluence among adolescents from Ajman compared to Dubai (MD = 1.03, $p < .01$) and Sharjah (MD = 0.61, $p < .01$). No significant differences were noted between Dubai and Sharjah.

Table 10

Demographics of the sample's families (n = 720)

Demographic	n (%)
Family composition	
Lives with Father and Mother	576 (80%)
Lives with Single Parent	116 (16.1%)
Lives with neither parent	22 (3.1%)
Missing	6 (0.8%)
Mother's employment status	
Employed	230 (40%)
Not Employed	458 (63.6%)
Do not know/Missing	32 (4.4%)

Mother's education (highest level)	
Unspecified	72 (10%)
Middle School	203 (28.2%)
High School	161 (22.4%)
Graduate Student	224 (31.1%)
Do not know/Missing	60 (8.3%)
Father's employment status	
Employed	565 (78.5%)
Not Employed	113 (15.7%)
Do not know/Missing	42 (5.8%)
Father's education status (highest level)	
Unspecified	80 (11.1%)
Middle School	214 (29.7%)
High School	155 (21.6%)
Graduate Student	243 (33.8%)
Do not know/Missing	28 (3.9%)

Prevalence of emotional and behavioural difficulties

There were no missing values for SDQ-A scores. Means and SDs for the total sample and by gender are shown in Table 11. The mean total difficulties score was 12.71/40 (SD = 5.72) and the median was 12 (range = 0–31).

Table 11

Mean (SD) and Median (Range) for SDQ-A Scores

	Boys (n = 360)	**Girls (n = 360)**	**Total (n = 720)**
Emotional Problems			
Mean (SD)	2.93 (2.43)	3.88 (2.33)	3.40 (2.43)
Median (Range)	2.5 (0–10)	4 (0–10)	3 (0–10)
Conduct Problems			
Mean (SD)	2.84 (2.07)	2.09 (1.58)	2.47 (1.88)
Median (Range)	2 (0–10)	2 (0–8)	2 (0–10)
Hyperactivity/inattention			
Mean (SD)	3.63 (1.96)	3.78 (1.87)	3.70 (1.92)
Median (Range)	3 (0–10)	4 (0–10)	4 (0–10)
Peer Problems			
Mean (SD)	3.32 (1.81)	2.96 (1.53)	3.14 (1.69)
Median (Range)	3 (0–9)	3 (0–9)	3 (0–9)
Prosocial Behaviours			
Mean (SD)	7.31 (2.44)	8.19 (1.79)	7.75 (2.18)
Median (Range)	8 (0–10)	9 (1–10)	8 (0–10)
Externalising Problems			

Mean (SD)	6.46 (3.43)	13.71 (2.83)	6.17 (3.15)
Median (Range)	6 (0–17)	6 (0–16)	6 (0–17)
Internalising Problems			
Mean (SD)	6.24 (3.63)	6.84 (3.14)	6.54 (3.40)
Median (Range)	5.5 (0–17)	6 (0–17)	6 (0–17)
Total Difficulties			
Mean (SD)	12.71 (6.34)	12.71 (5.04)	12.71 (5.72)
Median (Range)	12 (1–31)	12 (1–30)	12 (0–31)

Based on the recommended cut-offs (Youth in Mind, 2014) for normal, borderline, and abnormal scores, 13% of the sample scored in the abnormal range. Conduct problems were the most common difficulty (14.3%) followed by emotional problems (11.7%). Prosocial difficulties were rare in the entire sample (8.1%) as were hyperactivity symptoms (7.95%). Although possible clinically significant peer problems were reported at the expected level (10%), only 63% of participants scored in the normal range (see Table 12).

Table 12

Frequencies (%) of scores across SDQ-A classifications

		Normal	Borderline	Abnormal	Chi-Square
Total Difficulties	Total	514 (71.4%)	112 (15.6%)	94 (13.1%)	$X^2 = 7.16$, df = 2, $p < .05$
	Boys	256 (71.1%)	47 (13.1%)	57 (15.8%)	
	Girls	258 (71.7%)	65 (18.1%)	37 (10.3%)	
Emotional problems	Total	580 (80.6%)	56 (7.8%)	84 (11.7%)	$X^2 = 11.49$, df = 2, $p < .01$
	Boys	308 (85.6%)	21 (5.8%)	31 (8.6%)	
	Girls	272 (75.6%)	35 (9.7%)	53 (14.7%)	
Conduct Problems	Total	536 (74.4%)	81 (11.3%)	103 (14.3%)	$X^2 = 25.50$, df = 2, $p < .001$
	Boys	239 (66.4%)	50 (13.9%)	71 (19.7%)	
	Girls	297 (82.5%)	31 (8.6%)	32 (8.9%)	
Hyperactivity	Total	590 (81.9%)	73 (10.1%)	57 (7.95%)	

	Boys	294 (81.7%)	38 (10.6%)	28 (7.8%)	$X^2 = 0.15$, df = 2,
	Girls	296 (82.2%)	35 (9.7%)	29 (8.1%)	p = .929
	Total	453 (62.9%)	195 (27.1%)	72 (10%)	
Peer Problems	Boys	205 (56.9%)	109 (30.3%)	46 (12.8%)	$X^2 = 12.35$, df = 2,
	Girls	248 (68.9%)	86 (23.9%)	26 (7.2%)	p < .01
	Total	613 (85.15%)	49 (6.8%)	58 (8.1%)	
Prosocial Behaviours	Boys	285 (79.2%)	30 (8.3%)	45 (12.5%)	$X^2 = 23.14$, df = 2,
	Girls	328 (91.1%)	19 (5.3%)	13 (3.6%)	p < .001

Note. Total Sample N=720; girls = 360; boys = 360

Gender differences in emotional and behavioural difficulties

Girls reported significantly higher levels of emotional difficulties [t(719) = –5.38, p < .001; d = .4] and more prosocial behaviours [t(719) = –5.47, p < .001; d = .43], as well as internalising difficulties [t(719) = –2.34, p < .05; d = .18]. Boys reported higher levels of conduct [t(719) = 5.37, p < .001; d = .42] and peer problems [t(719) = 2.89, p < .001; d = .22]. There were no significant differences between boys and girls on the total difficulties and hyperactivity subscales (Table 11).

There were significant differences in the proportion of boys and girls scoring in the normal, borderline, and abnormal ranges for total difficulties, emotional difficulties, peer difficulties, conduct problems, and prosocial behaviours (see Table 12). For total difficulties, boys scored most frequently in the abnormal range and girls had more borderline scores. More girls scored in the normal range for conduct disorders, peer problems, and prosocial behaviours. More boys scored in the normal range for emotional problems.

Odds ratios for scores in the abnormal range versus scores in normal or borderline ranges by gender showed that girls had almost twice the odds of scoring above the threshold for possible clinical caseness for emotional problems (OR = 1.83, 95% CIs = 1.15–2.93). Boys were almost four times more likely to report clinically significant prosocial difficulties (OR = 3.81, 95% CIs 2.02–7.20), had more than twice the odds of scoring above the threshold for clinical caseness for conduct problems (OR = 2.51, 95% CIs = 1.61–3.93), and demonstrated twice the odds of having peer problems in the clinical range (OR = 1.88, 95% CIs 1.13–3.12).

Factors influencing emotional and behavioural difficulties

Family affluence showed a weak negative correlation with total difficulties ($r = –.074$, $p < .05$) and peer problems ($r = –.12$, $p < .01$), and weak positive correlation with prosocial behaviours ($r = .11$, $p < .01$), indicating that greater affluence was associated with more prosocial behaviours and fewer emotional, behavioural, and relational difficulties. The grade in which adolescents studied was found to be negatively correlated with total difficulties ($r = –.10$, $p < .01$), emotional problems ($r = –.079$, $p < .05$) and peer problems ($r = –.12$, $p < .01$), indicating higher rates of such difficulties among those in lower grades. Finally, age was associated negatively with conduct problems ($r = –.08$, $p < .01$) and positively with prosocial behaviours ($r = .09$, $p < .01$), indicating that younger participants reported more behavioural problems and fewer prosocial behaviours than their older colleagues.

One way ANOVAs were conducted to assess the influence of family structure (lives with two parents, lives with one parent, lives with no parents)

on SDQ-A scores demonstrated significant group effects for total difficulties [$F(2,711) = 5.51$, $p < .01$], hyperactivity [$F(2,711) = 3.1$, $p < .05$], peer problems [$F(2,711) = 5.97$, $p < .01$], externalising symptoms [$F(2,711) = 3.7$, $p < .05$], internalising symptoms [$F(2,711) = 4.88$, $p < .01$] and prosocial behaviours [$F(2,711) = 4.9$, $p < .01$]. As seen in Table 13, post hoc analyses revealed significant differences in total difficulties, peer problems, hyperactivity, internalising problems, externalising problems, and prosocial behaviours between adolescents from single-parent and two-parent households. Adolescents who lived with both parents and those who lived without their parents reported significantly different rates of peer problems and internalising difficulties. There were no significant differences for emotional and conduct problems across household types.

Nearly a third of the adolescents who were not living with either of their parents (31.8%) reported clinical caseness for total difficulties compared to 14.7% of those in single-parent households, and 11% of those who lived with both their parents [$X^2(2,714) = 7.95$, $p < .05$]. Those who lived in non-intact homes (i.e., homes with single or no parents) were almost twice as likely to report total difficulties above the clinical caseness threshold (OR = 1.57, 95% CIs = 0.95–2.61). Prosocial problems were reported by 6.8% of participants living with both parents, 9% of those living with neither parent and 14.7% of those living with one parent [$X^2(2,714) = 8.07$, $p < .05$].

Table 13

Frequencies (%) and comparison of SDQ-A means (SD) across households

	Two-parent homes (1) n = 576	One-parent homes (2) n = 116	No-parent homes (3) n = 22	Post hoc tests
Total difficulties	12.33 (5.75)	14.00 (4.6)	14.63 (6.97)	1 vs 2 p = .004[a]
Normal	425 (73.8%)	71 (61.2%)	14 (63.6%)	
Borderline	83 (14.4%)	28 (24.1%)	1 (4.5%)	
Abnormal	68 (11.8%)	17 (14.7%)	7 (31.8%)	
Emotional difficulties	3.30 (2.44)	3.72 (2.22)	3.91 (2.47)	NS
Normal	467 (81.1%)	92 (79.3%)	17 (77.3%)	
Borderline	43 (7.5%)	12 (10.3%)	1 (4.5%)	
Abnormal	66 (11.5%)	12 (10.3%)	4 (18.2%)	
Peer problems	3.04 (1.67)	3.46 (1.62)	4.00 (2.16)	0 vs 2 p = .009[b]
Normal	376 (65.3%)	64 (55.2%)	8 (36.4%)	1 vs 2 p = .015 [b]
Borderline	146 (25.3%)	40 (34.5%)	9 (40.9%)	
Abnormal	54 (9.4%)	12 (10.3%)	5 (22.7%)	
Hyperactivity	3.60 (1.94)	4.08 (1.76)	3.91 (2.02)	1 vs 2 p = .015[b]
Normal	474 (82.3%)	93 (80.2%)	20 (90.9%)	
Borderline	59 (10.2%)	11 (9.5%)	0	
Abnormal	43 (7.5%)	12 (10.3%)	2 (9.1%)	

Conduct problems	2.39 (1.90)	2.74 (1.68)	2.82 (2.04)	NS
Normal	435 (75.5%)	81 (69.8%)	16 (72.7%)	
Borderline	61 (10.6%)	19 (16.4%)	1 (4.5%)	
Abnormal	80 (13.9%)	16 (13.8%)	5 (22.7%)	
Prosocial behaviours	7.87 (1.09)	7.18 (2.55)	7.59 (2.06)	1 vs 2 p = .021[a]
Normal	499 (86.6%)	90 (77.6%)	18 (81.8%)	
Borderline	38 (6.6%)	9 (7.8%)	2 (9.1%)	
Abnormal	39 (6.8%)	17 (14.7%)	2 (9.1%)	
Internalising problems	6.34 (3.39)	7.18 (3.16)	7.91 (4.07)	0 vs 2 p = .033[b] 1 vs 2 p = .015[b]
Externalising Problems	5.99 (3.20)	6.82 (2.72)	6.73 (3.38)	1 vs 2 p = .013[a]

[a]Dunnett T3 [b]LSD

Table 14

Results of the Multiple Regression Analyses by Age, Grade, Gender, Family Structure, and Family Affluence

	t	P	B	F	df	p	adj. R^2
Total difficulties				5.08	5,692	.000	.028
Age	–0.08	.939	–0.02				
Grade	–2.76	.006	–0.72**				
Gender	0.43	.666	0.19				
Dual-parent home	–3.12	.002	–1.66**				
Family affluence	–1.67	.095	–0.14				
Emotional problems				9.98	5,692	.000	.061
Age	–1.52	.280	–0.17				
Grade	–1.08	.130	–0.10				
Gender	6.02	.000	1.09***				
Dual-parent home	–1.23	.095	–0.04				
Family affluence	–1.67	.220	–0.37				
Peer Problems				8.87	5,692	.000	.053
Age	1.06	.289	0.07				
Grade	–3.57	.000	–0.27***				
Gender	–3.25	.001	–0.41**				
Dual-parent home	–2.99	.003	–0.47**				
Family affluence	–3.20	.001	–0.08**				
Internalising Problems				7.46	5,692	.000	.044
Age	–2.85	.811	–0.44				
Grade	–0.24	.004	0.03**				
Gender	2.66	.008	0.68**				

Dual-parent home	–2.46	.008	–0.12**				
Family affluence	–2.67	.014	–0.84*				
Conduct Problems				6.99	5,692	.000	.041
Age	–1.34	.181	–0.10				
Grade	–2.50	.013	–0.21*				
Gender	–4.47	.000	–0.63***				
Dual-parent home	–2.28	.023	–0.39*				
Family affluence	0.65	.515	0.02				
Hyperactivity				2.44	5,692	.033	.010
Age	1.45	.148	0.11				
Grade	–0.72	.470	–0.07				
Gender	0.90	.370	0.13				
Dual-parent home	–2.28	.023	–0.42*				
Family affluence	–1.22	.222	–0.04				
Externalising Problems				3.11	5,692	.009	.015
Age	–1.84	.066	–0.27				
Grade	0.15	.882	0.02				
Gender	–2.04	.041	–0.49*				
Dual-parent home	–0.39	.698	–0.02				
Family affluence	–2.75	.006	–0.81**				
Prosocial Behaviours				10.62	5,692	.000	.065
Age	–0.03	.470	0.01				
Grade	0.72	.974	0.06				
Gender	5.53	.000	0.91***				
Dual-parent home	2.99	.004	0.10**				
Family affluence	2.91	.003	0.59**				

*p < .05, ** p < .01, *** p < .001

Regression analyses with SDQ scores as the dependent variables were conducted. As seen in Table 14, the regression model with total difficulties as the dependent variable was significant [$F(5,692) = 5.08$, $p < .001$]. Higher total difficulties were associated with lower grade [$B = –0.72$, $t(697) = –2.76$, $p < .01$] and those who were not living in dual parent homes [$B = –1.66$, $t(697) = –3.12$, $p < .01$]. These variables accounted for less than 3% of the variance in total difficulty scores (adjusted $r^2 = .028$).

The regression model was also found to be significant with emotional problems as the dependent variable [$F(5,692) = 9.98$, $p < .001$]. Only gender was independently associated with the level of emotional difficulties with girls having higher levels of difficulties [$B = 1.09$, $t(697) = 6.02$, $p < .001$] with only 6% of the variance accounted for (adjusted $r^2 = .061$).

In terms of peer problems, the regression model was found to be significant [$F(5,692) = 8.87$, $p < .001$], with a lower grade, boys, less affluent families, and the absence of any or both parents being associated with greater peer problems, together accounting for 5% of the variance (adjusted $r^2 = .53$).

The regression model with internalising problems as the dependent variable was significant [$F(5,692) = 7.46$, $p < .001$]. Higher internalising problems were associated with lower grade [$B = –0.44$, $t(697) = –2.85$, $p < .01$], lower affluence [$B = -0.84$, $t(697) = –2.46$, $p < .05$], boys [$B = 0.68$, $t(697) = 2.66$, $p < .01$], and those not living in dual parent households [$B = –0.84$, $t(697) = –2.67$, $p < .01$]. These variables accounted for less than 5% of the variance in internalising problems (adjusted $r^2 = .04$).

With conduct problems as the dependent variable, the regression model was significant [$F(5,692) = 6.99$, $p < .001$], and included variables accounting

for 4% of the variance (adjusted $r^2 = .41$). Specifically, lower grade, boys, and households with less than two parents were associated with more conduct problems.

The regression model was also significant with hyperactivity as the dependent variable [$F(5,692) = 2.44$, $p < .05$]. Living in dual-parent homes was the only factor that was associated with reduced hyperactivity issues. Only 1% of the variance was accounted for in this model (adjusted $r^2 = .010$).

When externalising problems was considered, the regression model was found to be significant [$F(5,692) = 3.11$, $p < .01$]. The model accounted for around 2% of the variance (adjusted $r^2 = .015$). Boys and less affluent families were associated with greater externalising problems.

The regression model with prosocial behaviours as the dependent variable was significant [$F(5,692) = 10.62$, $p < .001$]. Higher levels of prosocial behaviours were associated with more affluence [$B = 0.10$, $t(697) = 2.99$, $p < .01$], females [$B = 0.91$, $t(697) = 5.53$, $p < .001$] and those living in dual-parent homes [$B = 0.59$, $t(697) = 2.91$, $p < .01$], accounting for approximately 7% of the variance in prosocial behaviours (adjusted $r^2 = .065$).

Discussion

This study records a pioneering effort towards determining the rates of emotional and behavioural difficulties using the self-report version of the SDQ-A in a representative sample of native UAE adolescents. Thirteen per cent of young people scored above the cut-off for possible clinical caseness for emotional and behavioural difficulties suggesting that they would benefit from support for their emotional and behavioural difficulties. Adolescents in lower grades and those in non-intact families had more difficulties. Rates of

clinically significant emotional problems were around the expected rate (11.7%) but rates of ADHD-type symptoms were low (8%). There were no gender differences in total difficulties, but girls were more likely to report significant emotional problems while boys tended to report significant conduct, peer, and prosocial problems. Adolescents from non-intact families were more vulnerable to emotional and behavioural difficulties, evidenced by clinical caseness demonstrated on all scales except emotional and externalising problems scales. There was also evidence that being in a lower grade was a risk factor for poorer mental health.

Prevalence rates of emotional and behavioural difficulties were comparable with age-matched UK norms (Youth in Mind, 2014), as well as those from Jordan (Atoum et al., 2018), Iran (Mohammadi et al., 2013), Mongolia (Vanchindorj et al., 2017), and China (Wang et al., 2014). In terms of specific domains of functioning, the incidence of emotional and conduct problems was similar to findings reported by Atilola et al. (2013) and Atoum et al. (2018). This aligns with the fact that conduct and emotional problems account for the biggest burden of mental health problems among younger generations (Erskine et al., 2015). Despite cultural similarities between the native UAE adolescents in this study and their Omani counterparts in the study by Emam et al. (2016), all assessed difficulties across the sample in this study were found to occur at much lower rates of clinical caseness, except for conduct problems, which were similar.

Nonetheless, the mean scores and differences based on gender within the UAE sample aligned most evidently with the Omani cohort (Emam et al., 2016). Specifically, girls tended to report more emotional problems and

prosocial behaviours than boys, while boys tended to report greater peer, conduct, and externalising problems. Thus, while differences in prevalence rates across these normative populations may occur as a function of factors beyond culture (such as economic resources, national growth and development, and exposure to ethnic and educational diversity), similar trends occur based on gender within each cohort. This is also reflected in its exclusive influence on emotional problems, such that girls reported more such difficulties compared to boys, consistent with findings across those of Atoum et al., (2018), Mohammadi et al. (2013), Vanchindorj et al. (2017), and Wang et al. (2014). Some reasons for this might include a relative focus of selflessness and submission that underlie prosocial attributes compared to how boys are socialised (Zahn-Waxler et al., 2000) and earlier maturation (Patton et al. 2008; Ullsperger & Nikolas, 2017).

Though younger participants tended to report more behavioural and social difficulties (Vanchindorj et al., 2017; Wang et al., 2014), age differences did not entail significant differences in any of the reported problem areas. Higher rates of difficulties, particularly internalising problems related to emotions and peers and conduct difficulties were noted among those in lower grades. However, these findings may be compounded by a higher proportion of older students in lower grades, who are likely held back due to academic underachievement.

As expected, adolescents from affluent families tended to report fewer peer, internalising, and externalising problems and more prosocial behaviours. This finding corroborates with those from European studies (Ravens-Sieberer et al., 2008) and furthers that of Vanchindorj et al.'s (2017). As noted in

Ravens-Sieberer et al. (2008), this lends support to the notion that comfortable access to resources that meet one's needs affects the emergence and expression of emotional and behavioural difficulties. More strikingly, family structures serve as one of the primary contexts in which the participating adolescents learn and develop interactive, emotional, and behavioural patterns. Parental presence in Emirati households clearly and incrementally reduces the risk for the development of emotional and behavioural difficulties and promotes prosocial behaviours. The presence of both parents led to better outcomes compared to those who were raised by single parents, and adolescents in single-parent households fared much better than those who did not live with their parents. These findings corroborate previous findings from other cultures that demonstrate increased difficulties in the context of an unnatural absence of their parents from their lives due to immigration or separation (Canetti et al., 2000; Smeekens et al., 2012; Wang et al. 2014; Zhao et al., 2017). Particularly for UAE adolescents, living within non-intact families may incur difficulties owing to reduced relational resources and lack of other forms of developmental support (such as social workers, clinicians, or mentors) within an otherwise collectivistic community that has thrived on an abundance of resources in recent years (New World Wealth, 2021).

Use of the SDQ as a screener

The results of this study lend support to the use of the SDQ-A as a broad-based screener for emotional and behavioural difficulties among the Arabic-speaking adolescent population of the UAE, though with some caveats. The current sample follows the same pattern of cut-off scores for normal, borderline, and abnormal ranges as that of the original UK norms for all

subscales except peer problems. Deviations were also noted in the unacceptably low internal consistency of the conduct, hyperactivity, and peer problems scales. This was also alluded to in Emam et al., (2016) in that one of the items that was originally in the peer problems scale loaded on to the conduct problems scale instead. This could indicate the differential perceptions and existence of such presentations within the UAE and Arab populations. It is also possible that this may be an artefact of lesser items within each of these subscales, given that when combined into the externalising subscale, internal consistency was adequate.

Implications

Historically, mental health issues pertaining to children and adolescents have been underestimated, overlooked, or misunderstood, especially in developing countries like the UAE that traditionally operate on the notion that children should be seen and not heard. Furthermore, the apparent stability and peace in this region often lead to the misconception there was a lack of difficulties. Thus, the findings of this study refute these notions and assert the fact that emotional and behavioural difficulties among UAE adolescents are as prevalent and relevant as those from developed and developing countries. This is particularly pertinent given the need for support implied by the prevalence rates established herein for this demographic. In addition, taking internalising (emotional) difficulties seriously may help remit problems in the future given that they are highly predictive of co-morbid mental health issues, disruptive social linkages, drug misuse, and reduced educational achievement (Dekker et al., 2007; McLeod et al., 2016; Measelle et al., 2006). Thus, incorporating early detection, prevention, and intervention

can inform strategic development and sustainability efforts at the national level that will help reduce the burden of disease and improve the overall wellbeing of the adolescent population, who are the future of the country.

The UAE has been increasingly committed to acknowledging and developing a mental health infrastructure for its residents, though ventures specific to adolescents remain underdeveloped. In this regard, the results provide a foundation for adapting and streamlining interventions based on gender and differences in the expression of emotional and behavioural difficulties secondary to gender and affluence. The significance of this lies in the fact that mental health and wellbeing systems and services for school-aged adolescents are underdeveloped, nascent, and limited in the UAE. Thus, the effectiveness of such efforts may be supported by using the findings of this study to design reasonable and targeted efforts that are considerate of current resource limitations. Finally, findings related to a parental presence within the adolescents' households can be leveraged as an avenue for influence and intervention. This may be particularly helpful to the UAE context, given that the collectivistic emphasis within the culture places a substantial onus on parental influences. That parents of adolescents reporting emotional and behavioural difficulties are faced with associated parenting challenges is not hard to surmise. Hence, the following chapter presents a systematic review of existing online interventions focused on parents of such adolescents.

Strengths, limitations, and future directions

The large sample size and high response rate of this study are its notable strengths, making it representative of the native, Arabic-speaking adolescent population in the UAE. It also allows for increased accuracy and

generalisability. This is particularly important given the scarcity of published self-reported SDQ data that illustrates the state of mental health and wellbeing in adolescents from such. Thus, this study enhances the body of literature identified in the scoping review, thereby enabling comparative interpretations with similar studies conducted in other countries and enhancing the reliability and validity of conclusions drawn. Furthermore, the findings illustrate that such research and the use of broadband screening tools such as the SDQ is imperative in determining the differential needs of adolescents from such countries and cultures who have received little research or clinical attention.

The results of this study should be interpreted in consideration of its limitations, which include its exclusive reliance on self-reported data and lack of supplementary diagnostic confirmation. Thus, future consideration of the perceptions of caregivers through parent and teacher reports may help expand on the study's findings. Furthermore, evidence of low internal consistency on some of the subscales of the SDQ-A indicates scope for further research, such as a factor analysis to confirm the five-factor structure of the instrument.

Data for this study was conducted in public schools that tend to place a high premium on conformity and obedience. Despite efforts by the researcher to educate the participants on the voluntary nature of their participation, the possibility of conformity and obedience as motivational factors, and their influence on participatory behaviour, cannot be ruled out. Thus, it may be helpful to broaden this study's scope and generalisability by replicating it with adolescents in other settings, such as private schools, primary care centres, and clinics. Though not a confounding factor, the greater incidence of older teens in this study indicates usefulness in either focusing on narrower age groups or

incorporating experiences of younger adolescents. Likewise, broadening the study focus to family systems may expand on current findings. While parental presence has been identified as a key factor in the development of adolescents, learning about how the parental role is perceived, mechanisms and interactions that serve as protective factors, and what the parenting role entails within the traditional Arab family, may provide deeper insights. This may also include delving further into understanding the filial makeup of families from the UAE, the unique aspects of each member's role in the family, and how parenting is perceived and practised. It may also be useful to understand cultural approaches to understanding, expressing, and dealing with emotions and associated behaviours, and how these notions inform parenting practices and the parent-adolescent relationship. Finally, the association of emotional and behavioural difficulties with academic performance, while beyond the scope of this study, may also be of interest in future research endeavours, given its identification in the literature.

Conclusion

This study places on record the first known attempt at empirically determining the rates and nature of emotional and behavioural difficulties among native adolescents in the UAE. The findings lend support for the possibility of effective screening, help solidify the need for preventative support, and direct considerations towards leveraging parental influence as an effective strategy to avert and remit such problems among the youth of the UAE. Furthermore, awareness of certain demographics and family contexts that may be at risk for clinically significant difficulties can help streamline preventive and therapeutic efforts, thus leading to better management of

resources within the overburdened mental health system in the UAE. This specifically includes being mindful of the risk of emotional difficulties among girls, externalising and peer problems among boys, and greater difficulties among those who are struggling academically, financially disadvantaged, and raised within non-intact families.

Chapter Four: The Effectiveness of Online Parenting Programs for Emotional and Behavioural Difficulties Among Adolescents: A Systematic Review

Emotional and behavioural difficulties among adolescents are a matter of emergent concern due to their repercussions and rise in global prevalence rates. As per data from the 2017 Global Burden of Disease study (Global Burden of Disease Collaborative Network, 2018), depression rates in 2017 were at 1.24% among children aged 10 to 14 years, and 3.44% among adolescents aged 15 to 19 years, while corresponding anxiety rates were at 3.71% and 4.36% (Global Burden of Disease Collaborative Network, 2018; James et al., 2018). Furthermore, studies have consistently demonstrated homotypic continuity within individuals who develop emotional and behavioural problems during their adolescent years (Johnson et al., 2018; Scholten et al., 2013) with frequent comorbidity (Ogundele, 2018). A report by the WHO (2011) cautioned that, if left ignored and untreated, such difficulties among adolescents would reach epidemic levels within the next few years. Emotional problems also tend to be accompanied by a greater incidence of risky behaviours among adolescents such as self-harm (Stallard et al. 2013) and substance abuse (Kaminer et al., 2007; Wilkinson et al., 2016) relative to other age groups. Thus, emotional and behavioural difficulties experienced during adolescent years are not only debilitating but also have serious long-term implications on an individual, community, and global level. This indicates a need for suitable interventions catering to the prevention and treatment of both emotional and behavioural problems simultaneously.

Interventions

Interventions for emotional and behavioural difficulties among adolescents are varied and include prevention, symptom reduction, guided and unguided self-help tools, and psychotropic medication. Caregiver support frequently forms an integral part of behavioural and educational interventions for adolescents. This is based on the notion that cognitive and emotional development occurs in the context of parental scaffolds (Vygotsky, 1978) and relationships (Bowlby, 1978).

Parent-focused interventions, which aim to foster parenting skills and motivation to support and improve their children's mental health, enjoy particular support in the literature and are seen as an effective strategy in the prevention and management of adolescent emotional and behavioural problems (Comer et al., 2013). There is also evidence to support the effectiveness of parent-related approaches that are transdiagnostic and employ a cognitive behavioural framework (e.g., Comer et al., 2013; Ehrenreich-May et al., 2017; Ogundele, 2018; Wehry et al., 2015). This keeps in line with the notions that emotional and behavioural difficulties among adolescents go hand in hand and could benefit from similar and comprehensively designed programs.

Assumptions underlying parent interventions

Secure parent-adolescent relationships and effective communication patterns are consistently found to be protective and conducive to adolescent wellbeing (Haverfield, & Theiss, 2017; Yap, et al., 2016). However, parents of struggling adolescents tend to perceive themselves as inept and may be uncertain and unaware of how to help their child (Steca et al., 2010). Thus,

most parent-focused interventions are designed to improve parenting competency through the development of awareness, understanding, and specific parenting skills. Studies have found that such interventions may have a direct influence on adolescents' emotional and behavioural functioning in that parents are better able to meet their children's emotional, psychological, and behavioural needs (Allen et al., 2016; Dardas et al., 2017; Shochet et al., 2019). Alternatively, indirect influences may be at play such that parents' own emotional needs are better satisfied therefore enabling them to model and foster helpful behaviours (Gross, 2015; Rutherford et al., 2015).

Theoretical frameworks

In general, CBT interventions with adolescents are likely to involve parents in a supportive role to reinforce skills training. In addition, parent-focused interventions targeting emotional and behavioural difficulties tend to be underpinned by one of two main theories. Some parenting programmes use Bandura's (1971) social learning theory which assumes that children learn behaviours by observing their parents, who are seen as credible and influential role models. Social learning interventions, therefore, emphasise that the way the parents respond to their child's behaviour is a determinant of the continuation and frequency of similar behaviours in the future. Examples of effective interventions based on social learning theory include the Incredible Years intervention for behaviourally disruptive children (Gardner & Leijten, 2017), and the Triple P child and teen versions for skills and knowledge development among the parents and emotional and behavioural problems among the children and adolescents (Sanders et al., 2014; Ralph & Sanders, 2006). Evidence regarding effectiveness is embodied by a national initiative in

the UK called the Parenting Early Intervention Pathfinder that examined the effect of three different programmes that were based on social learning theory (Lindsay et al., 2007). Improvements were noted in the areas of prosocial child behaviour, positive parent outcomes (including improved mental health), and improved co-operation in family relationships.

Other parent-focused interventions emphasise the principles of attachment theory, which posits that children build strong emotional attachments with one or both parents when they serve as a secure base for engaging with novel and emotionally demanding experiences, thus supporting and empowering the child emotionally and socially (Ainsworth et al., 2015). The quality of parent-child relationships in infancy can predict the psychological wellbeing during the adolescent years (Resnic et al., 1997). Interventions founded on attachment theory highlight the relational aspects that influence the dynamics and manifestation of emotional and behavioural difficulties. In this regard, it is known that the parenting style affects adolescent emotional and behavioural wellbeing (Arulsubila & Subashree, 2017). An example of an attachment-based program for parents of adolescents is The Connect (Moretti et al., 2015) which is found to be effective in reducing emotional and behavioural difficulties corresponding with reduced attachment avoidance and anxiety respectively, and improved regulation of affect (Moretti & Obsuth, 2009).

Delivery Methods

In terms of the implementation of parent-focused programmes, while most interventions occur face-to-face, online and digital modalities have been deemed cost-effective, time-efficient, and accessible, while also maintaining

theoretical and empirical rigour (Breitenstein et al., 2014). An example of this is a tailored web-based intervention that targeted parenting factors that promoted their adolescent's risk of depression (Yap et al., 2018). For non-Western populations and those in remote regions, the ease of access to these online and digital interventions can help reduce the restricting effect of stigma and bridge the gap between need and service.

Rationale and Objectives

This review was undertaken since there is no systematic effort known to this author that gathers evidence about the scope and effectiveness of digital interventions for parents of adolescents with emotional and behavioural difficulties. Such a review was deemed necessary to inform the development of future interventions with parents of adolescents. Thus, the objective of this review is to assess existing online interventions for parents that are meant to develop specific parenting skills which help improve their adolescent's emotional and behavioural functioning.

Methods

Inclusion criteria

This review included randomised controlled trials (RCTs) with no limit to language, publication status, document type, or date of publication. The participant-focus of this study were parents of adolescents whose ages either ranged from or averaged between 10 and 19 years. Only studies that evaluated parent-based interventions aimed at helping parents understand, support, and improve their adolescent child's emotional and behavioural functioning. Interventions could include an adolescent component, however, at least some part of the intervention must involve and target the parent. Furthermore, the

parent-focused intervention must include a digital or online component, such as web-based or mobile applications, social media, visual media, emails, or text messages. The studies must include comparisons of the intervention to a control group that either involves no treatment, another active intervention, treatment as usual, or a waitlist.

Exclusion criteria

Studies were excluded if the intervention was entirely for the parent or family wellbeing without any relevance to the adolescent's emotional and behavioural functioning, if they only involved parents of adolescents with specific physical or developmental health conditions, and if the parents were diagnosed with a mental illness.

Types of outcome measures

Included studies reported at least one primary parenting outcome and one secondary child outcome. Primary outcomes included parenting behaviour, parenting style, attitudes towards adolescents' emotional and behavioural difficulties, knowledge of adolescents' emotional and behavioural difficulties, self-efficacy, expressed emotion, coping style, and caregiver's burden. Secondary outcomes included parent or self-reported adolescent emotional and behavioural difficulties including depression, anxiety, coping, stress, academic achievement, sleep, school attendance, substance abuse, and self-harm.

Search methods for identification of studies

Electronic searches

On 9 September 2018, CENTRAL, Embase, MEDLINE, PsycINFO, and PubMed were searched combining four components: online/digital,

parenting, adolescents, and randomised controlled trials. We (AF and FS) did not limit the search to language, document type, publication status, or time/date. We used the following search strategies for searching the databases:

CENTRAL via Cochrane Library

([mh CD-I] OR [mh CD-ROM] OR [mh "Compact Disks"] OR [mh "Computer-Assisted Instruction"] OR [mh ^Computers] OR [mh "Computers, Handheld"] OR [mh "Electronic Mail"] OR [mh Hypermedia] OR [mh Internet] OR [mh "Mobile Applications"] OR [mh Smartphone] OR [mh "Social Media"] OR [mh ^Software] OR [mh "Text Messaging"] OR [mh "Videodisc Recording"] OR [mh "Webcasts as Topic"] OR ("Compact Disc" OR "Compact Discs" OR "Compact Disk" OR "Compact Disks" OR "Computer Assisted" OR "Computer Game" OR "Computer Games" OR "Computer Program" OR "Computer Programme" OR "Computer Programmes" OR "Computer Programs" OR "E-Health" OR "Electronic Health" OR "Electronic Mail" OR "Electronic Mails" OR "E-Mail" OR "E-Mails" OR "Handheld Computer" OR "Handheld Computers" OR "M-Health" OR "Mobile Application" OR "Mobile Applications" OR "Mobile Health" OR "Mobile Phone" OR "Palm Pilot" OR "Palm Pilots" OR "Palmtop" OR "Palm-Top" OR "Personal Digital Assistant" OR "Pocket PC" OR "Pocket PCs" OR "Short Message Service" OR "Smart Phone" OR "Smart Phones" OR "Social Media" OR "Tablet Computer" OR "Tablet Computers" OR "Text Message" OR "Text Messages" OR App OR Apps OR CD OR CDROM* OR Computerised OR Computerized OR Cyber* OR Digital* OR DVD OR EHealth OR Email* OR Facebook OR Hypermedia OR Hypertext OR Internet OR iPad OR iPhone OR Laptop* OR Messaging OR MHealth OR Online OR

PDA OR PDAs OR Podcast* OR Smartphone* OR SMS OR Software* OR Texting* OR Tweet* OR Twitter* OR Virtual* OR Web OR Webcast* OR Website* OR WeChat OR Whatsapp* OR YouTube):ti,ab) AND ([mh Fathers] OR [mh "Legal Guardians"] OR [mh Mothers] OR [mh Parenting] OR [mh Parents] OR [mh "Single Parent"] OR (Father* OR Guardian* OR Mother* OR Parent*):ti,ab) AND ([mh Adolescent] OR (Adolescen* OR Teen* OR Young OR Youth*):ti,ab)

In Trials

Embase 1974 to 2018 Week 37 via Ovid SP

1. CD-I/ OR CD-ROM/ OR Compact Disk/ OR Computer/ OR Digital Computer/ OR Personal Computer/ OR Personal Digital Assistant/ OR E-Mail/ OR Hypermedia/ OR Internet/ OR Mobile Application/ OR Smartphone/ OR Social Media/ OR Software/ OR Text Messaging/ OR Video Disk/ OR Webcast/ OR ("Compact Dis?" OR "Compact Dis?s" OR "Computer Assisted" OR "Computer Gam*" OR "Computer Program*" OR E?Health OR "Electronic Health" OR "Electronic Mail?" OR "E?Mail?" OR "Hand?held Computer?" OR M?Health OR "Mobile Application?" OR "Mobile Health" OR "Mobile Phone?" OR "Palm Pilot?" OR "Palm?top" OR "Personal Digital Assistant?" OR "Pocket PC?" OR "Short Message Service" OR Smart?Phone? OR "Social Media" OR "Tablet Computer?" OR "Text Messag*" OR App OR Apps OR CD OR CDROM* OR Computeri?ed OR Cyber* OR Digital* OR DVD OR Facebook OR Hypermedia OR Hypertext OR Internet OR iPad OR iPhone OR Laptop* OR Messaging OR Online OR PDA OR PDAs OR Podcast* OR SMS OR Software* OR

Texting* OR Tweet* OR Twitter* OR Virtual* OR Web OR Webcast* OR Website* OR WeChat OR Whatsapp* OR YouTube).ti,ab.

2. Father/ OR Legal Guardian/ OR Mother/ OR Parent/ OR Single Parent/ OR (Father* OR Guardian* OR Mother* OR Parent*).ti,ab.
3. Adolescent/ OR Adolescence/ OR (Adolescen* OR Teen* OR Young OR Youth*).ti,ab.
4. Randomization/ OR Crossover-Procedure/ OR Double-Blind Procedure/ OR Randomized Controlled Trial/ OR Single-Blind Procedure/ OR (Randomi?ed OR Randomly OR Factorial* OR Cross?over* OR ((Singl* OR Doubl* OR Trebl* or Tripl*) adj (Mask* OR Blind*)) OR Assign* OR Allocat* OR Volunteer* OR Groups OR Trial*).ti,ab.
5. 1 AND 2 AND 3 AND 4
6. Exp Animals/ OR Exp Invertebrate/ OR Animal Experiment/ OR Animal Model/ OR Animal Tissue/ OR Animal Cell/ OR Nonhuman/
7. Human/ OR Normal Human/ OR Human Cell/
8. 6 AND 7
9. 6 NOT 8
10. 5 NOT 9
11. Limit 10 to Embase

Ovid MEDLINE(R) and Epub Ahead of Print, In-Process & Other Non-Indexed Citations and Daily 1946 to September 07, 2018

1. CD-I/ OR CD-ROM/ OR Compact Disks/ OR Computer-Assisted Instruction/ OR Computers/ OR Computers, Handheld/ OR Electronic

Mail/ OR Hypermedia/ OR Internet/ OR Mobile Applications/ OR Smartphone/ OR Social Media/ OR Software/ OR Text Messaging/ OR Videodisc Recording/ OR "Webcasts as Topic"/ OR ("Compact Dis?" OR "Compact Dis?s" OR "Computer Assisted" OR "Computer Gam*" OR "Computer Program*" OR E?Health OR "Electronic Health" OR "Electronic Mail?" OR "E?Mail?" OR "Hand?held Computer?" OR M?Health OR "Mobile Application?" OR "Mobile Health" OR "Mobile Phone?" OR "Palm Pilot?" OR "Palm?top" OR "Personal Digital Assistant?" OR "Pocket PC?" OR "Short Message Service" OR Smart?Phone? OR "Social Media" OR "Tablet Computer?" OR "Text Messag*" OR App OR Apps OR CD OR CDROM* OR Computeri?ed OR Cyber* OR Digital* OR DVD OR Facebook OR Hypermedia OR Hypertext OR Internet OR iPad OR iPhone OR Laptop* OR Messaging OR Online OR PDA OR PDAs OR Podcast* OR SMS OR Software* OR Texting* OR Tweet* OR Twitter* OR Virtual* OR Web OR Webcast* OR Website* OR WeChat OR Whatsapp* OR YouTube).ti,ab.

2. Fathers/ OR Legal Guardians/ OR Mothers/ OR Parenting/ OR Parents/ OR Single Parent/ OR (Father* OR Guardian* OR Mother* OR Parent*).ti,ab.
3. Adolescent/ OR (Adolescen* OR Teen* OR Young OR Youth*).ti,ab.
4. Controlled Clinical Trial.pt. OR Randomized Controlled Trial.pt. OR (Randomi?ed OR Randomly OR Trial OR Groups).ti,ab.
5. 1 AND 2 AND 3 AND 4
6. Exp Animals/ NOT Humans.sh.

7. 5 NOT 6

PsycINFO 1806 to September Week 1 2018 via Ovid SP

1. Computer Assisted Instruction/ OR Computers/ OR Computer Applications/ OR Computer Assisted Therapy/ OR Computer Games/ OR Computer Mediated Communication/ OR Computer Software/ OR Digital Computers/ OR Digital Video/ OR Hypermedia/ OR Hypertext/ OR Internet/ OR Online Therapy/ OR Online Community/ OR Online Social Networks/ OR Social Media/ OR Text Messaging/ OR Websites/ OR ("Compact Dis?" OR "Compact Dis?s" OR "Computer Assisted" OR "Computer Gam*" OR "Computer Program*" OR E?Health OR "Electronic Health" OR "Electronic Mail?" OR "E?Mail?" OR "Hand?held Computer?" OR M?Health OR "Mobile Application?" OR "Mobile Health" OR "Mobile Phone?" OR "Palm Pilot?" OR "Palm?top" OR "Personal Digital Assistant?" OR "Pocket PC?" OR "Short Message Service" OR Smart?Phone? OR "Social Media" OR "Tablet Computer?" OR "Text Messag*" OR App OR Apps OR CD OR CDROM* OR Computeri?ed OR Cyber* OR Digital* OR DVD OR Facebook OR Hypermedia OR Hypertext OR Internet OR iPad OR iPhone OR Laptop* OR Messaging OR Online OR PDA OR PDAs OR Podcast* OR SMS OR Software* OR Texting* OR Tweet* OR Twitter* OR Virtual* OR Web OR Webcast* OR Website* OR WeChat OR Whatsapp* OR YouTube).ti,ab.
2. Fathers/ OR Mothers/ OR Parent Training/ OR Parents/ OR Single Parents/ OR (Father* OR Guardian* OR Mother* OR Parent*).ti,ab.

3. (Adolescen* OR Teen* OR Young OR Youth*).ti,ab.
4. Exp Treatment Effectiveness Evaluation/ OR Clinical Trials/ OR Mental Health Program Evaluation/ OR (Randomi?ed OR Factorial* OR Cross?over* OR ((Singl* OR Doubl* OR Trebl* or Tripl*) adj (Mask* OR Blind*)) OR Assign* OR Allocat* OR Volunteer* OR Groups OR Trial*).ti,ab.
5. 1 AND 2 AND 3 AND 4
6. 1 AND 2 AND 4
7. Limit 6 to Adolescence <13 to 17 Years>
8. 5 OR 7kj

PubMed

((CD-I[mh] OR CD-ROM[mh] OR "Compact Disks"[mh] OR "Computer-Assisted Instruction"[mh] OR Computers[mh:NoExp] OR "Computers, Handheld"[mh] OR "Electronic Mail"[mh] OR Hypermedia[mh] OR Internet[mh] OR "Mobile Applications"[mh] OR Smartphone[mh] OR "Social Media"[mh] OR Software[mh:NoExp] OR "Text Messaging"[mh] OR "Videodisc Recording"[mh] OR "Webcasts as Topic"[mh] OR "Compact Disc"[tiab] OR "Compact Discs"[tiab] OR "Compact Disk"[tiab] OR "Compact Disks"[tiab] OR "Computer Assisted"[tiab] OR "Computer Game"[tiab] OR "Computer Games"[tiab] OR "Computer Program"[tiab] OR "Computer Programme"[tiab] OR "Computer Programmes"[tiab] OR "Computer Programs"[tiab] OR "E-Health"[tiab] OR "Electronic Health"[tiab] OR "Electronic Mail"[tiab] OR "Electronic Mails"[tiab] OR "E-Mail"[tiab] OR "E-Mails"[tiab] OR "Handheld Computer"[tiab] OR "Handheld Computers"[tiab] OR "M-Health"[tiab] OR "Mobile Application"[tiab] OR

"Mobile Applications"[tiab] OR "Mobile Health"[tiab] OR "Mobile Phone"[tiab] OR "Palm Pilot"[tiab] OR "Palm Pilots"[tiab] OR "Palmtop"[tiab] OR "Palm-Top"[tiab] OR "Personal Digital Assistant"[tiab] OR "Pocket PC"[tiab] OR "Pocket PCs"[tiab] OR "Short Message Service"[tiab] OR "Smart Phone"[tiab] OR "Smart Phones"[tiab] OR "Social Media"[tiab] OR "Tablet Computer"[tiab] OR "Tablet Computers"[tiab] OR "Text Message"[tiab] OR "Text Messages"[tiab] OR App[tiab] OR Apps[tiab] OR CD[tiab] OR CDROM*[tiab] OR Computerised[tiab] OR Computerized[tiab] OR Cyber*[tiab] OR Digital*[tiab] OR DVD[tiab] OR EHealth[tiab] OR Email*[tiab] OR Facebook[tiab] OR Hypermedia[tiab] OR Hypertext[tiab] OR Internet[tiab] OR iPad[tiab] OR iPhone[tiab] OR Laptop*[tiab] OR Messaging[tiab] OR MHealth[tiab] OR Online[tiab] OR PDA[tiab] OR PDAs[tiab] OR Podcast*[tiab] OR Smartphone*[tiab] OR SMS[tiab] OR Software*[tiab] OR Texting*[tiab] OR Tweet*[tiab] OR Twitter*[tiab] OR Virtual*[tiab] OR Web[tiab] OR Webcast*[tiab] OR Website*[tiab] OR WeChat[tiab] OR Whatsapp*[tiab] OR YouTube[tiab]) AND (Fathers[mh] OR "Legal Guardians"[mh] OR Mothers[mh] OR Parenting[mh] OR Parents[mh] OR "Single Parent"[mh] OR Father*[tiab] OR Guardian*[tiab] OR Mother*[tiab] OR Parent*[tiab]) AND (Adolescent[mh] OR Adolescen*[tiab] OR Teen*[tiab] OR Young[tiab] OR Youth*[tiab]) AND ("Controlled Clinical Trial"[pt] OR "Randomized Controlled Trial"[pt] OR Groups[tiab] OR Randomised[tiab] OR Randomized[tiab] OR Randomly[tiab] OR Trial[tiab]) NOT (Animals [mh] NOT Humans [mh])) NOT MEDLINE[sb]

Searching other resources

References within all included studies were also examined to identify further relevant studies.

Data collection and analysis

Selection of studies

Identified citations were collected and imported into EndNote X8 (27) and duplicates were removed. Titles and abstracts were screened by AF for assessment against the inclusion criteria for the review and her work was double-checked by FS. Disagreement between these two researchers and a random selection of excluded papers was reviewed by a third reviewer (CG). Full texts of the remaining articles were obtained and reviewed against the inclusion criteria by AF and FS and their work was verified by CG.

Data extraction and management

Extraction

A Microsoft Excel-based data extraction form was designed for the purpose of this study and used to extract the data such as details of the study population, interventions, outcomes, and study design.

Management

Microsoft Excel was used as a data entry and management tool to create the relevant tables and graphs. TIDieR check was used for the extraction of reported interventions from the trials.

Assessment of risk of bias in included studies

Data related to the quality of each study was assessed using Cochrane's Risk of Bias Tool (Higgins et al., 2011). The data were extracted by AF then double-checked by FS. Disagreements between these two

reviewers and a random sample of the data extraction were verified by the team leader (CG).

Protocol Registration

The protocol was registered on 31 October 2018 (PROSPERO Registration Number: CRD42018114921; URL: https://www.crd.york.ac.uk/PROSPERO/display_record.php?RecordID=114921).

Results

Selection of studies

We found 5,748 results from five main databases of which 2,329 were identified as duplicates and were removed in EndNote (Figure 2). After screening the titles and abstracts of the remaining papers, we obtained the full text of 320 papers. Eight additional papers were identified through a review of their reference lists.

When reviewing these full texts, 308 papers were removed mostly because they were not randomised controlled trials, the ages of the children in these studies were not within the age criteria established for this review, or parents did not receive interventions via a digital element. Other reasons for exclusion included multiple versions, components, or publications of a given study; focus on interventions for physical or developmental illnesses among adolescents or unrelated issues faced by the parents themselves; and lack of relevant parenting or adolescent outcomes. Two studies were not related to any emotional and behavioural difficulty or parenting issues. Thus, we identified 16 studies described in 20 papers (four of which were supplementary or additional publications of the same study) that were relevant

and met the inclusion criteria. Three of these studies (Santisteban et al., 2017; Schinke et al., 2004; Schinke et al., 2009b) used a stratified approach to randomise their samples into intervention and control trials.

Registration of included studies

11/16 of included studies have been registered in a clinical trial registry.

Figure 2

Selection of studies in PRISMA flow diagram.

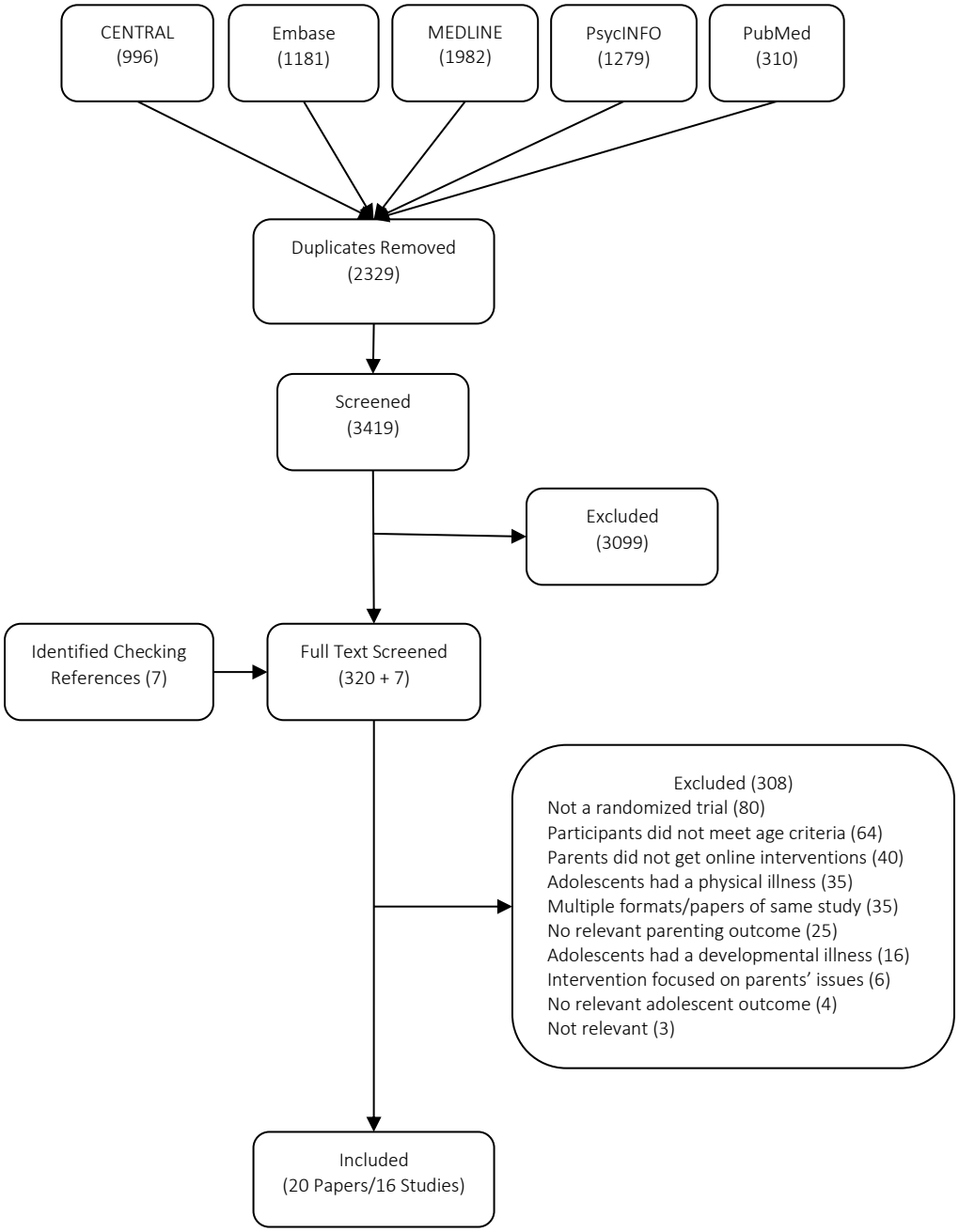


Table 15

Description of the included studies (n = 16)

Study Name	Country	Recruitment Setting	Targeted Issue	Age	Number of Participants	Adolescent Intervention Component
Cardamone-Breen et al. (2018)	Australia	Secondary schools + online	Depression and anxiety	12–15 years	349 parents, 327 adolescents	None
Donovan et al. (2012)	United States	Online (through colleges and universities)	Alcohol use	Average of 18 years	279 parent-child dyads	None
Fang & Schinke (2010); Fang et al. (2013)	United States	Online + community service agencies	Substance use	10–14 years	108 mother-daughter dyads	Skill-building to prevent substance use
Kacir & Gordon (1999)	United States	Mail + Schools	Behavioural problems	12–18 years	38 mothers	None
Lenhard et al. (2017)	Sweden	Ads in media, mental health care centres, primary care, and patient organisations	Obsessive-Compulsive Disorder	12–17 years	67 parent-child dyads	Focus of treatment with 12 educational and practice chapters

Napper et al. (2016)	United States	University (mail + email)	Alcohol use	17.81±0.46 years	399 parent-child dyads	None
Reuland & Teachman (2014)	United States	Online	Social Anxiety	10–15 years	18 mother-child dyads	None
Santisteban et al. (2017)	United States	School counsellor and community treatment agency referrals	Behavioural or mental health problems	12–15 years	80 parent-child dyads	Adolescent videos and family sessions
Schinke et al. (2004); Schwinn & Schinke (2010)	United States	Notices and announcements in community agencies	Substance use	10–12 years	514 adolescents and 196 parents	10 main + booster sessions alongside parent component
Schinke et al. (2009 a)	United States	Print ads + Online	Substance use	10–13 years	916 mother-daughter dyads	Skill-building to prevent substance use
Schinke et al. (2009 b)	United States	Print ads + Online	Substance use	10–13 years	202 mother-daughter dyads	Adolescents attended the program with their mothers

Schinke et al. (2009 c)	United States	Print ads + Online	Substance use	11–13 years	591 mother-daughter dyads	Skill-building to prevent substance use
Schwinn et al. (2014)	United States	Print ads + Online	Preventive health behaviours (for substance use and physical health)	10–12 years	67 mother-daughter dyads	Adolescents attended the program with their mothers
Toombs et al. (2018)	Canada	Word of mouth in the community	Parent-adolescent communication	13–17 years	18 parent-child dyads	None
Wurdak et al. (2017)	Germany	Schools, prevention organisations, prevention centres + online	Alcohol use	12–18 years	467 parents and 173 adolescents	None
Yap et al. (2018); Yap et al. (2019)	Australia	Schools + online	Depression and anxiety	12–15 years	359 parent-child dyads	None

Participants' age and sample size

As seen in Table 15, the ages of adolescents who were either participating or whose parents were participating in the reviewed studies, ranged between 10 and 18 years. While most studies comprised of 1:1 parent and child dyads, three studies (Cardomone-Breen et al., 2018; Schinke et al., 2004 included a greater number of parents than adolescents, and one study only included mothers in their sample. Sample sizes ranged from 18 to 399 participant dyads (including those assigned to control groups), with the total number of participants (both parents and adolescents) being 8,144 (Mean = 678.67) and 10 studies (Cardamone-Breen et al., 2018; Donovan et al., 2012; Fang & Schinke, 2010; Fang et al., 2013; Napper et al., 2016; Schinke et al., 2004; Schinke et al., 2009a, b, c; Wurdak et al., 2017; Yap et al., 2018, 2019) employed sample sizes that involved more than 100 dyads.

Location

Eleven of the reviewed studies were carried out in the United States, two studies in Australia, and one study each in Canada, Germany, and Sweden.

Participants for most of these studies were recruited through educational institutes, including secondary schools, colleges, and universities. Other participants were recruited through advertisements placed online and in their respective communities. Most of the included programs took place entirely on online platforms.

Targeted adolescent problems

The majority of studies (nine of 16) pertained to interventions targeting adolescent substance use, five of 16 focused on adolescent mood problems, and the remaining two studies targeted behavioural issues.

Control Groups

Control groups included (in order of frequency) no intervention (9), limited treatment component (4), alternative interventions (4), and waitlist (2).

Measurement of outcomes

A variety of measures were used to assess the outcomes. In terms of frequency, the ADAS (five studies) and the SCAS (three studies) were most commonly used to measure adolescent outcomes, the PRADAS was used in two studies to measure parenting outcomes, while the IFIRS and the FPSC were used in two studies each to measure both parent and adolescent outcomes.

Outcomes were assessed at timepoints ranging from one month to six years post-intervention, though three studies measured outcomes only at the intervention endpoint and without any follow-up. Only four studies evaluated treatment effects beyond a year, with annual follow-ups conducted by Schinke et al. (2004) over a period of six years (though only for adolescent outcomes; parenting outcomes were evaluated across three years), Fang and Schinke (2010), Fang et al. (2013) and Schinke et al. (2009a) for two years, and Schinke et al. (2009c) and Yap et al. (2018, 2019) for one year post-intervention. Particularly for the parent-only programmes, the short-term follow-up periods may have affected the studies' ability to capture positive changes in the adolescents.

Assessment of risk of bias

When assessing the quality of the reviewed studies, 13 of the 16 included studies indicated a moderate to high risk of bias, owing largely to performance factors such as blinding which is expected in behavioural studies (Figure 2). In terms of individual studies, Cardamone-Breen et al. (2018), Yap et al. (2018, 2019), and Lenhard et al. (2017) rated as the least risk of bias, with either high or unclear risk in terms of performance bias (Table 16). Conversely, Napper et al. (2016) demonstrated the highest risk of bias since there was no reporting or evidence of allocation concealment, attrition rates, and relevant procedural and methodological details.

Across the remaining studies, most demonstrated an unclear risk of bias due to a lack of reporting. In addition, there were insufficient procedures to reduce the risk for allocation concealment (Donovan et al. 2012; Schinke et al., 2004; 2009a; 2009b; Wurdak et al. 2017), and attribution effects (Fang & Schinke, 2010; Fang et al., 2013; Kacir & Gordon, 1999; Schinke et al., 2009b; 2009c). Furthermore, Kacir and Gordon (1999) demonstrated risks in relation to participant remuneration given before the final four-month follow up, and other procedures in Reuland and Teachman (2014), Santisteban et al. (2017), Schinke et al. (2004), Schwinn et al. (2014), and Toombs et al. (2018).

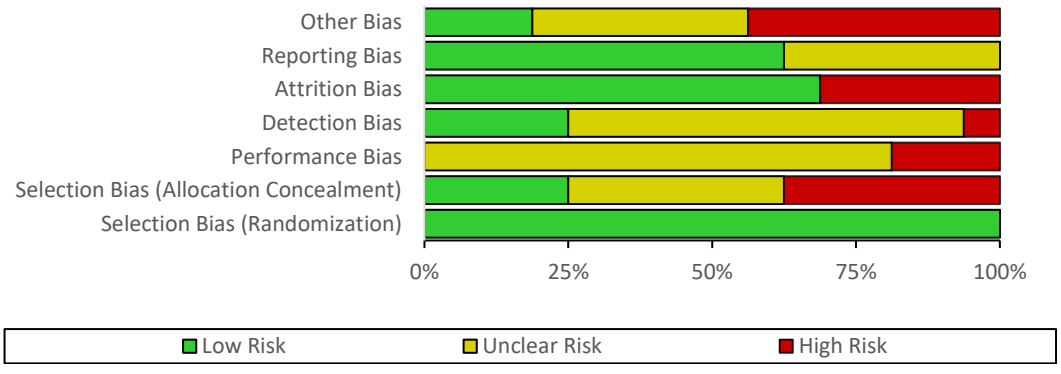
Table 16

Risk of bias across included studies (n = 16)

	Randomisation	Allocation Concealment	Performance Bias	Detection Bias	Attrition Bias	Reporting Bias	Other Bias
Cardamone-Breen et al. (2018)	+	+	−	+	+	+	+
Donovan et al. (2012)	+	−	?	?	+	?	?
Fang et al. (2010, 2013)	+	?	−	+	−	?	?
Kacir & Gordon (1999)	+	?	?	?	−	+	−
Lenhard et al. (2017)	+	+	?	+	+	+	+
Napper et al. (2016)	+	−	?	−	−	+	−
Reuland & Teachman (2014)	+	?	?	?	+	?	−
Santisteban et al. (2017)	+	?	?	?	+	?	−
Schinke et al. (2004)	+	−	?	?	+	+	−
Schwinn & Schinke (2010)	+	−	?	?	+	+	−
Schinke et al. (2009a)	+	−	?	?	+	+	?
Schinke et al. (2009b)	+	−	?	?	−	+	?
Schinke et al. (2009c)	+	+	?	?	−	+	?
Schwinn et al. (2014)	+	?	?	?	+	?	−
Toombs et al. (2018)	+	?	?	?	+	?	−
Wurdak et al. (2017)	+	−	?	?	+	+	?
Yap et al. (2018, 2019)	+	+	−	+	+	+	+
Criteria met (%)	100	25	0	25	68.75	62.5	18.75

Figure 3

Overview of risk of bias across domains (n = 16)



Interventions

Ten interventions were evaluated in the included studies, which have been detailed in Table 17. Six programmes (EBI, My Student Body-Parent, PACT, PNF, PAW, and PiP) targeted parents only with no adolescent component, while two (BiP OCD and Substance Use Prevention Programs) were primarily adolescent focused, with parents supporting the main intervention, and the remainder (CA CIFFTA and CBM-I) had both parent and adolescent focused components. One intervention was supported by individualised contact (Lenard et al., 2017). Interventions were primarily delivered through web-based applications, followed by smartphone applications, regular asynchronous clinician contact by text or call, email, and CD-ROM. As seen in Table 18, the most common components across these programs included psychoeducation and targeted the development of effective communication, problem-solving strategies, and parenting skills. The majority of the interventions targeted maladaptive behaviour and/or focused on making participants aware of self-help resources available in their communities.

Table 17

Description of studied interventions (n = 10)

Intervention	Study	Theory	Format	Target Problem	Target Audience	Program Content
BiP OCD Internet-based Cognitive Behaviour Therapy for Obsessive-Compulsive Disorder	Lenhard et al. (2017)	Exposure and response prevention (ERP)	Smartphone application and regular asynchronous therapist contact by text and occasionally by call	OCD	Adolescent-focused (Parent in supporting role)	**Structure:** 12-chapter manualised format implemented over three phases: psychoeducation regarding OCD and CBT, ERP exercises and cognitive training, and problem-solving and relapse prevention. Parents and adolescents are encouraged to carry out ERP exercises together and report back to the clinician. **Parent Component:** Five chapters covering family accommodation, parental coping strategies, and support of ERP. The degree of parental involvement is dependent on the developmental needs of the adolescent, with more degrees of freedom for older patients.

CA CIFFTA Computer Assisted Culturally Informed and Flexible Family-Based Treatment for Adolescents	Santisteban et al. (2017)	Structural family therapy and Motivational interviewing	Hybrid online and in-person format. Web-based application accessed via a provided netbook	Behavioural problems	Parent and adolescent focused components	**Structure:** multi-component treatment with four to six computer-based modules and six to 10 face-to-face sessions carried out over 12 weeks. **Parent Component:** Adolescents and parents were separately assigned five to six videos. Face-to-face family sessions focused on parenting and family issues and application of computer-assisted psychoeducational material.
CBM-I Cognitive bias modification for threat interpretation	Reuland & Teachman (2014)	Parent-Child Interactional Model of Social Anxiety	Web-based application	Social anxiety	Parent and adolescent focused components	**Structure:** Stimuli involved 50 ambiguous scenarios per session and a word fragment near the end of the scenario. Participants typed in the missing letter(s) (one letter in Sessions 1–3; two in Sessions 4–8) to complete the word fragment and then answered a comprehension question that reinforced the positive interpretation of the scenario. **Parent Component:** Parent training and assessment materials targeted beliefs that are empirically and theoretically linked to parent intrusive behaviour.

EBI Email Based Intervention	Wurdak et al. (2017)	Preventive parent-based programmes	Email	Alcohol use	Parent-focused	**Structure:** Four weekly emails including an introductory text, video clip, timetable, and a relevant four-page chapter containing an introduction, a summary of scientific findings, practical parenting advice, and a basic skills and parenting exercise. **Parent Component:** The entire intervention targeted parental self-efficacy and parenting skills.
My Student Body-Parent	Donovan et al. (2012)	Cognitive-behavioural and harm-reduction approaches	Web-based application	Alcohol use	Parent-focused	**Structure:** A four-week program involving seven 20-minute sessions that contained a web-based interactive tool, one audio-based "campus perspective", four articles, and one video-based lesson. Email reminders were sent prior to each session. **Parent Component:** All seven sections are parent-focused.
PACT Parent-Adolescent Communication Toolkit (Sequential)	Toombs et al. (2018)	Gottman's relationship repair theories and Strongest Families	Web-based application	Parent-Adolescent communication	Parent-focused	**Structure:** The program included an introduction, assessment, 10 building relationships modules, an optional communication module, and a summary completed over six weeks.

						Parent Component: Involved communication strategies and suggestions, combined with writing and self-reflection exercises for couples.
PNF Personalised Normative Feedback	Napper et al. (2016)	Social Norms Theory	Web-based application	Alcohol use	Parent-focused	**Structure:** Parents were presented with text and graphical data regarding college and underage drinking, parental approval of alcohol use, and associated communication with their children, followed by feedback on their perceptions relative to the norm and education regarding communication and harm reduction strategies. **Parent Component:** the entire program was parent-focused.
Parenting Adolescents Wisely (PAW)	Kacir & Gordon (1999)	Family Systems Theory	CD-ROM accessed through the clinic and workbook	Behavioural problems	Parent-focused	**Structure:** Series of nine video clips demonstrating families coping with common problem situations followed by two or three solutions, among which the user chooses and receives feedback on their preferred solution till the best option is chosen. A review quiz at the end of each unit reinforces learned skills.

						The program is completed over two weeks within one to three sittings. **Parent Component:** The entire program is parent-focused.
PiP Partners in Parenting	Cardamone-Breen et al. (2018); Yap et al. (2018, 2019)	Persuasive Systems Design	Web-based application	Depression and anxiety	Parent-focused	**Structure:** multi-level public health approach involving three components: parenting self-assessment, personalised feedback, up to nine interactive modules recommended based on the feedback, and weekly check-in phone calls. Each module was 15–25 minutes long and contained illustrations, audio clips, vignettes, interactive activities, goal-setting exercises, and an end-of-module quiz with immediate feedback. **Parent Component:** The entire program is parent-focused.

Substance Use Prevention Program	Fang & Schinke (2010), Fang et al. (2013), Schinke et al. (2004), Schinke et al. (2009a, b, c), Schwinn & Schinke (2010), Schwinn et al. (2014)	Family Interaction Theory	Web-based application or CD-ROM accessed through clinic resources	Substance use	Adolescent-focused (Parents in supporting role)	**Structure:** Nine 35-to-45-minute interactive weekly modules that involved developmentally tailored audio, animation, graphics, and activities for skill demonstrations, guided rehearsal, and immediate feedback. **Parent component:** Three to five modules involved both girls and mothers. Concurrent to the youth intervention, parent sessions involved a 30-minute videotape and print materials. Parents were also sent two newsletters with child management tips. A two-hour booster workshop was provided for parent-child dyads.

Table 18

Components for parents across interventions (n = 10)

Component	BiP OCD	CBM-I	CA-CIFFTA	EBI	PNF	My Student Body-Parent	PACT	PAW	PiP	Substance Use Prevention	Frequency
Psychoeducation	*		*	*	*	*	*		*	*	8
Parent-Adolescent Interactions			*	*	*	*	*	*	*	*	8
Parenting Skills	*		*	*			*	*	*	*	7
Preventive Intervention				*	*	*		*	*	*	6
Self-Help (For Parenting)				*	*	*	*	*		*	6
Problem-Solving Strategies					*		*	*	*	*	5
Social and Family Support	*		*				*			*	4
Family-Oriented Intervention			*					*	*	*	4
Parenting Self-Efficacy				*		*				*	3
Cognitive Modifications		*			*			*			3
Coping Strategies Training	*								*		2
Conflict Management			*				*				2
Mood Management		*							*		2
Contingency Management				*				*			2
Cultural Adaptation			*							*	2
Motivational Interviewing			*						*		2
Behavioural Training									*		1
Group Discussion		*									1

Note. BiP: Barninternetprojektet; CBM-I: Internet-based Cognitive Bias Modification; EBI: Email-based Intervention; PNF: Personalised Normative Feedback; PACT: Parent-Adolescent Communication Toolkit; PiP: Partners in Parenting

Intervention Outcomes

Parenting Outcomes

As seen in Table 19, 14 out of 16 of the studies were associated with improvements in parenting compared to controls, specifically in the areas of

knowledge about adolescent problems, communication, monitoring, adaptation to adolescent needs, rule setting, closeness, and parenting self-efficacy. Of the two studies that failed to show an improvement in parenting compared to control, one was a parent-only programme (Toombs et al., 2018) and the other included parent and adolescent focused components (Reuland & Teachman, 2014). All seven studies of adolescent-focused programmes that had parents in a supporting role were associated with improvements in parenting. In five of the successful studies, parenting outcomes were based solely on parent reports (Fang & Schinke, 2010; Fang et al., 2013; Kacir & Gordon, 1999; Lenhard et al., 2017; Napper et al. 2016; Toombs et al., 2018; Wurdak et al., 2017), eight others were reported by parents and adolescents (Cardamone-Breen et al., 2018; Donovan et al., 2012; Reuland & Teachman, 2014; Santisteban et al. 2017; Schinke et al. 2009a, b, c; Schwinn & Schinke, 2010; Schwinn et al., 2014; Yap et al., 2018, 2019), while those reported in Schinke et al. (2004) were based on adolescent reports only. Effect sizes for parent-focused interventions targeting parenting skills were in the medium range (e.g., family accommodation, d = .54, Lenhard et al., 2017).

Adolescent outcomes

Improvements in adolescent outcomes between intervention and control groups were noted in 12 out of 16 studies and included for depression (parent-reported but not adolescent-reported), anxiety, alcohol and substance use and abstinence, problem behaviours, conduct disorders and aggression, peer influence and conflict management. These improvements were noted solely by parents in three studies and not by adolescents (Kacir & Gordon, 1999; Fang & Schinke, 2010; Fang et al., 2013; Lenhard et al., 2017). In two

studies (Fang & Schinke, 2010; Yap et al., 2018, 2019), adolescents reported significant improvements in substance use or other mood issues (e.g., anxiety, Yap, et al., 2018, 2019), but not depression. Effect sizes for interventions targeting adolescent behaviours were in the medium range for maladaptive behaviours (e.g., conduct disorder, d = .54, Santisteban et al. 2017). Only five studies targeted adolescent emotional difficulties, of which the parents in the study by Lenhard et al. (2017) and both parents and adolescents in Yap et al. (2018) reported significant improvements in parenting and adolescent mental health compared to controls. Of the seven parent-only interventions, three produced improved parent-reported adolescent outcomes in substance use and problematic behaviours, and Yap et al. (2018, 2019) produced improvement in parent-reported and adolescent-reported emotional difficulties compared to control. Improvements in adolescent outcomes were also noted among all programmes that focused on adolescents, with parents in the supporting role, though two of these produced inconsistent adolescent outcomes. Specifically, Lenhard et al. (2017) demonstrated improvement in parent-reported anxiety and functional impairment that were not reflected in adolescent reports, and no improvement in parent-reported depression, compared to controls, while Fang and Schinke (2010) and Fang et al. (2013) reported a reduction in alcohol use but not depression.

Table 19

Outcomes for children and parents from included studies (n = 16)

Study	Control	Parent Outcome Measure	Adolescent Outcome Measure	Outcome Timepoints	Parenting Outcome	Adolescent Outcome
Cardamone-Breen et al. (2018)	Waitlist	PRADAS Parent and Adolescent Reports	SCAS Child and Parent Reports, SMFQ	One- and three-month follow up	Significant group-by-time interaction for parent-reported PRADAS scores indicating greater improvement in parenting risk and protective factors from baseline to 1-month (d = .30) and three-month follow-ups compared to control (d = .33). More parents in the intervention reported changing their parenting behaviour after the intervention compared to control at one-month follow-up (p < .001). No significant difference in adolescent reports of overall parenting	No significant between-group differences in either parent or adolescent reported change in depression and anxiety over time.

Donovan et al. (2012)	seven educational e-newsletters	PTCS (adapted for alcohol behaviour) C-PBSS	Frequency of binge drinking questions (Adapted from the PBSS)	One-, three-, and six-month follow up	Higher Greater communication about manner of drinking and protective behaviour (C-PBSS) strategies at post-intervention compared to control ($p = .01$). Greater increase in manner of drinking subscale of the C-PBSS ($p = .03$).	No significant effect or between-group differences in binge drinking. Increase in PBSS scores over time in intervention compared to control ($p = .02$).
Fang & Schinke (2010), Fang et al. (2013)	No intervention	FPSC, PPQ (maternal monitoring), SFP (family rules about substance use)	CDI, SPA, ADAS (30-day substance use)	One- and two-year follow up	Higher levels of adolescent-rated mother-daughter closeness ($\eta^2 = .08$), mother-daughter communication ($\eta^2 = .04$), maternal monitoring ($\eta^2 = .04$), and family rules against substance use ($\eta^2 = .44$) compared to control at one- and two-year follow-ups.	No significant between-group differences in depression at two-year follow-up. Reduction in alcohol and marijuana use at one- and two-year follow-ups compared to control.
Kacir & Gordon (1999)	No intervention	Parent Behavior Questionnaire, Parenting Knowledge Test	Eyberg Child Behavior Inventory	One- and four-month follow up	Increased knowledge of adaptive parenting practices at one-month follow-up compared to the control ($\eta^2 = .37$).	Parent reported significantly fewer problem behaviours ($\eta^2 = .35$) and intensity ($\eta^2 = .36$) at one- and four-month

					No significant differences in parenting behaviours compared to control.	follow-ups compared to control.
Lenhard et al. (2017)	Treatment as usual	FAS Parent Report	SCAS Short Child Version, CDI Short Version, Education, Work, and Social Adjustment Scale (Parent and Child report)	Post-intervention and three-month follow up	Significant group-by-time interaction for parent-reported family accommodation (d = .54).	Significant time-by-group difference for parent-reported anxiety (d = .67) and functional impairment (d = .43). No significant time by group effects for self-reported depression, anxiety, and functional impairment.
Napper et al. (2016)	Treatment as usual	Communication frequency, eight-item measure of parental monitoring, single-item measure of perceived parental approval of alcohol use	Single item measure of drinking frequency, Daily Drinking Questionnaire, Rutgers Alcohol Problem Index	One- and six-month follow up	Significant group-by-time interaction with an increase in parents' perception of the proportion of other parents who talked about alcohol with their children (partial $\eta^2 = .07$). No other significant interactions.	No significant between-group differences.
Reuland & Teachman (2014)	Parent-child and child-only	Child and parent report of parent intrusive	SAS-A	Post-intervention, one- and	No significant time-by-group differences.	No significant time-by-group differences.

	components of the same intervention	behaviour, Observed child behavioural avoidance and parent intrusive behaviours		two-month follow up		
Santisteban et al. (2017)	Delayed intervention	FES Child and Adolescent Report (Cohesion and Conflict subscales), PPQ	RBPC (Conduct Disorder, Socialised Aggression, and Anxiety/Withdrawal subscales), YSR	12-, 18-, and 24-week follow-ups	Greater parent- (d = .54) and adolescent- (d = .58) reported cohesion at 12 weeks compared to control. No significant between-group differences in family conflict or parenting practices.	Greater improvement in conduct disorder (d = .54), socialised aggression (d = .45), internalising (d = .37) and externalising problems (d = .59) at 12 weeks compared to control.
Schinke et al. (2004); Schwinn & Schinke, 2010	CD-ROM only and no intervention	Youth reported parent involvement (monitoring, rule setting, access to alcohol)	YRBS, Monitoring the Future, ADAS, Models for Drug Use Scale, CNUDS	Post-intervention, one-, two-, three-year, and six-year follow up	Greater family involvement compared to both controls at three-year follow-up.	Reduced alcohol use compared to both controls at three- and six-year follow-ups (d = .29). Reduced cigarette and marijuana use compared to no intervention control at post-test and one-, two-, and three-year follow-ups (d = .23). Reduced cigarette use and negative consequences related to alcohol (d = .25),

						and greater alcohol refusal skills (d = .26) compared to controls at six-year follow-up. Lesser peer influence compared to both controls at post-test, one- and three-year follow-ups.
Schinke et al. (2009a)	No intervention	IFIRS, FADS, PMS, Parent Report of Monitoring	ADAS, IFIRS, FADS, SPA, CDI, Coping Across Situations Questionnaire, Beliefs about Peer Norms Scale, Refusal Self-Efficacy Scale, CNUDS, Parent-reported Substance Abuse Subtle Screening Inventory	One- and two-year follow up	Better communication and closeness than control at two-year follow-up.	Lower risk factors, higher protective factors, and reduced substance use compared to control at two-year follow-up.
Schinke et al. (2009b)	No intervention	PMS, PPQ, FPSC, Intervention-Targeted Parenting Behaviors Scale,	FPSC, ADAS, The Alcohol Abstinence Self-Efficacy Scale, The Life Skills	Post-intervention and two-month follow-up	Improved communication, parental monitoring, and rule setting compared to control at two-month follow-up.	Improved conflict management, alcohol use-refusal skills, healthier beliefs about underage drinking, greater self-

		Individual Protective Factors Index	Training Questionnaire			efficacy about their ability to avoid underage drinking, and reduced alcohol consumption compared to control at post-test and two-month follow-up.
Schinke et al. (2009c)	No intervention	IFIRS, Unspecified measures for family rules about children's substance use, awareness of parent monitoring of girls' discretionary time, and problem-solving skills	CDI, IFIRS, ADAS, SPA, Unspecified measures for drug refusal self-efficacy, and intention to use	Post-intervention and one-year follow-up	Greater improvements in communication, establishment of family rules about substance use, and monitoring of their daughters' discretionary time compared to control across time.	Reduced substance use risk and use of substances compared to control across time.
Schwinn et al. (2014)	No intervention	Parental Bonding Instrument, Communication Scale, PMS	PSS, YRBS (Substance abuse items)	Post-intervention and five-month follow-up	Greater mother-daughter communication, parental monitoring, and closeness to daughters at post-test and five-month follow-up compared to control.	Greater drug refusal skills and reduced stress at five-month follow-up compared to control.
Toombs et al. (2018)	No or other intervention	PACS, IWK-PACC	DASS-21	Post-intervention	No significant between-group differences communication.	No significant between-group differences in depression.

Wurdak et al. (2017)	Waitlist	Adapted questions for rule setting practices, communication frequency, and quality of communication	Question about alcohol use adapted from ESPAD	Post-intervention	Higher knowledge and self-efficacy at follow-up than the control group for parents of both boys and girls. Stricter rule setting for boys than the control group.	Reduced heavy episodic drinking compared to control at post-test for boys. No significant between-group differences in alcohol consumption and drunkenness.
Yap et al. (2018, 2019)	Attention control (web-based fact sheets and five-minute weekly call)	PRADAS Parent and Adolescent Reports	SCAS Child and Parent Reports, SMFQ	Post-intervention, one-year follow-up	Greater improvement in overall parenting at three-month (d = .57) and one-year follow-ups compared to control (d = .51). No significant difference in adolescent reports of overall parenting.	Significant group-by-time interaction for parent-reported depression at post-intervention and one-year follow up (d = .21) and parent- and adolescent-reported anxiety at post-intervention. No significant differences in self-reported depression.

Note. ADAS: American Drug and Alcohol Survey, CDI: Children's Depression Inventory, CNUDS: Commitment to Not Use Drugs Scale, DASS-21: Depression Anxiety Stress Scale, ESPAD: Europa¨ische Schu¨lerstudie zu Alkohol und anderen Drogen (European student study on Alcohol and other drugs), FADS: Family Alcohol Discussion Scale, FAS-PR: Family Accommodation Scale-Parent Report, FES: Family Environment Scale, FPSC: Family Problem Solving Communication Index, IFIRS: Iowa Family Interaction Ratings Scale, IWK-PACC: IWK Parent-Adolescent Communication Checklist, PACS: Parent-Adolescent Communication Scale, PBSS: Communication about Protective Behavioral Strategies Scale, PMS: Parental Monitoring Scale, PPQ: Parent reported Parenting Practices Questionnaire, PRADAS: The Parenting to Reduce Adolescent Depression and Anxiety Scale, PSS: Perceived Stress Scale, PTCS: Parent-Teen Communication Scale, RBPC: Behavior Problem Checklist, SAS-A: Social Anxiety Scale for Adolescents-Revised, SCAS: The Spence Children's Anxiety Scale, SFP: Strengthening Families Program, SMFQ: The Short Mood and Feelings Questionnaire, SPA: Self-Perception Profile for Adolescents, YRBS: Youth Risk Behavior Survey, YSR: Youth Self-Report

Discussion

While face-to-face parent-focused interventions have been shown to be effective in preventing and treating emotional and behavioural difficulties among adolescents (Allen et al. 2015; Yap et al. 2016), the effectiveness of their online counterparts is less clear. Sixteen RCTs, pertaining to 10 online parenting programmes, which aimed to improve emotional and/or behavioural wellbeing in young people aged 10- to 19-year-olds without health or neurodevelopmental comorbidities were identified, with five targeting emotional difficulties exclusively.

In general, most of the reviewed programmes were effective in bringing about positive outcomes in parenting, with promising results demonstrated by two types of programmes, namely those that only targeted parents and those that targeted adolescents but involved parents in a supporting role to reinforce treatment gains. Specifically, greater improvements were noted in parenting competencies (including self-efficacy, monitoring, rule setting, awareness, and knowledge), parents' relationship and communication with their adolescents, and family involvement compared to comparable programmes or no intervention. Adolescent outcomes were also significantly improved in some studies, though this trend was more evident among the programmes that focused on both parents and adolescents. However, this may have been due to the short post-intervention follow up period that reduces the scope for evaluation of any consequent long-term effects on the adolescents' emotional and behavioural health, as seen in some face-to-face interventions with younger children (Chow et al., 2013). This supposition may be further supported in the conclusions drawn by Yap et al.

(2016) who argue that six months post-intervention is the minimum point at which adaptations to parenting may be expected to impact emotional and behavioural problems in children and adolescents. In line with this, few of the programmes reviewed here that were studied beyond this time period seemed to have demonstrated latent improvements in adolescent outcomes. In other programmes, improved emotional and behavioural functioning among adolescents was noted in the context of targeted improvements in factors associated with the parent-adolescent relationship, including communication, warmth or closeness, and provision of structure such as rule setting and monitoring. These factors may therefore be thought to facilitate and support the adolescent's ability to regulate and manage their emotions and behaviours. These factors are characteristic of authoritative parenting styles that foster a warm and responsive framework leading to secure attachment bonds.

Most of the studies identified focused on the prevention of substance abuse, with very few focusing on mood disorders or assessing for changes in mood alongside substance use and risky behaviours. The focus on behavioural issues may be reflective of the prevalence of these problems during this development period, particularly with substance use that is known to be a common problem among adolescents (Kaminer et al. 2007; Stallard et al., 2013). This supports the need for online components or programmes that incorporate emotional problems more directly, particularly since they are on the rise and either underlie or drive risk-taking behaviours within this population.

When reviewing the interventions themselves, it was noted that they tended to involve family, preventive, and self-reliant foci that foster a sense of

stability and control. This abides with the gold standards in adolescent care and the understanding that effective resolution of individual problems both occur and affect community and global functioning (James et al., 2018; Yap et al., 2016). In addition, these programmes were mostly entirely web-based and found to be effective without significant in-person contact with the participants. Unlike traditional face to face parenting interventions that are usually focused on younger children, family interaction theory was found to be most frequently used. While the theory includes elements of attachment and social learning principles on a relational level, it is not primarily based on them and may therefore be better suited to accommodate a broader developmental spectrum.

In terms of the components used to facilitate change across these programmes, psychoeducation and parent-adolescent interaction were most common. Other active components included skill development, social adaptation, cognitive development, and relational management. While these characteristics are also seen in similar interventions, the reviewed interventions differed from such programmes in terms of their lack of group-based formats. Possible explanations for this could be logistical issues rendered by online setups, risk of privacy breaches, and perceived threat to confidentiality and safety among participants.

The Yap et al. (2018) study showed particular promise as a parenting intervention, delivered through secondary schools in Australia, and with a low risk of bias. The intervention which provided individualised parent education was associated with improved parenting, reduction in parent-reported adolescent depression and anxiety, and reduction in adolescent reported

anxiety. The 12-month follow-up (Yap et al., 2019) found sustained improvements in parenting compared to parents in the control group (Cohen *d* = .51; 95% CI 0.30 to 0.72) and in parent-reported depressive symptoms in adolescents (Cohen *d* = −.21; 95% CI −0.42 to −0.01).

Finally, caution should be exercised when interpreting the results, owing to the quality and reliability of some of the studies that may have been impacted by small sample sizes (e.g., Kacir & Gordon, 1999; Reuland & Teachman, 2014; Toombs et al. 2018). The incorporation of active controls and larger sample sizes in future research might help reduce some of these biases. A meta-analysis was not possible given the small number of studies and the heterogeneity of the interventions and measured outcomes. Due to the cultural homogeneity of the samples and primary use of the English language, the conclusions of this review may not generalise to all populations. Thus, there remains a need to develop and adapt to a diversity of cultures. Furthermore, future research may consider the noted limitations when recruiting, designing, and reporting the findings of such studies to improve their generalisability, reliability, and management of emotional and behavioural difficulties among adolescents.

Conclusion

Online parent-focused interventions demonstrate considerable promise in terms of support for adolescent emotional and behavioural difficulties. The online format increases their reach and flexibility. Given the difficulty in accessing child and adolescent mental healthcare services in many countries, such programmes could help to buffer gaps in services, by enhancing parenting skills such as communication and emotional attachment. More

research is needed to explore the most effective way to implement online parenting interventions either within routine care or through schools as a preventative strategy.

Implications for online parenting interventions in the UAE

Not only is there a need to develop online parenting interventions for adolescents' emotional and behavioural difficulties, but also to adapt these to the needs of non-Western and non-native English-speaking populations, with psychosocial and systemic differences. For example, people in Arab societies like the UAE are not familiar with the psychological language and thought in the same way that their individualistic counterparts have been socialised into. Aside from verbiage, the stigma around mental health issues continues to dominate their cultural landscape, and associated discussions tend to be constrained within family boundaries. Therefore, discussing a child's difficulties outside of the family and amid strangers, albeit within their own community, can be deemed unthinkable and a matter of shame. Thus, it may be best to develop and offer an online program for such communities that involves confidentiality, flexibility, and self-agency.

In this respect, the systematic review provides credible evidence and direction for the development of a robust intervention aimed at improving parenting skills and offering support in raising adolescents with emotional and behavioural difficulties in the UAE. The PiP program evaluated by Cardamone-Breen et al. (2018) and Yap et al. (2018) seems most suited in meeting the goals of the proposed programme, including its focus, effectiveness, use of parental self-assessments, personalised feedback, and goal-setting exercises. The implementation of the Family Interaction Theory in

the frequently referenced Substance Use Prevention Program may also be useful in informing a structure that can facilitate greater family involvement, communication, rule setting, and monitoring, and reduced substance use risk and behaviours.

Chapter Five: Overall Discussion

Overall summary

Mental health, including the emotional and behavioural functioning of individuals, has received more attention within the past decade and has become a matter of national interest in the UAE. However, what continues to be neglected is the emotional and behavioural difficulties faced by native adolescents from this country. This includes both understanding the problems that they face and supporting their needs in a way that augments their growth and provides true, realistic, and lasting healing. The challenges that impede this intention include the psychological naivety of this community (relative to the West) leading to mental health stigma, the burden of psychological disease that such perceptions incur, and the lack of standardised and empirically supported conceptualisations that would bridge the gap between need and solution (Al-Darmaki & Sayed, 2009). The importance of exploring these issues and finding effective solutions cannot be underestimated, considering the unique social position of the UAE's adolescents as influential minorities, both in terms of culture and age. Not only are they emergent leaders and nurturers, but they are also an integral part of the interdependent community they currently live in.

Keeping these facts in mind, the objective of this thesis was to initiate research and clinical efforts towards improving the lives of UAE adolescents and their families. For this, three studies were undertaken in succession. At the foundation of this thesis is the first study (Chapter Two) which aimed at identifying an acceptable and reliable tool to identify emotional and behavioural difficulties among UAE adolescents. Building upon this, the

second study (Chapter Three) investigated the prevalence of difficulties and factors influencing their severity within a representative sample of adolescents from public schools where the primary medium of instruction is Arabic. The third and final study (Chapter Four) involved a systematic review of online parenting interventions with the aim of evaluating evidence for the effectiveness of online parenting interventions in promoting emotional and behavioural wellbeing among adolescents. It was hoped that the findings therein would be used as a basis for the development of a suitable programme for UAE parents.

Summary of findings

Chapter Two describes a pilot study involving 40 bilingual (Arabic- and English-speaking) boys and girls from the UAE who were studying in grades seven through 10 at a private Arabic-medium school. In using the well-validated RCADS-E as the standard in comparing Arabic versions of two self-report screening tools for emotional and behavioural difficulties (the RCADS-A and the SDQ-A), the latter was found to be more suitable than the RCADS-A. In addition to its brevity, breadth, and expansive norms (Wolpert et al., 2014), the appropriateness of the SDQ-A was empirically supported by appreciable internal consistency for the total score, and correlations with overall and disorder-specific constructs evaluated in the RCADS-E. Qualitatively, the relative ease and comprehensibility of the measure were indicated through its brevity, breadth, and least need for clarification. The findings also corroborated previous psychometric investigations (e.g., Alyahri & Goodman, 2006; Emam et al., 2016), and highlighted the utility of broad measures in assessing problems faced by an understudied population whose

experiences, understanding, and meaning of such difficulties differ qualitatively from their Western counterparts.

Thus, the SDQ-A was used in determining the prevalence of emotional and behavioural difficulties within a representative sample of 720 native adolescents from public schools in the UAE (Chapter Three). A fair proportion of this sample (specifically, 13%) was found to report difficulties above the cut-off for clinical concern, with girls reporting significantly higher rates and greater intensity of emotional problems than boys. Sample- and gender-wide proportions of normal, borderline, and abnormal scores were reflective of corresponding samples from the UK, and a few Middle Eastern and Asian countries for all scales except peer problems (Atoum et al., 2018; Mohammadi et al., 2013; Vanchindorj et al., 2017; Wang et al., 2014; Youth in Mind, 2014). As would be expected, patterns of prevalence and influencing factors were most similar to Omani adolescents (Emam et al., 2016), lending support to cultural factors that colour the effect of influencing factors studied here. Gender differences may be understood in terms of pubertal and neurological differences that render greater self-awareness and emotional focus in the face of hormonal changes among girls (Copeland et al., 2019). For adolescents in the UAE, this may also be attributed to normative expectations and approaches relating to girls versus boys. Considering that the girls in Study Two (Chapter Three) also reported higher rates of prosocial behaviours, it may be the case that their emotional difficulties are a product of them being subliminally taught to focus on service for others without much consideration of their own needs or opportunities for self-expression compared to boys. On the other hand, boys are typically expected to be expressive, active, and independent-

minded. Misinterpretations of these messages learned early on in adolescence and simultaneous lack of suitable rearing practices may underlie the increase in behavioural issues. This may explain the relative dominance and frequency of clinically significant conduct and peer problems among boys in Study Two (Chapter Three). Differences in how boys and girls are raised and treated in traditional cultures such as the UAE may be more pronounced than in Western countries, given that segregation based on gender is prominent here. Not only does this occur in public spaces (e.g., separate ladies' section in public transportation and waiting areas) and community settings (in the form of a separate *majlis* or gathering for males and females), but also extends to education, such that girls and boys study in different classrooms and schools. Thus, gender is naturally brought to the forefront as a factor that significantly influences their lived experience across academic, public, and domestic areas.

The data from Study Two (Chapter Three) also indicated that UAE adolescents who are retained in lower grades may be more at risk for emotional and behavioural difficulties independent of age. This is consistent with the correlation of reduced academic performance with a decline in psychosocial functioning seen across studies (Atoum et al., 2018; Dekker et al., 2007; McLeod et al., 2016; Measelle et al., 2006). Greater incidence of internalising problems among those in lower grades and those from less affluent families may be understood in the light of the high achieving society they live in and the fact that the UAE is one of the wealthiest countries in the Middle East with the highest wealth per capita ratio (New World Wealth, 2021). Thus, experiences of underachieving adolescents and those from less affluent families in the context of their wealthy and rapidly progressing

surroundings likely exacerbates the adverse effects of lower socioeconomic status and lesser monetary resources as has been established across other cultures and contexts (Ravens-Sieberer et al., 2008; Reiss, 2013; Vanchindorj et al., 2017).

Most notably, the risk for emotional and behavioural difficulties increased for adolescents living in non-intact families. Nearly a third of the small group of young people who were not living with either parent scored above the cut-off for abnormal levels of emotional and behavioural difficulties, and 14.7% of young people living with one parent, compared to 11.8% of people living with both parents. This is particularly noteworthy considering that the proportion of adolescents in this study who were living within intact families was higher than those in the US (US Census Bureau, 2018) and UK (Department of Work and Pensions, 2013). Thus, parental presence itself emphasised the role of parents in supporting native adolescents in the UAE. The findings from this study, taken together, add to the body of evidence supporting the notion that disrupted families adversely affect emotional and behavioural functioning in adolescence (Canetti et al., 2000; Smeekens et al., 2012; Wang et al. 2014; Zhao et al., 2017). This, along with the fact that prosocial behaviours were more prevalent in intact households, make it possible to conclude that parents (and parenting) are an underutilised resource that could be leveraged to promote emotional health and wellbeing.

Expanding on these findings, the systematic review of online parenting interventions described in Chapter Four found support for the use of online parenting interventions aimed at improving the emotional and behavioural difficulties faced by adolescents. Among the 16 identified RCTs that evaluated

the effectiveness of 10 such programmes, most were developed using family interaction theory for prevention and self-help by targeting parents' understanding of and relationship with their adolescents. Almost none of these programmes were directly based on attachment theory or the specific relationship between parents and adolescents, though various relational models were used. Those that targeted parenting, either exclusively or as part of interventions for adolescents with various emotional and behavioural difficulties were found to be most effective in improving parenting competency, the parent-adolescent relationship, and adolescent wellbeing. Online administration of the interventions appeared to be sufficient in achieving programme effectiveness. Group formats were largely lacking, possibly due to logistics involved, and non-Western and non-English speaking samples were entirely unaccounted for.

Methodological Issues

The strengths and weaknesses of each of the three studies are discussed in their respective chapters.

Reflexive Comments

The framework, methodologies, and thought processes in Western sciences and education is vastly different from traditional systems in other parts of the world, including the UAE. Though Western thought has permeated the popular landscape of globally minded residents in the UAE, the objectivity, consistency, and specificity promoted in scientific enquiry continue to be a foreign concept that is yet to be fully embraced and understood due to gaps in training and exposure (Ahammed, 2015). This is one of the bigger challenges in bringing this thesis to fruition and maintaining

the highest standards of research quality. In this regard, this thesis may be seen not only as a pioneering endeavour but also as a beginning step to develop a solid foundation on which robust theories, research, and intervention systems can be shaped, developed, and implemented. Even for the researcher, the conceptualisation, designing, conducting, and writing of this thesis was an experience that was both challenging and enlightening, not only in terms of the content but also the process.

Participating and conducting the studies in this thesis was also likely a rare and novel experience for students and administration alike. The cooperation and keenness of the Ministry of Education and the participating schools implied that they saw much value in this research. It was also made known to the researcher that the Ministry of Education had initiated efforts to host seminars for teachers regarding student wellbeing and counselling. As of this writing, they are also in the process of investing in and mandating a dedicated psychologist for each government school that is under their jurisdiction. These efforts and the enthusiasm shown by both parties in supporting this research underscored their observation and anticipation of psychological dysfunction among the youth they work with and shortcomings these authority figures experience when needing to alleviate their suffering. During data collection, there were few students who desperately asked for help through drawings of tearful faces and pleas such as “help me” written in the margins of the questionnaire. These students were debriefed and provided with resources for support, while the rest were encouraged to reach out for help should they require it. The need for help and support could not have been better emphasised by these subjective incidents.

Overall Strengths and Limitations

A comprehensive and robust study was striven for across all the studies undertaken as part of this thesis. This is represented in the large sample sizes, review of a vast array of relevant research, and data sourced from various avenues (including personal encounters and discussions). This allowed for streamlining the research towards investigations that were crucial starting steps in a relatively unexplored area. Pulling together what was learned from scientific evidence and social encounters, the decision to explore and identify broad-based screening measures was made keeping in mind that differences in the experience and expression of emotions and behaviours due to cultural influences weaken the generalisation of specific diagnostic labels. Even then, while the thesis refers broadly to emotional and behavioural difficulties, the findings warrant caution when interpreting behavioural constructs specifically. It is possible that the way native UAE adolescents perceive and understand their behaviours differ from what is considered normal and problematic in other parts of the world. Thus, qualitative analysis into such experiences and how they are worded in screeners may be a helpful way forward.

In anticipation of such issues, a key factor that drove all efforts associated with the three studies in this thesis was ecological validity. Both procedurally and statistically, this was facilitated through the sourcing for Arabic measures; comparisons and contrasts with populations that were similar to the UAE's culture, economic status, and geographical location; and literature reviews that expanded understanding of whether and how industry constructs and standards can be tailored and applied to the UAE context and other understudied cultural groups.

The collectivistic tone of the UAE culture manifests in behavioural compliance and obedience to authority. This is a double-edged sword that presented itself as a strength and limitation for this thesis. Data collection for the pilot and prevalence studies were administered by the teachers and school administration under the direction of the primary researcher. Teachers in government schools in the UAE often assume the role of a strict disciplinarian who must be respected and obeyed. Inadvertently, this ensured that the outlined expectations and procedures were thoroughly implemented, and likely impacted test-taking behaviours of the participating students in the prevalence study much more than those in the pilot study who studied at private schools. An example of this is the 100% participation and response rate across all questionnaires, indicating that, at a minimum, participation was considered to be an act of courtesy and appropriate, as implied by the teachers' approach. Data collection for the main study was also conducted during an exam day in an effort to reduce absenteeism and maximise participation. However, the role of exam stress and fatigue on the participants' responses cannot be entirely ruled out, though its effects may be minimal since the study was conducted after the exams.

Impact of the COVID-19 Pandemic

While the COVID-19 pandemic did not affect data collection of the studies elucidated in this thesis (since these were carried out prior to the year 2020), it restricted the possibility of piloting an online parenting programme, which was supposed to be conducted as the next step in consolidating the findings of these studies. Furthermore, research, education, and clinical practice across the globe and in the UAE have all been impacted since and

likely affect the validity and applicability of the thesis findings. To begin with, sudden and expected transition to distance learning, increased contact with family members, and movement restrictions have likely increased mental health concerns, as noted in emergent research with youth (Panda et al., 2021; Saddik et al., 2021; Thomas et al., 2020). Accessibility to healthcare systems and their ability to support the growing need have also been severely impacted. In this context, the implications of this thesis in identifying and working with adolescents and their families through online programmes are ideal and necessary.

In the UAE, methods to control the spread of the virus have been enforced along with consideration of the economic and psychological wellbeing of its residents. This has helped in making people feel safe and has reduced associated anxiety and deterioration of mental health (Saddik et al., 2021). However, data from the same study suggests that, in an environment of survival marked by concerns regarding contracting the viral infection and stress brought on by the pandemic, parents have become more susceptible to emotional struggles. This may affect parents' ability to engage with developmental endeavours as is the intention behind online parenting programmes. While the accessibility of an online parenting programme may not be adversely affected, the possibility of screen fatigue and the effects of extended screen use on physical health and functioning need to be considered. Overall, the impact of COVID-19 on adolescents and their families warrants attention and can affect how the findings of this study are implemented.

Clinical implications

Often in non-Western countries with a colonial history, there is an

increased and common risk for Western-based scientific and systemic advances to be blindly adopted or enforced with very little consideration for critical contextual factors that would necessitate a more adaptive and tailored approach (Marsella, 2011). The UAE is not immune to such a trend and may, in fact, be particularly vulnerable to this, given its dependency on a largely expatriated workforce (Al-Darmaki & Syed, 2009; Al Mualla, 2011). This is evidenced in the fact that screening measures, diagnostic tools, and interventions that are empirically validated and normed with North American and British samples (for example) are often used in exactly the same way as they would in their countries of origin, without considering differences in language, experience, and culture. Such practices pose an obvious risk of harm incurred through increased chances of misidentification and mistreatment. While there have been some concerted efforts within the UAE reflected in research and clinical practice to avoid such pitfalls, these have almost always focused on adults, and in some cases on young children. Almost no empirical initiatives seem to have been undertaken with regards to adolescents. Thus, the clinical implications of all the studies in this thesis serve to reduce such risks incurred by cultural bias through the development of a critical understanding of the state of emotional and behavioural difficulties among native adolescents in the UAE, what affects them, and how influential factors (such as parenting) may be appropriately leveraged to provide culturally sensitive support.

To begin with, an obvious contribution of this thesis is in establishing the utility of screening for emotional and behavioural difficulties among adolescents in the UAE through the particular use of the SDQ-A. It also places value in using scientific methods to systematically understand, inform, and

enforce helping strategies in a country that has only recently begun its acquaintance with mental health. The UAE government, schools, and healthcare systems may thus be encouraged to screen for such issues using the SDQ-A as a validated tool. The findings of this thesis lend support to ongoing governmental strategies to improve support for adolescents (as described in the previous paragraphs) and further aid policy-making with regard to adolescent wellbeing at the national and organisational levels.

Reflecting on the findings of study Two (Chapter Three), similarities between the prevalence of emotional and behavioural difficulties of native UAE adolescents and those of their Western counterparts encourage a more inclusive perception. This is important because the needs of this subset of the population tend to be dismissed or minimised in the context of the stereotype of wealth and authority often attributed to Emirati families, and the tendency of native families to undermine emotional and behavioural difficulties as "acting out" or "being dramatic". Using the results of this study to educate families about the emotional and behavioural realities of the adolescents in their community may contribute to a humbling and empathic disposition that can found their interactions and support towards this population. Considering that girls are more prone to emotional problems and boys tend to manifest their struggles behaviourally, it may also be helpful to streamline developmental approaches implemented through education programmes, parenting, and healthcare.

The findings from the third and final study (Chapter Four) imply that the best result may be obtained from interventions when parenting interventions are focused on enhancing the relationship between adolescents

and parents regardless of the nature of their emotional and behavioural functioning or whether adolescents were involved in treatment or not. The fact that improvements in adolescent outcomes corresponded with improvements in relational factors that underlie emotional and behavioural development implies value in parenting styles that employ warmth and responsiveness (for example, through communication and rule setting) to create a secure base for adolescents' healthy growth and development. Such a framework may be seen as well suited for native families in the UAE, given that a predominant part of the culture is rooted in family dynamics and the relationships formed therein. Given that the Emirati culture (much like other collectivistic cultures in Asia and Africa) traditionally endorse authoritarian forms of parenting, it follows logically that parenting programmes developed for this population emphasise reconsideration and adaptation of normative parenting approaches to better suit their increasingly self-aware and cognitively independent adolescents. With the aid of what is known through attachment theory, parents of the adolescents of today may benefit from psychoeducation and support that provides them with ways of thinking and relating that are both warm and responsive.

Given the findings of studies Two and Three, it seems apt to focus on systemic and family-based issues and approaches in the way of next steps. The presence of difficulties and the need for universal and comprehensive support for suffering adolescents, particularly those who do not enjoy the entirety of filial, financial, and academic resources, is undeniable. This is particularly so for emotional difficulties and family support, both of which do not seem to enjoy much attention across existing clinical programmes. Even among the

parenting programmes that have been reported, there appears to be a need to move beyond the negative framing of risky behaviours and work with the emotions that underlie these behaviours. This may be particularly true for the adolescents and their families in Study Two (Chapter Three), where conduct and emotional problems were the most frequently reported. A lack of cross-cultural programmes also indicates scope for future advancement. Taken together, while the reviewed programmes are valuable in and of themselves, they cannot be used as such with parents of UAE adolescents, given these substantial drawbacks. Therefore, the findings of the entire thesis, coupled with the stigma regarding mental health and the norm of keeping problems within the family, may be considered when developing a programme delivered online to increase awareness and communication skills among parents of native UAE adolescents.

Recommendations for an online parenting programme

Based on the literature review in the Introduction (Chapter One), the systematic review in Chapter Four, and anecdotal clinical experiences explained above, an online self-help psychoeducational programme can be created exclusively for parents and caregivers of native UAE adolescents. Given that such a programme would be the first of its kind in the region, it would be important to limit its scope to a few essential aspects based on the findings of this thesis in its entirety. With this in mind, and consistent with most of the online interventions reviewed in Chapter Four (Cardamone-Breen et al., 2018; Donovan et al., 2012; Kacir & Gordon, 1999; Napper et al., 2016; Toombs et al., 2018; Wurdak et al., 2017; Yap et al., 2018; 2019), would be designed exclusively for parents and would target those whose adolescent

children have been screened for emotional and behavioural difficulties through schools and primary care facilities, those whose children may be at risk based on their demographics and context (specifically, underachieving students and those from less affluent and non-intact families as noted in Chapter Three), and those who may be interested in such programmes for the betterment of their adolescent children. Considering the influencing role of family structure identified in Study Two (Chapter Three) and the theories reviewed in Chapter One, an attachment-based model that capitalises on the parent-adolescent relationship seems most suited as the foundation for the programme. Working on the quality of attachment of the adolescent is not only preventative but also protective and conducive to growth and healing (Doinita & Maria, 2015). Thus, components from Connect: An Attachment-Based Program for Parents and Caregivers (Moretti & Obsuth, 2009) described in Chapter One will be considered. Though this programme was designed using a face-to-face group format, an online version is being piloted with English-speaking populations as of this writing. Regardless, for the programme to be effective, it will need adaptation to the UAE context, in terms of language, focus, and intent. The adaptation process can be further streamlined in consideration of what was learned through the systematic review in Chapter Four. Thus, some of the structure and content of the Partners in Parenting (PiP) programme (Cardamone-Breen et al. 2018; Yap et al. 2018; 2019), which had the most robust evidence, will be extrapolated. Furthermore, Arab parents (including those in the UAE) tend to focus on their adolescent's observable behaviours and perceived academic success, sometimes even at the expense of relational and emotional aspects of their adolescents' development (Dwairy & Achoui,

2006). Stress levels experienced by non-intact and large families may also lead to parenting patterns that reduce the quality of the parent-adolescent relationship (Canetti et al., 2000; Smeekens et al., 2012; Zhao et al., 2017) and parental self-efficacy (Steca et al. 2011). Thus, the aims of this programme would be to improve parent or caregiver efficacy, improve parent-adolescent attachment security, to reduce adolescent emotional and behavioural difficulties. In line with this, the goals of this programme would be to

1. increase parents' or caregivers' insight into adolescent development, associated behaviours, attachment, and parenting styles as is applicable to them.
2. help parents or caregivers recognise behavioural and relational patterns based on attachment and parenting styles.
3. provide evidence-based suggestions to parents or caregivers for identifying, developing, and maintaining effective parenting skills and resources in response to their own needs and those of their adolescent children.

This triadic model of insight, reflection, and application would form the framework of the programme content.

To make it accessible and safe, the programme would follow a self-paced format (e.g., Cardamone-Breen et al. 2018; Reuland & Teachman, 2014; Toombs et al., 2018; Yap et al. 2018; 2019), though users would be encouraged to go through the content and spread out their learning over a period of eight to 12 weeks (based on the review of the most effective programmes identified in Chapter Four). As in the PiP programme (Cardamone-Breen et al. 2018; Yap et al. 2018; 2019), the main platform of

the programme would be an informational website with optional interactive features such as questions to help participants reflect and apply the information to their context, self-assessment of learning through relevant vignettes, worksheets to promote application of the learned material, and access to professionals for clarifications and learning support. Thus, the programme would be designed with an emphasis on self-help and prevention and can be accessed in private or at schools, clinics, and community settings. Adapting from the format of the email-based intervention evaluated by Wurdak et al. (2017), an option would be provided for the programme to be sent in its entirety or in sections on a regular basis to participating parents via WhatsApp or email. These options would serve as a foot in the door for parents and caregivers of UAE adolescents who are in need but often weary and sceptical of professional support. These aspects would also accommodate the privacy espoused by UAE families, thereby fostering a sense of safety and attenuating the influence of stigma.

The content of this website would include culturally relevant, linguistic comprehensible, resourceful, and individualised adaptations of the programmes and components reviewed in Chapter Four. This would involve developing the entire programme in Arabic, translating relevant psychoeducational material from the Connect (Moretti & Obsuth, 2009) and PiP (Cardamone-Breen et al. 2018; Yap et al. 2018; 2019) programmes into Arabic, revising the language from the material in the reviewed programmes to accommodate normative lexicon and experiences and reduce jargon that would be relative foreign to the citizens of the UAE, and using scenarios commonly encountered in UAE homes, clinics, schools, and primary care.

Orientation to the programme would involve an overview of the programme, the estimated time and effort involved, guide on how to navigate and leverage the website, transparency regarding aims, benefits, barriers, and scope; other logistical issues, and an initial survey to assess the knowledge, needs, and interest of the parents or caregivers. This survey would be based on the Parenting to Reduce Adolescent Depression and Anxiety Scale (PRADAS; Cardamone-Breen et al. 2018). Child outcomes could be assessed using the Arabic version of the self-report SDQ. Website patrons may also be encouraged to retake the survey after they have used all the materials to assess how they have accomplished their goals and scope for further growth.

The systematic review in Chapter Four provided evidence for the effectiveness of psychoeducation and would help parents improve attunement, accuracy, and empathy, allowing them to be their adolescent's secure base. Thus, in terms of programme engagement, psychoeducation would help acclimate and anchor participating parents, especially given the fact that they would be relatively uninitiated into psychological services. The proposed psychoeducational content would include theoretical explanations regarding attachment theory and its lifespan application, normative adolescent development, emotional and behavioural difficulties that are unique to this age group, the four types of parenting styles, and parenting strategies that correspond with various adolescent behaviours and needs. These would be adapted from sections of the Connect (Moretti & Obsuth, 2009) and PiP (Cardamone-Breen et al. 2018; Yap et al. 2018; 2019) programmes. Specific sections would be further modified considering the findings from Study Two (Chapter Three), including drawing attention to gender differences in

emotional and behavioural difficulties, and increased risk of such difficulties among those demonstrating reduced or impaired academic performance. Across these sections, reflective questions would be provided to facilitate the application of the content.

Suggested evidence-based parenting strategies would be focused on developing an authoritative parenting style. Not only is there evidence for this, but native UAE parents are likely to be interested due to their affinity for behavioural modification relative to cognitive reconstruction (Al-Karam & Haque, 2015). The strategies listed in this section would be based on those offered through the Connect programme (Moretti & Obsuth, 2009) and the parenting guidelines used in the PiP programme (Parenting Strategies Program, 2013; Yap et al., 2018; 2019). These strategies would be divided into three categories, beginning with specific parenting strategies related to guidance and positive discipline techniques, insight development through observation and listening, effective communication of validation and warmth, and setting boundaries. The next set of skills would focus on self-care alongside parenting responsibilities. This would include considering the caregiver's capacity and needs, spending time pursuing their own needs and interests, and paying adequate attention to their relationships with their co-parents. The final group of strategies would be geared towards seeking help, including collaborating with the school and healthcare systems and reaching out to family, friends, the community, and professionals.

Corresponding to this, the website would feature a resources page that would include information regarding accessible clinicians in the area, available parenting support and development programmes, reading and audio-

visual materials, and emergency contacts (among others). These would be made available through the course of the programme and more particularly after parents have utilised this resource, in the spirit of offering ongoing support and suggestions on how to move forward. Provisions for feedback and evaluation of the website structure, accessibility, relevance, and content (among others), as well as a space to ask questions, would also be made available.

Future Directions

As the next step in moving forward, the online parent-focused website proposed in the previous paragraphs would need to be realised and offered to eligible parents. This would require support from the appropriate ministry in the UAE government, recruitment of web designers, piloting of the programme, advertising it to the target audience, and ensuring ongoing research to improve its utility and effectiveness. Programme evaluations and enhancements may also be conducted through ongoing research into the effectiveness of this programme for the UAE. Alongside the implementation of this online resource, continuity of care may be made possible through the translation of the Connect programme (Moretti & Obsuth, 2009) into Arabic and provision of its original group-based format for parents who may be interested in development and support beyond what the proposed web-based programme has to offer. Furthermore, resources and support services may be sought, developed, and provided to adolescents who are struggling with emotional and behavioural difficulties, keeping in mind the differential manifestation and needs of girls versus boys, those who have been retained in lower grades due to their academic performance, and those families that may

be struggling economically. Further research on suitable interventions for UAE adolescents may be indicated in this regard.

To further empirical findings from this thesis, future studies could supplement self-reported data with parent- and teacher-reported findings and diagnostic confirmation. Qualitative research pertaining to the subjective emotional and behavioural experiences of adolescents as observed during data collection would also help expand on current findings. For the sake of the proposed online parenting intervention, it may also be helpful to assess the feasibility of a parenting measure such as the PRADAS (Cardamone-Breen et al., 2017) and the need to translate it into Arabic. This may serve the dual purpose of being a feedback or insight building tool and assessing therapeutic change through the programme. Furthermore, incorporating an evidence-based parenting assessment could help tailor the flow and content of the programme to what is relevant and appropriate for individual parenting needs using the Persuasive Systems Design system as has been done in the PiP programme (Yap et al., 2018). Using such a model would also enable the possibility of automatically providing individualised feedback on parenting efforts, without any interaction or support from a mental health professional.

Conclusion

This thesis offers an empirical analysis into identification and intervention for emotional and behavioural difficulties among native UAE adolescents. The three studies conducted therein identifies the SDQ-A as a suitable screening measure, which was then used to ascertain prevalence rates and understand how they are impacted by demographic and contextual factors and use that information in addition to that of existing interventions identified

and reviewed in the systemic review to develop the effectiveness and feasibility of a parenting programme tailored to fit the needs of this community. In addition to recommending the use of the SDQ-A across primary care settings (such as schools and healthcare facilities) to identify levels of emotional and behavioural difficulties among adolescents in the UAE, the findings and reviews also inform the development of an online parenting programme for parents of adolescents in the UAE. The studies provided evidence to support a focus on psychoeducation and skill-building aimed at improving the parent-adolescent relationships through which growth and development are fostered. These were incorporated into proposing a suitable programme that can be used by researchers and clinicians to develop and implement with parents of UAE nationals. Taken together, this thesis strongly endorsed the utility of further research and encourages the incorporation of the defined diagnostic and service methods within the UAE community, including through primary care, schools, and clinics.

References

Abbo, C., Kinyanda, E., Kizza, R. B., Levin, J., Ndyanabangi, S., & Stein, D. J. (2013). Prevalence, comorbidity and predictors of anxiety disorders in children and adolescents in rural north-eastern Uganda. *Child and Adolescent Psychiatry and Mental Health, 7*(1), 1–11.

Abera, M., Robbins, J. M., & Tesfaye, M. (2015). Parents' perception of child and adolescent mental health problems and their choice of treatment option in southwest Ethiopia. *Child and Adolescent Psychiatry and Mental Health, 9*(1), 1–11.

Abou-Saleh, M. T., Ghubash, R., & Daradkeh, T. K. (2001). Al Ain community psychiatric survey. I. Prevalence and socio-demographic correlates. *Social Psychiatry and Psychiatric Epidemiology, 36*(1), 20–28.

Ahammed, S. (2015). Thinking and Practicing Psychology in a Kaleidoscopic UAE: Notes from a Social Responsibility Perspective. In C. Y. Al-Karam, A. Haque (Eds), *Mental Health and Psychological Practice in the United Arab Emirates* (pp. 9–21). Palgrave Macmillan US.

Ainsworth, M. D. S., Blehar, M. C., Waters, E., & Wall, S. N. (2015). *Patterns of attachment: A psychological study of the strange situation*. Psychology Press.

Al Mualla, S. (2011). Psychiatric services in Dubai (a short descriptive report). *International Journal of Mental Health and Addiction, 9*(2), 219–225.

Al-Darmaki, F. R., & Yaaqeib, S. I. (2015). Psychology and mental health services in the United Arab Emirates. *Psychology International Newsletter,* 1–6.

Al-Darmaki, F., & Sayed, M. A. (2009). Counseling challenges within the cultural context of the United Arab Emirates. *International handbook of cross-cultural counseling: Cultural assumptions and practices worldwide*, 465–474.

Al-Karam, C. Y., & Haque, A. (Eds.). (2015). *Mental health and psychological practice in the United Arab Emirates*. Springer.

Allen, M. L., Garcia-Huidobro, D., Porta, C., Curran, D., Patel, R., Miller, J., & Borowsky, I. (2016). Effective parenting interventions to reduce youth substance use: a systematic review. *Pediatrics,* 138(2).

Alyahri, A., & Goodman, R. (2006). Validation of the Arabic strengths and difficulties questionnaire and the development and well-being assessment. *Eastern Mediterranean Health Journal*, *12*(2), 138–146.

Amstadter, A. B., Richardson, L., Meyer, A., Sawyer, G., Kilpatrick, D. G., Tran, T. L., ... & Acierno, R. (2011). Prevalence and correlates of probable adolescent mental health problems reported by parents in Vietnam. *Social Psychiatry and Psychiatric Epidemiology*, *46*(2), 95–100.

Arbel, R., Perrone, L., & Margolin, G. (2018). Adolescents' daily worries and risky behaviours: the buffering role of support seeking. *Journal of Clinical Child & Adolescent Psychology*, *47*(6), 900-911.

Arslan, E., Arslan, C., & Ari, R. (2012). An Investigation of Interpersonal Problem Solving Approaches with Respect to Attachment Styles. *Educational Sciences: Theory and Practice*, *12*(1), 15–23.

Arulsubila, M., & Subasree, R. (2017). Life skills development among adolescents. *International Journal of Multidisciplinary Educational Research*, *6*(2), 168.

Atilola, O., Balhara, Y. P. S., Stevanovic, D., Avicenna, M., & Kandemir, H. (2013). Self-reported mental health problems among adolescents in developing countries: results from an international pilot sample. *Journal of Developmental & Behavioural Pediatrics*, *34*(2), 129–137.

Atoum, M., Alhussami, M., & Rayan, A. (2018). Emotional and behavioural problems among Jordanian adolescents: Prevalence and associations with academic achievement. *Journal of Child and Adolescent Psychiatric Nursing, 31*(2–3), 70–78.

Ayyash-Abdo, H. (2002). Adolescent suicide: An ecological approach. *Psychological Schools. 39*, 326–342.

Ayyash-Abdo, H., Nohra, J., Okawa, S., & Sasagawa, S. (2016). Depressive Symptoms among Adolescents in Lebanon: A Confirmatory Factor Analytic Study of the Center for Epidemiological Studies Depression for Children. *Acta Psychopathologica, 2*(46), 1–8.

Bandura, A. (1971). *Social learning theory.* New York (NY): General Learning Press.

Baumrind, D. (1971). Current patterns of parental authority. *Developmental psychology*, *4*(1), 1.

Bi, X., Yang, Y., Li, H., Wang, M., Zhang, W., & Deater-Deckard, K. (2018). Parenting styles and parent–adolescent relationships: The mediating roles of behavioral autonomy and parental authority. *Frontiers in psychology*, *9*, 2187.

Boer, M., van den Eijnden, R. J., Boniel-Nissim, M., Wong, S. L., Inchley, J. C., Badura, P., ... & Stevens, G. W. (2020). Adolescents' intense and problematic social media use and their well-being in 29 countries. *Journal of Adolescent Health*, *66*(6), S89–S99.

Boudreau, B., & Poulin, C. (2009). An examination of the validity of the Family Affluence Scale II (FAS II) in a general adolescent population of Canada. *Social indicators research, 94*(1), 29.

Bould, H., Mars, B., Moran, P., Biddle, L., & Gunnell, D. (2019). Rising suicide rates among adolescents in England and Wales. *The Lancet, 394*(10193), 116–117.

Bowlby, J. (1978). Attachment theory and its therapeutic implications. *Adolescent psychiatry*.

Breitenstein, S. M., Gross, D., & Christophersen, R. (2014). Digital delivery methods of parenting training interventions: a systematic review. *Worldviews on Evidence-Based Nursing, 11*(3), 168–176.

Brown, J. D., & Wissow, L. S. (2010). Screening to identify mental health problems in pediatric primary care: considerations for practice. *The International Journal of Psychiatry in Medicine, 40*(1), 1–19.

Canetti, L., Bachar, E., Bonne, O., Agid, O., Lerer, B., De-Nour, A. K., & Shalev, A. Y. (2000). The impact of parental death versus separation from parents on the mental health of Israeli adolescents. *Comprehensive Psychiatry, 41*(5), 360–368.

Cardamone-Breen, M. C., Jorm, A. F., Lawrence, K. A., Mackinnon, A. J., & Yap, M. B. (2017). The parenting to reduce adolescent depression and anxiety scale: assessing parental concordance with parenting

guidelines for the prevention of adolescent depression and anxiety disorders. *PeerJ, 5*, e3825.

Cardamone-Breen, M. C., Jorm, A. F., Lawrence, K. A., Rapee, R. M., Mackinnon, A. J., & Yap, M. B. H. (2018). A single-session, web-based parenting intervention to prevent adolescent depression and anxiety disorders: Randomized controlled trial. *Journal of Medical Internet Research*, *20*(4), e9499.

Carlo, G., White, R. M., Streit, C., Knight, G. P., & Zeiders, K. H. (2018). Longitudinal relations among parenting styles, prosocial behaviours, and academic outcomes in US Mexican adolescents. *Child Development*, *89*(2), 577–592.

Chorpita, B. F., Ebesutani, C., & Spence, S. H. (2011). *Revised Children's Anxiety and Depression Scale.* Retrieved from http://www. childfirst. ucla. edu/Resources. html.

Chorpita, B. F., Moffitt, C., & Gray, J. (2005). Psychometric properties of the Revised Child Anxiety and Depression Scale in a clinical sample. *Behaviour Research and Therapy*, *43*, 309–322.

Chorpita, B. F., Yim, L. M., Moffitt, C. E., Umemoto L. A., & Francis, S. E. (2000). Assessment of symptoms of DSM-IV anxiety and depression in children: A Revised Child Anxiety and Depression Scale. *Behaviour Research and Therapy*, *38*, 835–855.

Comer, J. S., Chow, C., Chan, P. T., Cooper-Vince, C., & Wilson, L. A. (2013). Psychosocial treatment efficacy for disruptive behavior problems in very young children: A meta-analytic examination. *Journal of the American Academy of Child & Adolescent Psychiatry*, *52*(1), 26–36.

Copeland, W. E., Brotman, M. A., & Costello, E. J. (2015). Normative irritability in youth: developmental findings from the Great Smoky Mountains Study. *Journal of the American Academy of Child & Adolescent Psychiatry*, *54*(8), 635–642.

Copeland, W. E., Worthman, C., Shanahan, L., Costello, E. J., & Angold, A. (2019). Early pubertal timing and testosterone associated with higher levels of adolescent depression in girls. *Journal of the American Academy of Child & Adolescent Psychiatry,* 58(12), 1197–1206.

Daradkeh, T. K., Eapen, V., & Ghubash, R. (2005). Mental morbidity in primary care in Al Ain (UAE): Application of the Arabic translation of the PRIME-MD (PHQ) Version. *German Journal of Psychiatry*, *8*(3), 32–35.

Dardas, L. A., van de Water, B., & Simmons, L. A. (2018). Parental involvement in adolescent depression interventions: A systematic review of randomized clinical trials. *International Journal of Mental Health Nursing*, 27(2), 555–570.

Datta, P., Ganguly, S., & Roy, B. N. (2018). The prevalence of behavioral disorders among children under parental care and out of parental care: A comparative study in India. *International Journal of Pediatrics and Adolescent Medicine, 5*(4), 145–151.

De Ross, R. L., Gullone, E., & Chorpita, B. F. (2002). The revised child anxiety and depression scale: a psychometric investigation with Australian youth. *Behaviour Change*, *19*(2), 90–101.

De Vries, P. J., Davids, E. L., Mathews, C., & Aarø, L. E. (2018). Measuring adolescent mental health around the globe: psychometric properties of the

self-report Strengths and Difficulties Questionnaire in South Africa, and comparison with UK, Australian and Chinese data. *Epidemiology and Psychiatric Sciences*, *27*(4), 369–380.

Deighton, J., Croudace, T., Fonagy, P., Brown, J., Patalay, P., & Wolpert, M. (2014). Measuring mental health and wellbeing outcomes for children and adolescents to inform practice and policy: a review of child self-report measures. *Child and adolescent psychiatry and mental health*, *8*(1), 1–14.

Deighton, J., Lereya, S. T., Casey, P., Patalay, P., Humphrey, N., & Wolpert, M. (2019). Prevalence of mental health problems in schools: poverty and other risk factors among 28 000 adolescents in England. *The British Journal of Psychiatry*, *215*(3), 565–567.

Dekker, M. C., Ferdinand, R. F., Van Lang, N. D., Bongers, I. L., Van Der Ende, J., & Verhulst, F. C. (2007). Developmental trajectories of depressive symptoms from early childhood to late adolescence: gender differences and adult outcome. *Journal of Child Psychology and Psychiatry*, *48*(7), 657–666.

Department of Work and Pensions (2013). Percentage of children living with both birth parents, by age of child and household income; and estimated happiness of parental relationships. Retrieved on August 10, 2021, from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/223251/Children_both_parents_income_FINAL.pdf

Doinita, N. E., & Maria, N. D. (2015). Attachment and parenting styles. *Procedia-Social and Behavioral Sciences*, *203*, 199–204.

Drzewiecki, C. M., & Juraska, J. M. (2020). The structural reorganization of the prefrontal cortex during adolescence as a framework for vulnerability to the environment. *Pharmacology Biochemistry and Behavior*, 173044.

Dwairy, M., & Achoui, M. (2006). Introduction to three cross-regional research studies on parenting styles, individuation, and mental health in Arab societies. *Journal of Cross-cultural Psychology*. *27*(3). 221–229.

Eapen, V., & Ghubash, R. (2004). Help-seeking for mental health problems of children: preferences and attitudes in the United Arab Emirates. *Psychological Reports, 94*(2), 663–667.

Eapen, V., Al-Gazali, L., Bin-Othman, S., & Abou-Saleh, M. (1998). Mental health problems among schoolchildren in United Arab Emirates: prevalence and risk factors. *Journal of the American Academy of Child & Adolescent Psychiatry*, *37*(8), 880–886.

Ebesutani, C., Reise, S. P., Chorpita, B. F., Ale, C., Regan, J., Young, J., ... & Weisz, J. R. (2012). The Revised Child Anxiety and Depression Scale-Short Version: Scale reduction via exploratory bifactor modeling of the broad anxiety factor. *Psychological Assessment*, *24*(4), 833.

Ehrenreich-May, J., Rosenfield, D., Queen, A. H., Kennedy, S. M., Remmes, C. S., & Barlow, D. H. (2017). An initial waitlist-controlled trial of the unified protocol for the treatment of emotional disorders in adolescents. *Journal of Anxiety Disorders*, *46*, 46–55.

Eisenberg, D., Downs, M. F., Golberstein, E., & Zivin, K. (2009). Stigma and help seeking for mental health among college students. *Medical Care Research and Review*, *66*(5), 522–541.

El-Keshky, M., & Emam, M. (2015). Emotional and behavioural difficulties in children referred for learning disabilities from two Arab countries: A cross-cultural examination of the Strengths and Difficulties Questionnaire. *Research in Developmental Disabilities*, *36*, 459–469.

Emam, M. M. (2012). Associations between social potential and emotional and behavioural difficulties in Egyptian children. *Emotional and Behavioural Difficulties.* 17(1), 83–96.

Emam, M. M., Kazem, A. M., & Al-Zubaidy, A. S. (2016). Emotional and behavioural difficulties among middle school students in Oman: an examination of prevalence rate and gender differences. *Emotional and Behavioural Difficulties, 21*(3), 314–328.

Ernst, M., Pine, D. S., & Hardin, M. (2006). Triadic model of the neurobiology of motivated behavior in adolescence. *Psychological Medicine*, *36*, 299–312.

Erskine, H. E., Moffitt, T. E., Copeland, W. E., Costello, E. J., Ferrari, A. J., Patton, G., ... & Scott, J. G. (2015). A heavy burden on young minds: the global burden of mental and substance use disorders in children and youth. *Psychological Medicine, 45*(7), 1551–1563.

Essau, C. A., Lewinsohn, P. M., Lim, J. X., Moon-ho, R. H., & Rohde, P. (2018). Incidence, recurrence and comorbidity of anxiety disorders in four major developmental stages. *Journal of Affective Disorders*, *228*, 248–253.

Essau, C. A., Lewinsohn, P. M., Olaya, B., Seeley, J. R. (2014). Anxiety disorders in adolescents and psychosocial outcomes at age 30. *Journal of Affective Disorders, 163,* 125–132.

Fagerland, M. W. (2012). t-tests, non-parametric tests, and large studies—a paradox of statistical practice? *BMC Medical Research Methodology*, *12*(1), 1–7.

Fang, L., & Schinke, S. P. (2013). Two-year outcomes of a randomized, family-based substance use prevention trial for Asian American adolescent girls. *Psychology of Addictive Behaviors,* 27(3), 788–798. doi:10.1037/a0030925

Fang, L., Schinke, S. P., & Cole, K. C. (2010). Preventing substance use among early Asian-American adolescent girls: Initial evaluation of a web-based, mother-daughter program. *Journal of Adolescent Health,* 47(5), 529–532.

Fatima, S., Dawood, S., & Munir, M. (2020). Parenting styles, moral identity and prosocial behaviours in adolescents. *Current Psychology*, 1–9.

Fjermestad, K. W., Nilsen, W., Johannessen, T. D., & Karevold, E. B. (2017). Mothers' and fathers' internalising symptoms influence parental ratings of adolescent anxiety symptoms. *Journal of Family Psychology*, *31*(7), 939.

Ford, T., Goodman, R., & Meltzer, H. (2003). The British child and adolescent mental health survey 1999: the prevalence of DSM-IV disorders. *Journal of the American Academy of Child & Adolescent Psychiatry*, 42(10), 1203–1211.

Galambos, N. L., & Leadbeater, B. J. (2000). Trends in adolescent research for the new millennium. *International Journal of Behavioral Development, 24*(3), 289–294.

Gardner, F., & Leijten, P. (2017). Incredible Years parenting interventions: Current effectiveness research and future directions. *Current opinion in psychology, 15,* 99–104.

George, M. W., Zaheer, I., Kern, L., & Evans, S. W. (2018). Mental health service use among adolescents experiencing emotional/behavioral problems and school impairment. *Journal of Emotional and Behavioral Disorders, 26*(2), 119–128.

Gershoff, E. T., Lansford, J. E., Sexton, H. R., Davis-Kean, P., & Sameroff, A. J. (2012). Longitudinal links between spanking and children's externalising behaviours in a national sample of White, Black, Hispanic, and Asian American families. *Child Development*, *83*(3), 838–843.

Ghubash, R., Hamdi, E., & Bebbington, P. (1992). The Dubai community psychiatric survey: I. Prevalence and socio-demographic correlates. *Social Psychiatry and Psychiatric Epidemiology, 27*(2), 53–61.

Glazebrook, K., Townsend, E., & Sayal, K. (2015). The role of attachment style in predicting repetition of adolescent self-harm: A longitudinal study. *Suicide and Life-Threatening Behavior*, *45*(6), 664–678.

Global Burden of Disease Collaborative Network (2018). *Global Burden of Disease Study 2017 (GBD 2017) Reference Life Table.* Seattle, United States: Institute for Health Metrics and Evaluation (IHME).

Goldbeck, L., Schmitz, T. G., Besier, T., Herschbach, P., Henrich, G., (2007). Life satisfaction decreases during adolescence. *Quality of Life Research, 16*, 969–979.

Goodman, A. & Goodman, R. (2009). Strengths and difficulties questionnaire as a dimensional measure of child mental health. *Journal of the American Academy of Child and Adolescent Psychiatry*, *48*(4), 400–403.

Goodman, R. (1997). The Strengths and Difficulties Questionnaire: a research note. *Journal of Child Psychology and Psychiatry*, *38*(5), 581–586.

Goodman, R. (2001). Psychometric properties of the Strengths and Difficulties Questionnaire. *Journal of the American Academy of Child & Adolescent Psychiatry*, *40*(11), 1337–1345.

Goodman, R., Meltzer, H., & Bailey, V. (1998). The Strengths and Difficulties Questionnaire: A pilot study on the validity of the self-report version. *European Child & Adolescent Psychiatry*, *7*(3), 125–130.

Goodman, A., Lamping, D. L., & Ploubidis, G. B. (2010). When to use broader internalising and externalising subscales instead of the hypothesised five subscales on the Strengths and Difficulties Questionnaire (SDQ): data from British parents, teachers and children. *Journal of Abnormal Child Psychology*, *38*(8), 1179–1191.

Gross, J. J. (2015). Emotion regulation: Current status and future prospects. *Psychological Inquiry*, 26(1), 1–26.

Gulf News (2016). *The State of the UAE's Health.* Retrieved from http://gulfnews.com/gn-focus/special-reports/health/the-state-of-the-uae-s-health-2016-1.1658937

Hannigan, L. J., Pingault, J. B., Krapohl, E., McAdams, T. A., Rijsdijk, F. V., & Eley, T. C. (2018). Genetics of co-developing conduct and emotional problems during childhood and adolescence. *Nature Human Behaviour, 2*(7), 514–521.

Haque, A., & Al Kindi, B. A. (2015). Mental Health System Development in the UAE. In *Mental Health and Psychological Practice in the United Arab Emirates* (pp. 23–34). Palgrave Macmillan US.

Haverfield, M. C., & Theiss, J. A. (2017). Parental communication of responsiveness and control as predictors of adolescents' emotional and behavioral resilience in families with alcoholic versus nonalcoholic parents. *Human Communication Research,* 43(2), 214–236.

Hawton, K., i Comabella, C. C., Haw, C., & Saunders, K. (2013). Risk factors for suicide in individuals with depression: a systematic review. *Journal of affective disorders, 147*(1–3), 17–28.

Hecker, T., Hermenau, K., Salmen, C., Teicher, M., & Elbert, T. (2016). Harsh discipline relates to internalising problems and cognitive functioning: findings from a cross-sectional study with school children in Tanzania. *BMC Psychiatry, 16*(1), 1–9.

Hicks, B. M., DiRago, A. C., Iacono, W. G., & McGue, M. (2009). Gene-environment interplay in internalising disorders: consistent findings across six environmental risk factors. *Journal of Child Psychology and Psychiatry, 50*(10), 1309–1317.

Higgins, J. P., Altman, D. G., Gøtzsche, P. C., Jüni, P., Moher, D., Oxman, A. D., ... & Sterne, J. A. (2011). The Cochrane Collaboration's tool for

assessing risk of bias in randomised trials. *British Medical Journal*, 343, d5928.

Hobza, V., Hamrik, Z., Bucksch, J., & De Clercq, B. (2017). The Family Affluence Scale as an indicator for socioeconomic status: validation on regional income differences in the Czech Republic. *International Journal of Environmental Research and Public Health, 14*(12), 1540.

Hofstra, M. B., Van Der Ende, J. A. N., & Verhulst, F. C. (2001). Adolescents' self-reported problems as predictors of psychopathology in adulthood: 10-year follow-up study. *The British Journal of Psychiatry, 179*(3), 203–209.

Hoosen, N., Davids, E. L., de Vries, P. J., & Shung-King, M. (2018). The Strengths and Difficulties Questionnaire (SDQ) in Africa: a scoping review of its application and validation. *Child and Adolescent Psychiatry and Mental Health, 12*(1), 1–39.

IBM Corporation (2017). *IBM SPSS Statistics for Macintosh, Version 25.0.* Armonk, NY: IBM Corp.

James, S. L., Abate, D., Abate, K. H., Abay, S. M., Abbafati, C., Abbasi, N., ... & Abdollahpour, I. (2018). Global, regional, and national incidence, prevalence, and years lived with disability for 354 diseases and injuries for 195 countries and territories, 1990–2017: a systematic analysis for the Global Burden of Disease Study 2017. *The Lancet, 392*(10159), 1789–1858.

Johnson, D., Dupuis, G., Piche, J., Clayborne, Z., & Colman, I. (2018). Adult mental health outcomes of adolescent depression: a systematic review. *Depression and Anxiety,* 35(8), 700–716.

Johnston, L. D., O'Malley, P. M., Miech, R. A., Bachman, J. G., & Schulenberg, J. E. (2016). Monitoring the Future national survey results on drug use, 1975–2015: Overview, key findings on adolescent drug use. *Institute for social research.*

Karadag, M., & Ogutlu, H. (2021). Prevalence of psychiatric symptoms among refugee adolescents in Turkey: a controlled study. *Brazilian Journal of Psychiatry, 43*(1), 55–60.

Karreman, A., & Vingerhoets, A. J. (2012). Attachment and well-being: The mediating role of emotion regulation and resilience. *Personality and Individual differences, 53*(7), 821–826.

Kehoe, S., & O'Hare, L. (2010). The reliability and validity of the Family Affluence Scale. *Effective Education, 2*(2), 155–164.

Kessler, R. C., Aguilar-Gaxiola, S., Alonso, J., Angermeyer, M. C., Anthony, J. C., Berglund, P. A., ... & Ustun, T. B. (2008). Lifetime prevalence and age of onset distributions of mental disorders in the World Mental Health Survey Initiative. In *The WHO world mental health surveys: Global perspectives on the epidemiology of mental disorders* (pp. 511–521). Cambridge University Press.

Khamis, V. (2015). Bullying among school-age children in the greater Beirut area: Risk and protective factors. *Child Abuse & Neglect, 39,* 137–146.

Khamis, V. (2018). How can gender affect psychopathology in Lebanese school-age children?. *Psychology in the Schools*, *55*(4), 404–418.

Kinyanda, E., Kizza, R., Abbo, C., Ndyanabangi, S., & Levin, J. (2013). Prevalence and risk factors of depression in childhood and adolescence

as seen in 4 districts of north-eastern Uganda. *BMC International Health and Human Rights*, *13*(1), 1–10.

Kinyanda, E., Kizza, R., Levin, J., Ndyanabangi, S., & Abbo, C. (2011). Adolescent suicidality as seen in rural northeastern Uganda. *Crisis*.

Kuhn, C., Aebi, M., Jakobsen, H., Banaschewski, T., Poustka, L., Grimmer, Y., ... & Steinhausen, H. C. (2017). Effective mental health screening in adolescents: should we collect data from youth, parents or both? *Child Psychiatry & Human Development*, *48*(3), 385–392.

Lambert, L. (2008). A counselling model for young women in the United Arab Emirates: Cultural considerations. *Canadian Journal of Counselling*, *42*(2), 101.

Lambert, L., & Pasha-Zaidi, N. (2015). *Made in the UAE: An Indigenous Positive Psychology for the United Arab Emirates.* In Mental Health and Psychological Practice in the United Arab Emirates (pp. 83–91). Palgrave Macmillan US.

Larsen, B., & Luna, B. (2018). Adolescence as a neurobiological critical period for the development of higher-order cognition. *Neuroscience & Biobehavioral Reviews*, *94*, 179–195.

Lenhard, F., Andersson, E., Mataix-Cols, D., Rück, C., Vigerland, S., Högström, J., ... & Serlachius, E. (2017). Therapist-guided, internet-delivered cognitive-behavioral therapy for adolescents with obsessive-compulsive disorder: a randomized controlled trial. *Journal of the American Academy of Child & Adolescent Psychiatry*, *56*(1), 10–19.

Liang, J., Matheson, B. E., & Douglas, J. M. (2016). Mental health diagnostic considerations in racial/ethnic minority youth. *Journal of Child and Family Studies*, *25*(6), 1926–1940.

Ligier, F., Giguère, C. E., Notredame, C. E., Lesage, A., Renaud, J., & Séguin, M. (2020). Are school difficulties an early sign for mental disorder diagnosis and suicide prevention? A comparative study of individuals who died by suicide and control group. *Child and Adolescent Psychiatry and Mental Health*, *14*(1), 1–9.

Lindsay, G., Band, S., Cullen, M.A., & Cullen, S. (2007). *Evaluation of the parent early intervention pathfinder 2nd Interim report. DCSF-RW035.* London: DCSF. (59pp).

Liu, Y., Wang, M., Villberg, J., Torsheim, T., Tynjälä, J., Lv, Y., & Kannas, L. (2012). Reliability and validity of Family Affluence Scale (FAS II) among adolescents in Beijing, China. *Child Indicators Research*, *5*(2), 235–251.

Lorence, B., Hidalgo, V., Pérez-Padilla, J., & Menéndez, S. (2019). The role of parenting styles on behavior problem profiles of adolescents. *International Journal of Environmental Research and Public Health*, *16*(15), 2767.

Marsella, A. (2011). Twelve critical issues for mental health professionals working with ethno-culturally diverse populations. *Psychology International*. Retrieved Feb. 18 from http://www.apa.org/international/pi/2011/10/critical-issues.aspx.

McLeod, G. F. H., Horwood, L. J., & Fergusson, D. M. (2016). Adolescent depression, adult mental health and psychosocial outcomes at 30 and 35 years. *Psychological Medicine, 46*(7), 1401–1412.

Measelle, J. R., Stice, E., & Hogansen, J. M. (2006). Developmental trajectories of co-occurring depressive, eating, antisocial, and substance abuse problems in female adolescents. *Journal of Abnormal Psychology, 115*(3), 524–538.

Merikangas, K. R., He, J. P., Burstein, M., Swanson, S. A., Avenevoli, S., Cui, L., ... & Swendsen, J. (2010). Lifetime prevalence of mental disorders in US adolescents: results from the National Comorbidity Survey Replication–Adolescent Supplement (NCS-A). *Journal of the American Academy of Child & Adolescent Psychiatry*, *49*(10), 980–989.

Merten, E. C., Cwik, J. C., Margraf, J., & Schneider, S. (2017). Overdiagnosis of mental disorders in children and adolescents (in developed countries). *Child and Adolescent Psychiatry and Mental Health*, *11*(1), 1–11.

Mohammadi, M. R., Arman, S., Dastjerdi, J. K., Salmanian, M., Ahmadi, N., Ghanizadeh, A., Alavi, A., Malek, A., Gharibeh, H. F., Moharreri, F., Hebrani, P., & Motavallian, A. (2013). Psychological problems in Iranian adolescents: application of the self-report form of strengths and difficulties questionnaire. *Iranian Journal of Psychiatry*, *8*(4), 152.

Moretti, M. M., & Obsuth, I. (2009). Effectiveness of an attachment-focused manualized intervention for parents of teens at risk for aggressive

behaviour: The Connect Program. *Journal of Adolescence,* 32(6), 1347–1357.

Moretti, M. M., Obsuth, I., Craig, S. G., & Bartolo, T. (2015). An attachment-based intervention for parents of adolescents at risk: mechanisms of change. *Attachment & Human Development, 17*(2), 119–135.

Moretti, M. M., Obsuth, I., Mayseless, O., & Scharf, M. (2012). Shifting internal parent-child representations among caregivers of teens with serious behaviour problems: An attachment-based approach. *Journal of Child and Adolescent Trauma, 5,* 191–204.

Moretti, M. M., Pasalich, D. S., & O'Donnell, K. A., (2017). *Connect: An attachment-based program for parents of teens.* In H. Steele & M. Steele (Eds.), Handbook of attachment-based interventions (1st ed.). New York: Guilford Publications.

Mulhern, B., Mukuria, C., Barkham, M., Knapp, M., Byford, S., & Brazier, J. (2014). Using generic preference-based measures in mental health: psychometric validity of the EQ-5D and SF-6D. *The British Journal of Psychiatry, 205*(3), 236–243.

Nair, S., Ganjiwale, J., Kharod, N., Varma, J., & Nimbalkar, S. M. (2017). Epidemiological survey of mental health in adolescent school children of Gujarat, India. *BMJ Paediatrics Open, 1*(1).

Negriff, S., & Susman, E. J. (2011). Pubertal timing, depression, and externalising problems: A framework, review, and examination of gender differences. *Journal of Research on Adolescence, 21*(3), 717–746.

New World Wealth (2021). *Middle East Wealth Report 2021*. Retrieved from https://issuu.com/newworldwealth/docs/me_2021

O'Brien, D., Harvey, K., Howse, J., Reardon, T., & Creswell, C. (2016). Barriers to managing child and adolescent mental health problems: a systematic review of primary care practitioners' perceptions. *British Journal of General Practice, 66*(651), e693–e707.

Ogundele, M. O. (2018). Behavioural and emotional disorders in childhood: a brief overview for paediatricians. *World Journal of Clinical Pediatrics, 7*(1), 9.

Ortuño-Sierra, J., Fonseca-Pedrero, E., Aritio-Solana, R., Velasco, A. M., de Luis, E. C., Schumann, G., ... & Lawrence, C. (2015). New evidence of factor structure and measurement invariance of the SDQ across five European nations. *European Child & Adolescent Psychiatry*, *24*(12), 1523–1534.

Panda, P. K., Gupta, J., Chowdhury, S. R., Kumar, R., Meena, A. K., Madaan, P., ... & Gulati, S. (2021). Psychological and behavioral impact of lockdown and quarantine measures for COVID-19 pandemic on children, adolescents and caregivers: a systematic review and meta-analysis. *Journal of Tropical Pediatrics*, *67*(1), fmaa122.

Parenting Strategies Program (2013). *How to prevent depression and clinical anxiety in your teenager: Strategies for parents.* Retrieved from https://www.parentingstrategies.net/depression/media/pdf/Guidelines.pdf

Pasalich, D. S., Craig, S. G., Goulter, N., O'Donnell, K. A., Sierra Hernandez, C., & Moretti, M. M. (2021). Patterns and predictors of different youth

responses to attachment-based parent intervention. *Journal of Clinical Child & Adolescent Psychology*, 1–14.

Patalay, P., Fonagy, P., Deighton, J., Belsky, J., Vostanis, P., & Wolpert, M. (2015). A general psychopathology factor in early adolescence. *The British Journal of Psychiatry*, *207*(1), 15–22.

Patton, G. C., Sawyer, S. M., Santelli, J. S., Ross, D. A., Afifi, R., Allen, N. B., ... & Viner, R. M. (2016). Our future: a Lancet commission on adolescent health and wellbeing. *The Lancet*, *387*(10036), 2423–2478.

Perez-Gramaje, A. F., Garcia, O. F., Reyes, M., Serra, E., & Garcia, F. (2020). Parenting styles and aggressive adolescents: Relationships with self-esteem and personal maladjustment. *The European Journal of Psychology Applied to Legal Context*, *12*(1), 1–10.

Philipp, J., Zeiler, M., Waldherr, K., Truttmann, S., Dür, W., Karwautz, A. F., & Wagner, G. (2018). Prevalence of emotional and behavioural problems and subthreshold psychiatric disorders in Austrian adolescents and the need for prevention. *Social Psychiatry and Psychiatric Epidemiology*, *53*(12), 1325–1337.

Pinquart, M. (2016). Associations of parenting styles and dimensions with academic achievement in children and adolescents: A meta-analysis. *Educational Psychology Review*, *28*(3), 475–493.

Ralph, A., & Sanders, M. (2006). The 'Teen Triple P' Positive Parenting Program: A Preliminary Evaluation. *Youth Studies Australia*, *25*(2), 41.

Ravens-Sieberer, U., Wille, N., Erhart, M., Bettge, S., Wittchen, H. U., Rothenberger, A., ... & Döpfner, M. (2008). Prevalence of mental health

problems among children and adolescents in Germany: results of the BELLA study within the National Health Interview and Examination Survey. *European Child & Adolescent Psychiatry, 17*(1), 22–33.

Reardon, T., Harvey, K., Baranowska, M., O'Brien, D., Smith, L., & Creswell, C. (2017). What do parents perceive are the barriers and facilitators to accessing psychological treatment for mental health problems in children and adolescents? A systematic review of qualitative and quantitative studies. *European Child & Adolescent Psychiatry, 26*(6), 623–647.

Reiss, F. (2013). Socioeconomic inequalities and mental health problems in children and adolescents: a systematic review. *Social Science & Medicine*, 90, 24–31.

Rengasamy, M., Mansoor, B. M., Hilton, R., Porta, G., He, J., Emslie, G. J., ... & Brent, D. A. (2013). The bi-directional relationship between parent-child conflict and treatment outcome in treatment-resistant adolescent depression. *Journal of the American Academy of Child & Adolescent Psychiatry, 52*(4), 370–377.

Reuland, M. M., & Teachman, B. A. (2014). Interpretation bias modification for youth and their parents: a novel treatment for early adolescent social anxiety. *Journal of Anxiety Disorders*, *28*(8), 851-864.

Rickwood, D. J., Deane, F. P., & Wilson, C. J. (2007). When and how do young people seek professional help for mental health problems? *Medical Journal of Australia*, *187*(7), S35–S39.

Rizvi, S. F. I., & Najam, N. (2015). Emotional and behavioral problems associated with parenting styles in Pakistani adolescents. *VFAST Transactions on Education and Social Sciences, 3*(1), 200–207.

Rutherford, H. J., Wallace, N. S., Laurent, H. K., & Mayes, L. C. (2015). Emotion Regulation in Parenthood. *Developmental Review, 36*, 1–14.

Saddik, B., Hussein, A., Albanna, A., Elbarazi, I., Al-Shujairi, A., Temsah, M. H., ... & Halwani, R. (2021). The psychological impact of the COVID-19 pandemic on adults and children in the United Arab Emirates: a nationwide cross-sectional study. *BMC Psychiatry, 21*(1), 1–18.

Sahithya, B. R., Manohari, S. M., & Vijaya, R. (2019). Parenting styles and its impact on children—a cross-cultural review with a focus on India. *Mental Health, Religion & Culture*, *22*(4), 357–383.

Sanders, M. R., Kirby, J. N., Tellegen, C. L., & Day, J. J. (2014). The Triple P-Positive Parenting Program: A systematic review and meta-analysis of a multi-level system of parenting support. *Clinical Psychology Review*, *34*(4), 337–357.

Santisteban, D. A., Czaja, S. J., Nair, S. N., Mena, M. P., & Tulloch, A. R. (2017). Computer Informed and Flexible Family-Based Treatment for Adolescents: a Randomized Clinical Trial for at-Risk Racial/Ethnic Minority Adolescents. *Behavior Therapy*, *48*(4), 474–489.

Sawyer, S. M., Azzopardi, P. S., Wickremarathne, D., & Patton, G. C. (2018). The age of adolescence. *The Lancet Child & Adolescent Health,* 2(3), 223–228.

Scholten, W. D., Batelaan, N. M., van Balkom, A. J., Penninx, B. W., Smit, J. H., & van Oppen, P. (2013). Recurrence of anxiety disorders and its predictors. *Journal of Affective Disorders, 147*(1–3), 180-185.

Schwartz, O. S., Byrne, M. L., Simmons, J. G., Whittle, S., Dudgeon, P., Yap, M. B., ... & Allen, N. B. (2014). Parenting during early adolescence and adolescent-onset major depression: A 6-year prospective longitudinal study. *Clinical Psychological Science, 2*(3), 272–286.

Schwinn, T. M., & Schinke, S. P. (2010). Preventing alcohol use among late adolescent urban youth: 6-year results from a computer-based intervention. *Journal of Studies on Alcohol and Drugs, 71*(4), 535–538.

Schwinn, T. M., Schinke, S., Fang, L., & Kandasamy, S. (2014). A web-based, health promotion program for adolescent girls and their mothers who reside in public housing. *Addictive Behaviors, 39*(4), 757-760.

Sheldrick, R. C., Merchant, S., & Perrin, E. C. (2011). Identification of developmental-behavioral problems in primary care: a systematic review. *Pediatrics, 128*(2), 356–363.

Shirtcliff, E. A., & Essex, M. J. (2008). Concurrent and longitudinal associations of basal and diurnal cortisol with mental health symptoms in early adolescence. *Developmental Psychobiology: The Journal of the International Society for Developmental Psychobiology*, *50*(7), 690–703.

Shochet, I. M., Saggers, B. R., Carrington, S. B., Orr, J. A., Wurfl, A. M., & Duncan, B. M. (2019). A strength-focused parenting intervention may be a valuable augmentation to a depression prevention focus for

adolescents with autism. *Journal of Autism and Developmental Disorders,* 49(5), 2080–2100.

Smeekens, C., Stroebe, M. S., & Abakoumkin, G. (2012). The impact of migratory separation from parents on the health of adolescents in the Philippines. *Social Science & Medicine, 75*(12), 2250–2257.

Spence, S. H. (2018). Assessing anxiety disorders in children and adolescents. *Child and Adolescent Mental Health, 23*(3), 266–282.

Stallard, P., Spears, M., Montgomery, A. A., Phillips, R., & Sayal, K. (2013). Self-harm in young adolescents (12–16 years): onset and short-term continuation in a community sample. *BMC Psychiatry, 13*(1), 1–14.

Steca, P., Bassi, M., Caprara, G. V., & Delle Fave, A. (2011). Parents' self-efficacy beliefs and their children's psychosocial adaptation during adolescence. *Journal of Youth and Adolescence*, *40*(3), 320–331.

Stevanovic, D., Bagheri, Z., Atilola, O., Vostanis, P., Stupar, D., Moreira, P., ... & Dodig-Ćurković, K. (2017). Cross-cultural measurement invariance of the Revised Child Anxiety and Depression Scale across 11 world-wide societies. *Epidemiology and Psychiatric Sciences, 26*(4), 430–440.

Stockings, E., Degenhardt, L., Lee, Y. Y., Mihalopoulos, C., Liu, A., Hobbs, M., & Patton, G. (2015). Symptom screening scales for detecting major depressive disorder in children and adolescents: a systematic review and meta-analysis of reliability, validity and diagnostic utility. *Journal of Affective Disorders, 174,* 447–463.

Thabet, A. A., Stretch, D., & Vostanis, P. (2000). Child mental health problems in Arab children: application of the strengths and difficulties questionnaire. *International Journal of Social Psychiatry, 46*(4), 266–280.

Toombs, E., Unruh, A., & McGrath, P. (2018). Evaluating the parent-adolescent communication toolkit: Usability and preliminary content effectiveness of an online intervention. *Nurse Open, 5*(1), 29–36.

Tsai, K. H., López, S., Marvin, S., Zinberg, J., Cannon, T. D., O'Brien, M., & Bearden, C. E. (2015). Perceptions of family criticism and warmth and their link to symptom expression in racially/ethnically diverse adolescents and young adults at clinical high risk for psychosis. *Early Intervention in Psychiatry*, *9*(6), 476–486.

Ullsperger, J. M., & Nikolas, M. A. (2017). A meta-analytic review of the association between pubertal timing and psychopathology in adolescence: Are there sex differences in risk? *Psychological Bulletin*, *143*(9), 903.

United Nations (2015). *United Arab Emirates. Country Profile.* Retrieved from http://data.un.org/CountryProfile.aspx?crName=United%20Arab%20Emirates

United Nations, Department of Economic and Social Affairs, Population Division (2019). *World Population Prospects 2019, Online Edition.* Rev. 1. Retrieved July 28, 2011, from https://population.un.org/wpp/

U.S. Census Bureau. (2018, November). *America's families and living arrangements: 2018: Children (C table series).* Retrieved August 10, 20121, from census.gov/data/tables/2018/demo/families/cps-2018.html

Van Noorden, M.S., Giltay, E.J., Den Hollander-Gijsman, M.E., Van Der Wee, N.J., Van Veen T., Zitman, F.G. (2010). Gender differences in

clinical characteristics in a naturalistic sample of depressive outpatients: the Leiden routine outcome monitoring study. *Journal of Affect Disorders.* 125:116–23.

Vanchindorj, B., Bayartsogt, B., Yerlan, G., Narmandakh, A., Naidansuren, T., Batdelger, S., ... & Lkhagvasuren, N. (2017). Prevalence of emotional and behavioral problems among adolescence and some risk factors in Mongolia. *Asean Journal of Psychiatry, 18*(2), 51–64.

Vygotsky, L. S. (1978). *Mind in Society: The Development of Higher Psychological Processes* (M. Cole, V. John-Steiner, S. Scribner, & E. Souberman, Eds.) Cambridge, MA: Harvard University Press

Wang, J. N., Liu, L., & Wang, L. (2014). Prevalence and associated factors of emotional and behavioural problems in Chinese school adolescents: a cross-sectional survey. *Child: Care, Health and Development, 40*(3), 319–326.

Weems, C. F., Feaster, D. J., Horigian, V. E., & Robbins, M. S. (2011). Parent and child agreement on anxiety disorder symptoms using the DISC predictive scales. *Assessment, 18,* 213–216.

Wehry, A. M., Beesdo-Baum, K., Hennelly, M. M., Connolly, S. D., & Strawn, J. R. (2015). Assessment and treatment of anxiety disorders in children and adolescents. *Current Psychiatry Report, 17*(7), 52.

Wilkinson, A. L., Halpern, C. T., & Herring, A. H. (2016). Directions of the relationship between substance use and depressive symptoms from adolescence to young adulthood. *Addictive Behaviors, 60,* 64–70.

Woerner, W., Fleitlich-Bilyk, B., Martinussen, R., Fletcher, J., Cucchiaro, G., Dalgalarrondo, P., ... & Tannock, R. (2004). The Strengths and

Difficulties Questionnaire overseas: evaluations and applications of the SDQ beyond Europe. *European Child & Adolescent Psychiatry, 13*(2), ii47–ii54.

Wolpert, M., Cheng, H., & Deighton, J. (2014). Measurement Issues: Review of four patient-reported outcome measures: SDQ, RCADS, C/ORS and GBO—their strengths and limitations for clinical use and service evaluation. *Child and Adolescent Mental Health, 20(1),* 63–70.

World Health Organization (2011). *Comprehensive Action Plan: 2013–2020.* Retrieved from https://apps.who.int/iris/bitstream/handle/10665/89966/9789241506021_eng.pdf?sequence=1

World Health Organization (2021). *Adolescent and Young Adults Health.* Retrieved from http://www.who.int/en/news-room/fact-sheets/detail/adolescents-health-risks-and-solutions

Wright, B., Tindall, L., Littlewood, E., Allgar, V., Abeles, P., Trepel, D. & Ali, S. (2018). Computerised cognitive-behavioural therapy for depression in adolescents: feasibility results and 4-month outcomes of a UK randomized controlled trial. *Mental Health Research, 7*(1), 445–462.

Wright, M. O. D., Crawford, E., & Del Castillo, D. (2009). Childhood emotional maltreatment and later psychological distress among college students: The mediating role of maladaptive schemas. *Child Abuse & Neglect*, *33*(1), 59–68.

Yap, M. B. H., & Jorm, A. F. (2015). Parental factors associated with childhood anxiety, depression, and internalising problems: A

systematic review and meta-analysis. *Journal of Affective Disorders*, *175*, 424–440.

Yap, M. B. H., Cardamone-Breen, M. C., Rapee, R. M., Lawrence, K. A., Mackinnon, A. J., Mahtani, S., & Jorm, A. F. (2019). Medium-term effects of a tailored web-based parenting intervention to reduce adolescent risk of depression and anxiety: 12-month findings from a randomized controlled trial. *Journal of Medical Internet Research*, *21*(8), e13628.

Yap, M. B. H., Mahtani, S., Rapee, R. M., Nicolas, C., Lawrence, K. A., Mackinnon, A., & Jorm, A. F. (2018). A tailored web-based intervention to improve parenting risk and protective factors for adolescent depression and anxiety problems: Postintervention findings from a randomized controlled trial. *Journal of Medical Internet Research*, *20*(1).

Yap, M. B., Morgan, A. J., Cairns, K., Jorm, A. F., Hetrick, S. E., & Merry, S. (2016). Parents in prevention: a meta-analysis of randomized controlled trials of parenting interventions to prevent internalising problems in children from birth to age 18. *Clinical Psychology Review*, 50, 138–158.

Youth In Mind (2014). *Scoring the Strengths & Difficulties Questionnaire for age 4–17 or 18+*. Retrieved from https://sdqinfo.org/py/sdqinfo/c0.py

Youth in Mind (2018). *Arabic Strengths and Difficulties Questionnaire.* Retrieved from https://sdqinfo.org/py/sdqinfo/b3.py?language=Arabic

Zahn-Waxler, C., Klimes-Dougan, B., & Slattery, M. J. (2000). Internalising problems of childhood and adolescence: prospects, pitfalls, and progress

in understanding the development of anxiety and depression. *Development and Psychopathology, 12*(3), 443–466.

Zeinali, A., Sharifi, H., Enayati, M., Asgari, P., & Pasha, G. (2011). The mediational pathway among parenting styles, attachment styles and self-regulation with addiction susceptibility of adolescents. *Journal of research in medical sciences: the official journal of Isfahan University of Medical Sciences*, *16*(9), 1105.

Zhao, C., Wang, F., Li, L., Zhou, X., & Hesketh, T. (2017). Long-term impacts of parental migration on Chinese children's psychosocial well-being: mitigating and exacerbating factors. *Social Psychiatry and Psychiatric Epidemiology, 52*(6), 669–677.

Zolezzi, M., Alamri, M., Shaar, S., & Rainkie, D. (2018). Stigma associated with mental illness and its treatment in the Arab culture: A systematic review. *International Journal of Social Psychiatry, 64*(6), 597–609.

Appendix

Appendix A:

Participant Information Sheet for Study One (Original)

جامعة نوتنغهام

المملكة المتحدة – الصين – ماليزيا

معلومات المشارك

قسم الأمراض النفسية وعلم النفس التطبيقي

كلية الطب، كلية العلوم الطبية والصحية

عنوان البحث		**: الصعوبات الوجدانية عند الشباب بالمدارس الإماراتية**
الباحثة		**: آمنة الفلاحي (msxaa83@nottingham.ac.uk)**
الإشراف		**: البروفيسور/ كريس جلازيبروك (cris.glazebrook@nottingham.ac.uk)**
		والدكتور/ دافيد دالي (david.daley@nottingham.ac.uk)
الرقم للإنضباط	المرجعي	**: (سيتم إدخاله عقب إجراء المراجعة الإنضباطية)**

يُعد هذا المُستند بمثابة دعوة للمشاركة في دراسة بحثية عن إنتشار أعراض القلق والإكتئاب عند المراهقين من مواطني دولة الإمارات الإمارات العربية المتحدة. نقدر بعمق عملية مشاركة طفلكم في هذه الدراسة البحثية.
تُعد تلك المشاركة بمثابة مُشاركة تطوعية والتي يُمكن التوقف عن المشاركة فيها في أي وقت دون التسبب في حدوث أي تبعات أو نتائج سلبية. يُسمح لأطفالكم رفض الإجابة على أي أسئلة معينة. فور الإنتهاء من تحرير الإجابات وتقديمها، فإنه من غير المُمكن سحب البيانات وإستعادتها وذلك لأننا لن نقوم بإبقاء أسماء المشاركين مرفقة بالتقارير.

ما هو موضوع المشروع (الدراسة البحثية)؟

تهدف تلك الدراسة إلى مراقبة ورصد أعراض القلق والإكتئاب كما تعمل على تقديم تقييم نحن في غاية الحاجة إليه من أجل أن يتسنى لنا رصد معدلات إنتشار تلك الأعراض.

من سيُطلب منهم المشاركة في هذه الدراسة البحثية وما هو الدافع الكامن وراء ذلك؟

سيُطلب من الطلاب المراهقين المشاركة في الإجابة على التقرير المسحي على أن يتم إجراء الدراسة ذاتها في المدارس الخاصة في امارة دبي, في 3 صفوف دراسية مُختلفة في كل مدرسة (الصف السابع والصف الثامن والصف التاسع). تستند عملية إجراء تلك الدراسة على أن يكون متوسط عدد الطلاب في كل فصل 40 طالبا. سيتابع الطلاب بعد أسبوع من تكملة الاستبيان في اللغة العربية ودلك لمقارنة قوة الاستبيان المطلوب لمراهقين في الامارات.

ما هو الأمر الذي سيُطلب من طفلي القيام به؟

سيتم توجيه أسئلة للطفل وذلك عن نفسه ومشاعره وأفكاره هذا بالإضافة إلى توجيه أسئلة له ذات طبيعة عامة كالسؤال عن عمره والهيكل التركيبي لأسرته.

كيف سيتم إجراء تلك الدراسة البحثية؟

سيتم توزيع الإستبيان على المشاركين قبل حصولهم على فترة الغداء وفي تلك الحالة سنستغرق فترة تتراوح من 10 إلى 15 دقيقة من وقتهم. سيقوم الباحث في غضون تلك الفترة بشرح الدراسة ثم يُطلب من كل طالب القيام بالجواب على الأسئلة الواردة في الإستبيان. سيتم منح الطلاب فرصة بتوجيه الأسئلة بخصوص عناصر الإستبيان إذا أقتضى الأمر ذلك.

هل سيعود البحث بأي منفعة أو مزايا شخصية بالنسبة لي؟

تساعدنا تلك المعلومات المُقدمة من جانبكم في عملية دراسة القلق والإكتئاب بشكل أكثر قربا كما تُساعدنا في تطوير تدخلات وأساليب موجهة صوب وقاية شبابنا ومعالجتهم.

ماذا سيحدث للمعلومات التي سأقوم بتقديمها؟

سيتم الحفاظ على سائر المعلومات والبيانات المُقدمة لنا في سرية تامة فيما بين أعضاء الدراسة البحثية الثلاثة (يُمكنكم الإطلاع على أسماءهم الواردة أعلى الصفحة السابقة). لن يتمكن أي فرد من الوصول إلى تلك المعلومات بخلاف هؤلاء الثلاثة أشخاص أعضاء الدراسة البحثية، كما أنه لن يتم مشاركة تلك المعلومات مع أي فرد آخر بخلاف أعضاء الدراسة البحثية. كما أن سائر تلك المعلومات الشخصية المُقدمة من جانبكم تُعد بمثابة معلومات وبيانات مجهولة المصدر، لأنكم لن تذكروا أسماءكم الشخصية أو لن يتم تحديدكم من خلال المعلومات المقدمة لنا من جانبكم. سيتم الإحتفاظ بسائر تلك المعلومات في خزانة مغلقة داخل مكتبي بالإضافة إلى الإحتفاظ بها على موقع بيانات محمي برمز مرور (رقم سري) على الخادوم الآمن بجامعة نوتنغهام.

ما هو الغرض الكامن وراء الحصول على تلك البيانات؟

سيتم تحرير تلك الدراسة البحثية في جزء من رسالة دكتوراة الباحثة بقسم الأمراض النفسية وعلم النفس التطبيقي، كلية الطب، جامعة نوتنغهام، المملكة المتحدة. قد يتم كذلك الإعلان مستقبلا عن النتائج التي تم التوصل إليها من خلال الدراسة في المجلة الخاضعة لإستعراض الأقران. سيتم تجاهل تحرير سائر بيانات المشاركين في هذا الإعلان. قد يتم مشاركة النتائج المتوصل إليها مع الموظفين في وحدة السيكولوجي (علم النفس) التابعة لوزارة التعليم بدولة الإمارات العربية المتحدة والتي تُعد مسؤولة بدورها في الإنخراط بمسألة الصحة الوجدانية عند الطلاب. إذا كان لديكم أي أسئلة أو إستفسارات، يُرجى عدم التردد في التواصل معنا. يُمكنكم التواصل معنا قبل إجراء المشاركة أو عقب الإنتهاء منها على العنوان الوارد أعلاه.

نشكركم على مشاركتكم

إذا كان لديكم أي إستفسارات أو مشكلات بخصوص تلك الدراسة، يُرجى في المرحلة الأولى الإتصال على مشرف الطالب. حال عدم قيام المشرف بالجواب على إستفساراتكم على نحو مرض، يُرجى كتابة الإستفسار أو المُشكلة وإرسالها لمدير اللجنة الفرعية لعملية إنضباط الأبحاث بقسم الأمراض النفسية وعلم النفس التطبيقي (MS-DPAPEthics@nottingham.ac.uk +44(0)1158232214) والذي سيقوم بدوره بتمرير إستفساراتكم لمدير اللجنة.

Participant Information Sheet for Study One (Translated)

DIVISION OF PSYCHIATRY & APPLIED PSYCHOLOGY

SCHOOL OF MEDICINE, FACULTY OF MEDICINE & HEALTH SCIENCES

Project Title: Emotional difficulties in young people in UAE schools**.**

Researcher: Amna Al Falahi (msxaa83@nottingham.ac.uk)

Supervisors: Professor Cris Glazebrook

(cris.glazebrook@nottingham.ac.uk)

and Dr David Daley (david.daley@nottingham.ac.uk)

Ethics Reference Number: 1099

This is an invitation to take part in a research study about the spread of emotional problems in UAE Nationals adolescents. Your participation would be greatly appreciated.

You do not have to take part. If you do take part, you can stop at any time. It will not affect your school report card. Once you have handed in your completed questionnaire, we can't withdraw you from the study because we won't know which questionnaire is yours. The questionnaire is completely anonymous.

Please take this information home to show your parents.

What is the project about?
This study looks at the sorts of emotional problems young people in the UAE are experiencing. We want to try to find out a bit about how many people have problems so that we can find ways to help.

Who is being asked to take part, and why?
Adolescents aged 13 to 16 years from across three different emirates (Dubai, Sharjah and Ajman) will be asked to answer this survey. We have selected a boys' school and a girls' school from each of the three emirates. You have been asked to take part because you are aged between 13 and 16 years and attend one of the schools in our study.

What I will be asked to do?
You will be asked to complete 3 questionnaires. One will ask about you about yourself, for example, your age and whether you are a boy or a girl. We will also ask a little bit about your family, for example, whether you have siblings. We will not ask your name and we will not know who has completed the questionnaires.

The other 2 questionnaires will ask about your feelings and the things that you do. The questionnaires should take no more than 15 minutes to complete.

How will this study be done?

Amna will come into one of your classes next week to explain the study, check that you are happy to take part and then hand out the questionnaires. Amna will also answer any questions you have about the study. At the end, you will be given a thank you card with a small gift to thank you for your time.

Will the research be of any personal benefit to me?

The information you provide will not help you directly. We hope that the results of the study can be used to help find out what support is needed for young people in UAE schools who have emotional difficulties.

What will happen to the information I provide?

The data from the questionnaires will be stored in a password-protected computer file at the University of Nottingham. Only people in the research team will be able to look at the data.

What will you do with the data?

The findings from the study will be written as part of Amna's PhD thesis within the Division of Psychiatry and Applied Psychology, School of Medicine, the University of Nottingham, UK. The study findings may be published in a journal in the future. A summary of the findings from the group of young people taking part might be shared with the staff in the psychology unit at the U.A.E. Ministry of Education who is involved with the students' emotional wellbeing.

If you have any questions or concerns, please don't hesitate to ask. We can be contacted before and after your participation at the above address.

THANK YOU FOR YOU TAKING PART IN THIS STUDY.

If you have any queries or complaints about this study, please contact the student's supervisor in the first instance. If this does not resolve the query to your satisfaction, please write to the Administrator to the Division of Psychiatry & Applied Psychology's Research Ethics Sub-Committee (MS-DPAPEthics@nottingham.ac.uk, +44 (0)115 8232214) who will pass your query to the Chair of the Committee.

Appendix B:

Opt-Out Slip (Original)

المكرم ولي أمر الطالب : حفظه الله

السلام عليكم ورحمة الله وبركاتة وبعد :

تعتزم جامعة نوتنغهام ببريطانيا القيام بمشاركة بحث حول صعوبات الوجدانية عند البالغين في دولة الامارات

وذلك في يوم / الموافق / /

وقد تم ترشيح ابنكم ضمن الطلاب المشاركين في هذا النشاط ، عليه نأمل موافاتنا بموافقتكم أو عدمها ليتسنى لنا إجراء اللازم .

مدير

المدرسة

رأي ولي الأمر : ☐ موافق ☐ غير موافق

اسم ولي الأمر :

التوقيع :

الباحث :

رقم الجوال

ملاحظة : يجب إعادة هذا الخطاب للمدرسة بعد اطلاع توقيع ولي الأمر .

Opt-Out Slip (Translated in English)

DIVISION OF PSYCHIATRY & APPLIED PSYCHOLOGY

SCHOOL OF MEDICINE, FACULTY OF MEDICINE & HEALTH SCIENCES

Project Title: Emotional difficulties in young people in UAE schools.

Researcher: Amna Al Falahi…(msxaa83@nottingham.ac.uk)

Supervisors: Professor Cris Glazebrook (cris.glazebrook@nottingham.ac.uk) and Dr David Daley (david.daley@nottingham.ac.uk)

Ethics Reference Number: 0199

If you do not want your child to take part in the study, please complete this form and ask your child to return it to their teacher in the envelope provided.

Please exclude my child from this study (tick box) ☐

Name of Child .....

Name of Parent or Guardian .....

Signature: .....

Date .....

Appendix C: Ethics Approval from the UAE's Ministry of Education

Gmail

Amna Al Falahi <amnay.alfalahi@gmail.com>

Proof of Ethical Clearance for the Emotional Difficulties project

Muna Mohammad Janahi <Muna.Janahi@moe.gov.ae> Tue, Mar 6, 2018 at 9:48 AM
To: "Amnay.alfalahi@gmail.com" <Amnay.alfalahi@gmail.com>
Cc: "Dr.Fouzia Mohamed Saeed Badri" <fouzia.badri@moe.gov.ae>

To Whom it May Concern

Dear Amna,

Thank you for submitting the research proposal to the Advisors department at The Ministry of Education. The project titled ***Emotional difficulties in young people in UAE school*** has been reviewed by the Advisors department.

Hereby, we are pleased to inform you that you are granted an Ethical Clearance to do the field visits to some of the public and private schools that were assigned by the Advisors to apply your research study.

We wish you all the best.

Kind Regards.

UNITED ARAB EMIRATES
MINISTRY OF EDUCATION

الإمارات العربية المتحدة
وزارة التربية والتعليم

منى محمد نور جناحي

اداري رئيسي - مستشارو الوزير

Muna Mohammad Janahi

Administrative - Advisors to Minister

TEL : 042176201 : مباشر

Appendix D: University of Nottingham Ethics Approval

University of Nottingham
UK | CHINA | MALAYSIA

DPAP Committee

Date : 14 June 2018

Supervisor: Cristine Glazebrook

Applicant : Anna Al Falahi

Project: 0199 Emotional Difficulties in Young People in UAE Schools

A favourable opinion is given to the above named study on the understanding that the applicants conduct their research as described in the above numbered application. Applicants need to adhere to all conditions under which the ethical approval has been granted and use only materials and documentation that have been approved. If any amendments to the study are required, an amendment should be submitted to the committee for approval. An end of study form will be required once the study is complete.

yours

David Daley

Professor David Daley

Co-Chair of DPAP Ethics Subcommittee

Amanda Griffiths

Professor Amanda Griffiths

Co-Chair of DPAP Ethics Subcommittee

Page 1 of 1

Appendix E:

Research Packet for Study One (Original)

معلومات عامة للمشاركين

اهلا" وسهلا" طلابي الأعزاء، اليوم سوف نسألكم بعض الأسئلة حول معلومات عامة عنكم وعن من تعيشون معهم من خلال استبيانين، سوف نتطرق نسألكم عن مشاعركم وافكاركم التي تراودكم أحيانا"، سيأتي الباعث الأسبوع القادم لكي يسألكم اكثر عن افكاركم ومشاعركم ونود الصراحة التامة اثناء الإجابة، ونحرص السرية التامة مع اجاباتكم ، وأيضا يرجى قراءة الأسئلة جيدا" قبل الإجابة و للعلم لا داعي لكتابة الاسم على ورقتكم ، واذا لديكم أي أسئلة لا تترددوا ابدا" .

الأسئلة الديموغرافية

كم عمرك؟ : _____

هل انت ذكر أم أنثى؟ : _____

هل يعمل والدك؟ : _____

ماذا يعمل والدك؟ : _____

هل تعمل والدتك؟ : _____

ماذا تعمل والدتك؟ : _____

ما هي أعلى شهادة علمية حصل عليها والدك؟

	الشهادة الثانوية أو ما يعادلها
	شهادة أم برنامج تدريبي
	طالب
	حاصل على البكالوريوس
	حاصل على درجة الماجستير
	حاصل على درجة الدكتوراة
	أخرى

ما هي أعلى شهادة علمية حصلت عليها والدتك؟

	الشهادة الثانوية أو ما يعادلها
	شهادة أم برنامج تدريبي
	طالب
	حاصل على البكالوريوس
	حاصل على درجة الماجستير
	حاصل على درجة الدكتوراة
	أخرى

كم عدد الأشخاص الذين يعيشون في منزلك؟ : _____

قم بذكر الأشخاص الذين يعيشون في منزلك : _____

Name: _____ Date: _____

RCADS – Short Version

Please put a circle around the word that shows how often each of these things happen to you. There are no right or wrong answers.

1. I feel sad or empty	Never	Sometimes	Often	Always
2. I worry when I think I have done poorly at something	Never	Sometimes	Often	Always
3. I would feel afraid of being on my own at home	Never	Sometimes	Often	Always
4. Nothing is much fun anymore	Never	Sometimes	Often	Always
5. I worry that something awful will happen to someone in my family	Never	Sometimes	Often	Always
6. I am afraid of being in crowded places (like shopping centers, the movies, buses, busy playgrounds)	Never	Sometimes	Often	Always
7. I worry what other people think of me	Never	Sometimes	Often	Always
8. I have trouble sleeping	Never	Sometimes	Often	Always
9. I feel scared if I have to sleep on my own	Never	Sometimes	Often	Always
10. I have problems with my appetite	Never	Sometimes	Often	Always
11. I suddenly become dizzy or faint when there is no reason for this	Never	Sometimes	Often	Always
12. I have to do some things over and over again (like washing my hands, cleaning or putting things in a certain order)	Never	Sometimes	Often	Always
13. I have no energy for things	Never	Sometimes	Often	Always
14. I suddenly start to tremble or shake when there is no reason for this	Never	Sometimes	Often	Always
15. I cannot think clearly	Never	Sometimes	Often	Always
16. I feel worthless	Never	Sometimes	Often	Always
17. I have to think of special thoughts (like numbers or words) to stop bad things from happening	Never	Sometimes	Often	Always
18. I think about death	Never	Sometimes	Often	Always
19. I feel like I don't want to move	Never	Sometimes	Often	Always
20. I worry that I will suddenly get a scared feeling when there is nothing to be afraid of	Never	Sometimes	Often	Always
21. I am tired a lot	Never	Sometimes	Often	Always
22. I feel afraid that I will make a fool of myself in front of people	Never	Sometimes	Often	Always
23. I have to do some things in just the right way to stop bad things from happening	Never	Sometimes	Often	Always
24. I feel restless	Never	Sometimes	Often	Always
25. I worry that something bad will happen to me	Never	Sometimes	Often	Always

الصف : التاريخ :

المقياس المنقح لقياس القلق النفسي والإكتئاب عند الأطفال ـ نُسخة موجزة

يُرجى وضع دائرة حول الكلمة التي تبين عدد مرات حدوث أي مما يلي بالنسبة لك.
لا يوجد هناك أي إجابات صحيحة أو خاطئة.

1	**أشعر بالحزن أو الفراغ**	**أبداً**	**أحيانا**	**غالبا**	**دائما**
2	تنتابني نوبة من القلق عندما أعتقد بأنني قمت بأمر على نحو غير جيد	أبداً	أحيانا	غالبا	دائما
3	يراودني الشعور بالخوف لكوني بمفردي في المنزل	أبداً	أحيانا	غالبا	دائما
4	لم يعد هناك شئ جدير بالمرح بشأنه	أبداً	أحيانا	غالبا	دائما
5	تنتابني نوبة من القلق خوفا من أن يُصاب أحد أفراد أسرتي بأي مكروه	أبداً	أحيانا	غالبا	دائما
6	أشعر فجأة كما لو أنني غير قادر على التنفس دون أية أسباب لذلك	أبداً	أحيانا	غالبا	دائما
7	لدي مشكلة في الشهية	أبداً	أحيانا	غالبا	دائما
8	دائما ما أقوم بمواصلة التأكد من أنني قمت بفعل أي من الأمور على نحو جيد (مثل غلق الإنارة أو غلق الباب)	أبداً	أحيانا	غالبا	دائما
9	أخاف من وجودي بالأماكن المزدحمة (مثل مراكز التسوق وأدوار السينما والأتوبيسات والملاعب الزدحمة)	أبداً	أحيانا	غالبا	دائما
10	تنتابني نوبة من القلق حيال ما يعتقده الأخرون عني	أبداً	أحيانا	غالبا	دائما
11	لدي صعوبة في النوم	أبداً	أحيانا	غالبا	دائما
12	أشعر بالرعب إذا ما تعين علي النوم بمفردي	أبداً	أحيانا	غالبا	دائما
13	لدي مشكلة في الشهية	أبداً	أحيانا	غالبا	دائما
14	تنتابني على حين غرة نوبة من الدوار أو الإغماء دون أي سبب يُذكر	أبداً	أحيانا	غالبا	دائما
15	أقوم بفعل بعض الأمور تكرارا ومرارا (كغسل يدي أو التنظيف أو وضع الأشياء حسب نظام ترتيبي معين)	أبداً	أحيانا	غالبا	دائما
16	ليس لدي طاقة للقيام بالأشياء	أبداً	أحيانا	غالبا	دائما
17	أبدأ فجأة في الإرتعاش أو الإرتجاف بينما لا يوجد سبب يدعوا لذلك	أبداً	أحيانا	غالبا	دائما
18	لا يُمكنني التفكير بوضوح	أبداً	أحيانا	غالبا	دائما
19	أشعر بأنني عديم القيمة	أبداً	أحيانا	غالبا	دائما
20	أضطر للتفكير في أفكار معينة (مثل الأرقام أو الكلمات) لإيقاف حدوث الأمور السيئة	أبداً	أحيانا	غالبا	دائما
21	أفكر في الموت	أبداً	أحيانا	غالبا	دائما
22	أشعر وكأنني لا أرغب في السير أو التنقل	أبداً	أحيانا	غالبا	دائما
23	أقوم بفعل بعض الأمور على النسق الصحيح فقط لمنع حدوث أي من الأمور السيئة	أبداً	أحيانا	غالبا	دائما
24	لا أشعر بالراحة	أبداً	أحيانا	غالبا	دائما
25	تنتابني نوبة من القلق خوفا من حدوث أمرا سيئا لي	أبداً	أحيانا	غالبا	دائما

أستبيان مواطن القوة والصعوبة SDQ
(11-17سنة)

يرجى الإجابة على كل بند بـ : غير صحيح, صحيح نوعا ما , أو صحيح بالتأكيد بوضع علامة ☑
تحت الإجابة المناسبة . حاول أن تكون دقيقا في إجاباتك. سوف يساعدنا كثيرا إذا أجبت على كل فقرة حتى وان كنت غير متأكد أو ترى أنها غير مناسبة. يرجى أن تكون إجابتك على أساس كيف كانت الأمور بالنسبة لك خلال الستة الأشهر الأخيرة .

☐ ولد ☐ بنت

اسمك:
تاريخ الميلاد/ العمر :
المدرسة :

غير صحيح	صحيح نوعا ما	صحيح بالتأكيد	
☐	☐	☐	أحاول أن أكون لطيفا مع الآخرين. أهتم بمشاعرهم
☐	☐	☐	لا أستطيع أن أبقى ساكنا لفترة طويلة في مكان واحد. غير مستقر. كثير الحركة
☐	☐	☐	كثيرا ما تصيبني آلام في الرأس أو آلام في البطن أو الشعور بالغثيان
☐	☐	☐	أشرك الآخرين فيما يخصني من أشياء {أكل, أقلام, ألعاب .....الخ}
☐	☐	☐	ينتابني غضب شديد. وكثيرا ما أفقد أعصابي
☐	☐	☐	في العادة أحب العزلة. ألعب لوحدي. أبقى مع نفسي معظم الوقت
☐	☐	☐	أنا عادة أفعل ما يطلبه مني الكبار
☐	☐	☐	أقلق كثيرا
☐	☐	☐	أساعد الآخرين إذا ما حدث لأحدهم مكروه
☐	☐	☐	أتململ و أتلوى{أتقلقل وجسدي يتحرك} باستمرار أثناء جلوسي
☐	☐	☐	لدي صديق عزيز واحد أو أكثر
☐	☐	☐	أتعارك كثيرا. أتسلط على الآخرين وأجعلهم ينفذون ما أريد
☐	☐	☐	كثيرا ما أكون غير سعيد, حزين أو سريع البكاء
☐	☐	☐	بشكل عام من هم في سني يحبونني
☐	☐	☐	يتشتت انتباهي بسرعة. أجد صعوبة في التركيز
☐	☐	☐	أنا عصبي في المواقف الجديدة {غير المعتادة}. بسهولة أفقد ثقتي بنفسي
☐	☐	☐	أنا لطيف مع من هم أصغر مني سنا
☐	☐	☐	كثيرا ما يتهمني الآخرون بالكذب أو الخداع
☐	☐	☐	الأطفال الآخرون يسخرون مني أو يتنمرون علي
☐	☐	☐	كثيرا ما أتطوع لمساعدة الآخرين {الوالدين, المدرسين, الأطفال الآخرين}
☐	☐	☐	أفكر قبل أن أتصرف
☐	☐	☐	آخذ أشياء ليست ملكي من البيت أو المدرسة أو من أماكن أخرى
☐	☐	☐	أنسجم بشكل أفضل مع الكبار عنه مع من هم في نفس سني
☐	☐	☐	لدي مخاوف كثيرة . من السهل تخويفي
☐	☐	☐	أكمل العمل الذي أقوم به حتى النهاية . انتباهي جيد

التوقيع..... التاريخ.....

شكرا

الختام

وفي النهاية نود نشكركم لمشاركتكم في هذا الاستبانة، للعلم سيتم تجاهل تحرير سائر بيانات المشاركين في هذا الإعلان. قد يتم مشاركة النتائج المتوصل إليها مع الموظفين في وحدة السيكولوجي (علم النفس) التابعة لوزارة التعليم بدولة الإمارات العربية المتحدة والتي تُعد مسؤولة بدورها في الانخراط بمسألة الصحة الوجدانية عند الطلاب وهذا هو الغرض النهائي لهذا البحث.

إذا كان لديكم أي أسئلة أو استفسارات، يُرجى عدم التردد في التواصل معنا. يُمكنكم التواصل معنا قبل إجراء المشاركة أو عقب الانتهاء منها على العنوان الوارد أعلاه.

نشكركم على مشاركتكم

إذا كان لديكم أي إستفسارات أو مشكلات بخصوص تلك الدراسة، يُرجى في المرحلة الأولى الإتصال على مشرف الطالب. حال عدم قيام المشرف بالجواب على إستفساراتكم على نحو مرض، يُرجى كتابة الإستفسار أو المُشكلة وإرسالها لمدير اللجنة الفرعية لعملية إنضباط الأبحاث بقسم الأمراض النفسية وعلم النفس التطبيقي (MS-DPAPEthics@nottingham.ac.uk +44(0)1158232214) والذي سيقوم بدوره بتمرير إستفساراتكم لمدير اللجنة.

Research Packet for Study One (Translated)

General Instructions to Children

Today you will be asked to answer a few questionnaires, the first will ask you questions about yourself and your family, the second one will ask you about your thoughts and emotions. Next week, there will be two more questionnaires about your thoughts and emotions. Please read the instruction at the beginning of each questionnaire and try to answer the questions as honestly as you can, your answers are confidential, we will not be noting down your name or keeping track of it when we collect your answer. If a question is unclear, please feel free to ask the researcher for clarifications.

Child Assent Form

STUDENT RESEARCH PROJECT ETHICS REVIEW

Division of Psychiatry & Applied Psychology

Project Title: Emotional difficulties in young people in UAE schools.

Researcher: Amna Al Falahi…(msxaa83@nottingham.ac.uk)

Supervisor: Professor Cris Glazebrook (cris.glazebrook@nottingham.ac.uk)

and Dr David Daley (david.daley@nottingham.ac.uk)

Ethics Reference Number: *0199*

- The researcher has explained the study to me.
  YES/NO
- I know I do not have to take part
  YES/NO
- I know I can stop taking part if I wish
  YES/NO

Please tick this box to show that you are happy to take part in this study
☐

Demographic Questions

How old are you?

- ☐ 12 to 13
- ☐ 13 to 14
- ☐ 14 to 15
- ☐ 16 and above

Are you Male? ☐ or Female ☐

Does your father work? Yes ☐ or No☐

What does your father do?

- ☐ Works for the government
- ☐ Has his own business
- ☐ Is an employee at a private company

Does your mother work? Yes ☐ or No☐

What does your mother do?

- ☐ Works for the government
- ☐ Has her own business
- ☐ Is an employee at a private company

What is your father's highest level of education?

- ☐ Secondary school graduate
- ☐ High school graduate
- ☐ College or University graduate
- ☐ Don't know

What is your mother's highest level of education?

- ☐ Secondary school graduate
- ☐ High school graduate
- ☐ College or University graduate
- ☐ Don't know

Who lives in your home?

- ☐ Grandfather
- ☐ Grandmother
- ☐ Mother
- ☐ Father
- ☐ Sister How many?_____
- ☐ Brother How many?_____

Strengths and Difficulties Questionnaire

For each item, please mark the box for Not True, Somewhat True or Certainly True. It would help us if you answered all items as best you can even if you are not absolutely certain or the item seems daft! Please give your answers on the basis of how things have been for you over the last six months.

Your Name ..... Male/Female

Date of Birth.....

	Not True	Somewhat True	Certainly True
I try to be nice to other people. I care about their feelings	☐	☐	☐
I am restless, I cannot stay still for long	☐	☐	☐
I get a lot of headaches, stomach-aches or sickness	☐	☐	☐
I usually share with others (food, games, pens etc.)	☐	☐	☐
I get very angry and often lose my temper	☐	☐	☐
I am usually on my own. I generally play alone or keep to myself	☐	☐	☐
I usually do as I am told	☐	☐	☐
I worry a lot	☐	☐	☐
I am helpful if someone is hurt, upset or feeling ill	☐	☐	☐
I am constantly fidgeting or squirming	☐	☐	☐
I have one good friend or more	☐	☐	☐
I fight a lot. I can make other people do what I want	☐	☐	☐
I am often unhappy, down-hearted or tearful	☐	☐	☐
Other people my age generally like me	☐	☐	☐
I am easily distracted, I find it difficult to concentrate	☐	☐	☐
I am nervous in new situations. I easily lose confidence	☐	☐	☐
I am kind to younger children	☐	☐	☐
I am often accused of lying or cheating	☐	☐	☐
Other children or young people pick on me or bully me	☐	☐	☐
I often volunteer to help others (parents, teachers, children)	☐	☐	☐
I think before I do things	☐	☐	☐
I take things that are not mine from home, school or elsewhere	☐	☐	☐
I get on better with adults than with people my own age	☐	☐	☐
I have many fears, I am easily scared	☐	☐	☐
I finish the work I'm doing. My attention is good	☐	☐	☐

Your signature ..... Today's date .....

Thank you very much for your help

Final Note

Dear Students,

Thank you for your participation in this study on the emotional difficulties of young people in the UAE. We appreciate your help in answering the questionnaires; this is a big contribution to our research.

The goal of this research is to study in-depth the emotional difficulties of youth in order to later on work on developing solutions to address these difficulties. So, for your participation, we would like to offer you a small gift. We hope you accept this gift from us.

THANK YOU FOR YOUR SUPPORT

If you have any queries or complaints about this study, please contact the student's supervisor in the first instance. If this does not resolve the query to your satisfaction, please write to the Administrator to the Division of Psychiatry & Applied Psychology's Research Ethics Sub-Committee (MS-DPAPEthics@nottingham.ac.uk, +44 (0)115 8232214) who will pass your query to the Chair of the Committee.

Appendix F:

Information Sheet for Study Two (Original)

جامعة نوتنغهام

المملكة المتحدة – الصين – ماليزيا

معلومات المشارك

قسم الأمراض النفسية وعلم النفس التطبيقي

كلية الطب، كلية العلوم الطبية والصحية

عنوان البحث	:	**الصعوبات الوجدانية عند الشباب بالمدارس الإماراتية**
الباحثة	:	**آمنة الفلاحي** (msxaa83@nottingham.ac.uk)
الإشراف	:	**البروفيسور/ كريس جلازيبروك** (cris.glazebrook@nottingham.ac.uk) **والدكتور/ دافيد دالي** (david.daley@nottingham.ac.uk)
الرقم المرجعي للإنضباط	:	**(سيتم إدخاله عقب إجراء المراجعة الإنضباطية)**

يُعد هذا المُستند بمثابة دعوة للمشاركة في دراسة بحثية عن إنتشار أعراض القلق والإكتئاب عند المراهقين من مواطني دولة الإمارات العربية المتحدة. نقدر بعمق عملية مشاركة طفلكم في هذه الدراسة البحثية.

تُعد تلك المشاركة بمثابة مُشاركة تطوعية والتي يُمكن التوقف عن المشاركة فيها في أي وقت دون التسبب في حدوث أي تبعات أو نتائج سلبية. يُسمح لأطفالكم رفض الإجابة على أي أسئلة معينة. فور الإنتهاء من تحرير الإجابات وتقديمها، فإنه من غير المُمكن سحب البيانات وإستعادتها وذلك لأننا لن نقوم بإبقاء أسماء المشاركين مرفقة بالتقارير.

ما هو موضوع المشروع (الدراسة البحثية)؟

تهدف تلك الدراسة إلى مراقبة ورصد أعراض القلق والإكتئاب كما تعمل على تقديم تقييم نحن في غاية الحاجة إليه من أجل أن يتسنى لنا رصد معدلات إنتشار تلك الأعراض.

من سيُطلب منهم المشاركة في هذه الدراسة البحثية وما هو الدافع الكامن وراء ذلك؟

سيُطلب من الطلاب المراهقين المشاركة في الإجابة على التقرير المسحي على أن يتم إجراء الدراسة ذاتها في ثلاث إمارات مختلفة وهي دبي والشارقة وعجمان، سيتم إختيار مدرستين في كل إمارة على ان تكون إحداهما للذكور والأخرى للإناث. يبلغ إجمالي المدارس التي سيتم فيها إجراء هذا الدراسة البحثية 6 مدارس على ان يتم إجراء الدراسة في 3 صفوف دراسية مُختلفة في كل مدرسة (الصف السابع والصف الثامن والصف التاسع). تستند عملية إجراء تلك الدراسة على أن يكون متوسط عدد الطلاب في كل فصل 40 طالبا، وبذلك فإنه من المتوقع بأن يصل العدد النهائي من الطلاب المهدوف إخضاعهم لتلك الدراسة البحثية إلى حوالي 720 طالبا.

ما هو الأمر الذي سيُطلب من طفلي القيام به؟

سيتم توجيه أسئلة للطفل وذلك عن نفسه ومشاعره وأفكاره هذا بالإضافة إلى توجيه أسئلة له ذات طبيعة عامة كالسؤال عن عمره والهيكل التركيبي لأسرته.

كيف سيتم إجراء تلك الدراسة البحثية؟

سيتم توزيع الإستبيان على المشاركين قبل حصولهم على فترة الغداء وفي تلك الحالة سنستغرق فترة تتراوح من 10 إلى 15 دقيقة من وقتهم. سيقوم الباحث في غضون تلك الفترة بشرح الدراسة ثم يُطلب من كل طالب القيام بالجواب على الأسئلة الواردة في الإستبيان. سيتم منح الطلاب فرصة بتوجيه الأسئلة بخصوص عناصر الإستبيان إذا أقتضى الأمر ذلك.

هل سيعود البحث بأي منفعة أو مزايا شخصية بالنسبة لي؟

تساعدنا تلك المعلومات المُقدمة من جانبكم في عملية دراسة القلق والإكتئاب بشكل أكثر قربا كما تُساعدنا في تطوير تدخلات وأساليب موجهة صوب وقاية شبابنا ومعالجتهم.

ماذا سيحدث للمعلومات التي سأقوم بتقديمها؟

سيتم الحفاظ على سائر المعلومات والبيانات المُقدمة لنا في سرية تامة فيما بين أعضاء الدراسة البحثية الثلاثة (يُمكنكم الإطلاع على أسماءهم الواردة أعلى الصفحة السابقة). لن يتمكن أي فرد من الوصول إلى تلك المعلومات بخلاف هؤلاء الثلاثة أشخاص أعضاء الدراسة البحثية، كما أنه لن يتم مشاركة تلك المعلومات مع أي فرد آخر بخلاف أعضاء الدراسة البحثية. كما أن سائر تلك المعلومات الشخصية المُقدمة من جانبكم تُعد بمثابة معلومات وبيانات مجهولة المصدر، لأنكم لن تذكروا أسماءكم الشخصية

أو لن يتم تحديدكم من خلال المعلومات المقدمة لنا من جانبكم. سيتم الإحتفاظ بسائر تلك المعلومات في خزانة مغلقة داخل مكتبي بالإضافة إلى الإحتفاظ بها على موقع بيانات محمي برمز مرور (رقم سري) على الخادوم الآمن بجامعة نوتنغهام.

ما هو الغرض الكامن وراء الحصول على تلك البيانات؟

سيتم تحرير تلك الدراسة البحثية في جزء من رسالة دكتوراة الباحثة بقسم الأمراض النفسية وعلم النفس التطبيقي، كلية الطب، جامعة نوتنغهام، المملكة المتحدة. قد يتم كذلك الإعلان مستقبلا عن النتائج التي تم التوصل إليها من خلال الدراسة في المجلة الخاضعة لإستعراض الأقران. سيتم تجاهل تحرير سائر بيانات المشاركين في هذا الإعلان. قد يتم مشاركة النتائج المتوصل إليها مع الموظفين في وحدة السيكولوجي (علم النفس) التابعة لوزارة التعليم بدولة الإمارات العربية المتحدة والتي تُعد مسؤولة بدورها في الإنخراط بمسألة الصحة الوجدانية عند الطلاب.

إذا كان لديكم أي أسئلة أو إستفسارات، يُرجى عدم التردد في التواصل معنا. يُمكنكم التواصل معنا قبل إجراء المشاركة أو عقب الإنتهاء منها على العنوان الوارد أعلاه.

نشكركم على مشاركتكم

إذا كان لديكم أي إستفسارات أو مشكلات بخصوص تلك الدراسة، يُرجى في المرحلة الأولى الإتصال على مشرف الطالب. حال عدم قيام المشرف بالجواب على إستفساراتكم على نحو مرض، يُرجى كتابة الإستفسار أو المُشكلة وإرسالها لمدير اللجنة الفرعية لعملية إنضباط الأبحاث بقسم الأمراض النفسية وعلم النفس التطبيقي (MS-DPAPEthics@nottingham.ac.uk +44(0)1158232214) والذي سيقوم بدوره بتمرير إستفساراتكم لمدير اللجنة.

Information Sheet for Study Two (Original)

PARTICIPANT INFORMATION

Division of Psychiatry & Applied Psychology

School of Medicine, Faculty of Medicine & Health Sciences

Project Title: *Emotional difficulties in young people in UAE schools*

Researcher: Amna Al Falahi…(msxaa83@nottingham.ac.uk)

Supervisor: Professor Cris Glazebrook (cris.glazebrook@nottingham.ac.uk)

and Dr David Daley (david.daley@nottingham.ac.uk)

Ethics Reference Number: 0199

This is an invitation to take part in a research study about the prevalence of anxiety and depression symptoms in UAE Nationals adolescents. The participation of your children would be greatly appreciated.

This is a voluntary participation that can be terminated at any time with no negative consequences. Your children may decline to answer specific questions. Once completed and submitted, the questionnaire it is not possible to withdraw the data because we won't keep the names attached to the reports.

What is the project about?

This study looks at anxiety and depression symptoms and provides a much-needed assessment of prevalence rates.

Who is being asked to take part, and why?

Adolescents from across three different emirates will be asked to answer this survey: Dubai, Sharjah and Ajman, 2 schools in each Emirate, one for boys and one for girls. A total of 6 schools and 3 grades in each school (grade 7, 8 and 9). Based on a 40 student per class average, the final number of students we are aiming to reach is expected to be around 720 students.

What will my child be asked to do?

The child will be asked about himself, his feelings and thoughts along with general information about age, and family composition.

How will this study be done?

This questionnaire will be distributed to the participants before their lunchtime and will take approximately 10 to 15 min of their time. The researcher will explain the study, and then each student will be asked to

fill out the questionnaire. There will be an opportunity to ask questions about the survey items if needed.

Will the research be of any personal benefit to me?

The information you provide will help us study anxiety and depression more closely and assist us in developing preventative and treatment-oriented interventions for our youth.

What will happen to the information I provide?

All information and data that you provide to us are kept confidential to the three members of the research team (see their names at the top of the previous page). Only they have access to it, and it will not be shared with anyone outside of this team. All your information and data are anonymous so that you are not personally named or identifiable from the information you provide us. All your information is kept in a locked cabinet at my office, and on a password-protected database on a secure server at the University of Nottingham.

What will you do with the data?

The study will be written as part of the researcher's PhD thesis within the Division of Psychiatry and Applied Psychology, School of Medicine, the University of Nottingham, UK. The study findings may be published in a peer-reviewed journal in the future. All participants' data will be anonymised in this publication. The findings might be shared with the staff in the psychology unit at the U.A.E. Ministry of Education who is involved with the students' emotional wellbeing.

If you have any questions or concerns, please don't hesitate to ask. We can be contacted before and after your participation at the above address.

THANK YOU FOR YOUR PARTICIPATION

If you have any queries or complaints about this study, please contact the student's supervisor \ the first instance. If this does not resolve the query to your satisfaction, please write to the Administrator to the Division of Psychiatry & Applied Psychology's Research Ethics Sub-Committee (MS-DPAPEthics@nottingham.ac.uk, +44 (0)115 8232214) who will pass your query to the Chair of the Committee.

Appendix G:

Research Packet for Study Two (Original)

معلومات عامة للمشاركين

اهلا" وسهلا" طلابي الأعزاء ،اليوم سوف نسألكم بعض الأسئلة حول معلومات عامة عنكم وعن من تعيشون معهم من خلال استبيانين، سوف نتطرق نسألكم عن مشاعركم وافكاركم التي تراودكم أحيانا"، سيأتي الباعث الأسبوع القادم لكي يسألكم اكثر عن افكاركم ومشاعركم ونود الصراحة التامة اثناء الإجابة، ونحرص السرية التامة مع اجاباتكم ، وأيضا يرجى قراءة الأسئلة جيدا" قبل الإجابة و للعلم لا داعي لكتابة الاسم على ورقتكم ، "واذا لديكم أي أسئلة لا تترددوا ابدا.

الأسئلة الديموغرافية

كم عمرك؟ : _____

هل انت ذكر أم أنثى؟ : _____

هل يعمل والدك؟ : _____

ماذا يعمل والدك؟ : _____

هل تعمل والدتك؟ : _____

ماذا تعمل والدتك؟ : _____

ما هي أعلى شهادة علمية حصل عليها والدك؟

	الشهادة الثانوية أو ما يعادلها
	شهادة أم برنامج تدريبي
	طالب
	حاصل على البكالوريوس
	حاصل على درجة الماجستير
	حاصل على درجة الدكتوراة
	أخرى

ما هي أعلى شهادة علمية حصلت عليها والدتك؟

	الشهادة الثانوية أو ما يعادلها
	شهادة أم برنامج تدريبي
	طالب
	حاصل على البكالوريوس
	حاصل على درجة الماجستير
	حاصل على درجة الدكتوراة
	أخرى

كم عدد الأشخاص الذين يعيشون في منزلك؟ : _____

قم بذكر الأشخاص الذين يعيشون في منزلك : _____

مقياس الثراء العائلي

1. هل تمتلك عائلتك سيارة أو مركبة آلية أخرى؟

0 لا
0 نعم، سيارة واحدة
0 نعم، سيارتين

2. هل لديك غرفة نوم خاصة بك؟

0 لا
0 نعم

3. كم من أجهزة الكمبيوتر (بما في ذلك أجهزة الكمبيوتر المحمولة والأجهزة اللوحية، وليس بما في ذلك الألعاب الالكترونية والهواتف الذكية) تملك عائلتك ؟

0 لا شيء
0 واحد
0 اثنين
0 أكثر من اثنين

4. كم عدد الحمامات (غرفة مع حمام / دش أو كليهما) هناك في منزلك؟
0 لا شيء
0 واحد
0 اثنين
0 أكثر من اثنين

5. هل لدى عائلتك غسالة صحون؟
0 لا
0 نعم
6. كم مرة هل أنت وعائلتك سافرتو خارج دولة الامارات لقضاء عطلة العام الماضي؟
0 أبدا
0 مرة واحدة
0 مرتين
0 أكثر من مرتين

أستبيان مواطن القوة والصعوبة SDQ
(11-17سنة)

يرجى الإجابة على كل بند بـــ : غير صحيح, صحيح نوعا ما , أو صحيح بالتأكيد بوضع علامة ☑
تحت الإجابة المناسبة . حاول أن تكون دقيقا في إجاباتك. سوف يساعدنا كثيرا إذا أجبت على كل فقرة حتى وان كنت غير متأكد أو ترى أنها غير مناسبة. يرجى أن تكون إجابتك على أساس كيف كانت الأمور بالنسبة لك خلال الستة الأشهر الأخيرة .

☐ ولد ☐ بنت

اسمك:
تاريخ الميلاد/ العمر :
المدرسة :

غير صحيح	صحيح نوعا ما	صحيح بالتأكيد	
☐	☐	☐	أحاول أن أكون لطيفا مع الآخرين. أهتم بمشاعرهم
☐	☐	☐	لا أستطيع أن أبقي ساكنا لفترة طويلة في مكان واحد. غير مستقر. كثير الحركة
☐	☐	☐	كثيرا ما تصيبني آلام في الرأس أو آلام في البطن أو الشعور بالغثيان
☐	☐	☐	أشرك الآخرين فيما يخصني من أشياء {أكل, أقلام, ألعاب .....الخ}
☐	☐	☐	ينتابني غضب شديد. وكثيرا ما أفقد أعصابي
☐	☐	☐	في العادة أحب العزلة. ألعب لوحدي. أبقى مع نفسي معظم الوقت
☐	☐	☐	أنا عادة أفعل ما يطلبه مني الكبار
☐	☐	☐	أقلق كثيرا
☐	☐	☐	أساعد الآخرين إذا ما حدث لأحدهم مكروه
☐	☐	☐	أتململ و أتلوى{أتقلقل وجسدي يتحرك} باستمرار أثناء جلوسي
☐	☐	☐	لدي صديق عزيز واحد أو أكثر
☐	☐	☐	أتعارك كثيرا. أتسلط على الآخرين وأجعلهم ينفذون ما أريد
☐	☐	☐	كثيرا ما أكون غير سعيد, حزين أو سريع البكاء
☐	☐	☐	بشكل عام من هم في سني يحبونني
☐	☐	☐	يتشتت انتباهي بسرعة. أجد صعوبة في التركيز
☐	☐	☐	أنا عصبي في المواقف الجديدة {غير المعتادة}. بسهولة أفقد ثقتي بنفسي
☐	☐	☐	أنا لطيف مع من هم أصغر مني سنا
☐	☐	☐	كثيرا ما يتهمني الآخرون بالكذب أو الخداع
☐	☐	☐	الأطفال الآخرون يسخرون مني أو يتنمرون علي
☐	☐	☐	كثيرا ما أتطوع لمساعدة الآخرين {الوالدين, المدرسين, الأطفال الآخرين}
☐	☐	☐	أفكر قبل أن أتصرف
☐	☐	☐	آخذ أشياء ليست ملكي من البيت أو المدرسة أو من أماكن أخرى
☐	☐	☐	أنسجم بشكل أفضل مع الكبار عنه مع من هم في نفس سني
☐	☐	☐	لدي مخاوف كثيرة . من السهل تخويفي
☐	☐	☐	أكمل العمل الذي أقوم به حتى النهاية . انتباهي جيد

التوقيع..... التاريخ.....

شكرا

الختام

وفي النهاية نود نشكركم لمشاركتكم في هذا الاستبانة، للعلم سيتم تجاهل تحرير سائر بيانات المشاركين في هذا الإعلان. قد يتم مشاركة النتائج المتوصل إليها مع الموظفين في وحدة السيكولوجي (علم النفس) التابعة لوزارة التعليم بدولة الإمارات العربية المتحدة والتي تُعد مسؤولة بدورها في الانخراط بمسألة الصحة الوجدانية عند الطلاب وهذا هو الغرض النهائي لهذا البحث.

إذا كان لديكم أي أسئلة أو استفسارات، يُرجى عدم التردد في التواصل معنا. يُمكنكم التواصل معنا قبل إجراء المشاركة أو عقب الانتهاء منها على العنوان الوارد أعلاه.

نشكركم على مشاركتكم

إذا كان لديكم أي إستفسارات أو مشكلات بخصوص تلك الدراسة، يُرجى في المرحلة الأولى الإتصال على مشرف الطالب. حال عدم قيام المشرف بالجواب على إستفساراتكم على نحو مرض، يُرجى كتابة الإستفسار أو المُشكلة وإرسالها لمدير اللجنة الفرعية لعملية إنضباط الأبحاث بقسم الأمراض النفسية وعلم النفس التطبيقي والذي سيقوم بدوره بتمرير (MS-DPAPEthics@nottingham.ac.uk +44(0)1158232214) إستفساراتكم لمدير اللجنة.

Research Packet for Study Two (Translated)

General Instructions to Children

Today you will be asked to answer three questionnaires, the first will ask you questions about yourself and your family, the second one will ask you about your living situation and objects you and your family own. The last questionnaire will ask you about your thoughts and emotions. Please read the instruction at the beginning of each questionnaire and try to answer the questions as honestly as you can, your answers are confidential, we will not be noting down your name or keeping track of it when we collect your answer. If a question is unclear, please feel free to ask the researcher for clarifications.

Demographic Questions

How old are you?

- ☐ 12 to 13
- ☐ 13 to 14
- ☐ 14 to 15
- ☐ 16 and above

Are you Male? ☐ or Female ☐

Does your father work? Yes ☐ or No☐

What does your father do?

- ☐ Works for the government
- ☐ Has his own business
- ☐ Is an employee at a private company

Does your mother work? Yes ☐ or No☐

What does your mother do?

- ☐ Works for the government
- ☐ Has her own business
- ☐ Is an employee at a private company

What is your father's highest level of education?

- ☐ Secondary school graduate
- ☐ High school graduate
- ☐ College or University graduate
- ☐ Don't know

What is your mother's highest level of education?

- ☐ Secondary school graduate
- ☐ High school graduate
- ☐ College or University graduate
- ☐ Don't know

Who lives in your home?

- ☐ Grandfather
- ☐ Grandmother
- ☐ Mother
- ☐ Father
- ☐ Sister How many? _____
- ☐ Brother How many?_____

Family Affluence Scale

1. Does your family own a car or another motorised vehicle?
   - ☐ No
   - ☐ Yes, one car
   - ☐ Yes, two cars

2. Do you have your own bedroom?
   - ☐ No
   - ☐ Yes

3. How many computers (including laptops and tablets, not including game consoles and smartphones) does your family own?
   - ☐ None
   - ☐ One
   - ☐ Two
   - ☐ More than two

4. How many bathrooms (room with a bath/shower or both) are there in your home?
   - ☐ None
   - ☐ One
   - ☐ Two
   - ☐ More than two

5. Does your family have a dishwasher?
   - ☐ No
   - ☐ Yes

6. How many times did you and your family travel out of the U.A.E. for holiday/vacation last year?
   - ☐ Never
   - ☐ Once
   - ☐ Twice
   - ☐ More than twice

7. Does your family own a smartphone?
   - ☐ None
   - ☐ One
   - ☐ Two
   - ☐ More than two

Strengths and Difficulties Questionnaire S 11-17

For each item, please mark the box for Not True, Somewhat True or Certainly True. It would help us if you answered all items as best you can even if you are not absolutely certain . Please give your answers on the basis of how things have been for you over the last six months.

Your name..... Male/Female

Date of birth.....

	Not True	Somewhat True	Certainly True
I try to be nice to other people. I care about their feelings	☐	☐	☐
I am restless, I cannot stay still for long	☐	☐	☐
I get a lot of headaches, stomach-aches or sickness	☐	☐	☐
I usually share with others, for example CD's, games, food	☐	☐	☐
I get very angry and often lose my temper	☐	☐	☐
I would rather be alone than with people of my age	☐	☐	☐
I usually do as I am told	☐	☐	☐
I worry a lot	☐	☐	☐
I am helpful if someone is hurt, upset or feeling ill	☐	☐	☐
I am constantly fidgeting or squirming	☐	☐	☐
I have one good friend or more	☐	☐	☐
I fight a lot. I can make other people do what I want	☐	☐	☐
I am often unhappy, depressed or tearful	☐	☐	☐
Other people my age generally like me	☐	☐	☐
I am easily distracted, I find it difficult to concentrate	☐	☐	☐
I am nervous in new situations. I easily lose confidence	☐	☐	☐
I am kind to younger children	☐	☐	☐
I am often accused of lying or cheating	☐	☐	☐
Other children or young people pick on me or bully me	☐	☐	☐
I often offer to help others (parents, teachers, children)	☐	☐	☐
I think before I do things	☐	☐	☐
I take things that are not mine from home, school or elsewhere	☐	☐	☐
I get along better with adults than with people my own age	☐	☐	☐
I have many fears, I am easily scared	☐	☐	☐
I finish the work I'm doing. My attention is good	☐	☐	☐

Your Signature .....

Today's Date .....

Thank you very much for your help

Final Note

Dear Students,

Thank you for your participation in this study on emotional difficulties of young people in the UAE. We appreciate your help in answering the questionnaires; this is a big contribution to our research.

The goal of this research is to study in-depth the emotional difficulties of youth in order to later on work on developing solutions to address these difficulties. So, for your participation, we would like to offer you a small gift. We hope you accept this gift from us.

THANK YOU FOR YOUR SUPPORT

If you have any queries or complaints about this study, please contact the student's supervisor in the first instance. If this does not resolve the query to your satisfaction, please write to the Administrator to the Division of Psychiatry & Applied Psychology's Research Ethics Sub-Committee (MS-DPAPEthics@nottingham.ac.uk, +44 (0)115 8232214) who will pass your query to the Chair of the Committee.

Appendix H: Ethics Review Application Form

Division of Psychiatry & Applied Psychology (DPAP)

School of Medicine, Faculty of Medicine & Health Sciences

STUDENT RESEARCH PROJECT ETHICS REVIEW

APPLICATION FORM

The University of Nottingham's *Code of Research Conduct and Research Ethics* (2016) underpins the University's commitment to maintaining the highest standards of integrity, rigour and excellence in all aspects of its research and for all research to be conducted according to the appropriate ethical, legal and professional standards. This is consistent with the national framework published by Universities UK, *The Concordat to Support Research Integrity* (2012). Ethical review and approval is required for all projects where the research involves human participants.

The Division of Psychiatry & Applied Psychology's Research Ethics Sub-Committee is authorised by the Faculty of Medicine & Health Sciences Research Ethics Committee to approve certain types of projects for PGR, PGT and UG (BMedSci) students. Submission of this form by the supervisor (principal investigator) is the first step in that process.

For guidance about completing this form please read carefully the accompanying ETHICS REVIEW—GUIDANCE FOR STUDENTS AND SUPERVISORS. Ensure you are using the most up to date version: this is available on the DPAP Research Ethics webpage.

PROJECT TITLE: *Emotional difficulties in young people in UAE schools.*

SECTION 1: THE STUDENT

CO-INVESTIGATOR (STUDENT)	Amna Al Falahi
STUDENT ID NUMBER	4299909
EMAIL ADDRESS	msxaa83@exmail.nottingham.ac.uk
COURSE/PROGRAMME	PhD Clinical Psychology
DATES OF COURSE/PROGRAMME	2017-2020
PROPOSED RESEARCH PROJECT START	01/04/2018
PROPOSED RESEARCH PROJECT HAND-IN	01/11/2018
DATE OF ETHICS SUBMISSION	23/02/2018

SECTION 2: TYPE OF STUDY

Does your study involve?	Yes	No
1. National Health Service (NHS), National Offender Management Service (NOMS) patients, staff, premises, data or records, and Care Homes	☐	☒
2. Vulnerable populations and/or sensitive topics	☒	☐

If you have selected 'yes' for option 1 above please see ETHICS REVIEW—GUIDANCE FOR STUDENTS AND SUPERVISORS about ethical review procedures for these types of study. The DPAP Ethics Committee is not authorised to review these projects. For all other projects, carry on with this form.

Please tick below the description/s that best fits the proposed study. Multi-method studies may require more than one choice.

1	Literature review or meta-analysis only (no data collection)	☐
2	Secondary analysis of anonymised dataset with existing ethical or organisational approval	☐
3	Secondary analysis of patient identifiable dataset with existing ethical approval	☐
4	Study using data from a study that is underway and has already been granted ethical approval or an application for approval has been submitted to an appropriate Research Ethics Committee (e.g. NRES, SRC)	☐
5	Document analyses (e.g. of policy documents)	☐

If you have only ticked boxes in numbers 1–5 above (and none in boxes 6–12 below), the study will not require ethical review from the DPAPP Ethics Committee. Please go to Sections 3 (to outline the study very briefly) and 9 (explain why review is not required).

6	Study to be conducted/data to be collected outside the UK	☒
7	Internet-mediated research	☐
8	Participant contact study in an organisation (other than National Health Service, National Offender Management Service patients, staff, premises, data or records, and Care Homes) involving questionnaires, interviews, focus groups or observations	☒

9	Participant contact study in an organisation (other than National Health Service National Offender Management Service patients, staff, premises, data or records, and Care Homes) using methods other than in 8 above (e.g. fMRI, EEG)	☐
10	Ecological/observational study in a non-private location	☐
11	Health Needs Assessment using routinely collected data	☐
12	Other (give details) *Click here to enter text.*	☐

SECTION 3: OUTLINE OF STUDY

Project Title: *Emotional difficulties in young people in UAE schools*

Outline of study:

Anxiety and depression are debilitating mental health problems that often start during adolescence (Werner-Seidler, et al.,2017). In numerous studies, prevalence rates were reported around 20% (Costello, Mustillo, Erkanli, Keeler, and Angold, 2003; Merry et al., 2011). Adolescent anxiety and depression ha a significant and well-researched negative impact on the development of youth (W. K. Silverman and A. P. Field, 2011, p.349). Both depression and anxiety tend to have chronic and recurring course once the severity reaches the level of a disorder (Garber and Weersing, 2010; Scholten et al., 2013). A report by the World Health Organization (2011) indicated that by year 2020 mental health issues in children would reach epidemic proportions.

In the U.A.E. mental health has traditionally been considered taboo and research in this area neglected (Al-Darmaki, Yaaqeib, 2015). Between the years 1989 and 2008 only about 192 studies on mental health were published in the entire G.C.C. these studies indicated a high prevalence of depressive and anxiety disorders (Ghubash, Hamdi & Bebbington, 1992; Abou-Saleh, Ghubash & Daradkeh, 2001; Daradkeh, Eapen & Ghubash, 2005).

However, recent government policies have begun to encourage more research on mental health for the development of prevention and treatment programs. A few attempts have been made in the country to study adolescents' mental health. In 2004 a study undertaken by Eapen, Al-Sabosy, Saeed, and Sabri in primary care settings in the Al Ain District (UAE) showed a prevalence rate of 43% of mental illness among children. In 2012 the percentage of visits to child psychiatry clinics and Government Hospitals indicated ADHD/ADD/Disruptive behaviours at a rate of 49%. Furthermore, a 2013 study from twelve SEHA Hospitals in the U.A.E. reported 1,301 cases of ADHD. Finally in 2016 reports suggested that one out of five teenagers in Dubai suffered from anxiety and depression, and 7% of children suffered from learning disorders which is more than the double of the rate of 3% in UK and (The National, Abu Dhabi, 17 July, 2016).

Aims and Objectives

Even though there is an increase in reported rates of anxiety and mental illnesses in adolescents, very little research has been done so far. This study would provide a much-needed assessment of prevalence rates of anxiety and depression along with an assessment of related key factors such as gender, family SES, parental education levels, parental occupation, and family composition (divorce, number of wives, number of children).

Method

Study Design

To study emotional difficulties of young people in the U.A.E. a cross-sectional survey design is selected.

Participants

Participants in this study will be children aged 13-16 years (male and female) attending public schools in UAE. For the sample to be representative of the U.A.E. national population three main emirates with the largest populations will be selected: Dubai, Sharjah and Ajman. The measures and procedure will be piloted in a mixed sex private school. For the main prevalence study a minimum of 2 schools in each Emirate, one for boys and one for girls will be selected at random. A total of 6 schools and 3 grades in each school (grade 7, 8 and 9). Based on a 40 student per class average. The final sample size is expected to be around 720 students. Assuming 20% prevalence of possible or probable emotional difficulties as assessed by SDQ (Goodman & Goodman, 2011) a minimum sample of 246 participants is needed (5% confidence intervals)

Measures

Revised Children's Anxiety and Depression Scale (RCADS).

The measure selected to assess anxiety and depression is the Revised Children's Anxiety and Depression Scale (RCADS), short version. It is a well-established measure in the literature on children and adolescent mental health.

The self-report is made up of 25 items that measure the frequency of symptoms of anxiety and depression and total anxiety and depression. Items are rated on a 4-point Likert-scale from 0 ("never") to 3 ("always").

The measure has good reliability (Chorpita et al., 2005) and the internal consistency was found to be good, it ranged between .78 and .88. One week test-retest coefficients were also good (Chorpita et al. 2000). RCADS has a good concurrent validity with Children's Depression Inventory and with the Revised Children's Manifest Anxiety Scale (Chorpita et al., 2005). Finally, the measure has good discriminant validity, and all correlations with oppositional behaviours were non-significant (Chorpita et al., 2005).

The RCADS will be translated to Arabic and back translated into English. The measure will also be piloted in a small sample of bilingual Arabic / English adolescents.

The Strengths and Difficulties Questionnaire (SDQ).

The measure selected to assess psychopathological behavioural and emotional symptoms is The Strengths and Difficulties Questionnaire (SDQ) the Arabic version, it is a brief widely used screening questionnaire (Goodman, July 1997).

The self-report is made up of 25 items that assess emotional problems, conduct problems, hyperactivity or inattention, peer relationship problems and prosocial behaviour (Goodman, July 1997). Items are rates as not true, somewhat true and certainly true.

The concurrent validity was found to be good (Muris, Meesters & van den Berg, 2003) and so was the discriminant validity (Lundh, Wangby-Lundh & Bjarehed). The test-retest reliability was moderate (Yao et al., 2009).

Demographic Data and Social Economic Status.

Basic demographic data will be noted along with parental education levels, occupation and family composition. To get a good idea about the social economic status, the Family affluence Scale will be used.

Family Affluence Scale (FAS): version used in Czech Republic

This scale is a valid commonly used tool in applied research to identify the social economic status of children and adolescents (Kehoe and O-Hare, 2010). One of it's strength is that it's a measure the student themselves can answer.

The measure consists of 6 items to which the answer is no, yes, one, two, three. Based on the responses of the participants a total score is computed and higher scores are indicative of more wealth (range is 0 to 9) (Boyce et al., 2006). The reliability and validity are good (Hobza et al., 2017).

Procedure

Head Teachers of the selected schools will be sent a letter explaining the study and that the project has approval from Ministry of Education. The researcher will send copies of the participant information and parent consent form in an envelope to be signed and returned to the schools. Children in the targeted classes will take the information home to parents.

One week after the participant information and consent has been sent home, the researcher will attend the school on the agreed days. Children in the targeted classes will be informed about the study and explained that their responses will be anonymous and confidential and that

the study is to look at levels of difficulties in the class as a whole rather than individuals. They will also be informed that they do not have to take part and that they can withdraw at any time before they have completed and returned their questionnaire. After their questionnaire has been collected it will not be possible to withdraw their data and the questionnaires are anonymous.

Administration of the questionnaires (Arabic SDQ, Arabic RCADS-short version and Arabic demographic questionnaire) will take place at the beginning of a lesson and should take no more than 20 minutes. Children who do not wish to take part will be given an alternative activity. Questionnaires will be collected from each class in a sealed envelope labelled only with school name and class section. Number of children absent will also be recorded.

A pilot study will be conducted, prior to the main study, in one mixed sex private UAE school where children are educated in English. The Method will be as for the main study with exception that young people will complete the questionnaires twice one week apart.

Young people aged 13 to 16 (target n>20) who can read Arabic and English will be randomized to complete the English or the Arabic version of the RCADS first. The results of the pilot will be used to establish the preliminary reliability and acceptability of the Arabic version of the RCADS.

Analysis

Data will be analysed used SPSS. For pilot study data kappa will be used to look at the agreement for caseness (i.e. scoring above the cut-offs for clinical concern) between the SDQ and the RCADS in the 2 versions. Internal consistency will be compared and items and scores for the two groups compared across item scores, subscale scores and total scores.

For the main study descriptive scores will be analysed and the prevalence of possible clinical disorder calculated. Finally factors (e.g. gender, age, parent education) influencing emotional difficulties will be explored.

Clinical Implication

Identifying the prevalence rates of anxiety and depression symptoms in adolescents will provide necessary information about common emotional and behavioural difficulties and their co-morbidities. It will elucidate the need for the development of prevention and or treatment approaches to help alleviate anxiety and depression symptoms in the U.A.E. youth population.

References

Abou-Saleh, M. T., Ghubash, R., & Daradkeh, T. K. (2001). Al Ain community psychiatric survey. I. Prevalence and socio-demographic correlates. *Social psychiatry and psychiatric epidemiology*, *36*(1), 20-28.

Al-Darmaki, F. R., & Yaaqeib, S. I. (2015). Psychology and mental health services in the United Arab Emirates. *Psychol Int Newsl*, *2015*, 1-6.

American Psychiatric Association **(**1994**)** *Diagnostic and Statistical Manual of Mental Disorders* (4th edn). Washington, DC: APA.

Boyce, W., Torsheim, T., Currie, C., & Zambon, A. (2006). The family affluence scale as a measure of national wealth: validation of an adolescent self-report measure. *Social indicators research*, *78*(3), 473-487.

Costello, E. J., Mustillo, S., Erkanli, A., Keeler, G., & Angold, A. (2003). Prevalence and development of psychiatric disorders in childhood and adolescence Arch Gen Psychiatry 60 (8): 837–844. *Find this article online*.

Chorpita, B. F., Yim, L. M., Moffitt, C. E., Umemoto L. A., & Francis, S. E. (2000). Assessment of symptoms of DSM-IV anxiety and depression in children: A Revised Child Anxiety and Depression Scale. *Behaviour Research and Therapy, 38*, 835-855.

Chorpita, B. F., Moffitt, C., & Gray, J. (2005). Psychometric properties of the Revised Child Anxiety and Depression Scale in a clinical sample. *Behaviour Research and Therapy, 43*, 309-322.

Daradkeh, T. K., Eapen, V., & Ghubash, R. (2005). Mental morbidity in primary care in Al Ain (UAE): application of the Arabic translation of the PRIME-MD (PHQ) version. *German Journal of Psychiatry*, *8*(3), 32-35.

Eapen, V., Al-Sabosy, M., Saeed, M., & Sabri, S. (2004). Child psychiatric disorders in a primary care Arab population. *International Journal of Psychiatry in Medicine*, *34*(1), 51-60

Garber, J., & Weersing, V. R. (2010). Comorbidity of anxiety and depression in youth: Implications for treatment and prevention. *Clinical Psychology: Science and Practice*, *17*(4), 293-306.

Ghubash, R., Hamdi, E., & Bebbington, P. (1992). The Dubai community psychiatric survey: I. Prevalence and socio-demographic correlates. *Social psychiatry and psychiatric epidemiology*, *27*(2), 53-61.

Goodman, R. (July 1997). "The Strengths and Difficulties Questionnaire: a research note". *Journal of Child Psychology and Psychiatry, and Allied Disciplines*. **38** (5): 581–6.

Goodman, Anna; Goodman, Robert (January 2011). "Population mean scores predict child mental disorder rates: validating SDQ prevalence estimators in Britain". *Journal of Child Psychology and Psychiatry, and Allied Disciplines*. **52** (1): 100–8.

Hobza, V., Hamrik, Z., Bucksch, J., & De Clercq, B. (2017). The Family Affluence Scale as an indicator for socioeconomic status: validation on regional income differences in the Czech Republic. *International journal of environmental research and public health*, *14*(12), 1540.

Kehoe, S., & O'Hare, L. (2010). The reliability and validity of the Family Affluence Scale. *Effective Education*, *2*(2), 155-164.

Lundh, L.G., Wangby-Lundh, M., & Bjarehed, J. (2008). Self reported emotional and behavioral problems in Swedish 14 to 15-year-old adolescents: A study with the self-report version of the Strengths and Difficulties Questionnaire. *Scandinavian Journal of Psychology, 49,* 523–532.

Merry, S., McDowell, H., Hetrick, S., Bir, J., & Muller, N. (2004). Psychological and/or educational interventions for the prevention of depression in children and adolescents. *Cochrane Database Syst Rev*, *1*(1).

Muris, P., Meesters, C., & van den Berg, F. (2003). The strengths and difficulties questionnaire (SDQ*). European child & adolescent psychiatry, 12* (1), 1-8.Chicago

Scholten, W. D., Batelaan, N. M., van Balkom, A. J., Penninx, B. W., Smit, J. H., & van Oppen, P. (2013). Recurrence of anxiety disorders and its predictors. *Journal of affective disorders*, *147*(1), 180-185.

W. K. Silverman and A. P. Field. (2011) *Anxiety Disorders in Children and Adolescents*, (2nd edn) Published by Cambridge University Press

Inhorn, M., Aw, T-C., & Blair, I. (2010). *Global health and the UAE: Asia-Middle East connection*, New York, NY: Sage.

Valsemma, E., Al-Sabosy, M., Saeed, M. Sabri, S. (2004). Child psychiatric disorders in a primary care Arab population. *Journal of Psychiatric Medicine. 34* (1), 51-60.

Werner-Seidler, A., Perry, Y., Calear, A. L., Newby, J. M., & Christensen, H. (2017). School-based depression and anxiety prevention programs for young people: A systematic review and meta-analysis. *Clinical psychology review*, *51*, 30-47.

World Health Organization (2011). Mental health atlas: 2011. Retrieved from http://www.who.int/mental_health/evidence/atlas/profiles/are_mh_profile.pdf

Yao, S., Zhang, C., Zhu, X., Jing, X., McWhinnie, C. M., & Abela, J. R. Z. (2009). Measuring Adolescent Psychopathology: Psychometric Properties of the Self-Report Strengths and Difficulties Questionnaire in a sample of Chinese adolescents. *Journal of Adolescent Health, 45*, 55–62.

SECTION 3: OUTLINE OF STUDY

Project Title: *Emotional difficulties in young people in UAE schools*

Outline of study:

Anxiety and depression are debilitating mental health problems that often start during adolescence (Werner-Seidler, et al.,2017). In numerous studies prevalence rates were reported around 20% (Costello, Mustillo, Erkanli, Keeler, and Angold, 2003;Merry e al., 2011). Adolescent anxiety and depression has a significant and well-researched nega impact on the development of youth (W. K. Silverman and A. P. Field, 2011, p.349). Bot depression and anxiety tend to have chronic and recurring course once the severity reac the level of a disorder (Garber and Weersing, 2010; Scholten et al., 2013). A report by t World Health Organization (2011) indicated that by year 2020 mental health issues in children would reach epidemic proportions.

In the U.A.E. mental health has traditionally been considered taboo and research this area neglected (Al-Darmaki, Yaaqeib, 2015). Between the years 1989 and 2008 only about 192 studies on mental health were published in the entire G.C.C. these studies indicated a high prevalence of depressive and anxiety disorders (Ghubash, Hamdi & Bebbington, 1992; Abou-Saleh, Ghubash & Daradkeh, 2001; Daradkeh, Eapen & Ghubas 2005).

However, recent government policies have begun to encourage more research on mental health for the development of prevention and treatment programs. A few attemp have been made in the country to study adolescents' mental health. In 2004 a study undertaken by Eapen, Al-Sabosy, Saeed, and Sabri in primary care settings in the Al Ain District (UAE) showed a prevalence rate of 43% of mental illness among children. In 201 the percentage of visits to child psychiatry clinics and Government Hospitals indicated ADHD/ADD/Disruptive behaviors at a rate of 49%. Furthermore, a 2013 study from twel SEHA Hospitals in the U.A.E. reported 1,301 cases of ADHD. Finally in 2016 reports suggested that one out of five teenagers in Dubai suffered from anxiety and depression, 7% of children suffered from learning disorders which is more than the double of the rat 3% in UK and (The National, Abu Dhabi, 17 July, 2016).

Aims and Objectives

Even though there is an increase in reported rates of anxiety and mental illness adolescents, very little research has been done so far. This study would provide a m needed assessment of prevalence rates of anxiety and depression along with an assessm of related key factors such as gender, family SES, parental education levels, par occupation, and family composition (divorce, number of wives, number of children).

Method

Study Design

To study emotional difficulties of young people in the U.A.E. a cross-sectional su design is selected.

Participants

Participants in this study will be children aged 13-16 years (male and female) attending public schools in UAE. For the sample to be representative of the U.A.E. nation population three main emirates with the largest populations will be selected: Dubai, Sha and Ajman. The measures and procedure will be piloted in a mixed sex private school. F

the main prevalence study a minimum of 2 schools in each Emirate, one for boys and one for girls will be selected at random. A total of 6 schools and 3 grades in each school (grade 7, 8 and 9). Based on a 40 student per class average. The final sample size is expected to be around 720 students. Assuming 20% prevalence of possible or probable emotional difficulties as assessed by SDQ (Goodman & Goodman, 2011) a minimum sample of 246 participants is needed (5% confidence intervals)

Measures

Revised Children's Anxiety and Depression Scale (RCADS).

The measure selected to assess anxiety and depression is the Revised Children's Anxiety and Depression Scale (RCADS), short version. It is a well-established measure in the literature on children and adolescent mental health.

The self-report is made up of 25 items that measure the frequency of symptoms of anxiety and depression and total anxiety and depression. Items are rated on a 4-point Likert-scale from 0 ("never") to 3 ("always").

The measure has good reliability (Chorpita et al., 2005) and the internal consistency was found to be good, it ranged between .78 and .88. One week test-retest coefficients were also good (Chorpita et al. 2000). RCADS has a good concurrent validity with Children's Depression Inventory and with the Revised Children's Manifest Anxiety Scale (Chorpita et al., 2005). Finally, the measure has good discriminant validity, and all correlations with oppositional behaviors were non-significant (Chorpita et al., 2005).

The RCADS will be translated to Arabic and back translated into English. The measure will also be piloted in a small sample of bilingual Arabic / English adolescents.

The Strengths and Difficulties Questionnaire (SDQ).

The measure selected to assess psychopathological behavioral and emotional symptoms is The Strengths and Difficulties Questionnaire (SDQ) the Arabic version, it is a brief widely used screening questionnaire (Goodman, July 1997).

The self-report is made up of 25 items that assess emotional problems, conduct problems, hyperactivity or inattention, peer relationship problems and prosocial behaviour (Goodman, July 1997). Items are rates as not true, somewhat true and certainly true.

The concurrent validity was found to be good (Muris, Meesters & van den Berg, 2003) and so was the discriminant validity (Lundh, Wangby-Lundh & Bjarehed). The test-retest reliability was moderate (Yao et al., 2009).

Demographic Data and Social Economic Status.

Basic demographic data will be noted along with parental education levels, occupation and family composition. To get a good idea about the social economic status, the Family affluence Scale will be used.

Family Affluence Scale (FAS): version used in Czech Republic

This scale is a valid commonly used tool in applied research to identify the social economic status of children and adolescents (Kehoe and O-Hare, 2010). One of it's strength is that it's a measure the student themselves can answer.

The measure consists of 6 items to which the answer is no, yes, one, two, three. Based on the responses of the participants a total score is computed and higher scores are

indicative of more wealth (range is 0 to 9) (Boyce et al., 2006). The reliability and validit are good (Hobza et al., 2017).

Procedure

Head Teachers of the selected schools will be sent a letter explaining the study ar that the project has approval from Ministry of Education. The researcher will send copie the participant information and parent consent form in an envelope to be signed and returned to the schools. Children in the targeted classes will take the information home t parents.

One week after the participant information and consent has been sent home, the researcher will attend the school on the agreed days. Children in the targeted classes w be informed about the study and explained that their responses will be anonymous and confidential and that the study is to look at levels of difficulties in the class as a whole ra than individuals. They will also be informed that they do not have to take part and that can withdraw at any time before they have completed and returned their questionnaire. After their questionnaire has been collected it will not be possible to withdraw their data the questionnaires are anonymous.

Administration of the questionnaires (Arabic SDQ, Arabic RCADS-short version an Arabic demographic questionnaire) will take place at the beginning of a lesson and shoul take no more than 20 minutes. Children who do not wish to take part will be given an alternative activity. Questionnaires will be collected from each class in a sealed envelope labeled only with school name and class section. Number of children absent will also be recorded.

A pilot study will be conducted, prior to the main study, in one mixed sex private school where children are educated in English. The Method will be as for the main study with exception that young people will complete the questionnaires twice one week apart.

Young people aged 13 to 16 (target n>20) who can read Arabic and English will be randomized to complete the English or the Arabic version of the RCADS first. The result the pilot will be used to establish the preliminary reliability and acceptability of the Arabi version of the RCADS.

Analysis

Data will be analyzed used SPSS. For pilot study data kappa will be used to look a the agreement for caseness (i.e. scoring above the cut-offs for clinical concern) between SDQ and the RCADS in the 2 versions. Internal consistency will be compared and items scores for the two groups compared across item scores, subscale scores and total scores

For the main study descriptive scores will be analyzed and the prevalence of poss clinical disorder calculated. Finally factors (e.g. gender, age, parent education) influenc emotional difficulties will be explored.

Clinical Implication

Identifying the prevalence rates of anxiety and depression symptoms in adolesce will provide necessary information about common emotional and behavioral difficulties a their co-morbidities. It will elucidate the need for the development of prevention and or treatment approaches to help alleviate anxiety and depression symptoms in the U.A.E. y population.

References

Abou-Saleh, M. T., Ghubash, R., & Daradkeh, T. K. (2001). Al Ain community psychiatric survey. I. Prevalence and socio-demographic correlates. *Social psychiatry and psychiatric epidemiology*, *36*(1), 20-28.

Al-Darmaki, F. R., & Yaaqeib, S. I. (2015). Psychology and mental health services in the United Arab Emirates. *Psychol Int Newsl*, *2015*, 1-6.

American Psychiatric Association **(**1994**)** *Diagnostic and Statistical Manual of Mental Disorders* (4th edn). Washington, DC: APA.

Boyce, W., Torsheim, T., Currie, C., & Zambon, A. (2006). The family affluence scale as a measure of national wealth: validation of an adolescent self-report measure. *Social indicators research*, *78*(3), 473-487.

Costello, E. J., Mustillo, S., Erkanli, A., Keeler, G., & Angold, A. (2003). Prevalence and development of psychiatric disorders in childhood and adolescence Arch Gen Psychiatry 60 (8): 837–844. *Find this article online*.

Chorpita, B. F., Yim, L. M., Moffitt, C. E., Umemoto L. A., & Francis, S. E. (2000). Assessment of symptoms of DSM-IV anxiety and depression in children: A Revised Child Anxiety and Depression Scale. *Behaviour Research and Therapy, 38*, 835-855.

Chorpita, B. F., Moffitt, C., & Gray, J. (2005). Psychometric properties of the Revised Child Anxiety and Depression Scale in a clinical sample. *Behaviour Research and Therapy, 43*, 309-322.

Daradkeh, T. K., Eapen, V., & Ghubash, R. (2005). Mental morbidity in primary care in Al Ain (UAE): application of the Arabic translation of the PRIME-MD (PHQ) version. *German Journal of Psychiatry*, *8*(3), 32-35.

Eapen, V., Al-Sabosy, M., Saeed, M., & Sabri, S. (2004). Child psychiatric disorders in a primary care Arab population. *International Journal of Psychiatry in Medicine*, *34*(1), 51-60

Garber, J., & Weersing, V. R. (2010). Comorbidity of anxiety and depression in youth: Implications for treatment and prevention. *Clinical Psychology: Science and Practice*, *17*(4), 293-306.

Ghubash, R., Hamdi, E., & Bebbington, P. (1992). The Dubai community psychiatric survey: I. Prevalence and socio-demographic correlates. *Social psychiatry and psychiatric epidemiology*, *27*(2), 53-61.

Goodman, R. (July 1997). "The Strengths and Difficulties Questionnaire: a research note". *Journal of Child Psychology and Psychiatry, and Allied Disciplines*. **38** (5): 581–6.

Goodman, Anna; Goodman, Robert (January 2011). "Population mean scores predict child mental disorder rates: validating SDQ prevalence estimators in Britain". *Journal of Child Psychology and Psychiatry, and Allied Disciplines*. **52** (1): 100–8.

Hobza, V., Hamrik, Z., Bucksch, J., & De Clercq, B. (2017). The Family Affluence Scale a indicator for socioeconomic status: validation on regional income differences in the Czec Republic. *International journal of environmental research and public health*, *14*(12), 154

Kehoe, S., & O'Hare, L. (2010). The reliability and validity of the Family Affluence Scale. *Effective Education*, *2*(2), 155-164.

Lundh, L.G., Wangby-Lundh, M., & Bjarehed, J. (2008). Self reported emotional and behavioral problems in Swedish 14 to 15-year-old adolescents: A study with the self-rep version of the Strengths and Difficulties Questionnaire. *Scandinavian Journal of Psycholo 49,* 523–532.

Merry, S., McDowell, H., Hetrick, S., Bir, J., & Muller, N. (2004). Psychological and/or educational interventions for the prevention of depression in children and adolescents. *Cochrane Database Syst Rev*, *1*(1).

Muris, P., Meesters, C., & van den Berg, F. (2003). The strengths and difficulties questionnaire (SDQ*). European child & adolescent psychiatry, 12* (1), 1-8.Chicago

Scholten, W. D., Batelaan, N. M., van Balkom, A. J., Penninx, B. W., Smit, J. H., & van Oppen, P. (2013). Recurrence of anxiety disorders and its predictors. *Journal of affective disorders*, *147*(1), 180-185.

W. K. Silverman and A. P. Field. (2011) *Anxiety Disorders in Children and Adolescents*, (edn) Published by Cambridge University Press

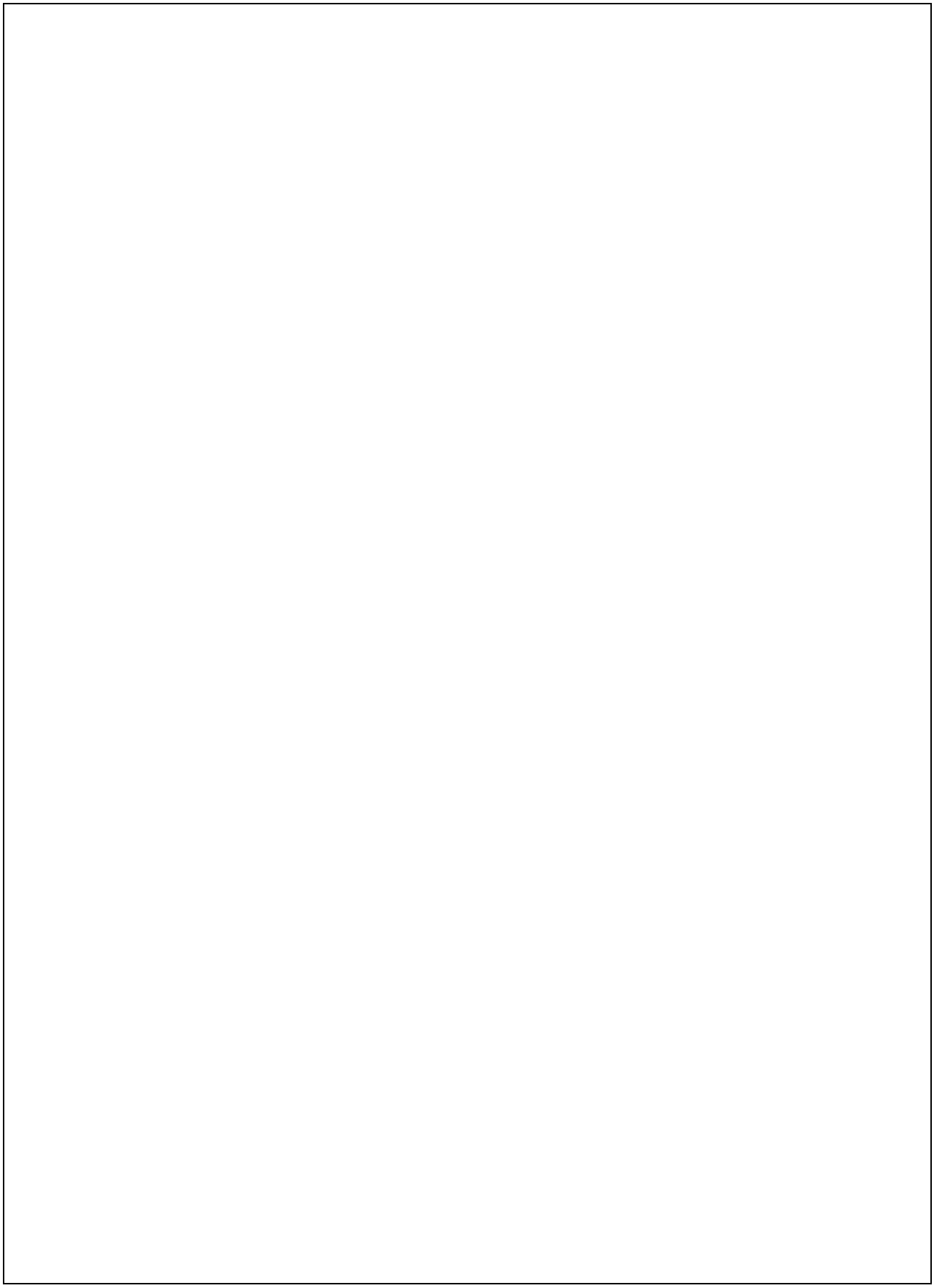
Inhorn, M., Aw, T-C., & Blair, I. (2010). *Global health and the UAE: Asia-Middle East connection*, New York, NY: Sage.

Valsemma, E., Al-Sabosy, M., Saeed, M. Sabri, S. (2004). Child psychiatric disorders in primary care Arab population. *Journal of Psychiatric Medicine. 34* (1), 51-60.

Werner-Seidler, A., Perry, Y., Calear, A. L., Newby, J. M., & Christensen, H. (2017). Sch based depression and anxiety prevention programs for young people: A systematic revie and meta-analysis. *Clinical psychology review*, *51*, 30-47.

World Health Organization (2011). Mental health atlas: 2011. Retrieved from http://www.who.int/mental_health/evidence/atlas/profiles/are_mh_profile.pdf

Yao, S., Zhang, C., Zhu, X., Jing, X., McWhinnie, C. M., & Abela, J. R. Z. (2009). Measur Adolescent Psychopathology: Psychometric Properties of the Self-Report Strengths and Difficulties Questionnaire in a sample of Chinese adolescents. *Journal of Adolescent Heal 45*, 55–62.



SECTION 4: PARTICIPANT INFORMATION PARENT ASSENT FORM

The University of Nottingham
UNITED KINGDOM · CHINA · MALAYSIA

PARTICIPANT INFORMATION

AND PARENT ASSENT

For Children aged 12–16

Division of Psychiatry & Applied Psychology

School of Medicine, Faculty of Medicine & Health Sciences

Project Title: Emotional difficulties in young people in UAE schools**.**

Researcher: Amna Al Falahi…(msxaa83@nottingham.ac.uk)

Supervisor: Professor Cris Glazebrook (cris.glazebrook@nottingham.ac.uk) and Dr David Daley (david.daley@nottingham.ac.uk)

Ethics Reference Number: … *[to be inserted following ethical review]*

This is an invitation to take part in a research study about the spread of emotional problems in UAE Nationals adolescents. Your participation would be greatly appreciated.

You do not have to take part. If you do take part you can stop at any time. It will not affect your school report card. Once you have handed in your completed questionnaire we can't withdraw you from the study because we won't know which questionnaire is yours. The questionnaire is completely anonymous.

Please take this information home to show your parents.

What is the project about?

This study looks at the sorts of emotional problems young people in the UAE are experiencing. We want to try to find out a bit about how many people have problems so that we can find ways to help.

Who is being asked to take part, and why?

Adolescents aged 13 to 16 years from across three different emirates (Dubai, Sharjah and Ajman) will be asked to answer this survey. We have selected a boys' school and a girls' school from each of the three emirates. You have been asked to take part because you are aged between 13 and 16 years and attend one of the schools in our study.

What I will be asked to do?

You will be asked to complete 3 questionnaires. One will ask about you about yourself, for example, your age and whether you are a boy or a girl. We will also ask a little bit about your family, for example, whether you have siblings. We will not ask your name and we will not know who has completed the questionnaires.

The other 2 questionnaire will ask about your feelings and the things that you do. The questionnaires should take no more than 15 minutes to complete.

How will this study be done?

Amna will come into one of your classes next week to explain the study, check that you are happy to take part and then hand out the questionnaires. Amna will also answer any questions you have about the study. At the end you will be given a thank you card with a small gift to thank you for your time.

Will the research be of any personal benefit to me?

The information you provide will not help you directly. We hope that the results of the study can be used to help find out what support is needed for young people in UAE schools who have emotional difficulties.

What will happen to the information I provide?

The data from the questionnaires will be stored in a password protected computer file at the University of Nottingham. Only people in the research team will be able to look at the data.

What will you do with the data?

The findings from the study will be written as part of Amna's PhD thesis within the Division of Psychiatry and Applied Psychology, School of Medicine, the University Of Nottingham, UK. The study findings may be published in journal in the future. A summary of the findings from the group of young people taking part might be

shared with the staff in the psychology unit at the U.A.E. Ministry of Education who is involved with the students' emotional wellbeing.

If you have any questions or concerns, please don't hesitate to ask. We can be contacted before and after your participation at the above address.

THANK YOU FOR TAKING PART IN THIS STUDY.

If you have any queries or complaints about this study, please contact the student's supervisor in the first instance. If this does not resolve the query to your satisfaction, please write to the Administrator to the Division of Psychiatry & Applied Psychology's Research Ethics Sub-Committee (MS-DPAPEthics@nottingham.ac.uk, +44 (0)115 8232214) who will pass your query to the Chair of the Committee.

SECTION 6: ORGANISATIONAL PERMISSIONS and/or EXTERNAL ETHICAL REVIEW

مكتب البعثات الدراسية
SCHOLARSHIPS OFFICE

وزارة شؤون الرئاسة
MINISTRY OF PRESIDENTIAL AFFAIRS

الرقم: 18/SCO/54
التاريخ: 5/جمادى الأول/1439 هـ
الموافق: 22/يناير/2018 م

معالي/حسين بن إبراهيم الحمادي الموقر

وزير التربية والتعليم

السلام عليكم ورحمة الله وبركاته

الموضوع: طلب الموافقة على زيارات ميدانية

يطيب لمكتب البعثات الدراسية التابع لوزارة شؤون الرئاسة أن يتقدم إليكم بالشكر الجزيل على تعاونكم البناء لما فيه تحقيق المصلحة العامة، وفي إطار السعي والعمل على تنمية وتطوير المهارات والقدرات البحثية لطلبة بعثة صاحب السمو رئيس الدولة للطلبة المتميزين علمياً، يرجى التكرم بالإيعاز لمن يلزم لتسهيل قيام الطالبة أمنه علي حمد الفلاحي بزيارات ميدانية لبعض المدارس الحكومية لمقابلة بعض الطلبة والطالبات. علما بأن موضوع بحث رسالة الدكتوراه هو طبيعة الاكتئاب والقلق في المدارس الحكومية في دولة الإمارات العربية المتحدة.

لمزيد من المعلومات يرجى التواصل مع الطالبة على رقم: 0506508812 أو التواصل بواسطة البريد الالكتروني: amnay.alfalahi@gmail.com

ونحن إذ نجدد شكرنا لتعاونكم ولحرصكم الصادق على إتاحة الفرصة لأبنائنا الطلبة للحصول على المعلومات التي يحتاجونها في إعداد بحوثهم الدراسية، لنتطلع على الدوام لتوسيع آفاق التعاون والعمل المشترك.

وتفضلوا بقبول فائق الاحترام

أحمد محمد أحمد الحميري
الأمين العام لوزارة شؤون الرئاسة
نائب رئيس مجلس إدارة مكتب البعثات الدراسية

هاتف: +971 2 641 3999 • فاكس: +971 2 641 3888 • ص.ب: 73505 - أبوظبي، دولة الإمارات العربية المتحدة
Tel. +971 2 641 3999 • Fax: +971 2 641 3888 • P.O Box: 73505 - Abu Dhabi, United Arab Emirates
www.sco.ae

Begin forwarded message:

From: Naeema A.Malik Alhali <Naeema.ahli@moe.gov.ae>
Subject: FW: تعميم: تسهيل مهمة باحثة من جامعة نوتنغهام البريطانية
Date: February 22, 2018 at 8:42:54 AM GMT+4
To: "Amnay.alfalahi@gmail.com" <Amnay.alfalahi@gmail.com>

الاخت الفاضلة
تم تسهيل مهمتك يمكنك البدأ من اليوم بالزيارات الميدانية .
بالتوفيق

السادة / مدراء مدارس الحلقة الثانية والثانوي بإمارة دبي / الشارقة / عجمان المحترمين
تحية طيبة وبعد ،،،

نهديكم أطيب تحية
وبالإشارة إلى الموضوع أعلاه، وردت إلينا استبانة من الباحثة / آمنة فلاحي من جامعة نوتنغهام البريطانية بحث تحت عنوان: (الصعوبات الوجدانية عند طلاب المرحلة الثانية والثانوية في المدارس الحكومية بدولة الإمارات العربية المتحدة) حيث ستقوم الباحثة بالزيارات الميدانية لطلاب الحلقة الثانية والثانوية في المدارس الحكومية بإمارة دبي والشارقة وعجمان لمقابلة الطلبة والطالبات وتطبيق الاستبانة، وللتواصل والاستفسار مع الباحثة على البريد الالكتروني Amnay.alfalahi@gmail.com ، وعليه يرجى التعاون لتسهيل مهمة الباحثة لإتمام البحث المذكور

للرد والاستفسار ومزيد من المعلومات يرجى التواصل مع :
الباحثة / آمنة فلاحي
البريد الالكتروني : Amnay.alfalahi@gmail.com
وتفضلوا بقبول فائق الاحترام

United Arab Emirates
Ministry of Education
الإمارات العربية المتحدة
وزارة التربية والتعليم

مركز العمليات المدرسية
Schools Operations Center

TEL : 80051115 **مباشر :**
FAX : 04-2176825 **فاكس :**

P.O.Box : 3962 **صندوق بريد :**
دبي,الإمارات العربية المتحدة
Dubai, United Arab Emirates

www.moe.gov.ae

SECTION 7: ADDITIONAL DOCUMENTATION

Demographic Questions

How old are you?

☐ 12 to 13

☐ 13 to 14

☐ 14 to 15

☐ 16 and above

Are you Male? ☐ or Female ☐

Does your father work? Yes ☐ or No☐

What does your father do?

☐ Works for the government

☐ Has his own business

☐ Is an employee at a private company

Does your mother work? Yes ☐ or No☐

What does your mother do?

☐ Works for the government

☐ Has her own business

☐ Is an employee at a private company

What is your father's highest level of education?

☐ Secondary school graduate

☐ High school graduate

☐ College or University graduate

☐ Don't know

What is your mother's highest level of education?

☐ Secondary school graduate

☐ High school graduate

☐ College or University graduate

☐ Don't know

Who lives in your home?

☐ Grandfather

☐ Grandmother

☐ Mother

☐ Father

☐ Sister How many?_____

☐ Brother How many?_____

الأسئلة الديموغرافية

كم عمرك؟ : _____

هل انت ذكر أم أنثى؟ : _____

هل يعمل والدك؟ : _____

ماذا يعمل والدك؟ : _____

هل تعمل والدتك؟ : _____

ماذا تعمل والدتك؟ : _____

ما هي أعلى شهادة علمية حصل عليها والدك؟

	الشهادة الثانوية أو ما يعادلها
	شهادة أم برنامج تدريبي
	طالب
	حاصل على البكالوريوس
	حاصل على درجة الماجستير
	حاصل على درجة الدكتوراة
	أخرى

ما هي أعلى شهادة علمية حصلت عليها والدتك؟

	الشهادة الثانوية أو ما يعادلها
	شهادة أم برنامج تدريبي
	طالب
	حاصل على البكالوريوس
	حاصل على درجة الماجستير
	حاصل على درجة الدكتوراة
	أخرى

كم عدد الأشخاص الذين يعيشون في منزلك؟ : _____

قم بذكر الأشخاص الذين يعيشون في منزلك : _____

Family Affluence Scale

1. Does your family own a car or another motorized vehicle?

☐ No

☐ Yes, one car

☐ Yes, two cars

2. Do you have your own bedroom?

☐ No

☐ Yes

3. How many computers (including laptops and tablets, not including game consoles and smartphones) does your family own?

☐ None

☐ One

☐ Two

☐ More than two

4. How many bathrooms (rooms with a bath/shower or both) are there in your home?

☐ None

☐ One

☐ Two

☐ More than two

5. Does your family have a dishwasher?

☐ No

☐ Yes

6. How many times did you and your family travel out of the U.A.E. for holiday/vacation last year?

☐ Never

☐ Once

☐ Twice

☐ More than twice

مقياس الثراء العائلي

1. هل تمتلك عائلتك سيارة أو مركبة آلية أخرى؟

0 لا
0 نعم، سيارة واحدة
0 نعم، سيارتين

2. هل لديك غرفة نوم خاصة بك؟

0 لا
0 نعم

3. كم من أجهزة الكمبيوتر (بما في ذلك أجهزة الكمبيوتر المحمولة والأجهزة اللوحية، وليس بما في ذلك الألعاب الالكترونية والهواتف الذكية) تملك عائلتك ؟

0 لا شيء
0 واحد
0 اثنين
0 أكثر من اثنين

4. كم عدد الحمامات (غرفة مع حمام / دش أو كليهما) هناك في منزلك؟
0 لا شيء
0 واحد
0 اثنين
0 أكثر من اثنين

5. هل لدى عائلتك غسالة صحون؟
0 لا
0 نعم
6. كم مرة هل أنت وعائلتك سافرتو خارج دولة الامارات لقضاء عطلة العام الماضي؟
0 أبدا
0 مرة واحدة
0 مرتين
0 أكثر من مرتين

Strengths and Difficulties Questionnaire

For each item, please mark the box for Not True, Somewhat True or Certainly True. It would help us if you answered all items as best you can even if you are not absolutely certain or the item seems daft! Please give your answers on the basis of how things have been for you over the last six months.

Your Name ..... Male/Female

Date of Birth.....

	Not True	Somewhat True	Certainly True
I try to be nice to other people. I care about their feelings	☐	☐	☐
I am restless, I cannot stay still for long	☐	☐	☐
I get a lot of headaches, stomach-aches or sickness	☐	☐	☐
I usually share with others (food, games, pens etc.)	☐	☐	☐
I get very angry and often lose my temper	☐	☐	☐
I am usually on my own. I generally play alone or keep to myself	☐	☐	☐
I usually do as I am told	☐	☐	☐
I worry a lot	☐	☐	☐
I am helpful if someone is hurt, upset or feeling ill	☐	☐	☐
I am constantly fidgeting or squirming	☐	☐	☐
I have one good friend or more	☐	☐	☐
I fight a lot. I can make other people do what I want	☐	☐	☐
I am often unhappy, down-hearted or tearful	☐	☐	☐
Other people my age generally like me	☐	☐	☐
I am easily distracted, I find it difficult to concentrate	☐	☐	☐
I am nervous in new situations. I easily lose confidence	☐	☐	☐
I am kind to younger children	☐	☐	☐
I am often accused of lying or cheating	☐	☐	☐
Other children or young people pick on me or bully me	☐	☐	☐
I often volunteer to help others (parents, teachers, children)	☐	☐	☐
I think before I do things	☐	☐	☐
I take things that are not mine from home, school or elsewhere	☐	☐	☐
I get on better with adults than with people my own age	☐	☐	☐
I have many fears, I am easily scared	☐	☐	☐
I finish the work I'm doing. My attention is good	☐	☐	☐

Your signature ..... Today's date .....

Thank you very much for your help

أستبيان مواطن القوة والصعوبة SDQ
(11-17سنة)

يرجى الإجابة على كل بند بـ : غير صحيح, صحيح نوعا ما , أو صحيح بالتأكيد بوضع علامة ☑ تحت الإجابة المناسبة . حاول أن تكون دقيقا في إجاباتك. سوف يساعدنا كثيرا إذا أجبت على كل فقرة حتى وان كنت غير متأكد أو ترى أنها غير مناسبة. يرجى أن تكون إجابتك على أساس كيف كانت الأمور بالنسبة لك خلال الستة الأشهر الأخيرة .

اسمك:
تاريخ الميلاد/ العمر :
المدرسة :

☐ ولد ☐ بنت

غير صحيح	صحيح نوعا ما	صحيح بالتأكيد	
☐	☐	☐	أحاول أن أكون لطيفا مع الآخرين. أهتم بمشاعرهم
☐	☐	☐	لا أستطيع أن أبقي ساكنا لفترة طويلة في مكان واحد. غير مستقر. كثير الحركة
☐	☐	☐	كثيرا ما تصيبني آلام في الرأس أو آلام في البطن أو الشعور بالغثيان
☐	☐	☐	أشرك الآخرين فيما يخصني من أشياء {أكل, أقلام, ألعاب .....الخ}
☐	☐	☐	ينتابني غضب شديد. وكثيرا ما أفقد أعصابي
☐	☐	☐	في العادة أحب العزلة. ألعب لوحدي. أبقى مع نفسي معظم الوقت
☐	☐	☐	أنا عادة أفعل ما يطلبه مني الكبار
☐	☐	☐	أقلق كثيرا
☐	☐	☐	أساعد الآخرين إذا ما حدث لأحدهم مكروه
☐	☐	☐	أتململ و أتلوى{أتقلقل وجسدي يتحرك} باستمرار أثناء جلوسي
☐	☐	☐	لدي صديق عزيز واحد أو أكثر
☐	☐	☐	أتعارك كثيرا. أتسلط على الآخرين وأجعلهم ينفذون ما أريد
☐	☐	☐	كثيرا ما أكون غير سعيد, حزين أو سريع البكاء
☐	☐	☐	بشكل عام من هم في سني يحبونني
☐	☐	☐	يتشتت انتباهي بسرعة. أجد صعوبة في التركيز
☐	☐	☐	أنا عصبي في المواقف الجديدة {غير المعتادة}. بسهولة أفقد ثقتي بنفسي
☐	☐	☐	أنا لطيف مع من هم أصغر مني سنا
☐	☐	☐	كثيرا ما يتهمني الآخرون بالكذب أو الخداع
☐	☐	☐	الأطفال الآخرون يسخرون مني أو يتنمرون علي
☐	☐	☐	كثيرا ما أتطوع لمساعدة الآخرين {الوالدين, المدرسين, الأطفال الآخرين}
☐	☐	☐	أفكر قبل أن أتصرف
☐	☐	☐	آخذ أشياء ليست ملكي من البيت أو المدرسة أو من أماكن أخرى
☐	☐	☐	أنسجم بشكل أفضل مع الكبار عنه مع من هم في نفس سني
☐	☐	☐	لدي مخاوف كثيرة . من السهل تخويفي
☐	☐	☐	أكمل العمل الذي أقوم به حتى النهاية . انتباهي جيد

التوقيع..... التاريخ.....

شكرا

Name: _____ Date: _____

RCADS – Short Version

Please put a circle around the word that shows how often each of these things happen to you. There are no right or wrong answers.

1. I feel sad or empty	Never	Sometimes	Often	Always
2. I worry when I think I have done poorly at something	Never	Sometimes	Often	Always
3. I would feel afraid of being on my own at home	Never	Sometimes	Often	Always
4. Nothing is much fun anymore	Never	Sometimes	Often	Always
5. I worry that something awful will happen to someone in my family	Never	Sometimes	Often	Always
6. I am afraid of being in crowded places (like shopping centers, the movies, buses, busy playgrounds)	Never	Sometimes	Often	Always
7. I worry what other people think of me	Never	Sometimes	Often	Always
8. I have trouble sleeping	Never	Sometimes	Often	Always
9. I feel scared if I have to sleep on my own	Never	Sometimes	Often	Always
10. I have problems with my appetite	Never	Sometimes	Often	Always
11. I suddenly become dizzy or faint when there is no reason for this	Never	Sometimes	Often	Always
12. I have to do some things over and over again (like washing my hands, cleaning or putting things in a certain order)	Never	Sometimes	Often	Always
13. I have no energy for things	Never	Sometimes	Often	Always
14. I suddenly start to tremble or shake when there is no reason for this	Never	Sometimes	Often	Always
15. I cannot think clearly	Never	Sometimes	Often	Always
16. I feel worthless	Never	Sometimes	Often	Always
17. I have to think of special thoughts (like numbers or words) to stop bad things from happening	Never	Sometimes	Often	Always
18. I think about death	Never	Sometimes	Often	Always
19. I feel like I don't want to move	Never	Sometimes	Often	Always
20. I worry that I will suddenly get a scared feeling when there is nothing to be afraid of	Never	Sometimes	Often	Always
21. I am tired a lot	Never	Sometimes	Often	Always
22. I feel afraid that I will make a fool of myself in front of people	Never	Sometimes	Often	Always
23. I have to do some things in just the right way to stop bad things from happening	Never	Sometimes	Often	Always
24. I feel restless	Never	Sometimes	Often	Always
25. I worry that something bad will happen to me	Never	Sometimes	Often	Always

الإسم : التاريخ :

المقياس المنقح لقياس القلق النفسي والإكتئاب عند الأطفال - نُسخة موجزة

يُرجى وضع دائرة حول الكلمة التي تبين عدد مرات حدوث أي مما يلي بالنسبة لك.
لا يوجد هناك أي إجابات صحيحة أو خاطئة.

1	أشعر بالحزن أو الفراغ	أبداً	أحيانا	غالبا	دائما
2	تنتابني نوبة من القلق عندما أعتقد بأنني قمت بأمر على نحو غير جيد	أبداً	أحيانا	غالبا	دائما
3	يراودني الشعور بالخوف لكوني بمفردي في المنزل	أبداً	أحيانا	غالبا	دائما
4	لم يعد هناك شئ جدير بالمرح بشأنه	أبداً	أحيانا	غالبا	دائما
5	تنتابني نوبة من القلق خوفا من أن يُصاب أحد أفراد أسرتي بأي مكروه	أبداً	أحيانا	غالبا	دائما
6	أشعر فجأة كما لو أنني غير قادر على التنفس دون أية أسباب لذلك	أبداً	أحيانا	غالبا	دائما
7	لدي مشكلة في الشهية	أبداً	أحيانا	غالبا	دائما
8	دائما ما أقوم بمواصلة التأكد من أنني قمت بفعل أي من الأمور على نحو جيد (مثل غلق الإنارة أو غلق الباب)	أبداً	أحيانا	غالبا	دائما
9	أخاف من وجودي بالأماكن المزدحمة (مثل مراكز التسوق وأدوار السينما والأتوبيسات والملاعب الزدحمة)	أبداً	أحيانا	غالبا	دائما
10	تنتابني نوبة من القلق حيال ما يعتقده الأخرون عني	أبداً	أحيانا	غالبا	دائما
11	لدي صعوبة في النوم	أبداً	أحيانا	غالبا	دائما
12	أشعر بالرعب إذا ما تعين علي النوم بمفردي	أبداً	أحيانا	غالبا	دائما
13	لدي مشكلة في الشهية	أبداً	أحيانا	غالبا	دائما
14	تنتابني على حين غرة نوبة من الدوار أو الإغماء دون أي سبب يُذكر	أبداً	أحيانا	غالبا	دائما
15	أقوم بفعل بعض الأمور تكرارا ومرارا (كغسل يدي أو التنظيف أو وضع الأشياء حسب نظام ترتيبي معين)	أبداً	أحيانا	غالبا	دائما
16	ليس لدي طاقة للقيام بالأشياء	أبداً	أحيانا	غالبا	دائما
17	أبدأ فجأة في الإرتعاش أو الإرتجاف بينما لا يوجد سبب يدعوا لذلك	أبداً	أحيانا	غالبا	دائما
18	لا يُمكنني التفكير بوضوح	أبداً	أحيانا	غالبا	دائما
19	أشعر بأنني عديم القيمة	أبداً	أحيانا	غالبا	دائما
20	أضطر للتفكير في أفكار معينة (مثل الأرقام أو الكلمات) لإيقاف حدوث الأمور السيئة	أبداً	أحيانا	غالبا	دائما
21	أفكر في الموت	أبداً	أحيانا	غالبا	دائما
22	أشعر وكأنني لا أرغب في السير أو التنقل	أبداً	أحيانا	غالبا	دائما
23	أقوم بفعل بعض الأمور على النسق الصحيح فقط لمنع حدوث أي من الأمور السيئة	أبداً	أحيانا	غالبا	دائما
24	لا أشعر بالراحة	أبداً	أحيانا	غالبا	دائما
25	تنتابني نوبة من القلق خوفا من حدوث أمرا سيئا لي	أبداً	أحيانا	غالبا	دائما

The University of Nottingham
UNITED KINGDOM · CHINA · MALAYSIA

SCHOOL HEAD INFORMATION SHEET

Division of Psychiatry & Applied Psychology

School of Medicine, Faculty of Medicine & Health Sciences

Project Title: *Emotional difficulties in young people in UAE schools*

Researcher: Amna Al Falahi…(msxaa83@nottingham.ac.uk)

Supervisor: Professor Cris Glazebrook (cris.glazebrook@nottingham.ac.uk) and Dr David Daley (david.daley@nottingham.ac.uk)

Ethics Reference Number: … *[to be inserted following ethical review]*

This is an invitation to take part in a research study about the prevalence of emotional problems in UAE Nationals adolescents. The participation of your students would be greatly appreciated.

This is a voluntary participation which can be terminate at any time with no negative consequences. Your students may decline to answer specific questions. Once completed and submitted, the questionnaire it is not possible to withdraw the data because we won't keep the names attached to the reports.

What is the project about?

This study looks at the sorts of emotional problems young people in the UAE are experiencing. We want to try to find out a bit about how many people have problems so that we can find ways to help.

Who is being asked to take part, and why?

Adolescents aged 13 to 16 years from across three different emirates (Dubai, Sharjah and Ajman) will be asked to answer this survey. We have selected a boys' school and a girls' school from each of the three emirates.

What will my student be asked to do?

The child will be asked to complete 3 questionnaires. One will ask about themselves for example age and gender. We will also ask a little bit about their family, for example whether they have siblings. We will not ask names and we will not know who has completed the questionnaires. The other 2 questionnaire will ask about feelings and behaviours. The questionnaires should take no more than 15 minutes to complete.

How will this study be done?

This questionnaire will be distributed to the students before their lunchtime and will take approximately 10 to 15 min of their time. The researcher will explain the study, and then each student will be asked to fill out the questionnaire. There will be an opportunity to ask questions about the survey items if needed.

Will the research be of any personal benefit to me?

The information you provide will help us study emotional problems more closely and assist us in developing preventative and treatment-oriented interventions for our youth.

THANK YOU FOR YOUR SUPPORT

If you have any queries or complaints about this study, please contact the student's supervisor in the first instance. If this does not resolve the query to your satisfaction, please write to the Administrator to the Division of Psychiatry & Applied Psychology's Research Ethics Sub-Committee (MS-DPAPEthics@nottingham.ac.uk, +44 (0)115 8232214) who will pass your query to the Chair of the Committee.

SECTION 8: ETHICAL CONSIDERATIONS

Please answer every question with a YES or NO by selecting the appropriate box to create a cross. If a question is not applicable to this study (e.g. it concerns interviews and this study does not involve interviews) tick the box in the 'N/A' column to the right.

If you tick any response that is shaded, you must explain how that risk will be allayed in the box below.

Issues relating to the topic of study

Risk No.		Yes	No
1	Will this research expose participants to risk of physical harm?	☐	✕
2	Are drugs, placebos or other substances to be administered or will the study involve any physically invasive procedures or collection of bodily samples?	☐	✕
3	Will participants be asked to discuss anything that might be considered sensitive?	☐	✕
4	Will this research expose participants to risk of emotional harm, or induce stress or anxiety beyond the risks encountered in normal life?	☐	✕
5	Could the study cause offence to participants?	☐	✕
6	Will the study involve prolonged or repetitive testing?	☐	✕
7	Will this research involve deception of any kind (for example, people taking part without their knowledge or consent)?	☐	✕
8	Will this research involve access to personal information about identifiable individuals without their knowledge or consent?	☐	✕
9	Will this research expose the researcher to risk of physical or emotional harm?	☐	✕

How will risks be allayed? *[If you have ticked any shaded boxes you must explain here how the risk/s will be allayed. Identify the risk by its number]*
Click here to enter text.

Procedural Issues N/A = not applicable for this study

		Yes	**No**	N/A
10	I have discussed the student researcher's personal safety and any risk of physical harm (while undertaking this study) with him/her and we have agreed suitable strategies to avoid or mitigate them	☐	☐	
11	I have discussed the student researcher's personal health and well-being and any risk of emotional distress or psychological harm (while undertaking this study) with him/her and we have agreed suitable strategies to avoid or mitigate them	☐	☐	
12	I have explained to the student the need to inform me immediately if any change in research methods is required: e.g., changes to the method of data collection, proposed sites of data collection, means by which participants are accessed, or any other significant changes to the research enquiry	☐	☐	
13	I have informed the student of the need to read and understand the University of Nottingham's Code of Research Conduct and Research Ethics (2016) and to agree to abide by it	☐	☐	
14	I have informed the student about the need to adhere to the British Psychological Society's Code of Human Research Ethics and other guidance I have advised	☐	☐	
15	I have discussed with the student the need to handle and store data securely as advised in the University's *Code of Research Conduct and Research Ethics* (2016)	☐	☐	
16	For internet mediated studies, I confirm I have discussed particular risks with the student and agreed suitable strategies to avoid or mitigate them	☐	☐	☐
17	For studies involving lone working: I have advised the student to read and abide by the University of Nottingham's Health & Safety Arrangements for Lone Working	☐	☐	☐
18	For studies involving vulnerable populations: I confirm that I have seen proof that the student has successfully completed a Disclosure and Barring Service (DBS) check to cover the period of study	☐	☐	☐
19	For studies in countries outside the UK, the student has explored and discussed with me the ethical, cultural and practical issues (for example, insurance) that are relevant for the participants and/or organisations in the relevant country, and we have taken them into account in the study's design	☐	☐	☐
20	I have explained to the student that if undertaking a study in an organisation, he/she is not permitted to approach potential participants or gather data until I have seen written permission from a manager/gatekeeper with appropriate authority.	☐	☐	☐
21	I have explained to the student that he/she is not permitted to approach potential participants or gather	☐	☐	

	data until I have received written notification that the project has passed ethical review.			

How will risks be allayed? *[If you have ticked any shaded boxes you must explain how the risk/s will be allayed. Identify the risk by its number]*
Click here to enter text.

Before starting data collection

		Yes	No
22	Will written authorisation be obtained in advance from an appropriate individual for research conducted as a visitor within, or concerning, organisations (e.g., companies, universities, schools)?	✕	☐
23	Will the study require the cooperation of a gatekeeper (eg manager) for access to participants?	☐	✕
24	Will the study involve those with whom the student researcher has an existing relationship or where there is an actual or perceived imbalance of power?	☐	✕
25	Will participants be under any coercion (direct or indirect or implied) to participate?	☐	✕
26	Will incentives (other than travel expenses or a suitable inconvenience allowance for their time) be offered to potential participants as an inducement to participate in the research?	☐	✕
27	Will each participant be given written Participant Information with details about the nature of the research, the purposes to which the data will be put, and the Ethics Reference Number?	✕	☐
28	Will written consent be obtained from each participant or relevant third party (eg. parent) using an approved Participation Consent form (or appropriate wording for internet-mediated studies)?	✕	☐
29	Will it be made clear that declining to participate will have no negative consequences for the individual?	✕	☐
30	Will it be made clear that participation is unlikely to be of direct personal benefit to the individual?	✕	☐
31	Will participants be asked for permission for their data from this study to be shared with other researchers in the future provided that their anonymity is protected?	✕	☐
32	Will participants be advised that non-identifiable data from this study might be used in academic research reports or publications?	✕	☐

How will risks be allayed? *[If you have ticked any shaded boxes you must explain here how the risk/s will be allayed. Identify the risk by its number]*

During the process of data collection

		Yes	No	N/A
33	The student researcher will provide participants with his/her name and University contact details, and those of the supervisor, so that they may get in touch about any aspect of the research if they wish to do so	✕	☐	
34	Participants will be guaranteed anonymity (only insofar as they do not disclose any illegal activities, and where there is disclosure or evidence of significant harm, abuse, neglect or danger to participants or to others)	✕	☐	
35	The student researcher will inform his/her supervisor of any incidents of actual or suspected harm (as above) which are disclosed to him/her during the course of data collection	✕	☐	
36	All participants will be informed that they are free to withdraw from the study at any time, without explanation, and that they may ask for the withdrawal of their data after collection (within a specified period)	✕	☐	
37	The student researcher will undertake data collection in a safe and appropriate place as discussed and agreed in advance with his/her supervisor.	✕	☐	
38	Research participants will be informed when observations and/or recording is taking place	✕	☐	☐
39	Participants will be treated with dignity and respect at all times.	✕	☐	

How will risks be allayed? *[If you have ticked any shaded boxes you must explain here how the risk/s will be allayed. Identify the risk by its number]* ***Click here to enter text.***

After data collection

		Yes	No	NA
40	Where anonymity has been agreed with the participant, data will be anonymised as soon as possible after collection and all steps taken to protect participants from direct or indirect identification	☐	☐	✕

41	All data collected will be stored in accordance with the requirements of the University's *Code of Research Conduct and Research Ethics* (2016)	✕	☐	
42	For qualitative studies where recordings involve third party transcription, I confirm that there will be a confidentiality agreement with the transcriber/s	☐	☐	✕
43	Data will only be used for the purposes outlined within the participant information and consent forms	✕	☐	
44	I confirm that details which could identify individual participants will not be disclosed to anyone other than the student researcher, their supervisor/s and (if necessary) transcription and translation services, internal and/or external examiners without participants' explicit consent	✕	☐	

How will risks be allayed? *[If you have ticked any shaded boxes you must explain here how the risk/s will be allayed. Identify the risk by its number]*
Click here to enter text.

After completion of research

		Yes	No
45	Will each participant be offered the opportunity to know about the overall research findings?	✕	☐
46	Will raw data be submitted to the supervisor after completion of the study?	✕	☐
47	Will all hard copies of data collection tools and data which enable the identification of individual participants be destroyed at the end of the project (when results— – pass or fail- of the programme of study are decided)?	☐	✕

How will risks be allayed? *[If you have ticked any shaded boxes you must explain here how the risk/s will be allayed. Identify the risk by its number]*
Click here to enter text.

SECTION NINE: DECLARATION BY SUPERVISOR

PRINCIPAL INVESTIGATOR

(LEAD SUPERVISOR) NAME *Click here to enter text.*

EMAIL ADDRESS *Click here to enter text.*

PhD projects only:

2nd SUPERVISOR NAME *Click here to enter text.*

EMAIL ADDRESS *Click here to enter text.*

SCHOOL/LOCATION *Click here to enter text.*

3rd SUPERVISOR NAME *Click here to enter text.*

EMAIL ADDRESS *Click here to enter text.*

SCHOOL/LOCATION *Click here to enter text.*

Box A or B below to be completed by principal investigator (lead supervisor):

EITHER:

A I confirm that in my view this project does not require ethical review for the reasons outlined below. Click here to enter text.	☐
I confirm that I have discussed procedural issues and code of conduct with the student. He/she has completed and emailed the ETHICS REVIEW - STUDENT DECLARATION form to me to indicate his/her understanding and agreement to abide by appropriate working procedures	☐

OR:

B	
This project has my approval	☐
I confirm that in my view the Participation Information is fit for purpose	☐
I confirm that in my view the Participant Consent form is fit for purpose	☐
I confirm that I have discussed procedural issues and code of conduct with the student. He/she has completed and emailed the ETHICS REVIEW - STUDENT DECLARATION form to me to indicate their understanding and agreement to abide by appropriate working procedures	☐

Supervisors should email this completed form in **PDF format** from their University of Nottingham email address (which functions as a signature) to the Committee's Administrator at MS-DPAPEthics@nottingham.ac.uk. Please submit one form per email, with subject header format: **Jim Smith 1234567 Ethics Application**

(Student First Name, Student Last Name, Student Number, Ethics Application)

For completion by the Ethics Administrator:

The form is the version currently available on the DPAP webpage	☐
All sections of this application form have been completed	☐

Outdated forms or forms with missing responses or incomplete sections will be returned to the supervisor without review.