Drivers of and protective factors for mental health and psychosocial well-being among adolescents

A snapshot from Tanzania and Viet Nam

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Key messages

- In both Tanzania and Viet Nam, mental health problems and poor psychosocial well-being are more prevalent among older adolescents aged 15 and above. Girls are more likely to experience mental health problems than boys, regardless of age.

- Protective factors include higher levels of family income, living with both parents and connectedness with caregivers. Social capital and inclusion, and school attendance are also protective.

- Socioeconomic drivers of poor psychosocial well-being include low or declining socioeconomic status and inability to meet basic needs. Country-specific drivers include the burden of needing to participate in income-generating activities (Tanzania) and migration (by parents or adolescents themselves) from rural to urban areas or to other countries in pursuit of economic opportunities (Viet Nam).

- Experience of bullying and discrimination also drives poor mental health among adolescents. In both countries, bullying and peer victimisation are associated with depression and suicidal ideation and behaviours – for victims but also for bullies. Adolescents may be discriminated against due to HIV-positive status (Tanzania), their sexuality or status as returning victims of human trafficking (Viet Nam).

- Physical violence, psychological maltreatment and neglect result in anxiety, depression and low self-esteem among adolescents. In Viet Nam, early marriage and forced school dropout result in feelings of social isolation for girls.

- In Viet Nam, poor psychosocial well-being is linked to access to modern technology and the risks of addictive online behaviours, particularly for boys; girls are more at risk from cyberbullying and stalking. However, Vietnamese adolescents also use technology to find support, relieve stress and connect with friends. There is little evidence from Tanzania on linkages between adolescents' use of technology and their mental health.

Introduction

Adolescence is a period of rapid biological, psychological and social change. Research has found that puberty, particularly early puberty, can trigger psychological stress for girls and boys alike. Key features of adolescence include brain maturation, pubertal development and increasing sensitivity to social cues (which are themselves influenced by gender norms) (Kapungu and Petroni, 2017). Mental disorders commonly emerge during the adolescent years, influenced both by the biological, emotional and cognitive processes associated with puberty and by the social contexts surrounding adolescents as they mature through this key life stage (Patton et al., 2016).

Self-harm – which includes both suicide and accidental death resulting from self-harm – is among the three leading causes of adolescent mortality globally, contributing to more than 62,000 deaths each year (WHO, 2019). Besides its impact on mortality, self-harm and other consequences of poor mental health put tremendous burdens on adolescents, their families and communities. Poor mental health is now the greatest contributor to the non-fatal burden of disease in young people globally (Sawyer et al., 2012).

Sex and (relative) age are associated with differing levels of mental health and psychosocial well-being among adolescents. Half of all serious mental illnesses begin by the age of 14. Different types of mental health problem are also more or less prevalent at different ages. For instance, globally, depression is the fourth leading cause of illness and disability among adolescents aged 15–19 years but the fifteenth for those aged 10–14 years. Conversely, behavioural disorders are the second leading cause of disease burden in young adolescents aged 10–14 years but the eleventh cause among older adolescents aged 15–19 years (WHO, 2019).

Girls are not more likely than boys to evidence depression in early childhood, but following puberty, their risk of developing depressive disorders increases drastically, resulting in a significant gender gap. Females are between 1.5 and 2 times more likely than males to be diagnosed with depression, both during adolescence and throughout their lives (Goddings, 2015; Patel, 2013).

Gender determines the differential power and control men and women have over the socioeconomic determinants of their mental health, their social position, their status in and treatment by society, and their susceptibility and exposure to specific mental health risks (WHO, 2014a). Globally, girls and young women are up to 3 times more likely than boys to have depressive disorders and to attempt self-harm (WHO, 2014b). Since at least the year 2000, self-harm has consistently been ranked as the world's first or second leading cause of death for older adolescent girls (aged 15–19), with especially high rates among girls living in South Asia and East Asia.

Gender intensification – the increased pressure for adolescents to conform to culturally sanctioned gender roles – has been posited as an explanation for gender differences in depression (Hill and Lynch, 1983). While gender socialisation starts at birth, early adolescence (between 10 and 14 years) is a critical point, as puberty intensifies social expectations from family members and peers related to gender. Attitudes that endorse norms perpetuating gender inequality can be harmful to both boys and girls (Kågesten et al., 2016), but particularly constrain girls' aspirations and opportunities.

Forms of gender-based discrimination that become exaggerated during adolescence include: violence; child, early and forced marriage, and adolescent pregnancy; sexual abuse and exploitation; limitations on mobility, social relationships and reproductive control; exclusion from education, employment and decision-making; and unequal chore burdens and caretaking responsibilities (Samuels, 2019). Rigid norms and discrimination limit the perceived control that girls and boys have over their own lives and futures, with deleterious effects for their mental health. Indeed, depression-related illnesses peak in adolescence, just as gender norms are consolidated (Kapungu and Petroni, 2017).

Findings from the literature review

Fondation Botnar has awarded ODI and its Tanzanian and Vietnamese partners funding for a 2.5-year project to address the mental health needs of adolescents in schools, in the community and at institutional level through the co-creation and application of digital and non-digital approaches. As a first stage in this project, we conducted a literature review. This paper summarises findings from that literature review, which sought to answer the following key questions:

- What is the psychological status and prevalence of different mental health and psychosocial-related challenges among adolescents in the study countries?
- What are the protective factors for adolescent mental health and psychosocial well-being in the study countries?
- What are the risk factors for adolescent mental ill-health and psychosocial distress in the study countries?

Findings are summarised in table form and by country (Tanzania, Table 1; Viet Nam, Table 2). For each country, the evidence presented is disaggregated by age and gender wherever possible. The tables present findings on: the psychological status of adolescents and prevalence of different mental health and psychosocial problems among young people; and the various protective and risk factors for adolescent mental health and psychosocial well-being. The review focuses on mid-adolescence (14–16 years) and older adolescence (17–19 years) but includes literature on younger adolescents so as not to miss key evidence.

Table 1   Mental health and psychosocial well-being of adolescents in Tanzania

Issue		Key findings
Problems and prevalence	Overall prevalence of mental health problems	*Overall* • Prevalence of mental disorders among youth populations in sub-Saharan Africa estimated at 13%–20% (Atilola and Ola, 2016; Cortina et al., 2012). • A recent survey of 8,075 adolescents aged 10–19 from nine communities in Burkina Faso, Ethiopia, Eswatini, Ghana, Nigeria, Tanzania and Uganda identified low prevalence of mental health risk factors, with the exception of low mood among older females, which they categorised as 'moderate' (Berhane et al., 2020). • An epidemiological study of Tanzanians aged 15–59 in Dar es Salaam found prevalence of common mental disorders among those aged 16–24 to be 4.7% (Jenkins et al., 2010). • A nationally representative survey of 700 Tanzanian secondary school students showed that 41% reported an elevated level of mental health problems in the past 6 months, and 31% of parents reported observing an elevated level of mental health problems in their children (Nkuba et al., 2018). • In Berhane et al.'s (2020) study of adolescents in seven countries, including Tanzania, prevalence of low mood[i] was generally higher among older (15–19 years) than younger (10–14 years) adolescents. • In Mbelwa's (2017) study of the prevalence of mental disorders among 108 adolescents in the Dar es Salaam juvenile justice system (remand homes), 30% of those aged 13–15 years but 55% of those aged 16–17 years suffered some kind of mental 'dysfunction'. *Differences by sex, ethnicity and other socio-demographic factors* • In Berhane et al.'s (2020) study, older adolescents and especially females are found to be at highest risk for depression and mental health risk factors across the study countries.

i   An indicator was constructed for low mood 'much of the time', 'most of the time' or 'all of the time' during the past week on a 5-point scale that also included 'hardly ever' and 'sometimes'.

Table 1 Mental health and psychosocial well-being of adolescents in Tanzania (cont.)

Issue		Key findings
Problems and prevalence (continued)	Internalising (depression, anxiety, stress, suicidal thoughts)	*Overall* • The 2008 Global School-based Student Health Survey (GSHS) of 2,176 students, primarily aged 13–15 years, in the Dar es Salaam region, found that loneliness and depression were common. During the previous 12 months, 6% of students (6.4% of adolescent boys; 5.8% of adolescent girls) had felt lonely most or all of the time; 3.8% (4.5% of boys; 3.1% of girls) felt so worried about something that they lacked sleep at night; and 23.6% (26.2% of boys; 21.7% of girls) felt so sad or hopeless almost every day for two weeks or more in a row that they stopped doing their usual activities. Finally, 8.3% (7.7% of boys; 8.8% of girls) reported having no close friends (Nyandindi, 2008). *Differences by sex, ethnicity and other socio-demographic factors* • A study of 3,013 out-of-school adolescent girls and young women aged 15–23 in north-west Tanzania found depressive and anxiety symptoms to be prevalent, at 36.7% and 31% respectively. One-third of respondents (33%) had mild symptoms, 20% moderate symptoms, and 6% severe symptoms of anxiety and depression (Kuringe et al., 2019). • A study of the association between mental health scores and risky sexual behaviours among 1,113 young males aged 15 and above (but not limited to adolescents, mean age of 27) of social groups known as 'camps' in Dar es Salaam found that men with higher anxiety or depression scores reported lower levels of condom use and were more likely to report sexual concurrency than men with lower scores (Hill et al., 2017). • A household-based survey of 7,762 adolescents aged 10–19 years from six countries – including Tanzania (rural Dodoma, $n = 1{,}226$; urban Dar es Salaam, $n = 825$) – found that depression was more common among older adolescents. Females were at higher risk than males, which the authors partly ascribe to specific pubertal changes and oestradiol levels among girls (Nyundo et al., 2020).
	Externalising (behavioural problems)	*Overall* • In Mbelwa's (2017) study of the prevalence of mental disorders among 108 adolescents in the Dar es Salaam juvenile justice system (remand homes), attention deficit disorder was found in some adolescents (no further details were available, including statistics).
	Suicide	*Overall* • In a study of adolescents aged 10–19 in six countries (including Tanzania), depression was associated with negative coping mechanisms such as smoking and alcohol abuse, as well as with suicide (Nyundo et al., 2020). • Analysis of the 2008 GSHS data found that adolescents reporting suicidal intent were more than twice as likely to report having been lonely, more likely to suffer from depressive symptoms and to have previously used an illicit substance (Dunlavy et al., 2015). It also identified an inverse association between age and suicidal planning (ibid.). *Differences by sex, ethnicity and other socio-demographic factors* • The 2008 GSHS of 2,176 students (primarily aged 13–15, in the Dar es Salaam Region) found that 11.6% of boys and 11% of girls had seriously considered attempting suicide during the previous 12 months; 7.2% of boys and 6.4% of girls had planned how they would attempt it (Nyandindi, 2008).
	Substance abuse	*Overall* • The 2008 GSHS of 2,176 students, primarily aged 13–15 years, in the Dar es Salaam Region, found that prevalence of alcohol use was 5.1%; 10.8% of respondents had drunk alcohol before the age of 14; 5.4% had used other drugs. • The same data found that only 2.7% of students had smoked cigarettes on one or more days during the past 30 days, among whom 23.3% tried their first cigarette at age 14 or younger. As many as 82.8% (78.1% to 87.5%) believed that smoking cigarettes was harmful to health (Nyandindi, 2008).

Table 1 Mental health and psychosocial well-being of adolescents in Tanzania (cont.)

Issue		Key findings
Drivers and protective factors	Socieconomic status	*Protective* • In Kuringe et al.'s (2019) study of 3,013 out-of-school adolescent girls and young women aged 15–23 in north-west Tanzania, having savings and emotional support were found to protect against depression and anxiety respectively. *Risk factors/drivers* • Nyundo et al. (2020) found that depressive symptoms and suicidal ideation/behaviours were associated, particularly among older adolescents and girls, with low socioeconomic status, food insecurity and poor access to health care. Engaging in income-generating activities can place an additional burden on in-school adolescents, increasing the risk of exhibiting depressive symptoms (ibid.). • A small qualitative study of adolescents aged 15–24 in poor agrarian communities in Tanzania, Ghana and Malawi found that sources of stress included difficulties in generating income, inability to meet basic needs and factors that could exacerbate poverty such as drought (Hall et al., 2019).
	Family factors (structure, relationships)	*Risk factors/drivers* • Mbelwa's (2017) study of the prevalence of mental disorders among 108 adolescents in the Dar es Salaam juvenile justice system (remand homes) found that depression and brief psychotic episodes were common among adolescents with unstable family situations (those whose parents had divorced or died and single-parented children). • Hecker et al.'s (2016) study of 409 children and adolescents aged 6–15 in southern Tanzania identified a strong relationship between harsh discipline and adolescents' internalisation of problems, which were in turn related to lower working memory capacity. • Suicide surveillance at the Muhimbili National Hospital in Dar es Salaam in 2005 for the population in general (including but not limited to adolescents) found that males were about three times more likely than females to commit suicide and that the main motive (recorded for 40% of victims) was family-related difficulties (Mgaya et al., 2008).
	Discrimination/ stigma	*Already marginalised/excluded groups who face stigma and discrimination can also face mental health issues* • Being HIV positive, but also a history of childhood deprivation and residing in a rural setting, were found to be significantly associated with depressive symptoms (Lwidiko et al., 2018). A cross-sectional analysis of 3,013 out-of-school adolescent girls (aged 15–23) found that the two factors most strongly associated with having anxiety symptoms were HIV-positive status and having experienced violence from sexual partners (Kuringe et al., 2019). • A small study of 24 adolescents found that psychosocial and mental health challenges confronted by HIV-positive youth include: loss of one or more parents; chronic domestic abuse; financial stressors restricting access to medical care and education; and high levels of internalised and community stigma among peers and other social contacts. Over half (56%) reported difficulties coming to terms with their HIV diagnosis and espoused related feelings of self-blame (Ramaiya et al., 2016). • A cross-sectional study of 182 HIV-positive adolescents and young people aged 12–24 (mean age, 17.2), also in Moshi, showed a variety of ways in which HIV-positive adolescents experience both internal and external stigma (Dow et al., 2016). In a second study (randomised controlled trial of 'trauma-focused cognitive behavioral therapy'), also from Moshi but focusing on orphans (living at home rather than in institutions) and their guardians, respondents identified mental health-related issues among overall problems encountered by orphans (Dorsey et al., 2015).

Table 1 Mental health and psychosocial well-being of adolescents in Tanzania (cont.)

Issue		Key findings
Drivers and protective factors (continued)	Violence within household and beyond	*Risk factors/drivers* • Nyundo et al.'s (2020) household-based survey of 7,762 adolescents aged 10–19 years from six countries – including Tanzania (rural Dodoma, $n = 1,226$; urban Dar es Salaam, $n = 825$) found that adolescents who are exposed to violence, whether emotional or physical, tend to have lower self-esteem, which can predispose them to depression and suicidal behaviour. • Berhane et al.'s (2020) regional study found that bullying (23%) and physical fighting (35%) were more common among younger male adolescents. • In a nationally representative sample of 700 secondary school children (mean age, 14.92) and 333 parents or primary caregivers, 41% of students reported an elevated level of mental health problems (40% emotional problems, 63% peer problems, 45% conduct problems, 17% hyperactivity) in the previous six months. Concordantly, 31% of parents reported observing an elevated level of mental health problems in their children (37% emotional problems, 54% peer problems, 35% conduct problems, 17% hyperactivity). The authors identify significant associations between physical violence by parents and adolescents' mental health problems reported by students and their parents (Nkuba et al., 2018). • Another study of 1,000 secondary school students aged 13–21 (mean age, 16.45) across five regions explored the relationship between childhood psychological maltreatment and self-esteem and psychological distress among adolescents, finding that 76.6% had experienced some form of psychological maltreatment. There was a strong correlation between psychological maltreatment and (poor) self-esteem, and a significant (but weak) correlation between psychological maltreatment and psychological distress (Mwakanyamale and Yizhen, 2019).
	School experiences/ pressure	*Protective factors* • A study of 402 undergraduate students in Tanzania found that 1 in 10 screened positively for mental distress, but that residing off-campus and perceived availability of social support reduced the likelihood of mental distress (Mboya et al., 2020). *Risk factors/drivers* • In north-west Tanzania, Kuringe et al.'s (2019) study of adolescent girls and young women aged 15–23 found that out-of-school girls are at higher risk of depressive and anxiety disorders compared with their in-school peers.
	Social relationships outside the household	*Protective* • A small qualitative study of adolescents aged 15–24 in poor agrarian communities in Tanzania, Ghana and Malawi found that social networks are an important source of coping support, but this resource is bounded by the availability of people with the capacity to provide the specific support needed (Hall et al., 2019). • A study of 31 Maasai women who had migrated to cities found that circular migrants, who lived and worked alongside other Maasai women, had a stronger social support network, which the authors argue is likely to lead to improved well-being (although the study does not analyse the relationship between social support and mental health and well-being) (Jowell et al., 2018). *Risk factors/drivers* • In Nyundo et al.'s (2020) study across three East African countries (including Dodoma, Tanzania), experience of being bullied increased adolescents' risk of depression by 60%–70%. • A study of 3,765 students (mean age, 14) representative of all middle school students in Tanzania found that prevalence of single psychological distress was 20.6% and multiple psychological distress 10.3%.[ii] Both single and multiple psychological distress were associated with bullying victimisation (Pengpid and Peltzer, 2020).

ii   The study questionnaire used was from the GSHS. For each respondent, incidence of psychological distress 'items' (no close friends, loneliness, anxiety, suicidal ideation and suicide attempt) were summed. Participants who reported one item were assessed to be suffering from 'single psychological distress', and those who reported 2–5 items to be suffering from 'multiple psychological distress'.

Table 1 Mental health and psychosocial well-being of adolescents in Tanzania (cont.)

Issue		Key findings
Drivers and protective factors (continued)	Gender norms and expectations (e.g. housework, early marriage, etc.)	*Risk factors/drivers* • For females aged 15–24 in poor agrarian communities in Tanzania, Ghana and Malawi, Hall et al.'s (2019) study found that coping processes include risky sexual behaviours (including transactional sex), which can lead to further stressors including sexually transmitted illnesses (STIs) and unintended pregnancy, setting up a continuing cycle of resource depletion, stress and unsafe health practices. Adolescent girls can thus find themselves uniquely vulnerable to stressors related to the intersection of poverty and gender, including early pregnancy and school dropout (Hall et al., 2019).
	Technology	• A mixed-methods study of internet user behaviour among 60 adolescents aged 15–19 in Dar es Salaam and in Mtwara, southern Tanzania, found that adolescents mainly access the internet through mobile phones and that Facebook is by far the most popular site (Pfeiffer et al., 2014). When asked why fewer girls than boys said they were internet users, the authors were told that girls were scared of disclosing their interest in the internet to guardians and teachers because internet use by adolescent girls is less accepted than by boys. This was due to concerns about negative influences, such as meeting the 'wrong' people. In addition, girls' behaviour was generally more restricted culturally than boys' behaviour.

Table 2 Mental health and psychosocial well-being of adolescents in Viet Nam, and drivers/protective factors

Issue		Key findings
Problems and prevalence	Overall prevalence of mental health problems	*Overall* • The first nationally representative epidemiological survey on the prevalence of mental health problems in children was conducted in 2014 in Viet Nam by Weiss et al. They surveyed 10 of the 63 provinces, with a final sample of 1,314 parents who reported on their child and 519 children (aged 12 or above) who reported on themselves. The authors found that the overall levels of child mental health problems were about 12% of the non-adult population, suggesting that approximately 3 million children are in need of mental health services. They found that overall rates of child mental health problems varied significantly across the 10 provinces. Adolescents in the southern provinces had lower levels of mental health problems than those in the central and northern provinces, since the southern part of Viet Nam is considered 'more socially supportive and less stressful' (Weiss et al., 2014: 150). • In northern Viet Nam, Hoang-Minh and Tu (2009) found that about 25% of adolescents aged 15–18 met the cut-off on at least one Child Behavior Checklist (CBCL) subscale.[iii] • In 2011, Amstadter et al. studied 1,368 adolescents aged 11–18 in DaNang and Khanh Hoa provinces and found that approximately 9% had mental health difficulties such as emotional difficulties, behaviour problems, hyperactivity and inattention, peer relationship problems and lack of prosocial behaviours. • Among high school students in Ho Chi Minh City, Anh et al. (2006) found that 16% were experiencing significant affective problems and 24% behaviour problems. • A qualitative study carried out by ODI and UNICEF Viet Nam (2018) with 113 adolescents aged 10 and above (39 aged 10–14, 69 aged 15–17, and 4 aged 18 or above) in Hanoi, Ho Chi Minh City, Dien Bien and An Giang identified local perceptions that psychosocial and mental health problems among adolescents are widespread and increasing. *Differences by sex, ethnicity and other socio-demographic factors* • Amstadter et al.'s (2011) study found that older adolescents were less likely than younger adolescents to be at risk of mental health problems. They did not find any gender differences in prevalence rates (Liu et al., 2009, cited in Amstadter et al., 2011).

iii The CBCL is a standardised instrument that assesses the behavioural problems and social competencies of children aged 4–18 years. Parents complete the checklist to detect emotional and behavioural problems in children and adolescents.

Table 2 Mental health and psychosocial well-being of adolescents in Viet Nam (cont.)

Issue		Key findings
Problems and prevalence (cont.)	Overall prevalence of mental health problems (cont.)	*Differences by sex, ethnicity and other socio-demographic factors* (cont.) • Conversely, a qualitative, longitudinal study of the trajectories of depression symptoms (based on data from 2006, 2009 and 2013 from 2,215 young people aged 10–24 in Chi Linh district, a semi-urban area) found that depression scores were highest among adolescents aged 15–17. In the baseline survey (2006), the older the respondents were, the more severe their depressive symptoms (Bui et al., 2018). Girls reported higher levels of depressive symptoms than boys, regardless of age; girls aged 15–17 had the highest mean depression score.
	Internalising (depression, anxiety, stress, suicidal thoughts)	*Overall* • A qualitative study by Nguyen et al. (2013a) revealed that depression, anxiety, stress, suicidal thoughts and suicide attempts were seen as major problems by professionals (such as teachers) for secondary school pupils aged 15–18. • Narrative analysis of depression among Vietnamese adults has found that Vietnamese patients with depression experience and present their distress mainly through somatic symptoms (Niemi et al., 2013). • A qualitative study by ODI and UNICEF Viet Nam (2018) with 113 adolescents found that somatic complaints – headaches, loss of appetite, poor sleep and nightmares – were common. • Using a Strengths and Difficulties Questionnaire (SDQ), Anh et. al. (2006) found that among high school students in Ho Chi Minh City, 16% were experiencing significant affective problems. • In a sample of 1,159 secondary school children, Nguyen et al. (2013b) found that 23% reported anxiety symptoms at a clinically significant level, and there were high levels of depression. Measuring depression using the Center for Epidemiologic Studies Depression Scale (CES-D), Nguyen et al. found that the prevalence of being in an at-risk category for clinical depression (a CES-D score of ≥ 16) was approximately 41.1% (ibid.). Of these cases, 26% were identified as having elevated levels of depression. • The results of SAVY 2 (a nationally representative survey of Vietnamese youth aged 14–25), conducted in 2009, indicated that 73.1% had ever felt sad, 27.6% had ever felt so sad or helpless that they stopped doing their usual activities, and 21.3% had ever felt really hopeless about their future (WHO, n.d.; Ministry of Health et al., 2010a). • In a nationally representative survey, Weiss et al. (2014) found that there were more cases of internalising problems such as anxiety and depression than externalising problems. *Differences by sex, ethnicity and other socio-demographic factors* • Weiss et al. (2014) found that, based on reports by both parents and adolescents, girls scored higher on emotional subscales of the measures SDQ, CBCL and youth self-report (YSR), meaning that girls have higher levels of being anxious, depressed, withdrawn and having somatic complaints. • Similarly, SAVY 2 data for participants aged 14–19 suggest that being female and from an ethnic minority were risk factors for sadness and depression. Young women (77.9%) and urban youth (78.9%) had higher rates of sadness and depression than young men (68.4%) and rural youth (71.2%) (Ministry of Health et al., 2010a). • Female students in a study by Nguyen et al. (2013b) were three times more likely to have anxiety symptoms compared with male students. • Bui et al. (2018) found that the risk of having depression symptoms was significantly higher for those living in urban areas. • Research on more than 2,000 Vietnamese students found that being female and belonging to the Kinh ethnic minority group was significantly associated with depressive symptoms, anxiety and low overall well-being (Tran, 2015). • One study showed that being female, living in an urban area, being unmarried and having higher education levels were all linked to higher levels of depression in Chi Linh district of Hai Duong province (Chan and Parker, 2004, cited in Niemi et al., 2013).

Table 2   Mental health and psychosocial well-being of adolescents in Viet Nam (cont.)

Issue		Key findings
Problems and prevalence (cont.)	Externalising (behavioural problems)	*Overall* • A qualitative study by ODI and UNICEF Viet Nam (2018) with 113 adolescents found that incidence of conduct problems was also quite high, with common symptoms including getting angry and losing one's temper easily, and lack of self-control. • McKelvey et al. (1999) found that in a sample of 1,526 children living in two neighbourhoods of Dong Da district in Hanoi, 5.3% of boys and 7.7% of girls aged 4–11, and 9.5% of boys and 10.1% of girls aged 12–18, scored in the clinical range suggesting that they had behavioural difficulties. • Using the SDQ, Anh et al. (2006) found that among high school students in Ho Chi Minh City, 24% were experiencing significant behaviour problems. *Differences by sex, ethnicity and other socio-demographic factors* • Weiss et al.'s nationally representative survey (2014) found that there were more cases of internalising problems such as anxiety and depression than externalising problems, attributed to a traditional Confucian emphasis on controlling disruptive emotions. • Stratton et al. (2014) found that on the SDQ, males report higher levels of hyperactivity and attention problems than females – according to both adolescent and parent reports. Furthermore, conduct problems and hyperactivity scores decreased with age, suggesting a possible maturation effect for some types of externalising problems (i.e. hyperactivity subscales on the SDQ) for adolescents. • Similar trends were found in McKelvey's (1999) study, where boys showed higher levels of externalising symptoms than girls. • In Stratton et al.'s (2014) study, minority ethnic status was associated with more emotional, hyperactivity/inattention and peer relationship problems, as reported by parents, whereas wealth was not a significant risk factor.
	Suicide	*Overall* • In a cross-country comparison of Vietnamese and Chinese adolescents, Blum et al.'s (2012) study of more than 17,000 young people aged 15–24 found that the prevalence of suicidal thoughts in the past 12 months was 2.3% in Hanoi ($n = 6{,}191$), the lowest in their sample, compared with 8.1% ($n = 6{,}212$) in Shanghai and 17% ($n = 4{,}706$) in Taipei. Similarly, less than 1% of Vietnamese youth attempted suicide compared with 1.3% in Shanghai and 6.9% in Taipei. • SAVY 2 (a nationally representative survey of Vietnamese youth aged 14–25) also identified low rates of suicide; 4.1% of respondents reported that they had contemplated suicide (Ministry of Health et al., 2010a). • A study of 2,737 students from public lower secondary schools found that 6.1% had attempted suicide in the past 12 months (Huong, 2009). *Differences by sex, ethnicity and other socio-demographic factors* • Blum et al. (2012) suggest that females are almost twice as likely as males to have suicidal thoughts. Furthermore, while 4.1% of those aged 14–17 and 4.4% of those aged 18–21 in their sample reported suicidal thoughts, those aged 15–19 were 37% more likely to report suicidal thoughts compared with older youth. • Thanh et al. (2005) also identified being female as a risk factor for suicide attempts; females reported more family conflict, which created an additive risk factor for them. • In SAVY 2, 5.9% of young women reported attempting suicide, nearly twice the rate among men (2.3%). More urban youth (5.4%) than rural youth (3.6%) had thought of suicide (Ministry of Health et al., 2010). • The ODI and UNICEF Viet Nam (2018) study with 113 adolescents aged 10 and above found that females were perceived as being at higher risk of suicide. Reasons put forward (largely by boys) for why girls are more likely to attempt or commit suicide include their greater susceptibility to emotions and living in remote areas, isolated from support structures.

Table 2   Mental health and psychosocial well-being of adolescents in Viet Nam (cont.)

Issue		Key findings
Problems and prevalence (cont.)	Substance abuse and gambling	*Overall* • A study of 1,200 Vietnamese adolescents and youth aged 16–30 from five provinces found that 46.2%, 37.3% and 9.9% reported alcohol consumption, smoking and illicit drug use respectively in the previous 30 days (Do et al., 2018). • ODI and UNICEF Viet Nam's (2018) qualitative study with 113 adolescents aged 10 and above found that easy access to harmful substances was particularly prevalent in Dien Bien province, where access to drugs and to poisonous leaves was relatively widespread. Alcohol abuse was also prevalent. Reasons range from people wanting to use them, to being tempted by their friends, to having cheap and easy access to substances. • The Global Adult Tobacco Survey found that prevalence of current users of any cigarette type (i.e. manufactured and hand-rolled) among respondents aged 15–24 was 11.9% (23.4% among males and 0.3% among females) (Ministry of Health et al., 2010b). • SAVY 2 found that 20.4% of respondents aged 14–25 had ever smoked tobacco (39.5% of men and 0.6% of women). Of those who smoked, 75.4% desired to stop and 79.7% had tried to stop smoking during the past year. Almost all respondents (98.3%) reported that it was easy to buy tobacco. Over half (51.6%) of current smokers usually bought their tobacco in a store and, of these, 83.4% were not refused cigarette purchases because of their age (Ministry of Health et al., 2010b). • As regards gambling, a study by Lostutter et al. (2011) of 880 young Vietnamese aged 16–24 (mean age, 20) found that a high percentage reported unsuccessfully trying to quit (33%), unsuccessfully trying to control their gambling (23%) and/or being told by family or friends to stop gambling (23%). Participants also reported missing out on other activities (21%) and/or neglecting their responsibilities (20%) or schoolwork (15%) due to gambling. Post hoc tests revealed that perceived stress was significantly higher for both at-risk gamblers and probable pathological gamblers compared with non-gamblers. *Differences by sex, ethnicity and other socio-demographic factors* • According to SAVY 2, being male, older and living in an urban area were all associated with higher substance abuse/smoking (Ministry of Health et al., 2010a). • In Diep et al.'s (2013) study of 1,216 students at Hanoi Medical University, male students drank more frequently, engaged in more binge drinking and experienced more alcohol-related mental health effects than female students. • Female students who drank more frequently were about six times more likely to have experienced mental health conditions than those who did not (ibid.). • In a study of 1,200 young people aged 16–30 across five provinces by Do et al. (2018), females were found to be less likely to use substances compared with males. People living in mountainous areas were more likely to use either single or multiple substances compared with those living in rural areas. • Male adolescents have also been found to be substantially more likely than females to meet criteria for disordered gambling (Lostutter et al., 2011).
Drivers and protective factors	Socioeconomic status	*Protective* • Amstadter et al. (2011) found that, after controlling for all other variables (i.e. gender and ethnicity), having more family income was a protective factor and associated with decreased likelihood of probable mental health problems. • Similarly, a qualitative study (ODI and UNICEF Viet Nam, 2018) with 113 adolescents aged 10 and above found that relatively better-off household socioeconomic status mitigated some sources of stress experienced by young people. • Revollo and Portela (2019) found that agency and self-efficacy correlate positively with the socioeconomic level of the household in which young people were born and grew up. • Good nutrition is associated with the development of psychological skills, with a positive relationship between greater higher-for-age scores and better psychological skills (self-efficacy, self-esteem and aspirations) (Thang and Hang, 2018).

Table 2   Mental health and psychosocial well-being of adolescents in Viet Nam (cont.)

Issue		Key findings
Drivers and protective factors (cont.)	Socioeconomic status (cont.)	*Protective* (cont.) • Trang and Duc (2014) found that being an older mother, having more education, having more income and having fewer children were all protective factors against child maltreatment. *Risk factors/drivers* • A Young Lives survey of a cohort of 12-year-olds found that younger adolescents from poor and ethnic minority households have lower subjective well-being, on average, than those from ethnic majority and non-poor households[iv] (Nguyen, 2011). • Conversely, in Weiss et al.'s (2011) study of children aged 6–16, more parent education and higher family income acted as a risk factor for both parents and adolescents who reported attention and hyperactivity problems. • For older adolescents in rural areas, limited economic opportunities, leisure activities and knowledge of vocational options is a cause of stress (ODI and UNICEF Viet Nam, 2018). • Le (2009) found that parents' education level and occupation are associated with children's suicide behaviour. Most children (79%) who had thought of suicide live in families where parents have low education level, and 87.5% in families where parents are manual workers. The study found that parent education level and socioeconomic status are inextricably linked. • While there were no significant gender differences in terms of prevalence of risk of disordered eating attitudes, socio-demographic factors (including wealthier subjective economic status and living in a lower middle-income country) were associated with eating disorder risk (Pengpid and Peltzer, 2018).
	Migration status	*Protective* • Youth in rural areas who never migrated reported a lower likelihood of suicidal thoughts compared with their urban counterparts in Hanoi in Blum et al.'s (2012) study of 6,000 adolescents and youth. • Jordan et al. (2013) found that children (or young adolescents, aged 9–11) of parents who are migrants and who therefore live with other carers were least likely to report lifetime use of alcohol (for both males and females). *Risk* • Migration of Vietnamese parents abroad for financial reasons can have a negative effect on the mental health of children left behind, with adolescents facing sadness and depression (ODI and UNICEF Viet Nam, 2018). • Jones et al. (2014) found that being away from one's support systems leads to loneliness for young adults who have migrated from rural to urban areas. • Urban-to-urban migrant status and poor relationship with mothers were associated with reporting attempted suicide in the past 12 months in Hanoi (Blum et al., 2012).
	Family structure and intra-household dynamics	*Protective* • Having both parents still living, or living with both parents, was found to be protective against depression and suicide, which the authors of a recent study also attribute to supportive or stable home environments (Nyundo et al., 2020). • ODI and UNICEF Viet Nam's qualitative study (2018) with 113 adolescents aged 10 and above found that emotionally healthy family relationships or family connectedness were a key positive factor in mitigating psychosocial stress and ill-being. • Le et al. (2012) found that living in families where family members were closely connected and their opinions valued, protected adolescents from experiences of low mood (internalising problems). • Teenagers who have strong connectedness with the family, and with fathers in particular, have almost 1.66 times higher self-esteem than others (Nguyen, 2011). • Phuong et al. (2013) found that father-bonding acted as a protective factor (for male and female school students) against thoughts about suicide.

iv   Subjective well-being was measured by showing each child a picture of a ladder with nine steps and asking: 'There are nine steps on this ladder. Suppose we say that the ninth step, at the very top, represents the best possible life for you and the bottom represents the worst possible life for you. Where on the ladder do you feel you personally stand at the present time?' The answers were recorded on the scale of 1–9.

Table 2   Mental health and psychosocial well-being of adolescents in Viet Nam (cont.)

Issue		Key findings
Drivers and protective factors (cont.)	Family structure and intra-household dynamics (cont.)	*Protective* (cont.) • Blum et al. (2012) found that higher mother and father quality of relationship scores were associated with 5% lower likelihood of suicidal thoughts among children. Higher maternal relationship scores were especially protective for youth in Hanoi. • In a nationally representative survey, Weiss et al. (2014) found that time spent by parents talking with adolescents aged 12 and above was linked to lower withdrawn-depressed and somatic complaints (internalising problems) on CBCL subscales. Time spent by parents talking with adolescents was also linked to lower attention problems, rule-breaking and aggressive behaviour subscales and, for older adolescents, lower conduct problems and hyperactivity subscales (externalising problems). • Parental 'understanding' and parental 'monitoring' are significantly associated with reduced likelihood of being bullied and experiencing mental health problems (Nguyen et al., 2019). *Risk factors/drivers* • Weiss et al. (2014) found that, for children aged 6–16, while having more siblings at home acted as a protective factor for younger children, for adolescents there was a positive correlation between number of siblings and the anxious-depressed and somatic complaints subscales. • In Diep et al.'s (2013) study of university students, living in rented accommodation or in a dorm was the strongest predictor of specific types of harm among male students only, while living with family acted as a protective factor. • Nguyen et al. (2019) found that parental 'control' was significantly associated with greater likelihood of being physically attacked and with mental health problems such as suicidal thoughts and loneliness.[v] • The ODI and UNICEF Viet Nam study (2018) with 113 adolescents aged 10 and above found that younger children emphasised that they faced high expectations from parents in terms of carrying out domestic chores and caring for younger siblings, and were afraid of being 'scolded' by parents for not doing those chores adequately. Similarly, children are also fearful of parents criticising them for poor marks at school and there have been some instances in which scolding for academic performance has led to suicide attempts. For mid-adolescents (14–16 years), when young people are increasingly trying to define an independent identity, parental 'control' was seen as a key source of stress, with children reporting that their parents do not allow them to go out with their friends, that they disapprove of romantic relationships, monitor their cell phone use and make them do chores around the house. Further, children often opted not to share their feelings with their parents, to protect their parents from worrying, which resulted in emotional isolation. • In Blum et al.'s (2012) study, females living outside parents' homes were less likely to experience suicidal thoughts compared with those living with parents. This was also found in Nguyen et al.'s (2010) work with 104 adults, which found that the majority of suicide attempters were living together with their family members or others (83.8%) while only 3% were living alone.
	Conflict, maltreatment or violence within the family	*Risk factors/drivers* • Household tensions can drive poor adolescent psychological well-being and can arise from a number of sources, including: family pressure on children to excel in school; a general feeling that parents do not understand children; marital conflicts (which often spill over to affect children); divorce; domestic violence from husbands; and lack of communication between parents and children, often as a result of changing family structures and the pressures on parents in a competitive labour market, which can lead them to neglect their children (ODI and UNICEF Viet Nam, 2018).

v   In this study, parental understanding, parental monitoring and parental control are components of a proxy of parent–adolescent bonding. Parental understanding and parental monitoring were identified via separate questions, i.e., 'How often did your parents or guardians understand your problems and worries during the past 30 days?' and 'How often did your parents or guardians really know what you were doing with your free time during the past 30 days?' The responses to these questions were 'never', 'rarely', 'sometimes', 'most of the time', or 'always'. These variables were recoded and classified as 'yes', which included 'most of the time/always', and 'no', which included 'never', 'rarely' and 'sometimes'.

Table 2 Mental health and psychosocial well-being of adolescents in Viet Nam (cont.)

Issue		Key findings
Drivers and protective factors (cont.)	Conflict, maltreatment or violence within the family (cont.)	*Risk factors/drivers* (cont.) • Lê (2009) found that of the 41 children who attempted suicide and were sent to Nhi Dong hospital, 94.4% cited poor quality of relationships with parents as the cause. • Thanh et al. (2005) found that of 435 suicide attempts among young adults, 73% were a result of family conflict. • Phuong et al. (2013) examined 972 children aged 12–15 in Hanoi and found that risk factors for increased alcohol consumption for males included sibling conflict and family history of drinking. • Research with university-level students indicated that conflict with parents and in romantic relationships was associated with feelings of sadness (Tran, 2015). • According to data from more than 11,000 households, 73.9% of children aged 2–14 experienced violent discipline. Moreover, 55.4% of children were subjected to psychological aggression (Ministry of Health et al., 2010a). • Physical and emotional maltreatment is associated with higher levels of sadness (Huong, 2009). • Le et al. (2011) conducted a secondary analysis on data from SAVY 1 and 2, and found that children who are exposed to violence both inside and outside their families were more likely to experience a low or depressed mood. • Nguyen et al. (2013b) found that students were likely to show higher levels of depressive symptoms when they were being physically or emotionally abused, which was also related to high levels of anxiety. • Huong (2009) found that males who experienced emotional maltreatment and severe sexual abuse during childhood were more likely to report cigarette smoking. Moreover, two or more forms of maltreatment were linked with higher likelihood of smoking cigarettes in the past month. For males and females, severe sexual abuse during childhood predicted higher levels of alcohol consumption in early adulthood. • After controlling for religion, family economic status, parent marital conflict, parent quality of relationship and other health-related variables, both males' and females' suicidal thoughts were correlated with severe emotional maltreatment and severe neglect during childhood. For males, physical maltreatment was associated with suicidal thoughts (Huong, 2009).
	Gender norms and expectations (e.g. housework, early marriage, etc.)	*Risk factors/drivers* • The qualitative study by ODI and UNICEF Viet Nam (2018) with 113 adolescents aged 10 and above found that for older girls, early marriage and school dropout both result in feelings of social isolation, with many girls turning to negative coping strategies (including crying alone, substance abuse, vandalism and suicidal thoughts) as a result. • Bui et al. (2018) found that depression among young people is associated with marital status (with depression scores higher among married than unmarried youth). • In the ODI and UNICEF Viet Nam (2018) study, gendered norms were mentioned as a strong driver for suicide, particularly for people in rural areas, with girls reporting that norms around son preference in rural areas may put girls at higher risk of suicide.
	School experiences/ pressure	*Protective factors* • One study found that school connectedness acted as a protective factor against suicidal ideation thoughts (Phuong et al., 2013). • School connectedness and peer support is a strong protective factor for children's mental health and well-being. Indeed, in Huong's 2009 study of more than 2,500 university students, friends were the main support for over 40% of the sample ($n = 1,044$). *Risk factors/drivers* • School location (that is, being an inner city, urban school) is linked to higher suicide ideation thoughts for both males and females (Phuong et al., 2013). They found that 16.1% of children in urban schools compared with 4.6% in suburban schools had suicidal thoughts. • School location also seems to influence substance abuse, with inner city, urban school children being more likely to consume more alcohol (ibid.). This was true for both males and females.

Table 2 Mental health and psychosocial well-being of adolescents in Viet Nam (cont.)

Issue		Key findings
Drivers and protective factors (cont.)	School experiences/ pressure (cont.)	*Risk factors/drivers* (cont.) • A small qualitative study of 36 teachers, 55 pupils aged 15–18 and 34 parents found that depression, anxiety, stress, suicidal thoughts and suicide attempts were seen as major problems by all stakeholders. Mental health problems were mainly associated with academic pressure, resulting from an overloaded curriculum and pressure from teachers and parents to succeed (Nguyen et al., 2013a). • In a sample of 1,159 secondary school students in Can Tho City, Nguyen et al. (2013b) identified that at school level, the major risk factors related to anxiety and depression (internalising problems) were high educational stress and poor marks in school. • Having serious quarrels with teachers or other school staff members has been identified as a risk factor for depression, while anxiety was associated with physical and emotional abuse from teachers or other staff members at school (ibid.). • The ODI and UNICEF Viet Nam (2018) study similarly identified school-level drivers of adolescent ill-being, including academic stress, inadequate support and/or shortcomings of the school environment. Being away from family and in boarding school was an added stressor, as was a lack of leisure activities and a lack of supportive teachers. • Bui et al. (2018) find that for those living in semi-urban areas of the country, higher education was associated with higher levels of depression, potentially because adolescents who reach secondary or tertiary education deal with more assignments, and have more requirements and experience pressure from their study programmes. • Marginalised groups may be particularly affected by academic pressure. As regards gender, ODI and UNICEF Viet Nam (2018) found that somatic complaints – headaches, loss of appetite, poor sleep and nightmares – are common, with reasons for these largely related to the stress associated with academic pressure, but also, particularly for girls, as a result of stress from having to juggle school and housework. The same study also found that being poor can limit adolescents' scholastic achievement by leaving them with less time to do schoolwork and fewer means for extra-tuition classes, or force them to drop out of school altogether. This leads to high levels of stress for children, who are not able to achieve their aspirations. • A qualitative study of 12 adolescents aged 16–17, their caregivers, friends, teachers and community members in two villages explored reasons for high school dropout among Cham H'roi (an ethnic minority) adolescents. It found that reasons included bullying and being left out by their majority ethnic (Kinh) peers, exclusion as a result of teaching strategies, pressure from peers from their own ethnic group who had already dropped out and lack of aspirations (an assumption that young Cham H'roi people will end up working on farms irrespective of level of education). By contrast, for Kinh adolescents, the main cause of dropout was failing the 10th grade entrance exam (Huong, 2011).
	School-based violence and bullying	*Risk factors/drivers* • Negative associations were found between different types of bullying and relations with peers (Thang and Hang, 2018). A short-term longitudinal study (two rounds of data collection, six months apart) of 1,424 Vietnamese students in middle and high schools (grades 6–11) found that students who were victimised often, and those who were classified as 'highly involved' as both victims and bullies, showed significantly higher levels of depression, psychological distress and suicidal ideation thoughts (ibid.). • The mental health of adolescents involved in bullying either as victim or bully at a 'low level' was generally similar to those not involved in any bullying (Le et al., 2017).[vi]

vi Data was collected in two waves ('Time 1' and 'Time 2'). The authors categorised bullying roles over time by: (1) not involved (include students who were not involved in any form of bullying at both times); (2) victims only (those who were victimised only at Time 1 or Time 2 or at both times); (3) bullies only (include students only bullied others at Time 1 or Time 2 or both); and (4) bully–victims (those who were bully–victims at Time 1 or Time 2 or both, or changed their roles as victims or perpetrators over time). The authors also measured levels of stability or change in bullying roles by comparing the mean score of bullying involvement at Time 1 and Time 2. In each group of bullying roles, students were categorised into four levels of bullying involvement: 'stable-low' (scores under the mean at Time 1 and Time 2); 'declining' (scores above the mean at Time 1 and under at Time 2); 'increasing' (scores below the mean at Time 1 and above at Time 2); and 'stable-high' (scores above the mean at Time 1 and Time 2.

Table 2 Mental health and psychosocial well-being of adolescents in Viet Nam (cont.)

Issue		Key findings
Drivers and protective factors (cont.)	School-based violence and bullying (cont.)	*Risk factors/drivers* (cont.) • Students who are perceived as 'meek' are most likely to be bullied; some students may even accede to more minor demands of peers (e.g. verbal harassment) in order to escape being subjected to more direct forms of violence (Horton et al., 2015). • As regards gender-differentiated impacts of bullying, in Le et al.'s (2018) study, females who had stable but low-level victimisation or bully–victim status had worse mental health than males with stable low-level exposure. • Using a measure about frequency of bullying in the past month, Phuong et al. (2013) found that among 972 school-going students, bullying was linked to suicidal thoughts, but only for male students. • In a study by Le et al. (2019), there were reciprocal associations between bullying victimisation and mental health problems. Bullying victimisation was an independent predictor of subsequent mental health problems; however, inversely, mental health problems also preceded students' experience of becoming victims or bully–victims. Females with mental health problems were more likely to be victims; whereas similarly distressed males were vulnerable to both being bullied and being perpetrators. • Causes of bullying between girls include showing off and envy (Hang and Tam, 2013). • A mixed-methods study of 1,616 high school students aged 16–18 (grades 10–12) in Hanoi saw respondents describe experiences of violence occurring at home, at school and in the community. These experiences led to sadness, loneliness, having extremely negative thoughts about the value of life and suicidal ideas (Le et al., 2018).
	Social relationships outside the household	*Protective factors* • Amstadter et al. (2011) found that higher social capital was associated with decreased likelihood of mental health problems. • Social status (being looked up to as a leader) and being socially active (joining more youth clubs) are associated with higher levels of happiness among 12-year-olds. However, this relationship could be less significant than it appears, given that a happier child is also more likely to participate in more clubs and to have more self-confidence to act as a leader (Nguyen, 2011). • The ODI and UNICEF Viet Nam (2018) study with 113 adolescents aged 10 and above identified active participation in leisure activities (e.g. sports, martial arts, reading, watching movies, joining school clubs or trips, learning through the internet) and having or being part of good social networks as a protective factor against mental health problems. • Amstadter et al. (2011) and Stratton et al. (2014) found affiliation with religion (Buddhism, Christianity, or other) to be a protective factor against emotional problems. *Risk factors/drivers* • Peer pressure is a risk factor for alcohol consumption: early adolescents (9–11 years) are more than five times as likely to have ever drunk alcohol if their friends also drink (Jordan et al., 2013). • In SAVY 2, while 36% of young men reported that the main reason for initiating smoking was curiosity, almost one-third (30.9%) reported that they started smoking because their peers smoked. In fact, more youth reported pressure from peers to start smoking than not (31% compared with 13%) (Ministry of Health et al., 2010b. • The qualitative study by ODI and UNICEF Viet Nam (2018) found that negative perceptions of adolescent physical appearance are a key risk factor, and that such concerns begin in early adolescence, especially among girls, who are anxious about menstruation or being overweight. • The same study found that romantic relationships (which often start in the school environment) are often associated with stress since, on the one hand, they have to remain hidden from parents and teachers who would forbid them and, on the other, break-ups and unrequited love lead to sadness, depression and sometimes even suicidal ideation thoughts or attempts.

Table 2   Mental health and psychosocial well-being of adolescents in Viet Nam (cont.)

Issue		Key findings
Drivers and protective factors (cont.)	Social relationships outside the household (cont.)	*Risk factors/drivers* (cont.) • A survey of 171 students (96% of whom were aged 12) from two middle schools in two communes of Quang-Tri province found that the major risk factors associated with suicidal ideation thoughts were feelings of loneliness, having no close friends and parental drinking (Le et al., 2016). • Lifetime exposure to poly-victimisation[vii] was associated with increased likelihood of involvement in health risk behaviours and symptoms of common mental health problems among both sexes, which increased adolescents' risk of having suicidal ideas in the previous year. Compared with non-victims or victims of fewer forms, poly-victims (boys and girls) were also more likely to report suicidal thoughts and plans (ibid.).
	Early marriage and school dropout	*Risk factors/drivers* • ODI and UNICEF Viet Nam (2018) find that among older adolescent girls, early marriage and school dropout both result in feelings of social isolation, with girls turning to negative coping strategies – including crying alone, substance abuse, vandalism and suicidal ideation – as a result. • Bui et al. (2018) find that depression among young people is associated with marital status (with depression scores higher among married than unmarried youth).
	Discrimination/ stigma	*Already marginalised/excluded groups who face stigma and discrimination can also face mental health issues* • Across the Mekong sub-region, trafficked adolescents' concerns about social ostracisation and maltreatment by others in their community of origin were associated with all symptoms of depression, anxiety and post-traumatic stress disorder (PTSD) in males, and with depression in females (Nodzenski et al., 2020). • A qualitative study of 139 young people from key populations at risk of HIV across four countries, including Viet Nam, found that norms discourage transgender youth from seeking professional or volunteer mental health services (UNICEF, 2019). • In a study of 710 male sex workers in Hanoi, Nha Trang and Ho Chi Minh City, 58.5% had clinically moderate levels of depression, with those in Ho Chi Minh City having the lowest scores (Goldsamt et al., 2015). • Studies show that stigma against HIV is related to higher levels of depression among Vietnamese men who are HIV positive (Salter et al., 2010; Esposito et al., 2009).
	Technology	*Protective factors* • In a small qualitative study of 20 adolescents and their parents in Danang, Sobowale et al. (2016) found that evidence-based psychotherapy treatments delivered through the internet have the potential to increase access to mental health for adolescents and would be well received, with most youths and parents agreeing that the internet could serve well as a care delivery model. Both groups reported lack of awareness of web-based interventions and logistical concerns regarding access as main barriers. In addition, though, many parents were concerned about internet addiction. • A qualitative study by ODI and UNICEF Viet Nam (2018) with 113 adolescents aged 10 and above found that some children used technology proactively to find support – for instance, reading internet articles to help learn how to deal with feelings of sadness or anger, watching entertaining videos, or reading stories on 'science and technology' to relieve stress, as well as connecting with friends on Facebook.

vii Lifetime exposure to poly-victimisation was assessed using the Juvenile Victimisation Questionnaire Revised 2 (JVQ R-2) Youth Self-reported Screener Version. The JVQ R-2 has 34 items, assessing lifetime exposure to property victimisation, threat, assault, child maltreatment, peer or sibling victimisation, sexual assault, witnessing of family or community violence. Three JVQ R-2 supplemental items assessing lifetime exposure to violence between family members, not just the parents, and cyber victimisation were added, making a total of 37 items. The JVQ has been shown to be reliable, acceptable and valid for use among children and adolescents in the USA, but has not been validated for use among Vietnamese adolescents.

Table 2 Mental health and psychosocial well-being of adolescents in Viet Nam (cont.)

Issue		Key findings
Drivers and protective factors (cont.)	Technology (cont.)	*Risk factors/drivers* • Access to modern technology is also linked to risks of addictive online behaviours, with access posing a threat to psychological well-being among adolescents who 'use it too much' (ODI and UNICEF Viet Nam, 2018). According to ODI and UNICEF Viet Nam (2018), boys tend to spend more time online, playing games in internet shops, and their sadness is attributed to losing games online. Over time, online gaming also appears to have negative spillover effects on academic attainment. While boys are more likely to play computer games than girls, girls are more at risk from cyberbullying and stalking (ibid.). • A quantitative study of 566 young Vietnamese aged 15–25 (56.7% female, 43.3% male) found that 21.2% suffered from internet addiction. They were more likely to have problems with self-care, difficulty in performing daily routine, and to suffer from pain and discomfort, anxiety and depression. However, the authors found no differences by gender or other socio-demographic variables. Nor was there any difference in cigarette smoking, water-pipe smoking and alcohol dependence between internet-addicted and non-internet-addicted groups (Tran et al., 2017). • A study of 736 students from eight secondary and high schools in Hanoi, Hai Phong and Hai Duong found that 24% were victims of at least one form of cyberbullying (Le, 2020).

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