ODI Report

Mental health and psychosocial well-being among adolescents in Viet Nam

Findings from a mixed-methods baseline study

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Acronyms/Glossary

ASEAN	Association of Southeast Asian Nations
CBCL	Child Behavior Checklist
CBO	community-based organisation
CSO	civil society organisation
FCS	family case study
FGD	focus group discussion
GRDP	gross regional domestic product
IDI	in-depth interview
IGT	intergenerational trio
IT	information technology
KII	key informant interview
LGBTQI+	lesbian, gay, bisexual, transgender, queer/questioning and intersex plus (community)
LMIC	low- and middle-income countries
MEL	monitoring, evaluation and learning
mhGAP	Mental Health Gap Action Plan
MoH	Ministry of Health
MoLISA	Ministry of Labour, Invalids and Social Affairs
NGO	non-governmental organisation
OLS	ordinary least squares
SDG	sustainable development goal
SDQ	Strengths and Difficulties Questionnaire
SES	socioeconomic status
WHO	World Health Organization

Executive summary

This mixed-methods study is part of a project funded by Fondation Botnar to address the mental health needs and psychosocial well-being of adolescents in two very different country contexts, Viet Nam and Tanzania.[1] The summary below outlines the content of the Viet Nam report, core findings and recommendations.

Study aims

This ODI Report is focused on identifying the key drivers of mental ill-health and psychosocial well-being among two subgroups of adolescents (those aged 11–15 years and those aged 16–19 years) in two cities (Vin City and Nha Trang) in Viet Nam.

A 2014 survey in Viet Nam found that approximately 3 million children (aged 12 or above) were in need of mental health services, with needs varying significantly across the 10 provinces surveyed. Viet Nam's mental health system is heavily focused on treating severe mental disorders (especially epilepsy and schizophrenia) in hospitals in urban areas, with few resources dedicated to more common mental health problems in any setting. Where mental health services do exist, uptake is low (especially among adolescents and children), partly due to lack of knowledge about those services, stigma surrounding mental ill-health, and lack of age- and gender-appropriate services.

Subsequent aims of the project are:

- To co-create (with adolescents, teachers and local authorities) and test a range of approaches (digital and non-digital) to support adolescents' mental health and well-being.
- To review and adapt potential approaches based on the monitoring, evaluation and learning (MEL) system, the baseline and endline studies, and ongoing feedback loops.
- To document the effectiveness of both digital and non-digital solutions in addressing adolescents' mental health problems.

Chapter 2: Methodology

We collected data from adolescents in eight public schools in urban and rural areas of two provinces, Khanh Hoa and Nghe An.

Primary data was collected in December 2020 and January 2021. The quantitative survey of 844 adolescents (in the 7th and 8th grades [middle school] and 10th and 11th grades [high school]) provided a baseline profile to better understand mental health status, literacy and service access, and to inform evaluation of the impact of the project's digital and non-digital interventions. We used purposive sampling to enrol adolescents, disaggregated by age (mid-adolescence [11–14 years] and older adolescence [15–19 years]), gender (male and female), mental health status and academic performance. Participants were recruited through enrolment lists with socio-demographic characteristics shared by the school teacher.

1 The three-year programme of work consists of six phases: (1) inception; (2) mixed-methods baseline data collection; (3) co-creation/design of solutions; (4) implementation of solutions; (5) mixed-methods endline data collection; and (6) sharing, dissemination and research uptake. Starting in May 2020, the project will run for a total of approximately 36 months.

Primary qualitative data collection consisted of in-depth interviews (IDIs), focus group discussions (FGDs), family case studies (FCS, interviewing different generations of the same family) and key informant interviews (KIIs). Among those interviewed for the qualitative study were adolescents who participated in the survey, and who showed high levels of internalising issues such as depression or anxiety according to the Strengths and Difficulties Questionnaire (SDQ). A total of 92 qualitative research interactions were conducted across the two sites.

Chapter 3: Overview of mental health policy and services in Viet Nam

Although Viet Nam does not have a mental health law, there is a draft National Mental Health Strategy covering the period 2015–2020, with a vision to 2030. It includes consideration of service provision across all life stages (from infancy to older age).

The main government ministries responsible for mental health services are the Ministry of Health (MoH) and the Ministry of Labour, Invalids and Social Affairs (MoLISA). There are several pieces of legislation that protect the rights of mentally ill persons, including MoLISA's Scheme 1215 (2011–2020), providing community-based social assistance and functional rehabilitation for people with mental illness or mental disorders.

Viet Nam's healthcare system is based on four tiers (central, province, district and commune); psychiatrists only work at the first two levels. While most mental health services (focusing on epilepsy and schizophrenia) are provided in hospitals, follow-up usually occurs within the community. Mental health services are provided through six types of institution: (1) two national psychiatric hospitals (in Hanoi and Bien Hoa); (2) provincial-level psychiatric hospitals; (3) outpatient facilities; (4) commune health stations; (5) day treatment facilities; and (6) community-based psychiatric inpatient units. Respondents most commonly mentioned the first two.

Chapter 4: Adolescents' mental health and psychosocial well-being status and knowledge

To establish the baseline of adolescents' mental health and psychosocial well-being status – including their mental health literacy, and the perceptions of adults and other community members about mental health – our key comparable metrics (collected through the survey) are the SDQ (a measure of emotional and behavioural difficulties) and the WHO-5 (a measure of subjective psychosocial well-being). We coded SDQ and WHO-5 scales on a range from 0% to 100%. In SDQ subscales (emotion, behaviour and prosocial), higher scores indicate a higher risk of mental health problems. On WHO-5, higher scores indicate greater psychosocial well-being.

To complement these continuous measures, we categorise the top quartile of the SDQ emotion distribution as consisting of students 'at risk' of mental health issues, and the top quartile of the WHO-5 distribution as consisting of students exhibiting relatively high psychosocial well-being. We also use the WHO-5 measure as a screening instrument for depression; following accepted standards, we designate individuals scoring 50% or less as being at risk of depression.

In the qualitative research, adolescents described symptoms or signs of mental distress as including 'overthinking' things, being stressed, having unresolved problems, being angry, being too emotional, thinking negatively, wanting to be alone, having too much energy and self-isolating. They

also cited physical symptoms such as being tired, having headaches and having a stomach ache. Some used derogatory terms to describe mental illness, such as 'crazy', 'insane' or 'abnormal'.

In our survey, only 41% of respondents reported knowing about the causes of mental ill-health, while 45% said they recognise the signs. More than two-thirds (69%) said they know of strategies to help them be more resilient when facing difficulties, 64% said they know of strategies for dealing with stress and 72% said they understand how social media impacts well-being. Only 13% said they would not tell anyone if they had a mental illness, and only 16% said they would not seek help from a professional. Just over a quarter (26%) think that mental ill-health is not a real medical illness.

The survey identified 33% of respondents as being at risk of depression (WHO-5), with relatively equal proportions in middle school and high school.

Both the qualitative research and the survey suggest that girls are more likely to experience mental health distress than boys. The survey found that 28% of girls are at risk of mental ill-health (according to the SDQ emotion subscale), compared with 14% of boys, and 37% of girls are at risk of depression (WHO-5), compared with 30% of boys. In a multivariate analysis, we found that girls are 2.9 times more likely to be at risk of mental ill-health than boys, and 1.4 times more likely to be identified as at risk of depression, even after controlling for other factors.

Findings also suggest that mental health stressors increase with age. The SDQ emotion score was higher for high school respondents and older respondents (aged 14–15) compared with middle school and younger respondents.

Ethnicity and socioeconomic status (SES) also impact mental health. The qualitative research found that adolescents from minority backgrounds are more likely to be discriminated against and bullied, with consequences for mental health. The survey also shows that risk of mental ill-health was higher among respondents who had experienced hunger in the past 12 months.

Respondents in the qualitative study mentioned experiencing stress, depression/sadness, anxiety and anger. There were also accounts of suicide ideation and detailed planning of suicides, although some reported that their friends had dissuaded them from going through with it.

Most respondents in the qualitative research perceived that mental health problems have increased compared to 5 or 10 years ago, citing reasons such as growing use of social media and electronic devices, and rapid economic development, which has contributed to increasing pressures and stress.

There were also some positive views, with respondents noting that students are now more able to talk about their problems, and some schools are developing strategies to reduce academic pressures, which are a considerable source of anxiety for many adolescents (see Section 4.1).

Chapter 5: Protective factors for mental health and drivers of mental ill-health

Adolescent respondents reported a range of factors that are protective of mental health. These include:

- having a positive perception of oneself (including physical appearance, personality and doing well at school)

- having positive family dynamics/good relationships with parents (in the survey, living with both parents was associated with higher subjective well-being (WHO-5))
- having close friends or other positive relationships outside the household
- having role models (this was positively associated with psychosocial well-being and a lesser risk of mental ill-health on the SDQ prosocial subscale)
- leisure activities (alone or with friends)
- having aspirations for the future (such as having a career, getting married, having children, and taking care of parents and grandparents).

In addition, the survey data found that adolescents with high psychosocial well-being have 11% higher self-efficacy than those with lower psychosocial well-being, whereas those at risk of mental ill-health had self-efficacy scores that were 7% lower than those classed as not at risk, and those at risk of depression had self-efficacy scores that were 10% lower than the rest.

Interestingly, girls were more likely to have a role model than boys. Respondents most commonly cited role models as the mother (52%), father (43%), grandmother (27%) and teacher (26%). The qualitative research indicates that a family member who had done well academically or who was financially successful was the most commonly mentioned role model.

Adolescent respondents also cited many factors as driving mental distress and ill-health, some of which appear to be the direct opposite of the protective factors. They include:

- negative self-perceptions, such as body image or physical appearance (among girls more than boys) was often linked to low self-esteem, self-worth and self-confidence
- unhappy or unstable family dynamics, which could make adolescents feel unloved, misunderstood, neglected or unsupported; some also reported being punished and/or scolded by parents, often due to poor academic achievement (see Section 5.2)
- parental separation or divorce, parental re-marriage or absence, parental death, or sudden accidents, injuries or chronic health problems among family members, as well as conflicts within the home (parents arguing, fathers 'beating' mothers); the survey found that 33% of respondents have witnessed physical violence against their mother, which was associated with higher risk of social and behavioural problems
- poverty/financial difficulties, leading to unmet basic needs (the survey found that adolescents who had gone hungry in the past 12 months had a statistically significant higher risk of mental ill-health on the SDQ emotion and behaviour subscales)
- conflict among peers and friends (whether due to jealousy, gossip, or perceived favouritism by teachers); bullying is also pervasive, and our survey found that being bullied is one of the best predictors of mental ill-health (it doubles the chances of being in the SDQ high-risk category or WHO-5 risk of depression, after controlling for other factors)
- schools, and the often extreme pressure (mostly from parents/family) on adolescents to perform well academically (which also leaves little time for leisure activities)
- experiencing violence or excessive discipline (most commonly from parents but also teachers, other adults, or peers); just under two-thirds of survey respondents (64%) reported experiencing physical or emotional violence or other maltreatment (e.g. being denied food) at home within the past year; experiencing physical violence more than doubles the chances of being identified with depression (after controlling for other factors)

- romantic relationships, particularly when they end, or are deemed socially unacceptable (such as homosexual relationships)
- technology, and addiction to mobile phones and social media (thus losing contact with the real world); the survey found that frequent internet use was among the best predictors of mental ill-health (it increases the likelihood of being high risk in mental ill-health (SDQ) by a factor of 1.7). The survey also found a higher risk of mental ill-health (SDQ emotion subscale) among respondents who had access to a smartphone, owned a mobile phone or had access to the internet whenever they needed.

Use of harmful substances (such as alcohol and cigarettes) was cited as both a driver of mental ill-health and a coping strategy. The survey found an association between consuming alcohol and high risk of mental ill-health, and that consumption of harmful substances was more common among respondents at risk of depression. Having ever smoked was associated with higher risk of mental ill-health, while consuming drugs was only associated with lower psychosocial well-being.

Chapter 6: Mental health-seeking behaviours, coping strategies and the influence of technology

Awareness and knowledge of services and support

Knowledge of what constitutes good mental health was high, at 74% (average); emotional literacy was also high (68%). Both were higher for those with high psychosocial well-being but lower for those at risk of depression.

For knowledge of sources of information about mental illness, the average score was 69%, indicating some level of confidence. However, only 35% of respondents were confident about where to seek information. Knowledge of sources of information was also linked with mental health outcomes (lack of knowledge was among the best predictors of risk of depression). Knowledge was lower among respondents with high risk of mental ill-health on the SDQ emotion subscale, higher among respondents with high psychosocial well-being, and lower among respondents at risk of depression.

The qualitative research found that some adolescents are aware that psychiatric hospitals, psychological counselling offices in schools, school mailbox schemes and hotline numbers are sources of information about mental health; others cited school talks and television (TV) talk shows as sources. However, in contrast to the survey findings, the qualitative research found that most adolescents had not heard of the mental health services available to them (including school-based services), and did not know where to find information about mental health.

Experiences of accessing formal or informal services

More than three-quarters of survey respondents (79%) said they would find psychotherapy useful if experiencing a serious emotional crisis. More than two-thirds (68%) disagree with the statement that talking about problems with a psychologist was a poor way to get rid of emotional problems. Overall, there seem to be positive attitudes towards seeking professional help for mental health issues.

Most of the adolescent respondents in the qualitative research had not used formal mental health services (e.g. a psychiatric hospital or clinic). Most feel that they have not needed professional support, and even if they may have felt they did need it – in contrast to the survey findings – they

would probably not have sought it. Reasons for not doing so include fear of embarrassment, lack of awareness and information, lack of confidence, and fear of stigma and discrimination. Neither have they used mental health services at school (reasons included teachers and other school staff being unapproachable, and concerns about confidentiality – for example, of the mailbox scheme).

Coping strategies and behaviour

Adolescents reported using *positive coping strategies* such as distraction and calming themselves (through watching TV shows and films, playing video games, listening to music, going out with friends, spending time with friends and family, using the phone and internet, playing sports, studying, reading, taking a walk and drawing). Many relied on friends for comfort and counselling, even family members too; although boys and girls alike reported turning first to their mother to share problems, girls were more likely to talk to their mother, and boys to their father. Adolescents were also more likely to confide in a sibling or other family member of the same sex as them. Some adolescents reported that they talk to their teachers about problems, and had found them to be very understanding and helpful.

Our quantitative analysis (using the Kidcope scale) identified three main groups of coping mechanism: (1) problem-solving or active coping; (2) distraction or internal coping; and (3) emotion-focused coping. Overall, problem-solving or active coping mechanisms were more common among survey respondents, followed by distraction or internal coping. Emotion-focused coping mechanisms appeared to be relatively rare.

Use of coping mechanisms was a good predictor of respondent's mental ill-health. Emotion-focused coping mechanisms were by far the highest predictor, increasing by 18 times the likelihood of being in the SDQ high-risk category (after controlling for other factors). Conversely, problem-solving reduced the risk by a factor of 0.3. Use of emotion-focused coping mechanisms more than triples the likelihood of being identified with depression, while use of distraction or internal coping mechanisms increases the likelihood by a factor of 2.5.

Negative coping strategies reported by adolescents included keeping problems to themselves, and not wanting to share with anyone for fear that people would not understand them. Some (girls more so than boys) coped by isolating themselves, staying in their room at home alone. Some also reported skipping meals (especially those who had been body-shamed by family or friends). Other adolescents reported sleep (or being unable to sleep – insomnia) as a negative coping mechanism.

Some adolescents (girls and boys) reported behaving in a violent way – for instance, hitting and breaking things as a response to depression or anger. While most adolescents in the qualitative research had not turned to harmful substances as a coping strategy, some did know of people who had used them.

Suicide ideation appeared to be common. Most adolescents in the qualitative research reported having friends or acquaintances who had had suicidal thoughts, with some (mostly older respondents of secondary school age) noting that they themselves had had such thoughts in the past. Self-harming was also mentioned by many adolescents and some key informants. Our survey found that as many as 28% of respondents had engaged in self-harm on occasion, while 2% did so frequently. There is a clear and statistically

significant association between mental ill-health (SDQ emotion subscale) and self-harming; 50% of respondents with high risk of mental ill-health have self-harmed, compared with only 25% among lower-risk respondents.

Technology use

Most adolescent respondents (in both cities, and as confirmed by the survey and qualitative research) have a smartphone, and if they do not own one themselves, they can use a parent's phone. Our survey found that 71% of respondents had their own mobile phone and 67% had access to a smartphone daily; only 7% did not have access at all. Adolescents reported the most common reasons for using a phone as studying, playing games and communicating with friends.

Fewer adolescents had access to a computer, and even fewer reported owning one. According to the survey, only 38% of adolescents live in a household without a computer, rising to 56% among children from the poorest households; only 12% of respondents indicated that they never have access to a computer when they want it. Adolescents cited the most commonly used platforms or applications as Facebook and Messenger, followed by YouTube and TikTok (in Vinh City) and Zalo, gaming apps and YouTube (in Nha Trang).

Respondents reported some positive aspects of technology use, including: relieving stress and loneliness; allowing people to 'connect', especially those who find it easier to text/write rather than speak; and finding information and services online (with reliable and up-to-date information that can be accessed quickly). Our survey found that more than 70% of respondents had looked for mental health information in the previous 30 days. Those with more access to technology appeared to have more emotional literacy and to be more knowledgeable about sources of information on mental illness.

The negative aspects or challenges of technology use (according to adolescents in the qualitative research), include distracting students from their school work, and risk of addiction and losing touch with the real world, causing difficulties in managing daily life. Respondents also raised some concerns about the effectiveness of the internet for addressing mental ill-health, noting that information on websites is often not checked or verified (and may even be dangerous), is often too generic to be useful, and may lack a personal/emotional connection (one of the benefits of in-person services). There is also a risk of children/adolescents seeing distressing and/or age-inappropriate images.

Overall impact of coping factors and technology access on mental health outcomes

The relationships we identify are suggestive only, and highlight several areas on which the intervention might usefully focus to support adolescent mental health. Overall, our multivariate analysis is able to explain around 30% of variation in the SDQ and WHO-5 scores. When controlling for a range of factors, we distil only a small number that appear to exert an independent influence on the SDQ emotion subscale. Emotion-focused coping mechanisms are by far the highest predictor, increasing by 18 times the likelihood of being in the SDQ high-risk category; being a girl triples the likelihood, being bullied doubles the likelihood, while frequent access to the internet increases the likelihood by a factor of 1.7. Conversely, being from the wealthiest socioeconomic group halves the likelihood, having someone to rely on also reduces it by nearly half, and using problem-solving or active coping mechanisms reduces the likelihood.

When analysing risk of depression, we found that all three coping mechanisms are the highest predictors. Distraction or internal coping increases the likelihood of being identified with depression by a factor of 3.5, while emotion-focused coping increases it by a factor of 2.5. Using problem-solving or active coping mechanisms reduces the likelihood of depression by 0.1 (90% less likely). Experiencing physical violence from parents also increases the likelihood of depression by a factor of 2.2. Being bullied or being a girl increases the likelihood of depression by a factor of 1.4. Conversely, having good knowledge of sources of information about mental health reduces the likelihood of depression by a factor of 0.7, and having someone to rely on reduces the likelihood by a factor of 0.6.

A range of other variables do not appear statistically significant for depression or high risk of mental ill-health, but remain significant for other outcomes. For example, living with both parents remains significant and positively associated with psychosocial well-being (WHO-5), and school level remains significantly associated with psychosocial well-being (lower well-being for high school students) and significant also for SDQ (emotion subscale) (lower score for high school students). Emotional violence remains statistically significant and positively correlated with SDQ (emotion subscale) and negatively associated with psychosocial well-being. Witnessing intimate partner violence increases the SDQ score (prosocial and behaviour subscales). Harmful behaviour remains statistically significant for SDQ (emotion subscale) (increasing risk).

Chapter 7: Recommendations

Many of the recommendations listed here include suggestions of how, and therefore also who, could take this up, and often this relates to those working in the education sector and especially schools and teachers. Other sets of recommendations are specific to certain stakeholders (such as mental health service providers, local authorities). More generally, many of these recommendations could be considered by government and development partners including donors and non-governmental organisations (NGOs).

Individual level

Recommendations at this level could be implemented by, for example, schools and teachers or extracurricular activities.

- Raise awareness among adolescents of the drivers and symptoms of mental ill-health.
- Give adolescents information on mental health services available to them, including face-to-face and online services.
- Raise awareness of stigma and discrimination around mental ill-health, as this prevents adolescents accessing support and services.
- Build adolescents' life-skills, to help them develop self-confidence, self-esteem and agency.
- Hold informed discussions around puberty, body image and romantic relationships (contributors to adolescent mental distress).
- Build peer support and social bonds among adolescents to provide opportunities for friendship and connectedness (protective factors).
- Train peer counsellors to act in a leadership/ mentorship role.

Household and family level

- Encourage more dialogue and communication between parents and children by: providing classes on parenting skills; engaging parents in school-related platforms (e.g. parent and teacher associations); encouraging more parent and child joint activities (e.g. sports,

entertainment); using role models (examples of families where parents have been supportive, for instance by allowing their children leisure time) to highlight positive impacts on children.
- Raise awareness among parents (and other family members) of the drivers and symptoms of mental ill-health, including discussing the norms that drive mental ill-health among adolescents and providing information about the services available.

School, school environment, teachers and headteachers

- Build teachers' capacity to provide mental health support to students, and help them to recognise the most common mental health disorders; they should be able to recognise and counteract stigma and discrimination, and know to which services they can refer students.
- Assign specific teachers and/or professional counsellors to address student mental health issues, giving appropriate consideration to issues of gender and age.
- Review and improve existing school-based approaches to address students' mental distress (e.g. mailboxes, counselling units), improving how they are run, and addressing concerns around confidentiality and potential backlash.
- Provide more school-based counselling services/units (staffed by experts), learning lessons from schools that have had better experiences and outcomes with such services than others.
- Advocate with provincial-level educational authorities to earmark more resources for school-based mental health support.
- Review workload (including homework and school hours) and academic pressures on students – one of the key drivers of mental distress – ensuring that non-academic subjects (e.g. sports) are given sufficient time in the curriculum.

Community level

- Raise awareness of the drivers of mental ill-health among adolescents and adults – for instance, through local associations, advocacy campaigns, media (TV and radio), etc.
- Identify, raise awareness amongst and build capacity of community-based associations or organisations to support adolescent mental health, such as youth unions or women's unions.

Mental health service providers

- Raise awareness among service providers of the drivers of mental ill-health (including gendered norms), and build their capacity to better recognise mental ill-health symptoms (including the most common disorders) and to provide age- and gender-appropriate targeted services.
- Advocate to increase the number and capacity of social workers and/or community-based mental health providers, to extend services beyond urban areas and make them more accessible to rural people.
- Inform mental health service providers of other services to which they might refer adolescents – including targeted services (e.g. telephone hotlines) but also activities/groups that promote adolescent well-being (e.g. youth or sports clubs).
- Link mental health service providers to schools and other community-based organisations (CBOs, e.g. youth unions), not only to allow easier referral but also so that they can give talks, provide materials, etc. to raise awareness about mental health (and support services) within schools.

Local authorities

- Improve coordination among those providing mental health services for adolescents – ministries (MoLISA, the Ministry of Education

and MoH), NGOs and CBOs, and within and between provinces.
- Raise awareness among local authority staff of the prevalence and drivers of mental ill-health among adolescents, shifting attention away from severe disorders towards the most common disorders.
- Advocate for more resources for mental health, not just staffing (including psychologists and counsellors) but also resources for mental health hospitals and services beyond the cities.

Radio, TV, (smart)phones and computers

- Increase the use of technology to promote messages on mental health, including through TV and radio.
- Promote digital approaches to addressing mental ill-health, as the anonymity they afford could enable adolescents to access information and resources more readily.
- Monitor online material and websites to ensure that they are providing accurate information and that adolescents are not exposed to dangerous materials or at risk of online abuse.
- Adults (parents and teachers) need to engage with adolescents so that they do not become addicted to being online, playing games, etc.
- Ensure blended (digital and face-to-face) approaches to supporting mental health and psychosocial well-being. While digital can be more confidential, face-to-face approaches also have value, so a combination of the two would be optimal.

1 Introduction

In 2016, around 1 in 6 people (15%–20%) globally had one or more mental or substance use disorders (Dattani et al., 2018). Mental ill-health and psychosocial problems often start during adolescence, with common mental disorders – anxiety and depression – being the most prevalent psychiatric illnesses among adolescents and young people worldwide WHO, 2020). Studies show that suicide rates among young people are increasing, often as a result of undiagnosed and untreated mental ill-health and/or psychosocial distress (Patel et al., 2007; WHO, 2016; ODI and UNICEF Viet Nam, 2018). Indeed, suicide is the third leading cause of death among 15–19-year-olds (WHO, 2021).

There has been some progress in global attention to mental health. Sustainable Development Goal (SDG) 3 now includes some targets related to mental health (Medium, n.d.); discussions around mental health were at the forefront of the World Health Assembly 74 in 2021, spurred on by the Covid-19 pandemic. The WHO-led Mental Health Gap Action Plan (mhGAP) (WHO, n.d.) has played an important role in supporting the scale-up of national services for mental, neurological and substance use disorders, especially in low- and middle-income countries (LMICs). Many NGOs and civil society organisations (CSOs) (including those led by youth and using digital approaches)[2] are also now working on mental health issues, including in LMICs.

Despite this progress, mental health remains neglected at global and national levels and even more so in LMICs, and while Covid-19 may be making in-roads in shifting this pattern, mental health is still not seen as a priority in many contexts. Less than 2% of national health budgets globally are spent on mental health (WHO, 2020), and this drops to less than 1% for LMICs (WHO suggests that 5% should be a minimum allocation). This shortfall in mental health spending results in gaps/shortages of trained personnel, services being concentrated in a few (often urban) areas, and funding favouring mental health hospitals at the expense of community-based and/or other support or preventive structures and activities. Similarly, most funding is directed towards severe mental disorders (e.g. schizophrenia or bipolar disorders, which are more easily observable and measurable). There is little funding directed to the more common disorders and less severe forms of mental ill-health, which often go unreported and untreated because they are more difficult to diagnose, less visible and because people are unwilling to come forward due to stigma (Weiss et al., 2012; van Ginneken et al., 2013; Kutcher et al., 2016).

Where mental health services do exist in LMICs, they are often inaccessible to those most in need, due to resource constraints and cultural norms (Patel et al., 2007; 2011; Rathod et al., 2017; Kutcher et al., 2017; Alloh et al., 2018). People living in LMICs disproportionately experience poverty, gender inequality, impacts from climate change-related events, and inadequate access to good physical health, literacy and housing, which can augment mental health difficulties (Mathias et al., 2018; Kutcher et al., 2016; Weiss et al., 2012). Yet, despite increased attention to adolescent mental health in recent years, adolescents with mental health conditions in LMIC contexts experience worse quality of care in comparison with other age groups. This is because adolescents are

2 Summaries of some of these approaches can be found in Rost et al. (2020) and Ananthakrishnan et al. (2020).

often less-experienced users of mental health services, with inadequate mental health literacy, including literacy about quality of care (Quinlan-Davidson et al., 2021). Similarly, available services and programming are often both age and gender blind, as they do not tailor services to the needs of adolescents, nor do they adequately reflect on how gender norms are replicated by the health systems (Percival et al., 2018).

Within this context, the overall aim of this project, funded by Fondation Botnar, is to address the mental health needs and support the broader well-being of adolescents in urban settings in Tanzania and Viet Nam. These two countries were selected because they represent different LMIC contexts. The purpose is not necessarily to compare the mental health environments (in terms of drivers of mental ill-health, mental health provision, etc.). However, the different levels of economic and technological development both across and within the two countries, as well as the different kinds of health system and status of mental health provision, make them interesting cases to explore. Also, as the study draws out, differences in underlying structures – including cultural contexts and the social and gender norms that influence much of behaviour – the poverty and livelihood dynamics, as well as the political systems, all exert diverse and context-specific effects on adolescents' mental health and broader well-being.

The specific objectives of the overall study include:

1. Identifying drivers of mental ill-health among mid- (11–15 years) and older (16–19 years) adolescents in two cities in Tanzania (Morogoro and Mwanza City) and Viet Nam (Vinh City and Nha Trang), also taking into account underlying social norms that may be driving mental distress.
2. Co-creating/designing – with adolescents, teachers and local authorities – and testing digital and non-digital approaches or solutions, for use in the classroom, the community and/or in relevant local government units to support adolescents' mental health and overall well-being.
3. Reviewing and adapting the approaches or solutions through learning acquired via a monitoring, evaluation and learning (MEL) system, the mixed-methods baseline and endline studies, and ongoing feedback loops.
4. Documenting the effectiveness of the technology-based solutions tested by the project for addressing mental health problems.

The project consists of six phases: (1) inception; (2) mixed-methods baseline data collection; (3) co-creation/design of solutions; (4) implementation of solutions; (5) mixed-methods endline data collection; and (6) sharing, dissemination and research uptake. Starting in May 2020, the project will run for a total of 36 months.

As part of the inception phase, a set of literature reviews were carried out to help situate and hone the overall design of the project, providing guidance to both the mixed-methods baseline and endline primary collection approach as well as to the design of the digital and non-digital solutions to be co-created with adolescents and others. These literature reviews also identified knowledge gaps to which the study aims to contribute.[3] Key findings from these literature reviews include the following:

- There are a range of tools and programming that focus on mental health in LMICs; however, there are few approaches targeting adolescents and children (Ananthakrishnan et al., 2020).

3 The outputs of the literature review can be found on the project webpage at https://odi.org/en/about/our-work/addressing-the-mental-health-needs-of-adolescents-in-tanzania-and-viet-nam-through-the-co-creation-ofdigital-and-non-digital-solutions/

- While digital interventions to address mental ill-health are becoming ever more popular, care needs to be taken not to exacerbate digital divides, with in-person, face-to-face interventions remaining important, with blended (digital and non-digital) approaches the ideal (Rost et al., 2020).
- While there are some adaptations of tools and scales for measuring mental health, these have not been adapted and validated fully for the contexts of Tanzania and Viet Nam; context specificities therefore remain critical to consider, including prevailing norms (Ananthakrishnan et al., 2020);
- There appears to be relatively little literature on co-creating mental health approaches with school children in general and, in particular, in LMIC contexts and the study countries (a few examples are included in Kutcher et al., 2019).

This report presents findings from the mixed-methods baseline study in Viet Nam. The most recent and first nationally representative epidemiological survey on the prevalence of mental health problems in children conducted in 2014 in Viet Nam found that about 12% of the non-adult population were affected, suggesting that approximately 3 million children (12 years and older) were in need of mental health services. The study also found that overall rates of child mental health problems varied significantly across the 10 provinces surveyed (Weiss et al., 2014). As we illustrate in this report, the mental health system in Viet Nam is heavily focused on the treatment of severe mental disorders (especially epilepsy and schizophrenia) in hospitals in urban areas, mostly tending to ignore the more common mental health problems (Lee et al., 2015; Niemi et al., 2010; Vuong et al., 2011). Similarly, given that the primary health care system is not equipped to deal with mental ill-health and there is a lack of trained staff, service coverage is also low beyond the urban centres and provincial capitals (Lee et al., 2015; MoH and Health Partnership Group, 2015). Where services do exist, uptake is low, especially among adolescents and children. Reasons for this include lack of knowledge about the existence of services, stigma surrounding mental ill-health, as well as lack of age- and gender-appropriate services (see, for example, Giang, 2006; MoH and Health Partnership Group, 2015).

Following this introductory section, Chapter 2 provides an overview of the methodology of the study along with a brief description of the study sites. Chapter 3 presents an overview of the policy and mental health services environment in Viet Nam. Chapter 4 discusses the mental health knowledge and status of adolescents, while Chapter 5 explores the drivers of mental ill-health as well as protective factors. Chapter 6 outlines the mental health-seeking behaviour of adolescents, including positive and negative coping mechanisms or strategies and their use of technology. The report concludes with recommendations in Chapter 7.

2 Description of study sites and methodology

2.1 Study sites

Data collection took part in eight public schools in urban and rural areas of Khanh Hoa and Nghe An provinces. The Department of Education and Training in each province operates public schools; however, they have limited autonomy and limited funding for extracurricular activities, including school counselling or other well-being support programmes.

Khanh Hoa, in the South Central Coast region, has a population of 1.2 million (recorded in 2018). Around 45% of the province's residents live in urban areas and, 55% in rural areas. Khanh Hoa is subdivided into two provincial cities (Nha Trang, its capital, and Cam Ranh), one district-level town and six districts. With a gross regional domestic product (GRDP) per capita of $2,698 and an annual growth rate of 7.4%, it is Viet Nam's second most developed province. Tourism and construction are the mainstays of the economy (each accounting for more than 40%), while agriculture constitutes around 10% of the economy[4].

Nghe An, in the North Central Coast region, has a population of 3.3 million (recorded in 2018), with the vast majority (85%) living in rural areas. It is subdivided into one provincial city (Vinh City, its capital), three district-level towns and 17 districts. With a GRDP per capita of $1,853 and annual growth of 8.8%, its economic performance places it in the top one-third of Viet Nam's provinces.

As with Khanh Hoa, services (tourism and the construction industry) are the major economic sectors, each accounting for approximately 40%, while agriculture/forestry/fishing accounts for around 18% of the province's economy[5].

For further details of the educational contexts and other infrastructure, see Annex 1.

2.2 Methodology

The data collection followed a quasi-experimental design using quantitative and qualitative research methods. One purpose of the qualitative work was to validate and deepen our understanding of the quantitative findings; for this reason, we identified several students who had participated in the quantitative survey for in-depth interviews (IDIs), as described in Sub-section 2.2.2. The methods align with the MEL component, which describes the changes to which the project aims to contribute to, following a Theory of Change and a results framework (see Annex 2 for further details of the MEL approach).

2.2.1 Quantitative methodology

The quantitative survey aimed to construct a baseline profile to understand mental health status, literacy and service access, and to inform the evaluation of the impact of the digital and non-digital interventions on these constructs. The questionnaire was designed through consultation with existing surveys on

4 General Statistics Office of Viet Nam (2018).
5 Ibid.

mental health.[6] Our review sought to identify robust indicators of adolescent mental health and psychosocial well-being (Table 1; given the nature of the project, we prioritize emotional problems), the constructs aligned with the key study hypotheses (Table 2; see also project results framework in Annex 2), and other indicators that previous research suggested were likely to influence mental health service access and outcomes (Table 3). To measure key constructs, we sought to identify scales with well-established psychometric properties and, where possible, to include those that had been previously validated in Viet Nam. The survey was translated into Vietnamese with some minor modifications made for the context (e.g. to describe educational performance). Annex 3 (Section A3.1) provides additional details of questionnaire design, and Annex 4 contains the full questionnaire.

Table 1 Indicators of adolescent health and psychosocial well-being

Scale	Construct	Resulting indicators
Strengths and Difficulties Questionnaire (SDQ)	Effective in screening for a range of child psychiatric disorders including oppositional disorders, hyperactivity disorders, depression, pervasive developmental disorders and some panic disorders (Goodman et al., 2000).	1. Average score rescaled on a 0–100 range. Higher numbers refer to higher risk of mental ill-health. 2. Based on Factor Analysis we identified three subscales (emotional, prosocial, behaviour). 3. 'At risk' category to which we (arbitrarily) designate the top quartile of individuals with the highest risk in the emotional subscale.
WHO-5 Well-Being Index	Measure of psychosocial well-being and screening instrument for depression (Topp et al., 2015).	1. Average score rescaled on a 0–100 range (where 0 represents lowest psychosocial well-being and 100 highest possible psychological well-being). 2. 'High performing' category to which we (arbitrarily) designate the top quartile of individuals with the highest scores. 3. 'At risk of depression' to which we designate individuals with a score of ≤50% of the total (normalised) score, a widely used threshold (see Topp et al., 2015).
Self-efficacy	Self-report assessment of self-efficacy as it pertains to adaptation abilities and coping scales for both stressful events and daily activities (Schwarzer and Jerusalem, 1995).	Average score rescaled on a 0–100 range (where 0 represents lowest level self-efficacy and 100 highest level self-efficacy).

Note: A linear rescaling was followed to convert all scales on a 0–100 range to ease interpretability.

6 Survey modules from various geographical contexts were consulted, including some especially for Viet Nam.

Table 2 Key constructs, hypotheses and corresponding survey

Construct	Hypothesis (by endline)	Indicators
Mental health awareness	20% increase in adolescents' mental health literacy	Emotional literacy Knowledge of what is important for good mental health
Agency in coping with mental health challenges	20% increase in the reported confidence of adolescents in their ability to address mental health problems	Ways of coping with mental health challenges (Kidcope) (Kidcope only measures the range of coping strategies used by the respondents, it does not specifically reflect confidence in the ability to address stress. The indicator is used as a proxy.) Knowledge of sources of information-seeking
Help-seeking behaviour	20% increase in the number of adolescents who use tech and non-tech solutions to address mental health issues, conditional on average levels of mental health	Attitudes Toward Seeking Professional Psychological Help Use of tech to seek health/mental health information

Table 3 Other determinants of mental health included in survey questionnaire

Topic	Details
Socio-demographic	Characteristics of respondents and households
Education and health	Subjective reports of education performance and physical health
Social support	Family, friends and role models
Technology	Usage overall and in seeking health information
Violence and responses to violence	Violence by peers, parents and teachers
Engagement in risky or harmful behaviours	Alcohol, smoking, drugs, self-harm and violence
Sexual activity	Engagement in sexual activity, number of partners, engagement in unwanted sex and in sex while drunk

The questionnaire and psychometric scales were tested and refined after piloting of the survey. A series of validity tests were run to each scale, including exploratory factor analysis for construct validity and reliability test with Cronbach's alpha (see Annex 3). The team concluded that the psychometric scales provided valid and reliable measures of the baseline mental health of the adolescent population in these schools.[7] We obtained good reliable scales for the following indicators: emotional literacy, knowledge of what is important for good mental health, knowledge of sources of information-seeking, Attitudes Toward Seeking Professional Psychological Help, Strengths and Difficulties Questionnaire (SDQ), the well-being questionnaire (WHO-5), and self-efficacy.

7 See Annex 3, Table A1 for full details of the validation results for the pilot survey and the final baseline.

For some scales, to maximise construct validity and reliability, we only retained data for scale items that were loading as expected in the exploratory factor analysis and excluded those that would increase Cronbach's alpha if the item was deleted. This enabled us to construct measures that were most attuned to the context where the survey was administered, albeit at the expense of comparability with other studies conducted in Viet Nam or elsewhere. For these scales, clinical thresholds established in other studies are unlikely to be valid in our data. For this reason, we use relative criteria to categorise some respondents as being at risk of mental ill-health or conversely, as reporting strong psychosocial well-being (see Table 1). Although the cut-off we use is arbitrary (i.e. observation above percentile 0.75 of the distribution), we believe this approach is best suited to shed light on disparities within our surveyed population. We prioritise highly reliable scales for our MEL framework to measure impact of the project by the time of the endline survey.

One scale – ways of coping with mental health challenges (Kidcope) – exhibited low reliability even after piloting and refinement.[8] The available evidence suggests that the issues we encountered with Kidcope are shared more widely.[9] However, respondents may not have understood the items in these scales or may have responded erratically owing to a limited understanding of what constitutes mental health.

The study employed two-stage stratified cluster sampling. We assumed that the regions and schools correspond to diverse strata within the country, while classrooms are heterogeneous clusters within each school. The first stage involved the selection of four schools in the capital cities of each province (Nha Trang and Vinh), following a purposive sampling design to allow for sufficient diversity in terms of school level and urban/suburban location. Within each province, the Department of Education and Training selected one high school (generally 16–18-year-old students) and one middle school (generally 11–15-year-old students) in both the suburban and urban parts of the city. The sample was recruited through public schools, which the vast majority of Vietnamese children attend (General Statistics Office of Viet Nam, 2019). The second stage involved the random selection of 20 classrooms in which all students were interviewed. The number of classrooms were determined by the need to ensure a sample size with sufficient statistical power (95% confidence intervals and 5% standard error).

The survey sample consisted of students in the 7th and 8th grades (middle school) and those in the 10th and 11th grades (high school).[10]

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8 The factor structure of Kidcope for our baseline still produced a coherent structure grouping negative coping strategies and positive coping strategies together in three separate factors (two negative, one positive). Of the three identified coping mechanisms, the scale for positive coping (speaking to friend, family member, teacher, etc.) appears to have a low but acceptable level of reliability. The active negative coping is reliable for middle school but not reliable for high school. The passive negative coping has low reliability for both school levels.

9 Antoniou and Drosos explain (2017: 62): 'As there are few available instruments that assess children's coping strategies, Kidcope is widely utilised, although there are varying results regarding its psychometric properties and factor structure. Several different factor structures have been proposed … It should be noted that even the studies with the same number of factors did not find the same factor structure. … [It follows that] Kidcope's factor structure is not stable and may vary across diverse samples.'

10 In Viet Nam, 9th grade and 12th grade students are preparing for high school or university exams, while 6th grade students have just entered secondary school. Owing to these diverse stressors (and because the 12th grade class will have already graduated at endline), these grades were excluded.

In each province, in two schools, two classes were randomly selected, and in two other schools, three classes were randomly selected (10 classes per province, 20 classes across both provinces). All the students in the selected classrooms (421 in Nha Trang and 423 in Vinh) were invited to participate in the study. Nearly all (842 of 844) consented and received parental consent to take part in the survey (99.7% participation rate).

The survey was self-administered through a paper-based questionnaire, which reduced the cost and time needed for data collection, as it permitted surveying many students in a relatively short time. Cognitive testing revealed that the participants understood the questionnaire well and preferred to answer by themselves.[11] The approach may also have reduced interviewer bias in responses to sensitive questions. A team member provided a brief introduction in each classroom before asking students to complete the questionnaire.

The survey team produced baseline levels for each key indicator for the sample and for relevant subgroups – e.g. by school level, region, gender, household SES, etc. (see Annex 5 for full details). In the main report, for ease of interpretation (and comparison across indicators), we rescaled all scales on a 0–100 range, depicting each indicator as a percentage of the possible maximum (i.e. the score that would be attained if a person exhibited the highest possible outcome).[12] We analysed the statistical significance of between-group differences using Chi-square, Anova or independent t-tests depending on the nature of the variables being compared. We describe the results that are statistically significant, and also report non-significant results where relevant. Given our small sample size, we flag all results of at least 10% significance or lower.[13] In the text, we first focus on bivariate analysis – reporting the risk ratio and specific test score (X^2, t-value or F-value), the degree of freedom and the p-value. We undertook ordinary least squares (OLS) and logistic multivariate regression analysis with robust standard error to analyse what factors emerged as significant predictors of mental health outcomes, after controlling for observable differences among students. Data preparation and most of the statistical analysis was conducted using Stata/SE 14.0 for Windows, while some scale validation, significance testing and complementary analysis used SPSS.

2.2.2 Qualitative methodology

Primary qualitative data collection was carried out in December 2020 and January 2021 by a team comprised of five members and the ODI team remotely. Piloting of the data collection tools, which were developed in a participatory way by all members of the study team, was carried out in November 2020 by local team members, and the tools then further adapted. Schools that met the pre-determined criteria were selected to participate in the study. (See Sub-section 2.2.1 for details of how schools were selected.)

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11 Cognitive testing is a qualitative technique used during questionnaire design that involves the administration of the survey to a small number of respondents, who are asked either to 'think aloud' as they answer a question or asked retrospectively why they answered a given question the way they did. The aim is to ensure that respondents have understood the questions in the way that researchers intended them to be understood.

12 This follows the example of Carnegie School of Education, LBU and CUCT (2018), which used this method to depict the Emotional Literacy Scale.

13 It is a more common practice to only report results that are significant at 5% or lower, but we consider that the reduced sample size makes this level too low for our study. Therefore, we choose to report results that are significant at least at the 10% level and provide the p-value so that the reader can make their own judgement.

Qualitative tools included in-depth interviews (IDIs), focus group discussions (FGDs), intergenerational trios (IGTs – where different generations of the same family are interviewed) or family case studies (FCSs) and key informant interviews (KIIs). Two strategies were used to enrol adolescent participants in the study. First, we used purposive sampling to enrol adolescents disaggregated by age (mid-adolescence [11–14 years] and older adolescence [15–19 years]), gender (male and female), mental health status and academic performance. These participants were recruited through enrolment lists with socio-demographic characteristics shared by school academic teachers. Second, the team selected adolescents who were interviewed for the quantitative component, based on their gender and their scores on the SDQ (those who showed high levels of internalising issues such as depression or anxiety). A total of 92 interactions were conducted across the two sites. Annex 7 contains basic socio-demographic details of qualitative research respondents.

Areas of enquiry that were explored in the qualitative component included: understanding the drivers of mental ill-health and psychosocial distress across different domains of adolescents' lives (in school, at home, in interpersonal relationships, etc.); the underlying social and gendered norms that may affect mental well-being; demand- and supply-side issues in relation to service access, quality and provision; and the kinds of technology available to and used by students (including the challenges and opportunities presented by each).

With appropriate consent, all interviews were recorded, and then transcribed and translated. The study team jointly developed a coding structure, based on what was emerging from the data (i.e. grounded theory) and all interviews were coded and entered into MAXQDA (data analysis software). Data from the coded segments was summarised according to agreed themes and the analysis also explored differences emerging from different variables, including site/location, gender, education, religion, mental health problems and experiences, and household structure. The analysis was then written up in the agreed report format.

While coding the qualitative interviews, researchers aimed to record whether statements, opinions or perceptions shared by respondents were described by a majority, more than half, some, or only a few. In the report, we refer to 'most or the majority' when a statement corresponds to well over 50% of respondents, usually two-thirds of respondents or more. We use 'more than half' when a statement corresponds to over 50% of respondents. We use 'some' when a statement corresponds to fewer than half of participants. We use 'few' when a statement corresponds to three or four participants. Finally, when a statement was mentioned by only one or two respondents, the report states so explicitly.

2.3 Ethics protocol and study limitations

The ODI has its own ethics review committee composed of internal and external members. This committee reviewed all data collection instruments and other protocols, and recommended adjustments as and when necessary. In-country clearance was not necessary in Viet Nam as the study protocol had been approved by the ODI ethics review committee. Approvals and permissions were instead sought via the relevant ministries and departments.

The adolescents who responded to the survey provided their written consent, acknowledging that their participation was completely voluntary

and that they were free to stop at any point or to leave blank any questions they did not wish to answer (see Annex 4). Two students opted out during the consent process. Participants in the qualitative data collection provided informed consent to take part and to be photographed, with name initials and random numbers used to protect their identity. For respondents under the age of 18, the team first sought consent from teachers acting as their guardians. The research teams were trained prior to the fieldwork and were regularly reminded to adhere to safeguarding protocols.

A few limitations merit discussion. The first concerns survey representativeness. The sample includes four schools from each city (Nha Trang and Vinh). In order to ensure diversity, the district authority selected two urban schools and two suburban schools within each city. The team then randomly sampled 20 classrooms within these schools. This final sample provides as much diversity as we could guarantee, but given the absence of a complete sampling frame to select the schools, we cannot conclude that the findings are fully regionally representative, and recommend presenting school-level results.

The second limitation concerns questionnaire sensitivity and potential response bias. Although the study team guided students on how to respond to the questionnaire to ensure that the questions were fully understood, the answers received were accepted as final, because there was no room to probe or to clarify ambiguities, or to overcome missing responses, particularly for sensitive questions. The possibility of response bias arises since respondents had access to the full survey before responding to any one question, which might result in changing some of their responses to be able to skip the follow-up questions. We found that including 'I prefer not to say' as a response to potentially sensitive questions increased the quality of the survey data as significant numbers of students selected this option.

The Covid-19 pandemic did not affect the ability of the team in Viet Nam to conduct the survey since the government had not introduced any lockdown measures or other types of restriction by the time of data collection (January 2021). Although qualitative data collection activities were not altered due to the pandemic, the content of the interviews was slightly reduced to account for the time that participants had to respond to the tool. The number of FGD participants was limited to between five and eight, and they were kept apart to control disease transmission. While the interviews were conducted in private rooms, various noises affected the quality of audio-recordings, meaning that some valuable quotes may have been lost during the transcription/translation process. We cannot quantify how Covid-19 affected participant responses, although some studies conducted as part of this project suggest significant mental health effects (see Chakraborty and Samuels, 2021; Leon-Himmelstine et al., 2021; Samuels et al., 2021).

Finally, it is possible that some students who agreed to participate in the survey might have responded without paying due attention, owing to exam fatigue and time constraints (the survey took place one week after the conclusion of the semester exam period).

3 National-level policy and programming/ service environment

3.1 Policies and ministries – national level

In 1998, the Government of Viet Nam declared improving mental health systems as one of the main targets of the National Health Target Programme (WHO, 2001, cited in Vuong et al., 2011). The country's mental health system was designed to detect, treat and reintegrate more than 50,000 schizophrenic patients into the community (Viet Nam government, 2001, cited in Vuong et al., 2011). The First National Target Programme on Community-Based Mental Health Care was implemented that same year in approximately 80% of the 11,000 communes targeted. At the same time, the Vietnamese government enacted a policy that provided provinces or cities with approximately 65,000 Vietnamese dong ($3.60) for the mentally ill (who lived alone or in poverty), allowing the government to decentralise the payout to those in need (Vuong et al., 2011).

Until 2004, the national plan only focused on schizophrenia and epilepsy. In 2004, the Research and Training Centre for Community Development (an NGO) presented its findings on mental illness to a regular meeting of the National Assembly's Parliamentary Commission for Social Affairs (Harpham and Tuan, 2006). This acted as a catalyst to include mental illness prevention strategies in policies. In 2010 therefore, the National Mental Health Plan was developed, which includes early detection of mental illness among women and children, improved integration of the mental health care system into primary care, and treatment for depression.

However, there continue to be gaps in policy and services because Viet Nam does not have a mental health law (RTCCD-MoLISA, 2011). Nevertheless, there are several pieces of legislation that work together to protect the rights of those who are mentally ill. For instance, the 1989 Law on Protection of People's Health recognises and affirms that all people have an equal right to health care and treatment. Moreover, in 2011, the Ministry of Labour, Invalids and Social Affairs (MoLISA) launched Scheme 1215 on community-based social assistance and functional rehabilitation for people with mental illness or mental disorders (2011–2020), in accordance with the Prime Minister's Decision No.1215/QD-TTg dated 22 July 2011 (MoH and Health Partnership Group, 2015).

Table A7 (Annex 8) provides a summary of Viet Nam's key laws, legislation and decrees that mention mental health. While some are not directly focused on mental health (such as those related to education and gender equality), they include clauses or elements that are relevant to mental health and broader well-being. Similarly, and given the focus of our study on adolescents, a snapshot of laws and legislation focusing on children and youth – including laws related to children's rights, youth participation and youth-friendly services – is also provided to highlight relevant references to mental health.

There is no standalone law for mental health in Viet Nam. However, there has been sustained advocacy on the need for such a law, and working groups have been actively engaged in drafting such a law (ASEAN Secretariat, 2016). The most recent piece of draft mental health legislation

focuses on access to mental health care, the rights of mental health service consumers and caregivers, competency and guardianship issues for people with mental illness, and voluntary and involuntary treatment (UNESCO, 2018). A National Mental Health Strategy for the period 2015–2020 (with a vision to 2030) exists in draft form and includes consideration of provision across all life stages (infants, children, adolescents, adults and elderly people).

There are a number of ministries, departments and central government programmes working on mental health (see Annex 8 for full details).

3.2 Service environment/ programming and stakeholders

3.2.1 Mental healthcare delivery/service environment – national level

Viet Nam's healthcare is built on a four-tier system (central, province, district and commune) and mental health is provided mainly through two types of service: community-based and hospital-based. While most mental health services are provided in hospitals, follow-up usually occurs at the community general practice (Lee et al., 2015). Psychiatrists only work at the central and provincial levels of the four-tiered system (ASEAN Secretariat, 2016). With a focus on epilepsy and schizophrenia, the government subsidises the costs of running mental hospitals. However, for all other mental illnesses, treatment and medication is paid out-of-pocket (Niemi et al., 2010). This section provides details of the main providers of mental health services in Viet Nam. Note that it is difficult to find up-to-date statistics, so the references cited may be outdated. Nevertheless, it is useful as it provides a picture of, and an historical perspective on, the state of mental health services in Viet Nam over the past decade or so.

National psychiatric hospital/central mental hospital: The national psychiatric hospital controls the mental health system, manages other hospitals and leads the national mental health programme. The National Psychiatric Hospital No. 1 (Hanoi) is the MoH's authorised institution to implement mental health policy and generally supervises the professional activities for mental health across the country. With the National Psychiatric Hospital No. 2 (Bien Hoa), it shares responsibility for direct management of provincial psychiatric hospitals (ASEAN Secretariat, 2016).

Mental/psychiatric hospitals: Provincial psychiatric hospitals provide inpatient services for mentally ill people and are also responsible for implementation of the community mental health programmes by, for example, referring patients to commune health stations for continuing care, supplying psychotropic medicines, supervising the activities of those stations and providing training for staff involved in mental health care (ibid.).

In 2014 there were 36 provincial psychiatric hospitals, 24 departments of mental health in provincial centres for social disease protection or centres for preventive medicine, and 25 departments of mental health in provincial general hospitals. Mental healthcare at district and commune levels is integrated into general healthcare facilities, namely district general hospitals, district health centres and commune health stations (ibid.). According to data collected in 2005, a report by the WHO and Ministry of Health (2006) notes that there were 30 mental hospitals available in the country with a total of 5,000 beds (6.18 beds per 100,000 general population), and 83% of these facilities are organisationally integrated with mental health outpatient facilities (see below). All 30 mental hospitals had at least one psychotropic medicine of each therapeutic class (anti-psychotic,

antidepressant, mood stabiliser, anxiolytic and antiepileptic medicines) available in the facility (ibid.). Again, using older data, Niemi et al. (2010) note that, in 2004, 54,500 patients were treated in mental hospitals, and the average number of inpatient days was 35. Only 4% of beds in mental hospitals were reserved for children and adolescents, according to the WHO and MoH (2006), although the total number of beds increased by 300 (6%) in the five years preceding their study.

Outpatient mental health facilities: According to the WHO and MoH report (2006), there were 600 outpatient mental health facilities available in the country in 2004, all providing follow-up care in the community and all having mental health mobile teams. In terms of available interventions, a few (less than 20%) outpatient facilities offer psychosocial interventions. All mental health outpatient facilities had at least one psychotropic medicine of each therapeutic class (anti-psychotic, antidepressant, mood stabiliser, anxiolytic and antiepileptic medicines) available in the facility or at a nearby pharmacy all year round (with a prescription) (ibid.). In 2004, there were 46,070 patients treated within outpatient facilities, and at day treatment facilities there were 3.7 users per 100,000 population (Niemi et al., 2010).

Of all users treated in mental health outpatient facilities (in 2006), 39% were female and 17% were children or adolescents. There were no facilities exclusively for children and adolescents (WHO and MoH, 2006).

Commune health stations: Commune health stations detect new cases, carry out initial assessment and refer, when appropriate, to the provincial psychiatric hospital. They are also in charge of receiving referred patients who have been discharged from provincial psychiatric hospitals, implementing follow-up care (including distributing medicines) and carrying out communication activities (ASEAN Secretariat, 2016).

Day treatment facilities for mental health: There were two day treatment facilities available in the country in 2004. On average, users spent 40 days per year in these facilities (WHO and MoH, 2006). Of all users treated in day treatment facilities, 33% were female and 10% were children or adolescents; there were no facilities specifically for children and adolescents (ibid.).

Community-based psychiatric inpatient units: There were 20 units available in the country with a total of 300 beds (0.37 per 100,000 population) in 2004. About 5% of patients in community-based psychiatric inpatient units received one or more psychosocial interventions in 2005 (ibid.). In 2004, there were no beds in community-based inpatient units reserved for children or adolescents (ibid.).

Table A8 (Annex 8) summarises service provider perspectives on the strengths and weaknesses of existing services to support adolescent mental health.

3.2.2 Mental health services at site level and key stakeholders relevant to mental health and psychosocial well-being for adolescents

In this sub-section we provide a snapshot of mental health services that study respondents (especially key informants) mentioned as being available or that they knew about in the study sites, especially for adolescents. Relatedly, we also list key stakeholders that were mentioned as key actors and policy influencers in relation to adolescent mental health in the study sites.

In terms of services available in the sites (see Table A9, Annex 9, for further details), responses included those directly focusing on mental health and well-being (such as schools providing psychological counselling services, and hospitals or clinics providing mental health/psychiatric services) and those providing indirect support (such as outings/extracurricular activities for adolescents provided by schools, and life-skills programming).

Table 4 outlines the key actors and policy-makers at study site level, their overall role/purpose and the work they carry out in relation to adolescent mental health. This was obtained from both a review of secondary literature and from the interviews carried out as part of this study. These overlap both with Sub-section 3.2.1 on national-level service provision, with what key informants mentioned (see Annexes 8 and 9).

Table 4 Mapping of key actors and policy influencers relevant to adolescent mental health in study/project locations

Institution	Role/purpose	Work relevant to adolescent mental health
Nghe An province		
Department of Education and Training	Perform management for educational settings at all levels in the area	Drafting and implementing government policies on education
Department of Labour – Invalids and Social Affairs	In charge of social welfare: labour and employment, vocational training, child protection and gender equality at a regional scale	Drafting and implementing government policies on social welfare
Department of Health	Perform management of medical system in the area	Drafting and implementing government policies on healthcare
Psychiatric hospital	Main mental health facility in the province	• Providing mental healthcare with a medical approach (diagnose, medical treatment etc.) • Research in mental disorders
Khanh Hoa province		
Department of Education and Training	Perform management for educational settings at all levels in the area	Drafting and implementing government policies on education
Department of Health	Perform management of medical system in the area	Drafting and implementing government policies healthcare
Ho Chi Minh Communist Youth Union	Responsible for organising activities of education, training, social work, and volunteering for young people, usually students	• Propaganda and education function: raise awareness of social issues such as prevention of social evils, Covid-19 etc. • Training workshop in various topics • Cooperate with students' associations in the area to identify and support students who need help

Table 4 Mapping of key actors and policy influencers relevant to adolescent mental health in study/project locations (Cont.)

Institution	Role/purpose	Work relevant to adolescent mental health
Khanh Hoa province		
Center for Social Work	Providing and promoting social work services for individuals, families and community groups in the province	• Receiving children in need of urgent protection such as abandoned children, victims of domestic violence, victims of sexual abuse, victims of trafficking and victims of forced labour • Providing counselling service through hotline or by face-to-face meetings • Providing therapy for people with mental disorders • Life-skills training for children and adolescents
Department of Labour, Invalids and Social Affairs	In charge of social welfare: labour and employment, vocational training, child protection and gender equality at a regional scale	• Drafting and implementing government policies on social welfare
Viet Nam Youth Education Support Center (4T Center)	Helping the young generation of Viet Nam to maximise their potential with a comprehensive development programme (physical, cognition, emotion and skills)	• Youth volunteer club network • Training camp: extracurricular activities for students with the aim of developing skills and social knowledge necessary for personal development
Psychiatric hospital	Main mental health facility in the province	• Functional rehabilitation for people with mental disorders • Organise field trip to the campus for high school students to learn more about rehabilitation activities for mental patients in the hospital

Building on these different kinds of stakeholder, we conducted an analysis to identify primary and secondary stakeholders in terms of whether the project was likely to engage with them, the relationships between them, and the extent to which they will have an effect on adolescents' mental health and broader well-being. Annex 10 provides further details of this stakeholder analysis, which used the systems and networks visualisation software Kumu.[14]

14 https://kumu.io

4 Mental health and psychosocial well-being status and knowledge/awareness

This chapter seeks to establish what we know of the mental health and psychosocial well-being of adolescents at baseline, and their mental health literacy, including perceptions of adults and the community towards mental health. Our key comparable metrics – collected through our survey – are the SDQ (a measure of emotional and behavioural difficulties) and the WHO-5 (a measure of subjective psychosocial well-being) (see Annex 3 for more details). The chapter explores which students appear to be most at risk of experiencing mental health problems, contrasting differences in survey-based measures with the perceptions of adolescents and other informants. It then discusses perceptions of trends in the prevalence of mental health problems and how respondents explained disparate trends, drawing on qualitative fieldwork. Finally, it examines community perceptions of and responses to mental health issues, highlighting a generalised lack of support.

4.1 Mental health indicators, knowledge and perceptions

We coded SDQ and WHO-5 scales on a range from 0% to 100%. In SDQ subscales (emotion, behaviour and prosocial) higher scores indicate a higher risk of mental health problems. On WHO-5, higher scores indicate greater psychosocial well-being. For our survey respondents, the average SDQ score for the emotion dimension subscale was 61%, for prosocial subscale 72%, and for behaviour subscale 49%, while the average for the WHO-5 scale was 62%.[15] The SDQ prosocial scale appears to have an asymptotic normal distributionwhile other SDQ scales appear skewed towards lower values (Figure 1).[16] The WHO-5 scale shows a wider dispersion and a much flatter distribution. This partly reflects a wider set of possible responses to the WHO-5 (a 6-option rather than 3-option Likert scale) but may also suggest greater variation in psychosocial well-being among the sample. To complement these continuous measures, we categorise the top quartile of the SDQ emotion distribution[17]

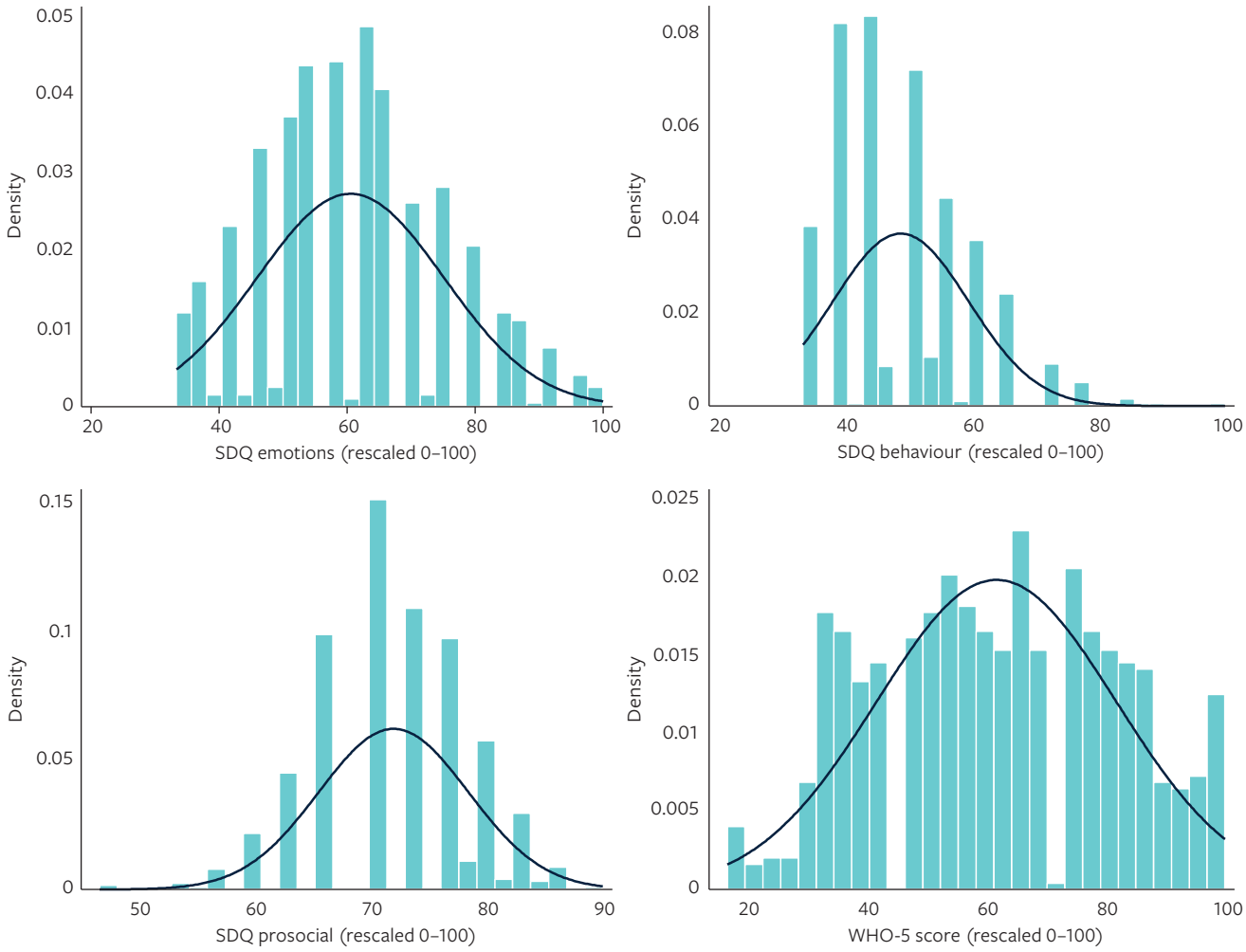
15 The 'raw' mean for the SDQ on the traditional scale of 1–3 (with higher scores indicating a propensity to mental ill-health) while the corresponding mean for the WHO-5 on the traditional scale of 1–6 (with higher scores indicating greater psychosocial well-being) is 4.47.

16 The SDQ prosocial scale follows a normal distribution according to Skewness Kurtosis test, but results are significant for Shapiro–Wilk, rejecting the null hypothesis of normal distribution. All other SDQ scales are not normally distributed according to Shapiro–Wilk and Skewness Kurtosis. The SDQ prosocial distribution is fairly symmetrical with a skew of –0.151, and it is slightly leptokurtic (kurtosis = 3.159). The SDQ emotions scale is also symmetrical with a skew of 0.309 and is platykurtic (kurtosis = 2.611). The SDQ behaviour scale has a positive skew of 0.818 and is leptokurtic (kurtosis = 3.731). The WHO-5 scale is also symmetrical with a skew of 0.010 and is platykurtic (kurtosis = 2.201).

17 Only for emotion given the focus of this project. Note SDQ behaviour has 0.429 Pearson correlation with SDQ emotions, while correlation with SDQ prosocial is only 0.165. Correlation between prosocial and behaviour is 0.1845.

as consisting of students 'at risk' of mental health issues, and the top quartile of the WHO-5 distribution as consisting of students exhibiting relatively high psychosocial well-being. We also use the WHO-5 measure as a screening instrument for depression; following accepted standards, we designate individuals scoring 50% or less on this measure as being at risk of depression.[18]

Figure 1 Distribution of the SDQ and WHO-5 scales among survey responses



18 We do not use the SDQ data to gauge the incidence of mental health issues. While the instrument is often used as a clinical tool, with a threshold established for 'caseness', this threshold was established in the UK and there are questions as to its appropriateness in other settings. Moreover, we adjusted the initial scale during the validation process to maximise its reliability – meaning that thresholds established for the full scale do not apply. For this reason, we identify the top quartile of the student population as being at risk of mental ill-health (see Chapter 2, Sub-section 2.2.1). For the WHO-5, by contrast, we use a threshold of 50% to indicate a likelihood of depression as this threshold has been used in many settings (see Topp et al., 2015); and we complement this by focusing also on the top quartile of the distribution, consisting of those individuals who report relatively high psychosocial well-being.

When adolescent respondents in the qualitative research were asked what they understood by the term 'mental health', responses ranged from not having heard of the term (mostly younger adolescents) to having some vague ideas of what it is. Among those who did not know the term (and were asked to think what it might imply, or to imagine it) and those who vaguely knew of it, they often associated mental health with the brain and having negative thoughts. Also, and as we pick up again later, adolescents spoke about it as being related to 'pressure on studying', when someone has an inferiority complex and when someone has problems but is unable to speak about it.

> Respondent 1: It affects our brain, whether the brain is working properly or not.
>
> Respondent 2: If we tend to think about the negativity, it will cause some bad mental health symptoms, and if we think positively, that will be good.
>
> (Mixed sex FGD with 16–18-year-olds, Nha Trang)

> I think it's pressure on studying.
>
> In my opinion, it might be a complex, inferiority complex about something.
>
> In my opinion, there are things that a student has and is envious of and disliked by other students, and that student often considers them as his/her inferiority complex.
>
> I think, for example, a student has problems which he/she can't tell others.
>
> (FGD with 11–12-year-old girls, Nha Trang)

The qualitative research found that adolescent respondents were more likely to be familiar with terms such as 'depression' and 'anxiety', especially the former. And when asked to describe the symptoms or signs of mental distress, they were much more likely to provide an answer. Answers included 'overthinking' things, being stressed, having unresolved problems, being angry, having an unpredictable mood, being too emotional, thinking negatively, wanting to be alone, having too much energy, not being able to control oneself and self-isolating and/or hiding away/hiding themselves. Respondents also noted physical symptoms such as being tired, having headaches, feeling dizzy, or having a stomach ache. To these symptoms or signs of mental distress among adolescents, adult respondents added sitting too long at a computer and living in a 'virtual' world, hanging out alone, feeling left out and having few social activities.

> Unpredictable mood, sometimes happy, sometimes sad, sometimes uncomfortable. (FGD with 17-year-old girls, Nha Trang)

There were some misunderstandings and misconceptions, with some adolescents as well as adults in the qualitative research associating mental health with autism. This has been found in other studies in Viet Nam (e.g. ODI and UNICEF Viet Nam, 2018) and was explained then by the fact that there had been a national campaign in the media about autism, so people may well have picked this up from there. Thus, one 15-year-old boy linked depression with autism, noting that 'It's called autism because they are not talkative, [they are] reticent and don't like to communicate with others' (IDI with 15-year-old boy, grade 9, Vinh City). Similarly, a participant in an FGD with adults, in describing an attempted suicide by an adolescent girl, explained how people refer to it as autism:

> After that, it started gradually like that, no one played with her anymore. She's also sad. But actually when she went back home, she didn't talk to her parents or brothers and sisters. And about three or four months later, her academic performance declined. When her teacher asked her, 'You're a good student. What's wrong with you?' When hearing that, she felt oppressed since her friends didn't play with her and her teacher talked to her like that. As a result, when she went home, she cut her wrist with a razor blade, it bled a lot, and she tried to use the rope to jump from upstairs. Her brother accidentally saw that, he pulled the rope back and shouted for everyone to help. People usually call what I saw autism.
> (FGD with parents of adolescents, Nha Trang)

Adolescent and adult respondents alike often used negative, derogatory or stigmatising language when describing mental health, using words such as 'crazy', 'insane' and 'abnormal'.

In our survey, only 41% of respondents reported being knowledgeable about the causes of mental health, while 45% said they recognise signs of poor mental health. However, when asked what they can do, 69% said they know strategies to make people more resilient when facing difficult situations, 64% said they know strategies for dealing with stress, and 72% said they understand how social media impacts well-being. Only 13% said they would not tell anyone if they were to have a mental illness, and only 16% said they would not seek help from a mental health professional if they had a mental illness. Only 26% think that mental ill-health is not a real medical illness.

4.1.1 Perceptions and data on at-risk groups

The literature on Viet Nam identifies a number of groups that are at elevated risk of mental ill-health, although findings do vary by study and according to internalising (e.g. depression, anxiety, stress, suicidal thoughts) or externalising (e.g. behavioural problems) mental health challenges. Amstadter et al.'s (2011) study found that older adolescents were less likely than younger adolescents to be at risk of mental health problems generally (and they did not find any gender differences in prevalence rates) (Liu et al., 2009, cited in Amstadter et al., 2011). Another study found that the older the adolescent respondent, the more severe their depressive symptoms, with girls reporting higher levels of depressive symptoms than boys, regardless of age, and girls aged 15–17 having the highest mean depression score (Bui et al., 2018). Being female was also associated with a higher risk of mental ill-health (including suicidal thoughts) in a number of other studies (e.g. Blum et al., 2012; Chan and Parker, 2004, cited in Niemi et al., 2010; Ministry of Health et al., 2010; ODI and UNICEF Viet Nam, 2018; Thanh et al., 2005; Tran, 2015; Weiss et al., 2014) as was living in urban areas (Bui et al., 2018; MoH et al., 2010; Chan and Parker, 2004, cited in Niemi et al., 2010) and being a member of an ethnic minority group (Tran, 2015). However, a number of studies exploring externalising symptoms, substance abuse/smoking and 'disordered gambling' indicate that males are at higher risk than females (Diep et al., 2013; Do et al., 2018; Lostutter et al., 2011; McKelvey et al., 1999; MoH et al., 2010; Stratton et al., 2014). Many of these findings are also reflected in our primary data.

A few female adolescent respondents in our qualitative research suggested that girls are more likely to experience mental health distress – noting that girls feel under more pressure (including over

their studies) than boys, are less open to sharing their problems and are 'more complicated'. Boys, on the other hand, were seen to be 'freer to speak their mind' and generally more 'carefree' and 'happy'. There was also a view that girls are 'weaker' than boys and therefore possibly more likely to be bullied, which also affects their mental health (although it was noted by a few respondents that boys can be sensitive too and can also be bullied) (see Sub-section 5.2.7).

> Yes, they [boys] feel very free. If they have something to say, they just speak out. Otherwise, they will not. Or they are also afraid of making mistakes, but that is a small number of students. Most of them are seldom under the pressure like us. (FGD with 15-year-old girls, Vinh City)

> Girls, the weaker ones [are more likely to be bullied].
>
> Basically both boys and girls can be, but the ones that are weaker or have no resistance are more likely.
>
> It's maybe because of their personalities, how they behave, if they are hated by others then they would definitely be bullied.
>
> (FGD with 13-year-old girls, Nha Trang)

In line with the qualitative survey, the quantitative survey found statistical differences between boys and girls in their risk of mental ill-health, as measured by the SDQ or WHO-5. Girl respondents scored higher on the SDQ emotion subscale ($t = -4.7039$, df = 822, $p < 0.001$) and lower on subjective well-being (WHO-5) ($t = 2.0858$, df = 822, $p < 0.05$) in comparison with boys. But boys scored higher on the SDQ prosocial subscale ($t = 1.9646$, df = 822, $p < 0.05$) and SDQ behaviour subscale ($t = 2.2728$, df = 822, $p < 0.05$).[19] We found that 28% of girls are at risk of mental ill-health according to the SDQ emotion subscale, compared to 14% of boys ($X^2 = 23.3502$, df = 1, $p < 0.001$), and 37% of girls are at risk of depression (WHO-5) compared with 30% of boys ($X^2 = 4.1477$, df = 1, $p < 0.05$). These findings confirm that girls are at higher risk of mental health disorders, particularly emotional problems and depression. When it comes to behavioural problems or social problems, boys are at higher risk (this remains consistent in a multivariate analysis).

Also echoing the literature, respondents in the qualitative research – adolescents, their parents and other adults – felt that mental health stressors increased with age, particularly around puberty, as girls (especially those in our sample) noted facing physiological and psychological changes. This is also the age when both boys and girls are increasingly susceptible to peer influence, which can have both positive and negative effects on their well-being. Parents also noted that as children get older, they become more independent and are less supervised, so parents may not know if their adolescent children are getting involved in activities (such as alcohol abuse) that could harm their mental health.

> In the 9th grade, from early puberty, it [mental health] started changing [becoming worse]. (Participant in FGD with 15-year-old girls, Vinh City)

19 Prosocial is coded positively, so higher values mean a more prosocial inclination.

> Personally, I think high school students are more likely [to experience mental ill-health].
>
> When children are in secondary school, parents take care of them and ride them to schools. But when they get into high schools, parents buy them a motorbike so that they go to school by themselves. Therefore, the time parents spend monitoring [their] children decreases.
>
> (FGD with parents of adolescents, Vinh City)

From the perspective of adolescents in the qualitative research, an increase in mental ill-health as they grow older was often linked to pressure (especially from parents) to perform well academically (see also Sub-section 5.2.6), particularly because education is strongly perceived as an important route to obtaining employment. This in turn reduced time for leisure activities and time to play, which was seen to support mental health/well-being (see Sub-section 5.1.4) – the lack of which led students to feel isolated and 'sad'. It was also noted that once adolescents, girls in particular, got older, their parents restrict their movements outside the house due to worries about engaging in relationships, marrying early and dropping out of school. Hence restricting girls' mobility was seen as a way of mitigating these risks, even though doing so may harm girls' well-being. For adolescent boys, restrictions on their movements as they get older was not mentioned; instead, respondents noted that conflicts are more likely to arise from friendships and other relationships as boys grow older. This in turn can lead to falling out among friends, which might impact well-being.

> When I was a child ... it was easy for me to go out. Wherever I wanted to go, I just needed to tell my mom that I would go to that place and I would be at home on time. Now when I grow up, I'm not allowed to go anywhere, I just stay at home. If I want to go, I can only go to my paternal grandparents' house or maternal grandparents' house. Those are the two places that I am free to go to and to other places, I'm not. (Female respondent in mixed sex FGD with 16–18-year-olds, Nha Trang)

The survey found statistical differences between age groups and school levels, but only for the SDQ emotion subscale. Older students and those in high school showed greater emotional difficulties. SDQ emotion was higher for high school respondents ($t=-2.1660$, df=835, $p<0.05$) and for older respondents (14–15) ($t=-2.1347$, df=816, $p<0.05$) compared with middle school and younger respondents. By contrast, 32% of middle school respondents reported high psychosocial well-being compared with 26% among high school respondents ($X^2=2.9523$, df=1, $p<0.10$). We found no significant differences in terms of depression (WHO-5) or SDQ prosocial or behavioural problems.

Other factors that make certain adolescents more vulnerable to mental ill-health (as indicated by respondents) include ethnicity and SES. Using our survey data, we tested various socioeconomic groupings (i.e. adolescents that have experienced hunger and being poor/rich on the socioeconomic scale) and found some association at the bivariate level. Respondents who reported having experienced hunger in their household in the past 12 months had higher scores on the SDQ emotion subscale ($t=-2.6168$, df=757, $p<0.001$) than those who had not, and had higher scores on the SDQ behavioural problems subscale ($t=-2.8354$, df=757, $p<0.001$). Psychosocial well-being (WHO-5)

was lower among poorer respondents, but only marginally significant ($t = 1.7439$, df = 558, $p < 0.1$). The survey did not allow testing for differences between ethnic groups.[20]

In our qualitative research, however, adolescents in both provinces noted that students from ethnic minority backgrounds are discriminated against, bullied and ignored – all of which are likely to increase their risk of mental ill-health. They also noted that students from poorer households tend to face more challenges, including discrimination, bullying and teasing by their wealthier classmates.

When adolescent respondents in the qualitative research were asked if they had ever experienced mental health issues themselves, many mentioned experiencing stress, depression/sadness, anxiety and anger. Our survey identified 33% of respondents with risk of depression (WHO-5 depressed) with relatively equal proportions in middle school and high school. However, scores varied considerably across schools, ranging from 24% in the school with lowest incidence to 41% in the school with highest incidence.

One girl who had experienced depression in the past noted how she was blamed and criticised for it, largely by her parents, which made her depression worse, although as the narrative below shows, they did come to understand her better.

> So I used to have depression. At that time, my parents thought that's because of me, because of factors such as rarely going outside, then using the phone too much … then … later, the more my parents didn't understand me, the worse my situation became. Only after that did they begin to sympathise more with me, like, 'what's your problem?', which means like … my parents understand me more, but people around still couldn't understand, like 'this girl has mental illness, she's like this, she's like that', like 'you're not normal. You're just making up things in your head yourself'. (FGD with 16-year-old girls, Vinh City)

One 14-year-old girl had officially been diagnosed with schizophrenia and spoke about being scared and depressed when she was first diagnosed, and her parents being 'terrified'. She also spoke about being scared that people, especially family members and friends, would stigmatise and discriminate against her.

> I've got acute psychosis and neurological disorders. I had an epileptic seizure before, when I was 1 year old, at my first birthday party. It was the facial nerve palsy (7th cranial nerve) and my parents took me to the hospital to get acupuncture treatment, as it distorted my face. Then … I get to be like this [gestures to her face] thanks to the acupuncture treatment. But currently it relapses, the … neurological disorders … acute psychosis. Do you know acute psychosis? It's schizophrenia. Back then, I couldn't believe that I had mental disorders, and the doctor prescribed me. For someone like me, it was unbelievable. I'm fine now. Much better than before. Back then, I was paranoid … I was scared and depressed and things. I had emotional disorders, and my parents were terrified … I'm scared that it could be my friends and my relatives [who will discriminate against me]. (IDI with 14-year-old girl, Vinh City)

20 The survey sample was too small to include ethnicity as a variable given that 97% of our sample were of Kinh ethnic origin, 1% Khác and 2% did not report any ethnicity.

Several adolescent respondents in the qualitative research described experiencing suicidal thoughts relatively regularly, but not planning or acting on them, saying (for instance) that they did not dare to go through with it or they had 'rethought it' (see Box 1).

Box 1 Accounts of planning suicide attempt

> I took sleeping pills. I wanted to kill myself and even wrote down the idea of stabbing myself in the stomach with a knife.
> I tried to do that but I was reminded of my mom. And I didn't dare to do it.
> After the ... after the semester ended. When I said that if my mom found out ... I told my friend that if this time, the grade was 'Good',[i] I might actually kill myself. I did get the 'Good' grade, and when my mom knew about it, I was going to kill myself for real. But my friend advised me against doing that and talked me out of it a lot, so I stopped.
> I made a plan ... I searched on the internet beforehand.
> Almost ... almost every month [I think about killing myself].
> My friend talked me out a lot, they talked about the last time ... they talked to her mom, she mentioned ... mentioned her mom.
> (IDI with 16-year-old girl, Nha Trang)
>
> I felt like everything came so suddenly and it was pretty bad. I felt like I couldn't take it so I was going to [commit] suicide. However, my best friend talked me out of it and I dropped it.
> I made a plan ... I planned to wait until the weekend, when I had a day off and people wouldn't care what I was doing. That's when it could work.
> I bought them [sleeping tablets].
> Very often [I think about suicide].
> (IDI with 14-year-old boy, Nha Trang)
>
> Uhm ... it started [thinking about suicide] from my secondary school years [grade 6].
> It still happens. Until now I don't even feel anything.
> I felt like my mother had suffered too much, maybe if I died then she would feel better.
> (IDI with 17-year-old girl, Vinh City)
>
> That day, after taking the exam, I thought that I could never achieve the credit student award, so I was stressed. My parents were much older than me. They got married early ... no, late, and they didn't understand me, so when I was stressed, I was about to commit suicide, so my form teacher had a talk with me. At first, it's because my mom called for her help. After the talk and some advice from her, I rethought about it, so it's getting better now.
> (IDI with 16-year-old girl, Nha Trang)

i In the Vietnamese educational secondary system, the 'Good' grade is not difficult to earn, so it does not meet many parents' expectations.

Multivariate analysis of our survey data allowed better understanding of how the various socio-demographic indicators predict mental health risk (in terms of the SDQ and WHO-5). We considered the impact of characteristics of students (e.g. gender, age, school level), their household SES, their religion (Christian, Buddhist) and their place of residence (province and urban/suburban). The OLS regressions (see Annex 6, Table A4) show that gender is the most consistent predictor, with girls 2.9 times more likely to be at high risk of mental ill-health (SDQ emotion subscale) and 1.4 times more likely to be identified with depression (WHO-5) after controlling for other factors. However, boys are at higher risk for behavioural problems than girls ($p < 0.05$). High school students or older respondents (aged 14–15) are more likely to be at risk according to the SDQ emotion subscale ($p < 0.01$), and less likely to enjoy high psychosocial well-being ($p < 0.01$).[21] SES was only significant for those identified as being at high risk based on the SDQ emotion subscale, with better-off respondents (top quintile SES) about half as likely to experience emotional problems ($p < 0.01$). Being Christian was associated with being 1.9 times more likely to be identified with depression based on the WHO-5 scale; we found no correlations between religion and scores on the SDQ or WHO-5; thus more studies are needed to confirm this result.[22] We found that province and urban/suburban location had no statistically significant association with scores on the SDQ or WHO-5 after controlling for other factors.[23] Overall, we found that the socio-demographic indicators alone explained little variation in either outcome (maximum of 6% R^2 for WHO-5 score, and only 4% for SDQ emotion).[24] This suggests that mental health issues and subjective well-being are not determined principally by socio-demographic factors other than age, and gender to a certain degree, and that the interventions need not devote undue attention to targeting at-risk groups within the student population based on the basis of these characteristics. However, some attention could be given to girls and high school or older adolescents (aged 14–15).

4.1.2 Perceptions of trends in mental health incidence/prevalence of mental health problems

Findings from Viet Nam's first nationally representative survey on the prevalence of mental health problems in children, conducted in 2014, show that the overall levels of child mental health problems were about 12% of the non-adult population, with significant variation across the country's 10 provinces. Adolescents in the southern provinces had lower levels of mental health problems than those in the central and northern provinces (Weiss et al., 2014: 150). A number of other smaller studies also report prevalence rates. For instance, a study in northern Viet Nam found that about 25% of adolescents

21 We tested for school level (high school/middle school) and age group (12–13 and 14–15). They show similar results, as expected given they are highly correlated. We reported only school level in Annex 6, Table A4.

22 We tested for various combinations of factors: the full SES classification, top and bottom groups, and experiencing hungers. The best predictor is the one reported in Annex 6, Table A4.

23 Both variables appeared significant in OLS regressions that includes only demographic factors, but stop being significant when we control by drivers and coping strategies. Regressions with only demographic factors are available upon request.

24 Figures correspond to OLS regressions including only the set of demographic factors and are available upon request.

aged 15–18 met the cut-off on at least one Child Behavior Checklist (CBCL) subscale[25] (Hoang-Minh and Tu, 2009). A study of 1,368 adolescents aged 11–18 in DaNang and Khanh Hoa provinces found that approximately 9% had mental health issues such as emotional difficulties, behaviour problems, hyperactivity and inattention, peer relationship problems and lack of prosocial behaviours (Amstadter et al., 2011). Another study, among high school students in Ho Chi Minh City, found that 16% were experiencing significant affective problems and 24% were experiencing behaviour problems (Anh et al., 2006).

Most respondents in our qualitative research (adolescents and adults) perceived that mental health problems have increased compared with 5–10 years ago. Key informants in particular indicated a direct relationship between growing social media/electronic device use and worsening psychological difficulties among adolescents (as well as adults) in recent years. They spoke about students getting more and more addicted to their phones and social media, including gaming apps/video games, and imitating what they see in these games. Other responses, especially from adolescents, indicate that mental health problems are increasing due to heavier school workloads, with a more difficult curriculum and the ever-increasing pressures placed on children by their parents to do well academically. This is true for both boys and girls; some respondents noted that previously, girls 'did not need to study too much' as they were not expected to go on to college/university and get a job, but this has changed now. (Both these themes, of increasing technology usage and academic pressures, are explored further in Sub-sections 5.2.6 and 5.2.12 under 'Drivers of mental ill-health'.)

> It [mental ill-health] has been increasing over time because 20 years ago, electronic media devices weren't good. Now it's more convenient, there's the media, the internet. But it's also a problem. Students, especially adults, and parents as well, easily get addicted to electronic devices. And electronic devices have a significant impact on students' psychophysiology and mentality, on adults as well. Very significant impact. (KII 21, Vinh City)

> In the past, studying was at your pace. At that time, girls didn't need to study too much, finishing grade 12 was enough. I never thought of going to college and then going to work, so I didn't invest in studying. And now if we want our children not to suffer from pains, they have to try to go to college or university to have jobs. So we have to invest for our children now. But at my time, passing the university entrance exam was very difficult. (FGD with mothers of adolescents, Nha Trang)

Rapid economic development over the past decade was mentioned by some adults in the qualitative research as leading to increases in stress and, more generally, mental health challenges. Parents reportedly face growing economic pressure to work more, which in turn means they can spend less time with their children, including taking care of them. According to some respondents, this has also highlighted gaps/division along socioeconomic lines, with better-off parents being able to spend more on their children than those who are less well-off. This in turn has led to division among children, and an increase in bullying. Therefore rapid economic development may increase mental distress.

25 The CBCL is a standardised instrument that assesses the negative 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.

> In general, it [mental health problems] increases periodically. In the period from 2000 to 2010, it started to increase, but it was less. From 2010 up to now, the economy has rapidly developed, giving people more economic exposure. Rich parents spent more on their children. Then there was the division among the better-off friends. (FGD with parents of adolescents, Nha Trang)

Some more positive views on changes in mental health were also expressed, from key informants and adolescents. Key informants noted that relationships between teachers and students have become more relaxed and students are more open to discussing their problems and worries than previously. Another respondent noted how schools had recently undergone some changes, including how assessments are conducted, and have adopted strategies to lessen the pressures faced by students. One respondent noted how this had made their child happier:

> Another change is the relationship between teachers and students. It seems that teachers are more friendly and students talk more openly. Students also talk more openly about their worries in love life compared to the past. (KII 13, Vinh City)

> I do see that a little has changed in the past year in terms of the ranking/scoring the students, so the students are less pressured, just like with my own child – now he is happier when he goes to class than staying home. Now in class, the students are assigned into groups, so they play with their own group, create these models, and different products, so they are more active. (KII 8, Nha Trang)

Another respondent noted that since awareness around mental ill-health was increasing generally, this has led to some declines in incidence of mental ill-health, presumably because children are now more able to reach out if they have a problem. However, another respondent suggested that while mental ill-health has always been around, the reasons that the number (of people with mental health problems) are increasing now is precisely because awareness has increased and people are coming forward more, and are therefore being picked up by 'statistics'.

> I think the changes are relatively positive, there are fewer and fewer of those cases. Since society is advancing, the awareness of students is increasing, but I think the increase is not a lot, it is changing but slowly. (KII 7, Nha Trang)

4.1.3 Community perceptions and responses to mental health issues

Respondents in the qualitative research were asked how members of the community perceived and responded to mental health/ill-health issues. For most people, mental health/ill-health is associated with negative behaviours and, as a result, behaviour and attitudes towards those facing mental ill-health were usually stigmatising and discriminatory, even within households/families. Specifically, adolescent respondents commented that: people, 'stay away' from those with mental health issues; children in schools were avoided and end up playing alone; within

their families such children are often neglected; and there were accounts of children with such problems being sent to social protection centres[26] where the state was left to care for them. Family members also reported wanting to hide a child with mental health problems – another reason for sending them to a state-run institution. There were also comments that people had no time to look after such children anymore; they were seen as a burden to families busy and caught up in their day-to-day lives.

> People even discriminate towards their children. If the family has one member suffering psychosis, they will be neglected mostly by their siblings and even parents ... though less likely. That child is considered the family burden. There are some families throwing the disabled child to the social protection centre, suspending the relation with the child and leaving it to the state. (KII 17, Vinh City)

Often it is the parents of adolescents telling them to stay away from people with mental illness, since they fear it might happen to their children, or that they may 'infect them'. There is a perception that people with symptoms of mental ill-health (although respondents did not mention specific disorders) are dangerous, which is yet another reason to stay away from them. There is also a worry among some parents that mental ill-health may be genetic/hereditary. As a result, some parents have tried to keep their children away from a family member who may be facing such challenges. Parents sometimes restrict their children from reading about mental ill-health as they perceive that if the child reads or learns about it, it may increase their likelihood of experiencing it.

26 These are institutions run by MoLISA, for children who have mostly severe mental disorders (for further details see ODI and UNICEF Viet Nam, 2018).

5 Protective factors for mental health and drivers of mental ill-health

This chapter examines protective factors for mental health, followed by drivers of mental ill-health, drawing on qualitative fieldwork and our survey. The survey sought to identify and quantify factors influencing the likelihood of scoring highly on our positive psychosocial well-being measure (WHO-5) or, conversely, being at risk of depression according to the same measure, and the likelihood of being at risk of mental ill-health according to the SDQ. Each section describes the literature in Viet Nam and then assesses our empirical evidence.

5.1 Protective factors for mental health

The literature reviews identified a number of protective factors leading to positive mental health and psychosocial well-being among adolescents in Viet Nam. Higher family income was associated with decreased likelihood of mental health problems and/or was seen to mitigate some sources of stress experienced by young people (Amstadter et al., 2011; ODI and UNICEF Viet Nam, 2018). Another study found that agency and self-efficacy correlate positively with the SES of the household in which young people were born and grew up (Revollo and Portela, 2019). Having a supportive home environment, living with both parents, and having emotionally healthy family relationships and feelings of connectedness were all found to be protective factors against depression and suicide, while helping to mitigate psychosocial distress and ill-being and to promote self-esteem (Blum et al., 2012; Le et al., 2012; Nguyen et al., 2019; Nguyen, 2011; Nyundo et al., 2020; ODI and UNICEF Viet Nam, 2018; Phuong et al., 2013; Weiss et al., 2014). Relationships beyond the household were also seen to be protective against mental ill-health in the literature – having good social networks, friendships, peer support and school connectedness could all protect adolescents' mental health (Huong, 2009; Phuong et al., 2013). Engaging in leisure activities as well as affiliation to religion were also seen to be protective (Amstadter et al., 2011; ODI and UNICEF Viet Nam, 2018; Stratton et al., 2014). Finally, technology – including delivery of online treatment for mental health problems and accessing information on how to deal with sadness and anger, as well as connecting with friends – was found to be protective in some small qualitative studies (ODI and UNICEF Viet Nam, 2018; Sobowale et al., 2016). Our findings resonate with the findings of many studies in the secondary literature.

5.1.1 Self-confidence, self-esteem and self-efficacy

Having a positive perception of oneself was identified as an important protective factor among respondents in the qualitative research, as it led to increased self-confidence, self-esteem and self-efficacy. When adolescents were asked what they liked about themselves, several mentioned their physical appearance; both male and female respondents said they liked their height and that they were taller than their classmates. Others noted that they thought themselves 'cute'. In terms of personality traits, adolescent respondents gave a wide range of aspects that they liked, including being positive, confident, a good conversationalist, funny, friendly and able

to make friends quickly. A large proportion of (primarily) female adolescent respondents spoke proudly of doing well at school or in a particular subject (e.g. English, science, drawing), getting good grades, winning prizes, making their teachers happy, being better at school than their friends and being able to study well. This gave them a sense of pride and well-being.

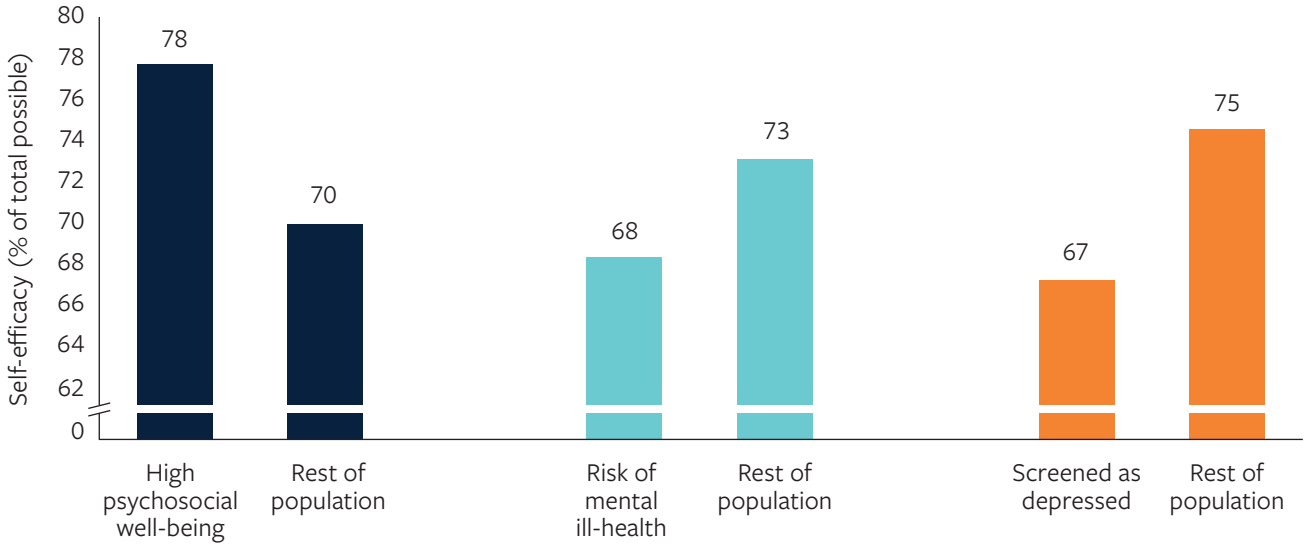
Our survey data also links self-efficacy, positive psychosocial well-being and mental health: those with high psychosocial well-being have 11% higher self-efficacy than those with lower psychosocial well-being ($t = 9.3060$, df = 837, $p < 0.001$), whereas those at risk of mental ill-health had self-efficacy scores that were 7% lower than those not at risk ($t = 5.0165$, df = 834, $p < 0.001$), and those at risk of depression had self-efficacy scores that were 10% lower than the rest ($t = -9.3315$, df = 835, $p < 0.001$). We found no statistical differences in self-efficacy scores across gender, age groups, school level, SES, or religious group (see Figure 2).

5.1.2 Positive family dynamics

In keeping with many other studies carried out in Viet Nam, positive family dynamics or relationships with parents were protective of adolescents' mental health. Adolescents in our qualitative research noted that living with their parents and being cared for by them (and, on some occasions, cared for by older siblings) made them feel happy and supported. Our survey found that respondents living with both parents had higher subjective well-being (WHO-5) ($t = -2.5973$, df = 833, $p < 0.01$) and were more likely to have been classified as having high well-being (WHO-5 top) ($X^2 = 3.8252$, df = 1, $p < 0.05$) than those living with one parent only or another relative.

Many of the adolescent respondents in the qualitative research also described doing activities with their parents or siblings, which made them feel content and were often used as spaces to share concerns; this was especially the case for female respondents. We found some gendered

Figure 2 Self-efficacy and links with mental health



Note: Psychosocial well-being is measured as top quintile WHO-5 scale; risk of mental ill-health is measured as top quintile in SDQ emotion; risk of depression is measured as 50% WHO-5 scale.

patterns in parental relationships, with girls tending to spend time and do activities with their mothers and boys with their fathers. Activities also differed by gender: girls did household chores with their mothers (e.g. washing dishes, sweeping, cooking) while boys went out with their fathers, played football, etc. Similarly, when asked which family member the respondent was closest to, girls were much more likely to say their mother, while boys were more likely to say their father. Adolescents have good relationships and spend time with other family members, mostly grandparents. Again, girls liked spending time with grandmothers and boys with grandfathers – although this pattern of spending time with grandparents was more common for girls than boys, and the time was typically spent doing household chores together.

> It's my dad [who makes the child happy] buying me lots of toys, or bringing me to the park or the supermarket or the amusement park. (IDI with 11-year-old boy, Vinh City)

5.1.3 Social relationships outside the household

Relationships outside the household are critical to support mental well-being. The majority of adolescent respondents in the qualitative research commented that they had close friends with whom they spend time, with some directly attributing this to mental well-being. The majority of respondents' friends were from their school class, with several indicating that their close friends lived nearby but did not go to their school. Several adolescent respondents (all female) commented that they had friends whom they know from the internet. Adolescents interact with their friends in numerous ways, including studying and playing together, going out to eat together or just talking.

> Uhm, I think being together with my family and ... being able to see my friends every day, that's what makes me happy. (FGD with 13-year-old girls, Nha Trang)

The importance of relationships outside the household was also reflected in the survey. Thus most students in our survey felt they could rely on a handful of people – 35% rely on one or two people, and 33% rely on three to five people (Figure 3). The number of social supports was significantly associated with gender, school level and SES. High school students typically reported having more social supports than middle school students ($X^2 = 9.6207$, df = 4, $p < 0.05$). Generally, respondents from households with better SES also reported having more supports ($X^2 = 18.9381$, df = 12, $p < 0.1$), but there are a significant number of better-off students without any support (13% compared with 7% among the poorer respondents). There are more boys than girls who have no one to rely on (13% compared with 8%), but more boys also rely on three to five people (36% compared with 30%) while most girls rely on one to two people (41% compared to 30% among boys) ($X^2 = 14.5060$, df = 4, $p < 0.001$). This indicates that there is a polarisation for boys and for better-off respondents who either more frequently have a good number of people they can receive support from, or do not have support at all. Responses from girls suggest they have a more consistent level of support.

In our data, the number of people they could rely on was positively associated with respondents' psychosocial well-being (Figure 4), as measured by the share who were classified as having high psychosocial well-being ($X^2 = 14.6995$, df = 4, $p < 0.005$). Conversely, risk of mental ill-health ($X^2 = 16.2349$, df = 4, $p < 0.005$) or depression ($X^2 = 43.1181$, df = 4, $p < 0.001$) was higher among respondents with a smaller number of social

supports. As many as 55% of those without any support at all were at risk of depression, compared with 26% among those who can rely on three to five people.

Figure 3 Share of respondents by number of social supports

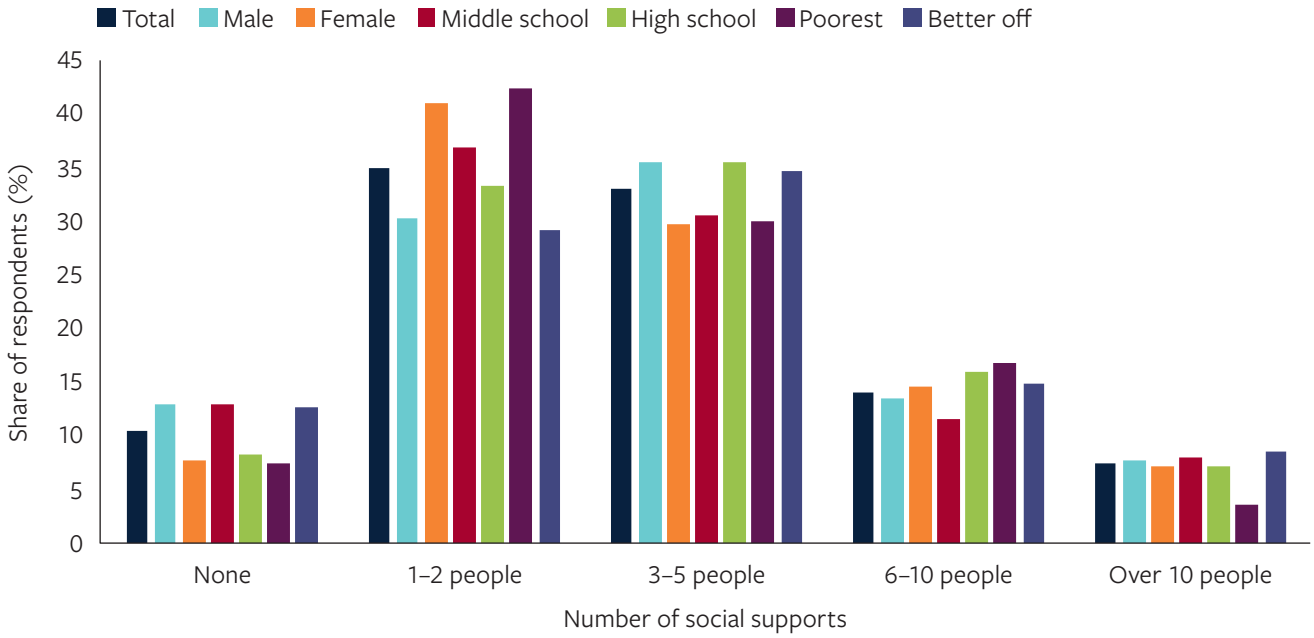
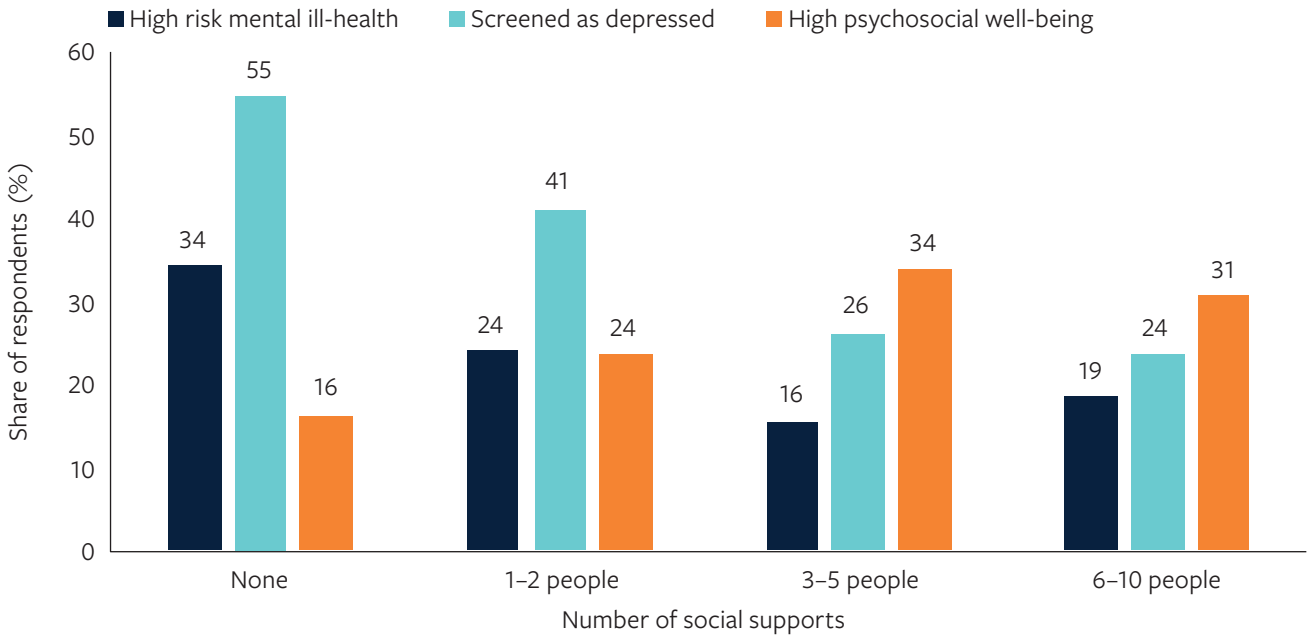


Figure 4 Mental health outcomes and social supports



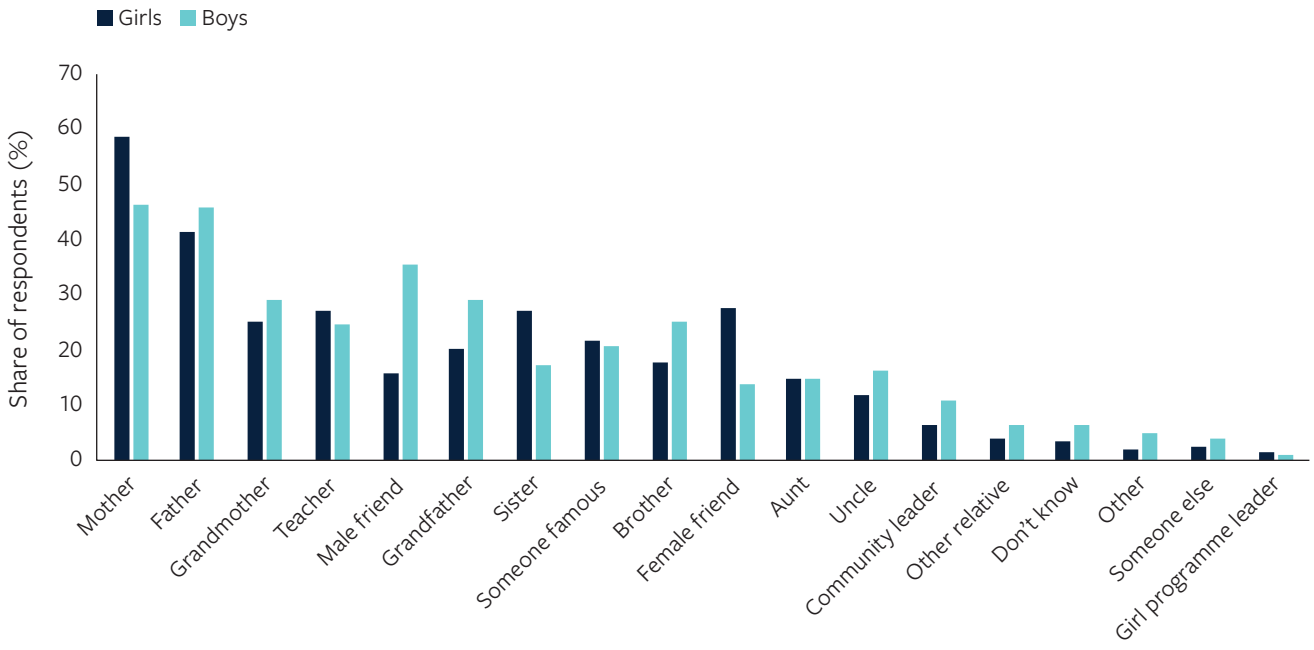
Note: Psychosocial well-being is measured as top quintile WHO-5 scale; risk of mental ill-health is measured as top quintile in SDQ emotion subscale; risk of depression is measured as 50% WHO-5 scale.

Only a handful of adolescent respondents in the qualitative research reported being in a relationship. Those that were in a relationship generally indicated satisfaction with it, saying that their partner 'cares about me'. However, when asked if their parents knew about the relationship and what they thought about it, most responded that they had not told their parents, possibly fearing disapproval.

Having a role model – someone to emulate and look up to – was also seen as a protective factor for mental health. In our quantitative survey, 85% of respondents reported having a role model. Having social supports is also strongly associated with having a role model – 86% of those with any kind of support have role models compared with 14% of those with no social supports (X^2=10.8966, df=1, p<0.001). Girls were more likely to have a role model than boys (X^2=4.4098, df=1, p<0.036). We found no statistical significance according to either school level or SES.

Having a role model was positively associated with psychosocial well-being (F=5.06, df=1, p<0.05) and a diminished risk of mental ill-health in the SDQ prosocial subscale (t=2.89, df=827, p<0.005). However, it did not predict the likelihood of being identified as at risk of depression, or classified as high-risk mental ill-health in the SDQ emotion or behaviour subscales. The role models most commonly cited by survey respondents were their mother (52%), father (43%), grandmother (27%) and teacher (26%) (Figure 5). Girls would more commonly cite their mother, grandmother, sister or female friend, while boys would cite their father, grandfather, brother or male friend. Boys and girls were equally likely (21%) to cite someone famous, including Adam Khoo, Albert Einstein, BTS (Jimin và Suga), Bill Gates, Cristiano Ronaldo, BlackPink, Emma Watson, Ngọc Trinh, Phạm Nhật Vượng, Phạm Trung Vàng, Trịnh Trần Phương Tuấn (Jack), among others.

Figure 5 Role model figures by gender



Note: This is a multiple choice question that allows more than one answer.

In the qualitative research, the role models frequently mentioned by adolescents included a family member – female or male – and often someone who had done well academically, who had or who does 'study well', who was financially successful and in a successful career. Thus, for instance, one respondent cited their grandfather who, despite a difficult start in life, did a PhD and became a director of a company in the UK. Others spoke about their uncles who studied well, and one respondent also mentioned his sister who 'studies well and understands things quickly'. One girl, as seen from the narrative below, wanted to be like her mother who had raised her on her own and was financially independent.

> I'd say becoming someone like my mom, because she raised me all by herself since 4th grade ... She is a strong woman who is financially independent and loves her children unconditionally. She doesn't always show how she feels but sometimes she does talk about her hardship to us so that we will have the motivation to study and grow up with a stable future. (IDI with 16-year-old girl, Nha Trang)

The second most frequently cited role model was a famous person, with respondents naming a variety of people, including athletes and scientists. Other role models cited included friends, classmates and teachers. Again, these were cited as role models because of their academic prowess and successful career. More girls identified teachers as a role model than boys.

> Perhaps I admire my English teacher, she's very successful at work and I really like ... her character and style. (IDI with 16-year-old girl, Nha Trang)

5.1.4 Leisure activities and distraction

In the qualitative research, leisure activities were identified as being supportive of adolescents' well-being. Many leisure activities were carried out with friends, although some were done alone and involved use of a mobile phone. The most frequently cited activities included: watching movies/TV; using a mobile phone to engage with social media, playing online games, listening to music; reading; going out; and playing sports (e.g. football, basketball, volleyball). When probing differences between the leisure activities of boys and girls, most said that there were no differences, but a few activities stood out. Thus quite a few girls described engaging in domestic activities – cleaning the house and helping their parents – in their free time, which made them 'happy'. Girls were also likely to engage in skincare and make-up activities, which boys did not. Some suggested that boys are more likely to do online gaming, although others said that both genders do so.

Parents and caregivers viewed these leisure activities positively, encouraging their children (across all age groups) to relax, de-stress and reduce the pressures of their studies. Parents were especially supportive of sporting activities (although these applied mostly to boys) as they were seen as 'healthy'. However, there were also some concerns that sports may lead to risk of injury and/or that they may interfere with studying if done excessively, and hence they were sometimes discouraged.

> Well, my mother doesn't worry too much about me watching movies too much, or sitting around chatting with friends too much. My mom wants me to spend a lot of time relaxing to reduce pressure of studying. (FGD with 11–12-year-old girls, Nha Trang)

5.1.5 Aspirations for the future

Having aspirations for the future emerged in the qualitative research as being supportive of mental health. When adolescents were asked about their aspirations, common responses included having a career, getting married and having children. Often a career came first – and this was true for girls and boys alike – so that they could be independent when they married and had children, with some saying that they would wait until they were aged 33–35 to have children.

> Both mum and I think that I should get married after a certain age, when I already have a successful career ... after around ... 33–35 ... Because as I know, both mom and grandma said that [one could be] successful after 28, then you get married at 30 and then have children. You could have children two or three years later, no need to rush. I think that when you're successful, you can be independent; you don't cling to anyone. (IDI with 13-year-old girl, Nha Trang)

Girls and boys both highlighted the desire to get a job so that they could take care of their parents and grandparents, as they had taken care of them. Adolescents' career aspirations varied significantly and ranged from skilled jobs such as a doctor or teacher, to manual jobs such as an excavator or a baker, jobs in the tourism industry (such as a hotel manager), a military career, and a career in the creative and information technology (IT) industries (one mentioned wanting to be a YouTube reviewer). These aspirations did not appear to vary by gender. Some adolescents aspired to a similar job to the one their parents were doing. Some did not mention any jobs but aspired to be wealthy and lead a 'comfortable life'.

> Yes. When I grow up ... I'm going to find someone when I grow up, and have a job and take care of my parents ... I want to be a preschool teacher. (IDI with 14-year-old girl in grade 8, Nha Trang)

> Growing up, I want to work, have a family home, take care of these parents, then ... want to be a good doctor to save many people. But also at that time I hope that my grandparents are still alive to have filial piety, so my children ... When I am sick, my grandfather often stays up late to take care of me. (IDI with 11-year-old boy, Vinh City)

Despite some adolescents having relatively high career aspirations (e.g. to be a doctor), many were also aware of the barriers or challenges they may face in achieving their goals. Boys and girls alike noted that to be a doctor one had to study hard, get high grades and pass the exams. They were willing to do this, including taking extra classes and focusing more on their studies ('using the phone less, playing less games') to achieve such a goal. More generally, regardless of career aspiration, adolescents noted that they needed to study more and be distracted less to achieve their goals. There were some concerns about the costs needed to take up some careers (e.g. if someone wanted to work in the tourism industry), but this did not seem to be a concern for the majority of respondents.

While some adolescent respondents (approximately half) perceived that barriers to achieving aspirations did not vary by gender – noting instead that it varies by individuals and depends on 'mindsets' and on 'whose will is stronger' irrespective of their gender – some noted that there was a gender-based difference. On the one hand, some suggested that the

personalities of boys and girls differ, with girls more 'skilful and careful in communicating' while boys are the opposite, implying that achieving their aspirations may be more difficult for boys. Similarly, boys were seen to be more quick-tempered and impulsive than girls, which again may influence their ability to obtain and stay in employment.

> The difficulty that only males have [in achieving their aspirations], I think it's the mental problem, as males are often quick-tempered, impulsive, so the way they treat others is less mild-tempered than that of females, like they get angry more often. (IDI with 12-year-old girl, Vinh City)

On the other hand, several respondents, especially girls, suggested that males had greater resilience ('tougher mentally') – for instance, to stress – and that they were also physically stronger and more able to bear hardships than females. At the same time, women were seen as weaker, less able to do physically demanding jobs and having poorer health. All of this implies that men may be more likely to achieve their aspirations even if they have to go through difficult situations to do so.

Other gender-based barriers that tend to favour males in achieving their aspirations, according to respondents, were that females often have to spend time looking after the family while males are able to focus on their career. It was also perceived that some companies preferred recruiting males due to maternity leave discrimination. Women also sometimes face challenges to enter specific careers where they have to perform better than males. For example, to become a soldier and enter military school, because there are fewer spaces open to them, girls have to get higher scores, with one respondent reporting that 'boys have to achieve a grade 25–26, while girls [have to get] 27 or above'. Similarly, working in security or in the business sector was seen to be harder for females than males, and girls were often advised against it, presumably because they did not have the physical strength and were seen as 'weaker' than men.

> I think men have to take responsibility for their career. Women have to take care of their husband and kids, their marriage, deal with family problems … They take care of those more than men do. (IDI with 15-year-old girl, Vinh City)

> And some other jobs are the same, too … for example, for security jobs, it's easier for males than females. I want to be a businesswoman when I grow up, but like my parents said, doing business is very hard, especially for females, so choose a different one [job] that is less hard. (IDI with 12-year-old girl, Vinh City)

5.2 Drivers of mental ill-health and psychosocial distress

Many of the drivers of mental ill-health and psychosocial distress are mirror images of the protective factors. Our findings resonate widely with those from the literature. Studies show that adolescents with limited economic opportunities and children from poorer (often ethnic minority) households, with low parental education level, are more likely to exhibit stress, suicidal behaviour, lower subjective well-being and eating disorders (Lê, 2009; Nguyen, 2011; ODI and UNICEF Viet Nam, 2018; Pengpid and Peltzer, 2018). Studies also show how poor family relationships (including controlling behaviour/

excessive discipline from parents, high parental expectations to perform well academically, conflicts with parents and inability to share feelings with parents) led to stress, suicidal thoughts and attempts, sadness, loneliness and emotional isolation among adolescents (Blum et al., 2012; Lê, 2009; MoH et al., 2010; Nguyen et al., 2010; ODI and UNICEF Viet Nam, 2018; Thanh et al., 2005). Challenges in relationships beyond the household have been identified as leading to distress. These include romantic relationships, but also peers and the pressure to look and behave in certain ways (ODI and UNICEF Viet Nam, 2018; Tran, 2015). Physical violence or maltreatment (both within and outside the household) and/or exposure to violence was found to result in increased likelihood of low or depressed mood and suicidal thoughts (Huong, 2009; Le et al., 2011; Nguyen et al., 2013a). There is also some evidence from the literature that gendered social norms can drive mental ill-health – a preference for sons, school dropout and early marriage, as well as juggling of school and housework, resulted in social isolation, depression and suicidal thoughts in girls (ODI and UNICEF Viet Nam, 2018).

Schools and school environments have been identified as a key driver of mental distress among students. Academic pressures from teachers and parents, quarrels with teachers and other school staff, lack of supportive teachers, an overloaded curriculum and obtaining poor marks have been shown in various studies to lead to depression, anxiety, stress, and suicidal thoughts and attempts (Bui et al., 2018; Nguyen et al., 2013b; ODI and UNICEF Viet Nam, 2018). Being bullied at school was found to lead not only to school dropout, but also to depression, psychological distress and suicidal ideation, with some studies also showing that both the victims and their bullies exhibit higher levels of these symptoms (e.g. Le et al., 2017).

5.2.1 Negative self-perceptions and lack of self-worth

One theme mentioned by many adolescents in the qualitative research, and confirmed by accounts from other family members, was of negative self-perceptions, with body image or physical appearance being one of the main drivers of low self-esteem and feelings of shame (for findings from the quantitative survey, see Sub-section 5.1.1). Adolescents noted that they do not like their body image, perceiving themselves as being 'too short', 'too fat', that they are pimply/have acne, or that their skin is too dark. Adolescents framed these discussions around their physical appearance in two ways. On the one hand, they compared themselves with others who they perceived to be more beautiful than them. On the other, they noted that they feel ashamed when they are gossiped about and teased (a 13-year-old girl in grade 8, Vinh City, explained, 'They teased me that I was fat') or when they are bullied by others who point out their physical flaws or inadequacies. Family members also reportedly contribute to these feelings by, for instance, telling their children not to eat too much (although different parents can have different approaches, as the quote below shows). This can lead to adolescents skipping meals (see Sub-section 6.3.2, Negative coping strategies). All of this adds to adolescents' feelings of low-esteem, sadness and depression.

> Normally my mom thinks that she shouldn't let me eat too much … because I'm too fat. But my dad is different. My father lets me eat. He also said that I should eat more to have the strength to study. (FGD with female students, Vinh City)

While girls of all ages appear to be more affected by poor body image than boys, some boys also

expressed their insecurity about body image, with one noting that because his family talks about him being fat, it led to him feeling unconfident and skipping meals. The mother of another adolescent boy also noted the pressures on adolescents to behave well, be good-looking and well-groomed in public; in her case, she thinks her son will need to meet these expectations to have a wife in the future.

Adolescents reported that negative body image affects their self-worth and self-confidence in other aspects of life too. Not wanting to meet or make friends, being uncommunicative and being bad at studying were all lumped together with negative body image.

> For example, my skin can easily catch acne. That makes me unconfident and prevents me from meeting my friends. (IDI with 17-year-old girl, Nha Trang)

Character and/or personality traits was another theme that emerged in responses about what adolescents did not like about themselves. Several adolescents (mostly girls) reported their quick temper as something they disliked. Others noted how (speaking both about themselves and other adolescents) they disliked being lazy, shy, timid, clumsy and lacking self-control (also noting that those who are timid are more likely to be bullied).

A few older female adolescent respondents reported that their poor social and communication skills made it difficult to make and sustain friendships, and also made school challenging, especially when having to speak in front of the class. All of this had an effect on their self-confidence, with some also wanting to isolate themselves as a way of dealing with this (see also Sub-section 6.3.2).

Other behaviours adolescents disliked about themselves included forgetfulness (and being late for things), being disruptive in class and breaking things. They also reported struggling with feelings that they inconvenience their parents, teachers and classmates. Not being intelligent or being bad at studying, especially when compared with their classmates, were other traits that adolescents (perhaps boys more so than girls, among our respondents) disliked about themselves.

> I feel useless ... It's because I'm not very intelligent ... Compared to my classmates who are capable of understanding what the teachers were lecturing, while it was very hard for me to do the same. (IDI with 17-year-old boy, Vinh City)

5.2.2 Unhealthy family structure and intrahousehold dynamics

In line with findings from the literature, the qualitative research identified unhappy or unstable family dynamics as a key risk factor for adolescent mental ill-health. The most commonly cited family-related challenge, according to adolescents and confirmed by adult respondents, was adolescents feeling unloved, neglected or unsupported by parents and being punished and/or scolded by them, often as a result of poor academic achievement. Adolescents also expressed frustration that their parents do not understand them, that they do not care about their children's emotions and do not have time to listen to them – all of which leave adolescents feeling distressed and depressed. For some, this is exacerbated when parents compare them unfavourably with their siblings: some adolescents observed that their parents appear to care more about their brother or sister than them, the parents 'feed them [siblings]

more' while the adolescent feels that they are 'left alone' – feelings that led one adolescent to have suicidal thoughts. According to key informants, this lack of equal treatment, or inadequate parenting, can also lead to children becoming spoilt and lacking discipline, which may affect their interactions with others and may not provide them with the skills to cope with challenges and difficult situations in the future.

> When I get bad grades, my parents scold me so hard. I really feel like crying and feel self-pity many times, but there is no one to share with and I really need that my parents will understand my emotions ... on the other hand, they just want to put pressure on me to be in higher position than others. And I feel very bad. (FGD with 11–14-year-old adolescents, Vinh City)

> Family plays an important role in each person's life. We keep saying family, school and society ... but family is still the main factor. That many people depend on society or school for their children's education is unacceptable. Children without proper care from parents may be spoiled when stepping into society. (KII 19, Vinh City)

These perceptions of being unloved and neglected are further exacerbated by living arrangements and life-cycle/stage issues. Deaths of parents or other close family members (e.g. a grandmother) caused severe mental distress, according to both adolescent and adult respondents, with reports of adolescents staying home alone, 'crying alone' and not wanting to talk to anyone. Sudden accidents, injuries or more chronic health-related problems of household/family members also caused mental distress, not least because of their financial implications. Thus one adolescent talked about her grandmother having an accident and her mother having to cover the costs of medical treatment. Another girl mentioned her disabled sibling and the costs needed for her ongoing treatment. This led to the adolescents involved (mostly girls) feeling worried and anxious, both about the person who was unwell or injured, and also about their parent (typically the mother) having to shoulder additional burdens. Some adolescent girls ended up taking on more responsibilities at home because of this, which also increased their stress.

Parental separation and/or divorce was another life-stage event that was reported to cause mental distress among adolescents. Both adolescent and adult respondents in the qualitative research reported that children's behaviour changed when this happened (e.g. someone who was once obedient and studying well reportedly became 'angry' and ended up 'hanging around a lot' when his parents got divorced). Key informants also noted that 'it affects [students'] spirit', and this was especially the case when parents do not talk about it with their children and do not support them emotionally through the process. (One key informant also commented that divorce rates are increasing.)

Our quantitative survey found a positive association between living with both parents and psychosocial well-being as measured by the WHO-5 scale (see Sub-section 5.1.2). However, we did not find any statistically significant differences in mental ill-being (SDQ emotion subscale) or depression.

In the qualitative research, re-marriage and parent(s) absent for various reasons (e.g. imprisonment, working far away) emerged as another cause of distress among adolescents. Re-marrying was often associated with a parent

no longer having time for their child and no longer caring for them once they were with a new spouse. When a parent is working abroad, they are not able to engage in parenting and/or provide guidance and advice for their child. Also, when one parent was absent, adolescents reported feeling that the parent who was still at home took their feelings of stress and frustration out on them, thus causing distress. It was also observed by adults (key informants and parents of adolescents) that adolescents who live with an extended family member (e.g. a grandparent or an aunt) – either because the parents are working far away or because they have died – may also not receive sufficient care, love and understanding ('... sometimes grandparents do not understand the children'), which can cause distress among those children.

> Uhm, my mom ... she's not cared about me since she got married to her new husband. (IDI with 14-year-old girl, Vinh City)

> Now my dad is always away for business for such a long time, so my mother is the breadwinner, so everything seems to be all my fault, and she often scolds me. (FGD with 16–17-year-old adolescents, Vinh City)

As already mentioned, a recurring theme in the qualitative research (according to adolescent and adult respondents alike) is that parents (and other family members/caregivers) do not have time for their children and, as a result, adolescents may lack parenting and support, and often feel neglected. This is often due to parents having to work long hours to earn a living, leaving them with little time to do anything else – including taking care of and showing interest in their children. Although they may have limited time to care for their children, this does not necessarily mean that parents lessen their power/control over their children. Thus another widespread refrain – according to adolescents and possibly more (older) girls than boys – is the strict control that parents maintain over their lives (which is also seen in the literature). Adolescents felt that their parents did not trust them and put continual pressure on them to stay in and study rather than go out and socialise.

> I find my difficulty is that my parents are too strict. They do not allow me to socialise much or have time for entertainment, go out with friends, but always have to .... spend all the time studying. (FGD with 16–18-year-olds, Nha Trang)

Adolescents in the qualitative research also mentioned conflicts at home as causing them difficulty and distress. Girls especially mentioned frequent arguing and shouting between their parents, which upset them. There were also accounts of some fathers abusing alcohol, which in turn led to domestic abuse and fathers 'beating' their mothers. A couple of adolescent girls also noted how their fathers were 'domineering', and no one could have a say and/or be heard on anything in their household. All of this reportedly traumatised the children, leaving them scared for their future relationships.

Some findings from the quantitative survey are relevant here. One-third (33%) of respondents had witnessed physical violence against their mother, and this was associated with higher risk of social problems as per SDQ prosocial ($F = 12.74$, df = 1, $p < 0.001$) and behavioural problems ($F = 40.69$, df = 1, $p < 0.001$). However, we found no statistically significant differences in the likelihood of being at risk of depression, having high risk of

mental ill-health as per the SDQ emotion subscale, or being classified with high well-being as per the WHO-5 scale.

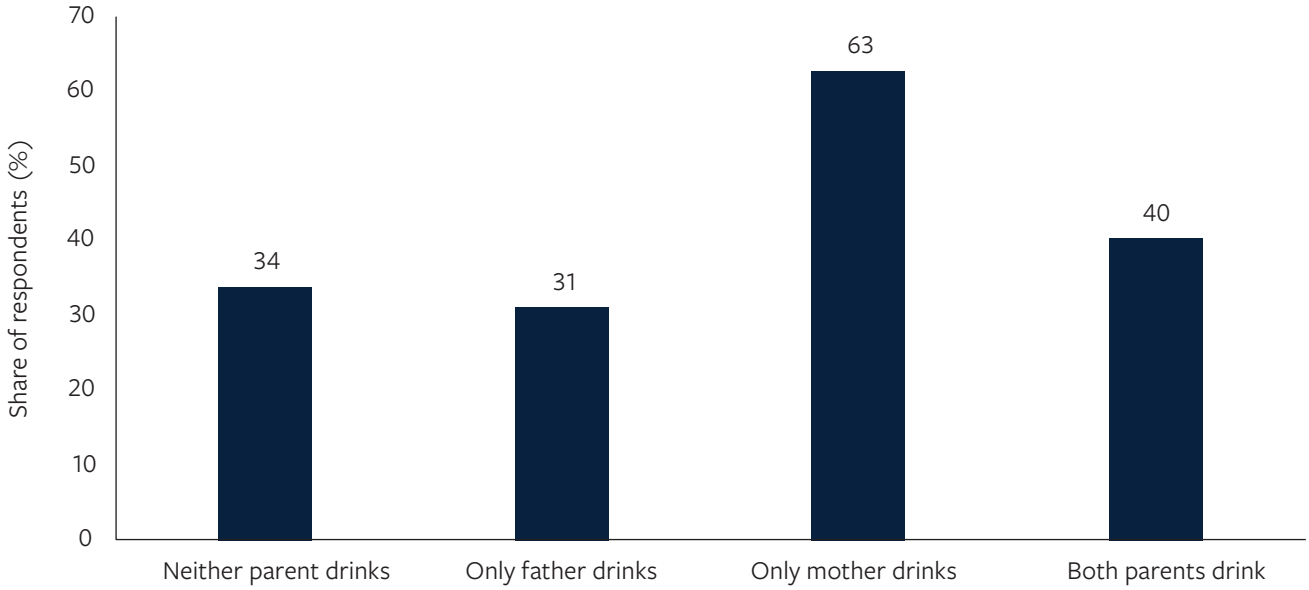
The survey also found that 80% of respondents reported that their father drinks alcohol, while 15% reported that their mother drinks alcohol; 14% reported that both their parents drink, 66% that one parent drinks, and 20% that neither parent drinks. According to our findings, having a father who drinks alcohol was not related to an increased risk of mental health issues among respondents, yet having a mother who drinks alcohol was associated with a greater chance of being at risk of depression ($X^2 = 6.4401$, df = 3, $p < 0.1$) (Figure 6). Associations with mental ill-health in SDQ scales or mental well-being in WHO-5 were not conclusive.

5.2.3 Poverty and the inability to meet basic needs

During the qualitative interviews, a few adolescents shared that they (and their parents) experience distress due to the poor financial situation at home, which leads to unmet basic needs. Some adolescents spoke about their parents or themselves feeling distressed because they could not afford to pay a utility bill, they could only 'eat instant noodles', they could not afford extra (study) classes and they could not buy appropriate clothing or footwear. Participants in a mixed-sex group discussion with adolescents felt this was especially the case for suburban dwellers.

> Financial difficulties [cause distress].
>
> Difficulties in money, especially going to school. If ... you live here, in the countryside, no one ... not all people can afford extra classes, almost self-study.
>
> It's related to dressing, clothes, footwear.
>
> (FGD with 16–18-year-old adolescents, Nha Trang)

Figure 6 Respondent at risk of depression, by parents' alcohol consumption

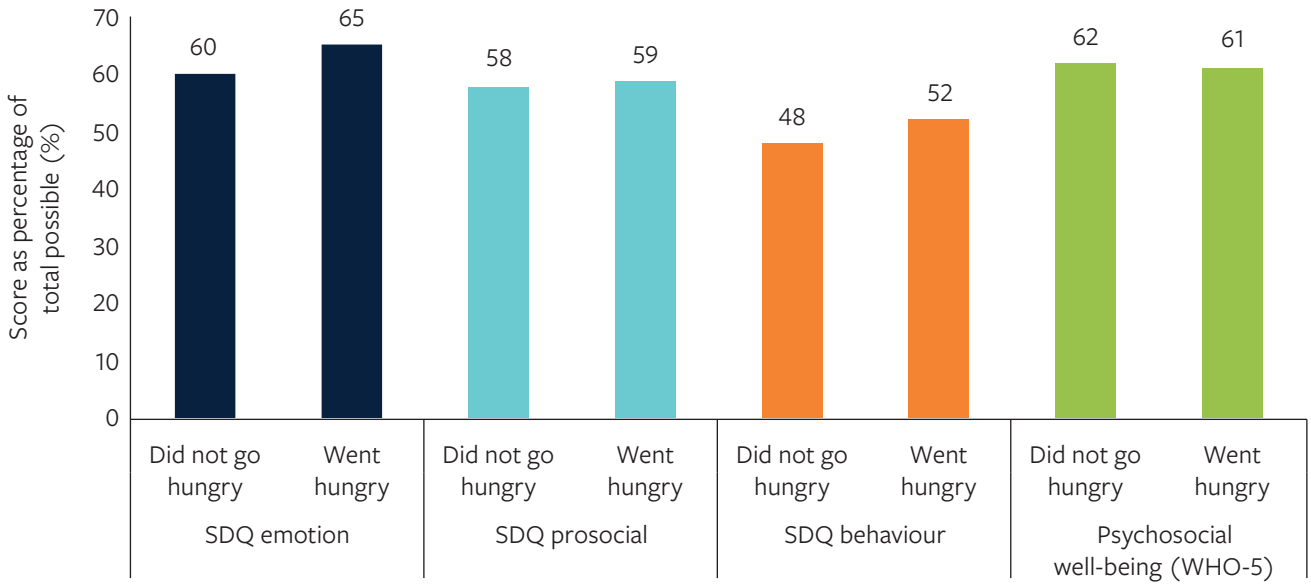


Our quantitative survey also found low but significant associations between mental health outcomes and poverty (Figure 7). However, the only observed significant association was with extreme levels of poverty such as experiencing hunger. Those who had experienced hunger in the past 12 months had statistically significant higher risk of mental ill-health in SDQ emotion ($F=6.85$, df=1, $p<0.01$) and behaviour ($F=8.04$, df=1, $p<0.001$) subscales.

We found no conclusive evidence of a relationship between mental health outcomes and SES measured in quintile strata with the wealth index in the survey. However, the gap between the rich and the poor was cited by some adolescents in the qualitative research (and confirmed by adults) as causing self-pity and distress. Adolescents made comparisons between those who, for instance, receive more material things – mobile phones, shoes, clothes, bicycles – from their parents, and others who do not. They noted that as they grow older, these differences become starker. However, a few adolescents also shared that being rich also has its challenges. For example, they may be despised by their poorer counterparts and generally unrecognised for their achievements. Also, people may attribute the achievements of wealthy adolescents to their parents 'buying grades' or having good relationships or networks.

Poverty and lack of livelihood opportunities also means that in some families, one or both parents migrate abroad, with some staying away for many years. This has led to them being little involved in their children's upbringing, with adolescents reporting 'missing them'. Their family's poor financial status also led to a few adolescent girls reporting feeling distressed and wanting to work to help their parents, although also noting that they were too young to do paid work. While the vast majority of adolescent respondents reported not having engaged in paid work (as they are encouraged to focus on studies), a couple of older girls shared their experiences of working part-time (e.g. with relatives, selling goods online) alongside studies to help provide for the family and 'buy them presents', but also using the money for their 'hobbies' and to pay for books and extra classes.

Figure 7 Mental health outcomes by experience of hunger



Some adolescents expressed feelings of distress about lack of job opportunities in the future. This was noted by older adolescent girls who also indicated that boys have better job prospects than girls. Girls variously noted that boys are stronger so can do a larger range of work, and that companies prefer to recruit male workers because they will not have to pay them for maternity leave. This led to girls especially worrying about the future, including their ability to support their family. One key informant also noted that lack of job opportunities, especially for graduates, often led to adolescents feeling 'depressed and unmotivated'.

> I'm anxious about ... mostly about my studies. I'm worried that I might not be able to ... find work that I want to do. I'm worried that I can't take care of my family in the future. (IDI with 16-year-old girl, Nha Trang)

5.2.4 Lack of friendships, and conflict among peers

As discussed in Section 5.1 (protective factors), close friends are a source of support for adolescents and are protective of mental health. By the same token, absence of close friends was reported to be a driver of mental ill-health. In the qualitative research, several adolescents shared (reports that were confirmed by adults/their parents) that they felt sad or distressed if they were isolated by friends or did not have friends with whom to share things, to 'hang out together' or 'to play'. As seen in Sub-section 5.1.3, the survey also confirmed a relationship between feelings of isolation, and depression and mental ill-health. Some adolescents observed that they felt sad when their friends were unsupportive, were not available for them when they needed support or did not reciprocate support they themselves had provided in the past.

> When I help my friend, I do it with all the best intentions, no need to say thanks. But when I need help, no one helps me. They avoid me. (IDI with 18-year-old girl, Vinh City)

Conflict among peers and friends is relatively commonplace and is another cause of distress among adolescents. This distress is compounded if adolescents are also facing challenging situations at home (this appears to affect older adolescents more, particularly girls). Causes of conflict include jealousies, gossiping and rumours arising from, for instance, interactions and relationships between certain boys and certain girls. Conflict can also arise from someone being 'picked on' (bullied) at school (see Sub-section 5.2.7). Social media may exacerbate these challenges and tensions by allowing rumours to spread more widely, as well as more quickly (see this section, and Sub-section 5.2.7 on bullying and Sub-section 5.2.12 on technology, where cyberbullying is also discussed).

> ... back in my old high school, there was a really nice kid, but he was ... in the class some kids didn't like him. So they went on the internet spreading fake rumours about him, that caused him to not be liked by many people when he graduated. (FGD with 16-year-old boys in grade 10, Vinh City)

Adolescents also reported experiencing conflict among classmates arising from perceived favouritism by teachers. Some spoke about teachers favouring 'class officers', 'paying them more attention and giving them higher scores'. Adolescents also indicated that a high-pressure academic environment, due to pressure from parents and teachers to excel in studies, can

also make the classroom environment tense and competitive, which hampers friendships among classmates.

> Concerning teachers, they often bias class officers, many students would be jealous that the teacher would pay more attention to class officers, give them higher scores. Other students will say those are her children. And they hate that. (FGD with 11–14-year-old adolescents, Vinh City)

Some adolescent friendships were also viewed as being unhealthy, especially by parents. Adolescent boys in particular reported that their parents disapprove of certain friends as they see them as a bad influence, so pressure their child not to spend time with these individuals – especially those who had dropped out of school and were working, fearing their children would follow suit. Rather, they prefer their child to spend time with children who got 'good grades' and who were 'nice kids'. One adolescent boy himself noted how he was influenced by another adolescent who started 'acting like his friend' and engaging in bad behaviours (such as 'teasing girls').

5.2.5 Lack of time for leisure activities

As seen in Sub-section 5.1.4, leisure activities are protective for adolescents' mental health. However, our study respondents also noted a number of barriers or factors that limit their ability to engage in leisure activities – the main one being lack of free time. In particular, adolescents reported that the substantial amount of time spent on studies leaves them with little to no time to engage in leisure activities or extracurricular activities. A few adolescents reported that this makes them sad, but others appear to rationalise it, considering that engaging in leisure activities can be a waste of time.

Parents not allowing children to spend time on leisure activities and taking time away from their studies was another important barrier. This was confirmed both by adolescents and adults (parents and other key informants). This makes some adolescents feel 'sad'. Also, as key informants mentioned, parents often place too much pressure on adolescents for their studies, which in turn means they have little time to relax and relieve their stress.

> Actually at first I really wanted her [the woman's daughter] to have some sports or exercises to do, but then I saw her studying decline as she was too passionate about it, so I stopped her. (FCS with 38-year-old mother of 17-year-old girl, Vinh City)

Some parents worried about potential dangers when their children go out to play, including that they may get into fights or have accidents. Some were also reluctant for their daughters to mix with boys during their leisure time. This all resulted in parents limiting their children's leisure time, which in turn had an effect on their mental health.

Other barriers to adolescents engaging in leisure activities include lack of inclination/becoming bored or fed up with activities, the costs needed to take part (e.g. one adolescent noted the costs involved in learning to play the guitar) and lack of equipment, especially to do sport – something that was confirmed by a key informant.

5.2.6 School-related pressure and school experiences

As noted in the literature, and as has begun to emerge when exploring other dimensions in this report, schools and the school environment are a critical driver of mental distress among adolescents. The vast majority of adolescents in the qualitative research reported that they felt pressure, and sometimes extreme pressure, to do well at school. While pressure may come from many sources, including the wider society and community, adolescents themselves, teachers or peers, there is a sense, expressed both by adolescents and key informants, that this pressure overwhelmingly emanates from parents or family. However, there were differing perceptions between adolescents and parents. While adolescents reported that their parents would punish and scold them if they did not do well at school, most parents see this as trying to set their children on the right course. For parents, doing the best for their children may include taking them to extra classes (outside school) and encouraging them to study subjects that will allow them to pursue a 'stable' career (although adolescents may perceive these as more difficult subjects). All of this places stress on adolescents. Only one or two parents noted that they were putting too much pressure on their children and were fearful of the possible impact on their child's mental health, having learnt from their own experiences when younger.

> Yes, parents are a bit harsh about the scores sometimes. They scold me when I get the score of 7. They said, why was my score was so low? When getting bad marks, I'm forbidden from something, from playing games, for example.
>
> (FGD with 13-year-old boys, Nha Trang)

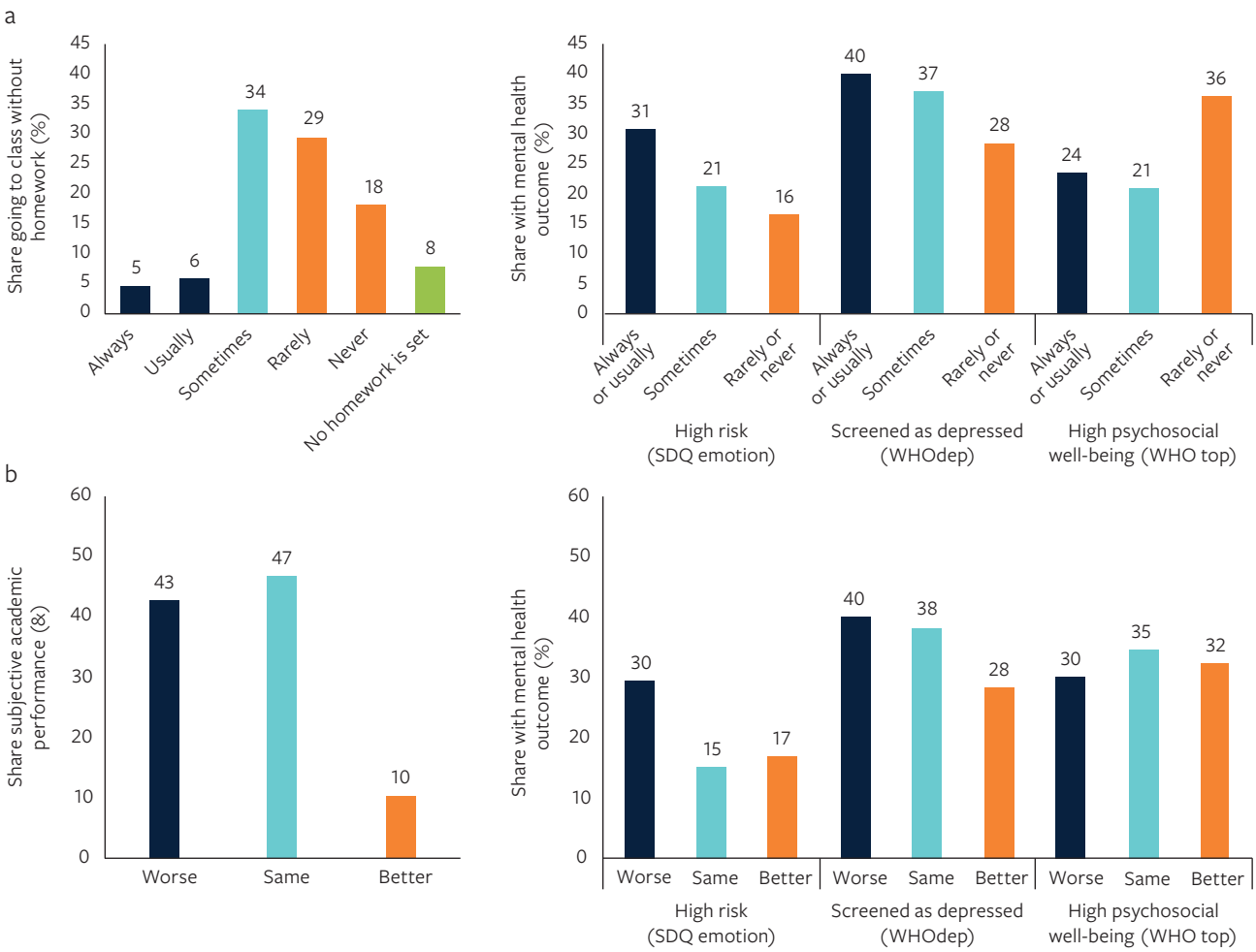
> Because I think that becoming an officer, entering the state's military, first the discipline and the education will be fine, I'm very assured. Second, if he's disciplined, then later his wife and kids would be more stable. But if he just wanders around, then I'm afraid that he won't have a stable job in the future.
> (FCS with 56-year-old mother of 17-year-old boy, Nha Trang)

Often the pressure to do well in school involves parents comparing their child's academic performance with other, better-performing classmates, friends and also siblings. This all causes substantial distress, sadness (with feelings of 'sadness' expressed often by adolescent girls) and feelings of inferiority. Similarly, it makes adolescents feel that their parents only care about their grades and not about their feelings.

> My parents force me to be as good as the other students or even better than them. I cannot get lower scores than others. I am under this pressure, and many times I am so sad, I sit alone in my room or I think about it then cry alone in my house, no one comforts, shares with or talks to me. (FGD with 11–12-year-old girls, Nha Trang)

Our quantitative survey also found an association between school performance and mental health outcomes (Figure 8). Being at the top of the psychosocial well-being scale was associated with more frequently completing homework (X^2=19.4027, df=2, p<0.001), while being classed as at high risk of mental ill-health (SDQ emotion subscale) is associated with completing homework less frequently (X^2=9.4160, df=2, p<0.01), as well as being at risk of depression (X^2=7.7200, df=2, p<0.05). When adolescents compared themselves as performing worse than others in their class, they were less likely to have high psychosocial well-being (X^2=5.8843, df=2, p<0.1), more likely to be at high risk of mental ill-health (X^2=16.6095, df=2, p<0.001) and more likely to be at risk of depression (X^2=10.4484, df=2, p<0.001). All in all, better school performance is associated with higher psychosocial well-being and better mental health, which aligns with the qualitative findings.[27]

Figure 8 Mental health outcomes and school performance, measured by (a) homework completion, and (b) subjective academic performance



27 We also tested differences in mental health outcomes depending on actual exam marks, which we divided into quintiles, but found no statistically significant differences, except between the lowest quintile of exam performers and those at high risk on the SDQ emotion subscale.

Other factors related to school or the school environment also triggered anxiety and stress for adolescents. Adolescents in the qualitative research reported facing severe anxiety and distress, particularly around exam time. Students are fearful that they may not meet their own expectations or the expectations of those around them (including parents, teachers, classmates and others). Adolescents reported missing some sleep in order to prepare for exams, which made them more irritable.

Strict teachers were another cause of stress for students. Stress arose from teachers giving them difficult tasks, being particularly critical, punishing them for getting bad grades and putting pressure on them to get good grades. According to adolescents and to adults in the qualitative research, peer competition in academic attainment can also generate tension and feelings of jealousy and conflict among classmates, which can make students feel anxious or fearful about poor performance and results in an emotionally unsupportive environment.

Adolescent respondents, their parents and other key informants also cited high workload and long days as important stressors. This refers not only to substantial amounts of homework assigned from school but also to extra classes in which many parents enrol their children, particularly older adolescents. Several older adolescents reported going straight to extra classes after school and getting home late at night, only to continue with homework.

> [I study] about 10 hours ... [in the] morning ... then have a PE [physical education] class... The PE class is about 1–2 hours. Then five periods in the afternoon, from 1pm to 5pm. Then go to [an] extra class ... Finish the extra class then go home. It's about 8.30pm to 9pm already ... It's the same for every day [from Monday to Saturday] ... [then I study in the evening] until around 1am. (IDI with 17-year-old boy, Nha Trang)

Some parents do express concern about these extra classes, noting (for instance) that their children may not have time 'to eat or rest properly' and are 'always tired', but at the same time they feel pressure to sign up their children so that they will not fall behind. There is also the perception of SES, in that the wealthier the family, the more they can afford to send children to extra classes. At a wider societal level, there is a sense of increasing pressure to achieve academically, with going to university seen as the norm nowadays, as one key informant described.

> I think the teenagers in Khanh Hoa study too much, it's a trend – parents and the study programmes are increasing students' workload, so the students lack the time to relax and relieve stress. I think they study too much ... I see just my grandchildren at home, my grandchildren study in high school normally, often from Monday to Friday, and at night they have to go to cram school, learn more on the main subjects, Saturday and Sunday they have to study at a language centre. They do not have free time, most have no free time ... The students are studying too much and [studies] burden them to the point where they can't handle the study load anymore, which could cause stress and other mental health issues. (KII 7, Nha Trang)

Adolescents noted some other specific drivers of distress, including obtaining low marks and struggling with assignments (' ...when I'm unable to

solve a math problem or any other tasks. It makes me upset', explained a 16-year-old girl in grade 10, living in Nha Trang). However, high attainment also creates further stress for adolescents, as it raises the expectation for future performance.

> If someone has a good record before, then there will be pressure on the future, so at least they have to match their achievements. (FGD with 16–17-year-olds, Vinh City)

Generally, and as confirmed by study respondents, this combination of sources of pressure to do well academically – from parents, teachers, peers and society, as well as from the adolescents themselves – is an important driver of mental ill-health. This leads not only to constant stress, anxiety, tiredness and sadness, but also to a lack of sleep, insomnia and, in some cases, adolescents are reported to have been driven to suicide.

> I think this life has too much pressure these days. And these students are under pressure from themselves, the scores, family's expectations and the school, [from] teachers who are chasing after an achievement, want you to get good grades. (KII 3, Nha Trang)

> Such pressure eventually leads to the lack or loss of sleep. The student isn't losing control, he just needs sleep, because he is losing sleep constantly. They can study up to 2am and still don't understand the materials, but still have to stay up until 4am or 5am to go to class. The student can't control that, so he gets tired and his health deteriorates. Cases like that, they come to hospital a lot. (KII 8, Nha Trang)

5.2.7 Bullying

As already mentioned, bullying is a driver of mental ill-health and appears to be pervasive, according to our respondents (adolescents and adults alike). In our quantitative survey, as many as 40% of respondents reported having been 'picked on or bullied' by other children and young people. Having been bullied was correlated with risk of mental ill-health on the SDQ emotion subscale ($F=73.32$, df = 813, $p<0.001$), the SDQ prosocial subscale ($F=13.83$, df = 813, $p<0.001$) and the SDQ behaviour subscale ($F=302.13$, df = 813, $p<0.001$). By contrast, those who have not experienced bullying have better psychosocial well-being ($F=18.66$, df = 811, $p<0.001$). We also found that 42% of those who had experienced bullying were at risk of depression, compared with 28% among those who had not experienced bullying ($X^2=18.2113$, df = 1, $p<0.001$); 30% are identified as at high risk of mental ill-health on the SDQ emotion subscale, in contrast with 15% among those who have not experienced bullying ($X^2=24.6611$, df = 1, $p<0.001$).

In the qualitative interviews, adolescents reported hearing about, witnessing and experiencing bullying, both in school and outside, with victims of bullying reporting feeling sad, angry, scared, anxious, isolated and distressed. Adolescents reported that those in higher grades typically bully younger students. Targets of bullying are variously those who have poor academic performance or those who perform highly, those who are shy, quiet, weak, gentle or naïve, and those who are 'abnormal or mentally unstable'.

> And I see one of the most common pressures is bullying, school bullying, and the gentle and shy children are more likely to be bullied by the

> others. They not only punch and kick, but they also force the shy children to pay them money every day. This is one of the most common pressures caused by the guys who are older than them, the gangsters in the school. (FGD with parents of adolescents, Nha Trang)

Adolescents reported (and their reports were confirmed by parents) that isolating or excluding someone is a common form of bullying experienced at school. This often happens when a friend or groups of friends suddenly decide to stop speaking or interacting with someone, staying away from them, not playing with them and generally excluding them from joint activities. Being isolated by friends or classmates causes severe distress for adolescents.

One adolescent girl in an FGD reported that girls tend to be bullied more at school, while boys may experience more bullying outside school. There was also the sense that girls get more upset about things than boys, who generally care less about these matters. Relatedly, it was reported by some that adolescent girls especially are bullied about their appearance – with some reporting being called ugly, fat, and criticised for not having the 'right hip measurements' by female and male classmates alike (see also Sub-section 5.2.1).

> Most of the girls were bullied more in class. On the contrary, boys are often bullied outside of school. In my opinion, girls have many problems, such as love, appearance, and study. Meanwhile, boys are straightforward, not paying attention to trivial things. As a result, girls get bullied in class, and boys are bullied outside of school. (Participant in FGD with 15-year-old girls, Vinh City)

Online bullying was raised as a concern by adolescent and adult respondents. Adolescents (especially younger girls) mentioned feeling uncomfortable when photos of themselves were posted online by others, and some also observed that online 'verbal fights' (via Facebook) made them feel uncomfortable. Several adolescents discussed seeing videos posted of fights or a group of adolescents ganging up on one person. Key informants especially noted how adolescents faced pressures from online platforms that can spread false rumours, and being taunted by anonymous accounts on social media. Others also noted that those who are more sensitive are likely to feel more down and to be more affected by online bullying, with some also suggesting that online bullying can be easily remedied by blocking messages and the people who generate them.

5.2.8 Discipline, abuse and violence

Excessive discipline and potential abuse can have mental health ramifications for adolescents, whether it stems from teachers, other adults, peers, but perhaps more commonly (as reported by respondents) from parents. Our interviews suggest that the line between excessive physical discipline and violence or physical abuse by parents is often blurred. Many adolescents shared that they fear being hit or beaten by their parents (often as a consequence of poor academic performance or other school-related expectations, as discussed in Sub-section 5.2.6), with more boys fearful of this than girls (whether perpetrated by the mother or father).

> 14-year-old boy from Nha Trang shared, in an in-depth interview: 'I'm scared of being beaten by my mother.' However, this fear is not always borne out (some indicated that their parents did not always respond with physical discipline, but just scolded them).

In a couple of cases, there were reports of what would appear to be violence and physical and emotional abuse perpetrated by fathers against their adolescent daughters. This was reported by an adolescent reporting her own experiences, and by a mother talking about her daughter, and confirming that both she and the father do sometimes hit their daughter. These experiences cause substantial distress for the adolescents involved.

> There were many things that happened. That time ... for instance, at that time my father beat me up. He was very drunk. Then he forced me to call my mom and say this and that to my mom, and I didn't really like that. He really pressured me to do so, but I didn't do what he said, so he beat me up. That happened a long time ago. (IDI with 14-year-old girl, Nha Trang)

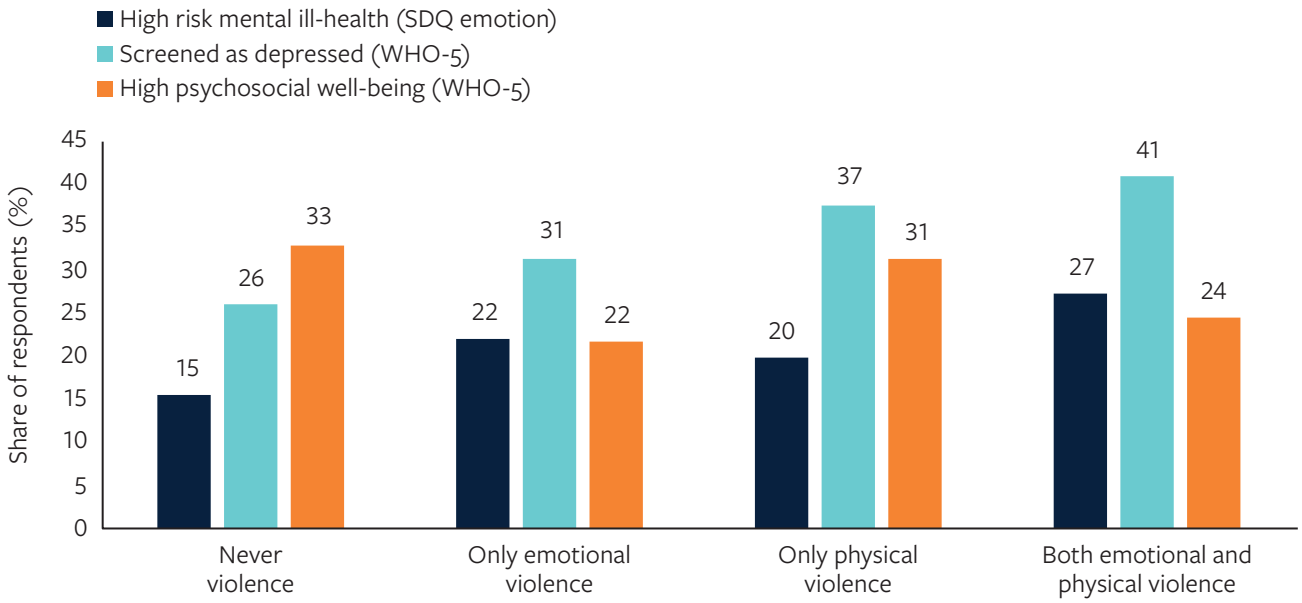
Findings from the survey confirm reports of violence within the home given during the qualitative research. About two-thirds (64%) of survey respondents reported experiencing either physical or emotional violence or other maltreatment (e.g. being denied food) at home within the past year; 34% reported experiencing both emotional and physical violence, 18% emotional violence only, and 13% physical violence only. Physical violence is more common among middle school or younger students, while emotional violence is more common among high school age or older (X^2=49.1196, df=3, p<0.001). There are differences between religious groups: emotional abuse is less common among Buddhist families (X^2=6.1268, df=2, p<0.05), while physical violence is less common among non-religious families (X^2=5.2413, df=2, p<0.10).[28] We did not find any statistically significant differences between boys and girls, urban or suburban settings, or by socioeconomic group.

The findings reveal a strong association between experiencing violence at home and mental health outcomes (Figure 9). A higher number of respondents were at risk of depression (41%) among those experiencing physical and emotional violence, while this figure decreased to 26% for those who have never experienced violence (X^2=15.5566, df=3, p<0.001). A larger proportion of respondents are also at higher risk of mental ill-health (SDQ emotion subscale) when experiencing both types of violence (X^2=12.0177, df=3, p<0.01). Conversely, psychosocial well-being is higher for those not experiencing violence and for those experiencing physical violence only (X^2=8.7761, df=3, p<0.05).

Violence or physical abuse by teachers appears relatively common in the survey but less so in the qualitative research. A fifth (20%) of survey respondents reported that they had been beaten, hit, whipped or caned by a teacher at school. Boys more frequently experienced physical abuse (X^2=27.8971, df=2, p<0.005), as did students from suburban areas (X^2=16.3437, df=2, p<0.001). About a third (30%) of respondents reported having been punished at school in another way, such as being forced to run around, stand on a bench or kneel. Again, this practice was more common among boys (X^2=28.9843, df=2, p<0.001), high school students (X^2=24.6965, df=2, p<0.001) and those in suburban areas (X^2=4.9747, df=2, p<0.10). There were no statistically significant differences by SES. Violence or physical abuse by teachers was only significantly associated with mental ill-health in the SDQ prosocial subscale

28 The majority of the survey respondents were Buddhist (44%), followed by those who did not practice any religion (38%). A small percentage (12%) were Christian, or other religion (1.3%), and 5% did not disclose their religion.

Figure 9 Adolescent experiences of violence at home and impact on mental health



($F=5.34$, df=779, $p<0.005$) and behavioural subscale ($F=8.36$, df=779, $p<0.001$). There were no associations with psychosocial well-being, depression or high risk on the SDQ emotion subscales.

In the qualitative research, one adolescent girl noted that there was a teacher who beat a student, and one adolescent boy noted that in primary school he was physically punished by a teacher to a point where he was hurt. Teachers exerting excessive discipline, being harsh and scolding children was perhaps more common, and observed by both adolescents and their parents. As a 13-year-old girl in grade 7, from Vinh City, said in an IDI, 'She [the teacher] cares about students, but she usually scolds a little too much'. A few adolescents also reported inappropriate behaviours by teachers, such as teasing or using harsh words, which could make the students involved feel sad.

Adolescents noted that sometimes they face violence or abuse from their peers, both at school and in the community. Adolescent boys reported that fights tend to happen outside school, involving gangs. These fights appear commonplace, with boys more likely to get into fights than girls. Some younger adolescent girls reported observing inappropriate touching of girls' bodies by boys at school, which makes them feel uncomfortable and distressed.

5.2.9 Use of harmful substances

Use of harmful substances (such as alcohol and cigarettes) has been found to be both a driver of mental ill-health and also a negative coping strategy (see also Sub-section 6.3.2).

Our quantitative survey showed that 32% of respondents had drunk alcohol, 7% had smoked, and 2.8% had consumed drugs. There is an association between consuming alcohol and high risk of mental ill-health: SDQ emotion subscale ($F=2.94$, df=816, $p<0.1$), SDQ prosocial subscale ($F=18.63$, df=816, $p<0.001$), and SDQ continuous emotion subscale ($F=3.64$, df=816, $p<0.1$). Alcohol consumption is also more common among respondents identified with depression ($X^2=3.8171$,

df = 1, $p < 0.1$). Consuming drugs was associated only with lower psychosocial well-being ($F = 7.2$, df = 815, $p < 0.01$). Smoking was associated with higher risk of mental ill-health on the SDQ emotion subscale ($F = 6.36$, df = 816, $p < 0.05$), SDQ prosocial subscale ($F = 11.23$, df = 816, $p < 0.001$), and SDQ behaviour subscale ($F = 13.04$, df = 816, $p < 0.001$).

In the qualitative interviews, while most adolescents reported never having smoked, drunk alcohol or consumed drugs, there were high levels of awareness of these issues among adolescents and their parents. Of the few adolescents that reported trying smoking once or twice, this was often due to seeing a family member (typically the father) smoking. A few adolescents reported trying smoking due to influence from friends, although they also noted that it was not good, and were aware of the bad (addictive and cancerous) effects of smoking.

Some younger adolescents (under 15 years) reported smoking e-cigarettes, and there is a sense that these are not that harmful (e.g. 'smoke coming out with aromatic essential oils', 'it's basically water vapour entering my body'). Adult respondents (key informants and parents) also confirmed that e-cigarettes are widespread. Within adolescent FGDs, some adolescents reported that smoking was more of a problem for boys than girls. Girls indicated that they (girls) are more likely to use e-cigarettes than regular (tobacco) cigarettes.

Most adolescents, regardless of age and gender, reported that they had never drunk alcohol, meaning spirits or hard liquor ('I've only drunk beer, but I've never drunk alcohol', explained an 11-year-old boy in grade 6, from Vinh City, in an IDI). Of those who said they had drunk beer, many reported that they tried it at their parents' suggestion (often the father) so that 'they can avoid it in the future'. Many adolescents reported that if they do drink, it would mainly be during celebrations (weddings or birthdays), with some also noting that they felt obliged to drink even if they did not want to. There appears to be a perception among adolescents that drinking is bad and could become addictive (with some saying that when they tried it they 'felt a little dizzy'). However, there was also a sense that if and when they drink alcohol, it is not a problem as they only drink during celebrations to make them 'happier, more cheerful' (according to an IDI with a 17-year-old girl in grade 11, in Nha Trang), and that they are able to moderate the amount they drink in these situations.

In general, adolescents (irrespective of age and gender) reported that they had never used drugs (such as cocaine or heroin). A few reported that they would never try drugs because they perceive them to be harmful and addictive, especially compared to other substances such as cigarettes. Many adult respondents, however, viewed drug use as an issue among adolescents in both study sites, although many had not seen evidence of such in their area, with one key informant also noting that there has been no research on this sensitive topic.

> At the age of 16 or 17, in large regions ... the rate of drug usage in the community is quite high. (KII 15, Vinh City)

> There is also cocaine or anything like that ... Or even methamphetamine, I think that affects a lot of our mental health. (KII 6, Nha Trang)

5.2.10 Romantic relationships, early pregnancies and marriage

Many adolescents in the qualitative research reported that they are not in a romantic relationship and do not plan to be in one at this time in their life. Many respondents, adolescents as well as adults (key informants and parents), observed that romantic relationships can cause significant mental distress, especially when the relationship ends or when love is unrequited.

> I broke up with my first love when I was in 8th grade. I couldn't focus on anything days later. I didn't notice anything around me, didn't hear anyone and couldn't study. (IDI with 17-year-old boy, Vinh City)

Similarly, many study respondents – adolescents and adults alike – noted how romantic relationships and achieving well academically were incompatible and could therefore cause stress. Adolescents variously noted that they do not have time for romantic relationships because they 'study too much'. Others observed that when someone's grades start going down, rumours start going around that the person is in a relationship (which is often the case); and others noted how when one girl's parents found out she was in love, her father made her stay at home for a short while and they monitored what she was doing, so her grades improved.

> There was one time my friend, not me, her parents found out that she's in love, then her dad made her stay at home for four days. After that, her parents made her stay inside. And in the kitchen they installed lots of cameras looking out over the living room and a camera at the gate in order to control her time and not let her use mobile devices. I think her relationship did affect her studying, but when they stopped, forbidding her like that, then her scores were better. (FGD with 16-year-old girls, Vinh City)

Some key informants observed that as a result of parents not showing enough affection to their children, some adolescents became involved in romantic relationships at a young age, suggesting that they were looking for something they had not found within their families. Some of these relationships may be inappropriate and could lead to mental ill-health. Also, according to key informants, children could face mental health challenges when their parents do not allow romantic relationships and/or do not discuss intimate issues such as love and relationships with their children. This can also lead adolescents to keep their relationships 'secret' and to feel 'ashamed'.

More generally, parents of adolescents have a negative view of love or intimate relationships during adolescence and are likely to discourage such relationships. In addition to fearing that such relationships would affect children's studies, parents often feel that adolescents are too young for such relationships, and that they should continue to have fun and remain carefree, also thereby associating love with sadness or mental health issues for adolescents. Adolescents confirmed that parents typically discourage romantic relationships, for fear of children dropping out of school or ending their education early to get married. Such disapproval also makes it difficult for adolescents to continue a relationship.

> My child ... has not yet reached the age of love so he is carefree, he does not worry or think much, just worries about eating and drinking [laughing]. He worries about playing and other stuff, he is still carefree. In my neighbourhood, there are also a few early love cases of children. They think much and feel sad, they keep it alone, they have little contact with others. (FGD with mothers of adolescents, Nha Trang)

FGDs with adolescents (as well as one key informant interviewee) indicated that parents not accepting homosexual or lesbian relationships could lead to mental health issues for adolescents. Disapproval of such relationships can lead adolescents to be secretive and hide their feelings and relationships, or (according to some reports) being heartbroken, 'crying a lot' and abandoning their studies when their parents found out.

According to key informants during the qualitative research, romantic relationships can lead to early sexual activity and unplanned teenage pregnancies, and therefore also school dropout – all of which have negative consequences for adolescents' (especially girls') mental health. However, according to the survey, sexual encounters appear to be relatively uncommon; the most common response among respondents was that none of their friends had ever had sex (87%). Only 5% reported that all of their friends had ever had sex, 7% that a few of their friends had ever had sex, and 1% that most of their friends had ever had sex.

Despite these low levels of reports from adolescents in the survey, there were cases of early sexual activity and unplanned pregnancies, as key informants variously noted that the adolescents are not prepared, they are not guided by their family, they do not seem to understand the information they are provided with and the consequences of their actions, and when they fall in love they generally 'lose control'. This can result in girls leaving school.

> Most prevalent is early love. Because there is no family guide and girls are too open in love without control, they do not think much about health and gender.
>
> Nowadays, love is too popular. I'm not sure but I believe so through conversation.
>
> It seems that students are too open in relationships, thus having sex at an early age.
>
> Students at this age gain awareness through lessons. Yet what matters is that due to their feelings, thoughts at this stage, they can't control themselves. This causes them troubles. In fact, this issue has already been discussed by the homeroom teacher or lessons.
>
> (KII 13, Vinh City)

There were also some reports (from adult key informants) that *norms around marriage meant that some adolescent girls in particular had dropped out of school to get married and start a family*. This was irrespective of the wishes of the girl and could happen even if she had not reached the legal age of marriage. This has wider mental health and well-being implications for girls especially, limiting their future opportunities and potential.

> In my local place, there are many students having mental, reproductive and gender problems. Many students have to leave school early due to lack of awareness....
>
> Yes, since they have to start a family at an early age. This stems from family tradition, which suggests that students should get married and bear children after finishing school. Furthermore, since early interaction prompts desire for early adulthood, children soon get themselves into trouble...
>
> There still exist cases of students starting a family at 16, 17, not reaching the minimum legal age for marriage ... [it is] mainly seen in girls. Nonetheless, boys also meet that problem in this locality.
>
> (KII 13, Vinh City)

5.2.11 Stigma

Adolescent and adult respondents both reported that experiencing stigma and discriminating attitudes can be a driver of mental ill-health among adolescents. Adolescents reported that those who do not follow norms related to their gender (e.g. how they should look and the kinds of activity they should do) may be labelled as homosexual, made fun of and generally stigmatised. When asked directly, adolescents also perceived that members of the lesbian, gay, bisexual, transgender, queer/questioning and intersex plus (LGBTQI+) community are more likely to experience sadness and depression.

> My class has a silent friend, who doesn't talk much. However, regarding studying, he performs very well. Despite having logical thinking, he does everything slowly, not as fast as other friends. He may be affected by his four sisters, so if boys play soccer, he won't play but just sit and talk with girls. Especially, he always follows girls to every place, because he doesn't like to play with guys, so he is called 'gay guy"... (FGD with 16–18-year-old adolescents, Nha Trang)

Many adult key informants reported that adolescents will not seek help for their mental health condition because of discrimination or stigma toward those who experience psychological challenges. Similarly, they observed that families are embarrassed to reveal family members' mental illness (also for fear of it being suggested that they might be suffering the same) and therefore refrain from seeking formal or specialist services, with the pressure on the individual continuing to grow (see also Section 6.2). Generally, if family problems or issues are aired in public (including if someone is divorced), the negative attention and scrutiny from the wider community can lead to mental health distress, according to some adolescents. These reactions are often due to lack of awareness, knowledge and education around mental health issues, as well as sometimes misinformation, according to some adolescents.

> Nonetheless, the huge mental barrier is that families tend to feel embarrassed or hide, avoid mentioning their child's conditions. This barrier can be eliminated by advocating and raising people's awareness. (KII 17, Vinh City)

5.2.12 Technology

Many adult key informants (including parents) reported that technology, mobile phones and social media have a negative impact on adolescent

mental health (see also Section 6.5). They reported that some adolescents get addicted to online games (which they play alone), with some adults comparing the nature of the addiction to drugs. They also noted how adolescents become dependent on their mobile phone, and end up living in a virtual world and lose contact with the real world, and some even start mirroring behaviour they see in online games. Too much technology usage can also leave adolescents unable to function and solve problems in their daily life, according to key informants. It can distract them from their studies, can affect their academic results (and this was particularly the case during the Covid-19 pandemic – for further details, see Samuels et al., 2021) and can lead to them falling behind in their studies, which in turn causes them stress and anxiety.

> Nowadays children depend too much on mobile phones or online games, so the virtual life affects a lot of their life. They cannot solve their problems in the reality, and if they do, they are based on the virtual world. They can't even know the nature of those problems. If you want to solve the problem, you have to understand the nature of it. But nowadays many children don't understand it because they always live in the virtual world. (KII 16, Vinh City)

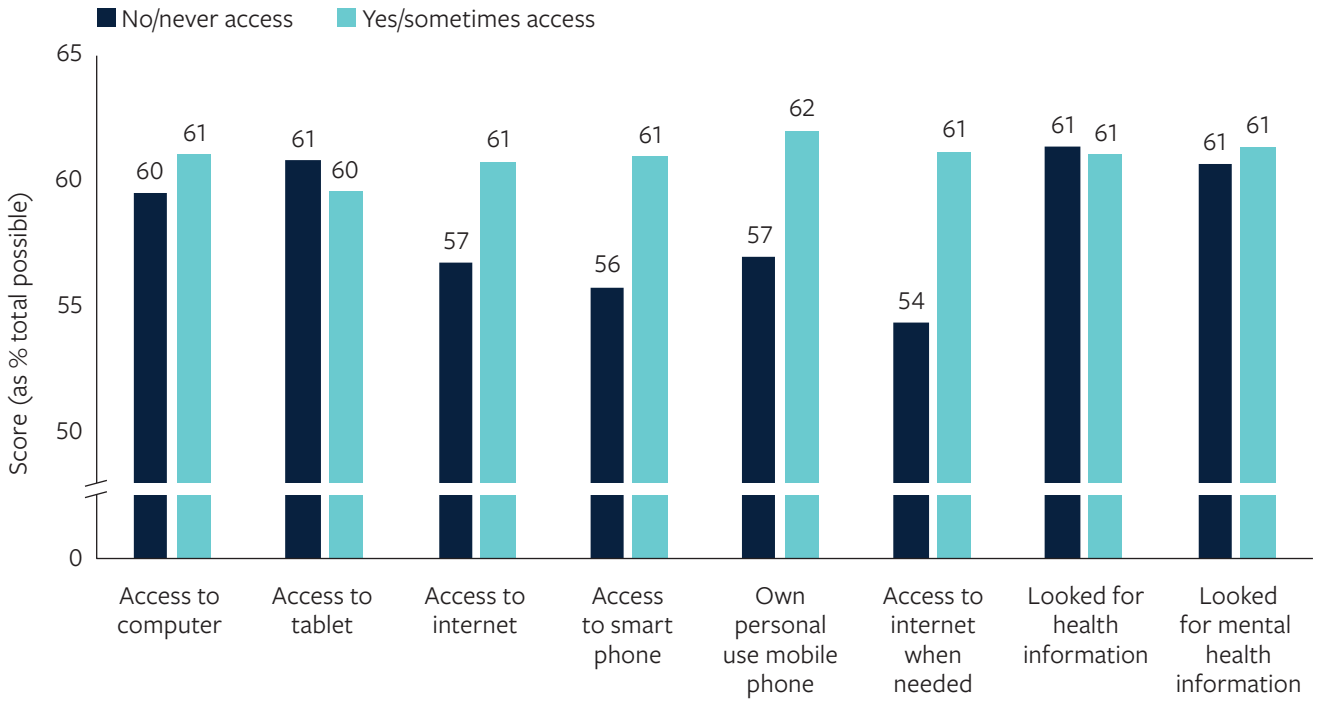
Some adolescents also recognised that video games especially could be a challenge to mental health, noting how they can become addicted to gaming and applying some of the actions they learnt from the games in real life. Some adolescents and key informants also mentioned receiving unwanted (sometimes inappropriate or threatening) messages from strangers online (often 'pretending to be of the same age') as causing distress. While adolescents noted that they would block or 'unfriend' these people straight away, key informants also highlighted the need to teach children how to restrict the 'leakage of their images and personal information'.

Some adolescents in the qualitative research also spoke about how the patterns of drivers of mental ill-health are changing, often as a result of technology. So, previously they would back-bite and bully directly/face-to-face, but now they are able to do this online; there is a sense that it has got worse as a result, and also because there are more platforms through which bullying can take place. This may explain why we found that survey respondents who own a personal mobile phone and/or frequently use the internet were 1.7 times more likely to be at high risk (SDQ emotion subscale) after controlling for other variables in our OLS regressions (Annex 6). Similarly, having been bullied increases the likelihood of being at high risk (SDQ emotion subscale) by a factor of 2.3, and the likelihood of experiencing depression by a factor of 1.4 (Annex 6).

> Because if it was in the old days, this problem was only about back-biting and bullying directly. And now there is texting, threatening to swear at each other both in real life and online, which is increasing. There are also cases on social networks, people curse each other a lot, but in real life, they still talk to each other in a normal way. (Mixed-sex FGD with 16–17-year-olds, Vinh City)

Results from our survey mirror the findings from the qualitative research and confirm that respondents who have more access to, or greater use of, the internet are at greater risk of mental ill-health (SDQ emotion subscale) (Figure 10).

Figure 10 Risk of mental ill-health by access to technological devices and the internet



We found a statistically significant higher risk of mental ill-health (SDQ emotion subscale) among respondents who have access to a smartphone ($F = 6.416$, df = 1, $p < 0.011$), among those who own a mobile phone for personal use ($F = 20.398$, df = 1, $p < 0.001$) or who have access to the internet when needed ($F = 12.828$, df = 1, $p < 0.001$).

5.3 Bringing together drivers of mental ill-health and protective factors

Finally, we look at the combined multivariate effect of the drivers and protective factors explored in this chapter on our key mental health variables: the SDQ (emotion subscale) and WHO-5 (see Annex 6, Table A4 for full regression results). The OLS regressions also include the demographic variables as control (see Sub-section 4.1.1 for a description of those results).

The analysis identifies some key drivers of mental ill-health after controlling for other variables. Having been bullied is one of the most consistent and significant predictors for SDQ emotion and behaviour subscales. Respondents who have been bullied are 2.3 times more likely to be at high risk (SDQ emotion) of mental ill-health and 1.4 times more likely to be at risk of depression**.** Frequent internet access is another important driver associated with higher scores for SDQ emotion, increasing the likelihood of mental ill-health by a factor of 1.7.

Emotional violence is positively and significantly associated with higher SDQ scores (emotion subscale), as well as the combination of emotional and physical violence, both of which are negatively associated with psychosocial well-being. The likelihood of being identified as at risk of depression increases by a factor of 2.2 when respondents are exposed to physical violence by their parents, but

we found no statistically significant difference for emotional violence or the combination of emotional and physical violence. Having only a mother who consumes alcohol is positively associated with risk of depression, but not statistically significant when controlling for other factors. Witnessing intimate partner violence was only significant for higher risk in the SDQ prosocial and SDQ behaviour subscales. Harmful behaviour such as harming oneself, being in a gang, or consuming harmful substances was positively associated with higher scores for SDQ emotion subscale.

In terms of protective factors, having someone to rely on appears to be consistently and negatively associated with the SDQ scores (emotion, prosocial and behaviour subscales), but is positively associated with psychosocial well-being. Having someone to rely on decreases the odds of being identified as at high risk (SDQ emotion) by 38% and halves the chances of being at risk of depression. Being violently punished by a teacher is not statistically significant, nor is access to technology (such as computer, tablet, or smartphone) or having a role model.

6 Mental health-seeking behaviours, coping strategies and the influence of technology

This chapter focuses on adolescent awareness of and responses to mental health issues. Section 6.1 explores mental health literacy and knowledge of sources of information and support. Section 6.2 examines adolescent experiences of accessing formal and informal support[29] while Section 6.3 highlights positive and negative ways of coping with mental ill-health. Section 6.4 focuses on the linkages between technology and mental health, including ownership and usage, and positive as well as negative aspects of technology. This chapter also focuses on the responses on average, and how they vary according to characteristics of students and their households (Annex 5 contains full descriptive statistics emerging from the analysis). Section 6.5 focuses on whether mental health literacy enhances health-seeking behaviour and the extent to which mental health literacy and distinct coping mechanisms are associated with better mental health. In the following chapter, we consider how these findings can inform services and interventions seeking to improve mental health, particularly those relevant to this project.

6.1 Awareness or knowledge of services and support

A key theme we examined in both the quantitative and qualitative data concerns knowledge of mental health issues and confidence in accessing relevant information. Our survey included two scales of mental health literacy, measuring emotional literacy (including stigma and knowledge of mental health) and knowledge of what constitutes good mental health. We also included a separate scale focused on confidence in seeking information on mental illness through various channels.

The average score on the emotional literacy index was 68%. Just 62 respondents (7.4%) scored less than 50%, 695 (83%) scored more than 50% but less than 75%, and 79 (9%) scored 75% or more. Knowledge of what constitutes good mental health was higher still – the average was 74%. Only 36 respondents (4.3%) scored less than 50%, while 594 (39%) scored higher than 50% but less than 75%, and 207 (61%) scored at least 75%. Neither of the two scales have a normal distribution – they show a higher peak and slightly negative skewness – indicating that a group of respondents have low emotional literacy and knowledge of what

29 By formal support, we refer to regulated interventions and resources providing mental health support and services by mental health professionals – for example, primary care services, specialist mental health services or psychiatric services based in general hospitals or health clinics. Informal help is usually provided by friends, family, school, religious leaders or other non-medical sources. In our study sites, NGOs, schools and traditional healers provide informal support.

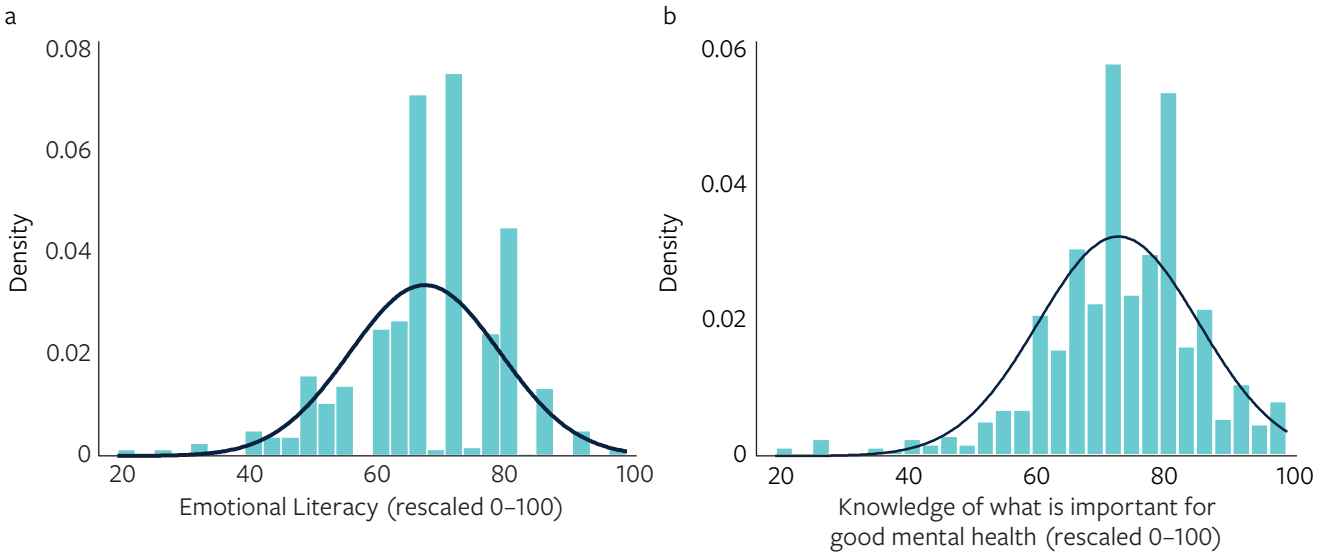
constitutes good mental health (Figure 11).[30] The top of the scale becomes an upper bound limit, but one may expect further diversity among high values.

Disparities across schools were significant for both emotional literacy ($F=9.250$, df = 7, $p<0.001$) and knowledge of what is important for good mental health ($F=2.994$, df = 7, $p<0.001$), indicating the large degree of heterogeneity across the study sites. Some schools start from a much lower baseline for the project than others (note the large disparity in the figures for the top and bottom contrasting schools in red in Figure 12). The survey results also show higher levels of emotional literacy and knowledge among older children and those in high school (significant at $p<0.001$ in all cases). We observed significant differences between socioeconomic groups ($p<0.005$ for both scales) but the direction is not linear, with lower levels in the middle of the distribution. In terms of religion, Christian students appear to have lower emotional literacy, and those without religion had the highest score ($F=6.519$, df = 3, $p<0.001$). Buddhist respondents had the most knowledge of what is important for mental health ($F=4.100$, df = 3, $p<=0.01$).

We found no statistically significant differences between girls and boys, or other immediate factors.[31]

Emotional literacy is higher for respondents identified with high psychosocial well-being ($F=12.11$, df = 829, $p<0.001$) and lower for those at risk of depression ($F=18.82$, df = 835, $p<0.001$). Knowledge is higher among respondents identified with high psychosocial well-being ($F=12.12$, df = 830, $p<0.001$) and lower among those whose score indicated they were at risk of depression ($F=25.63$, df = 836, $p<0.001$).

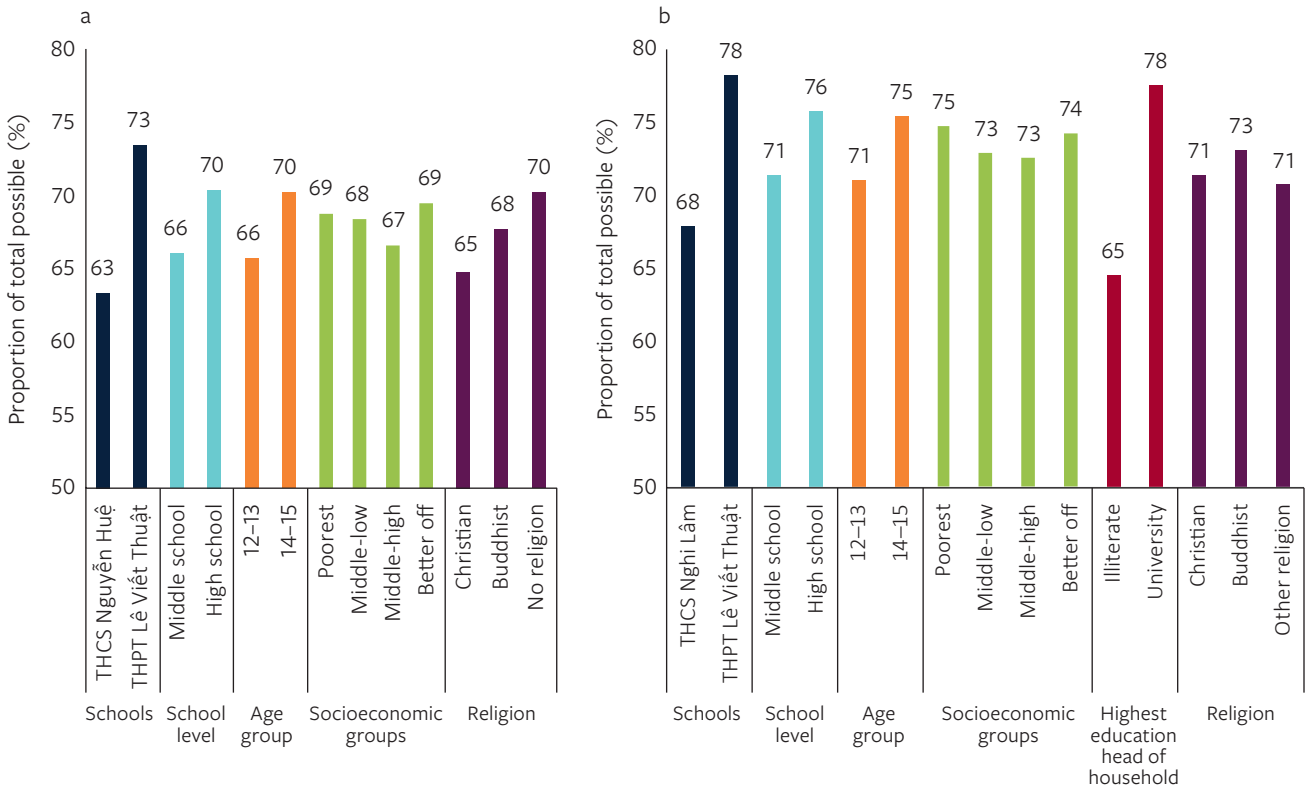
Figure 11 Distribution of (a) emotional literacy, and (b) knowledge of what is important for good mental health



30 The Shapiro–Wilk test and Skewness/Kurtosis tests confirm that values on both scales are not normally distributed. Emotional literacy has a negative skew of 0.720 with a leptokurtic distribution (kurtosis = 4.24). Knowledge of what is good for mental health has a negative skew of 0.941 with a leptokurtic distribution (kurtosis = 5.41).

31 Gender differences remain non-significant even after interaction with age.

Figure 12 Key differences in reports of (a) emotional literacy, and (b) knowledge of mental health

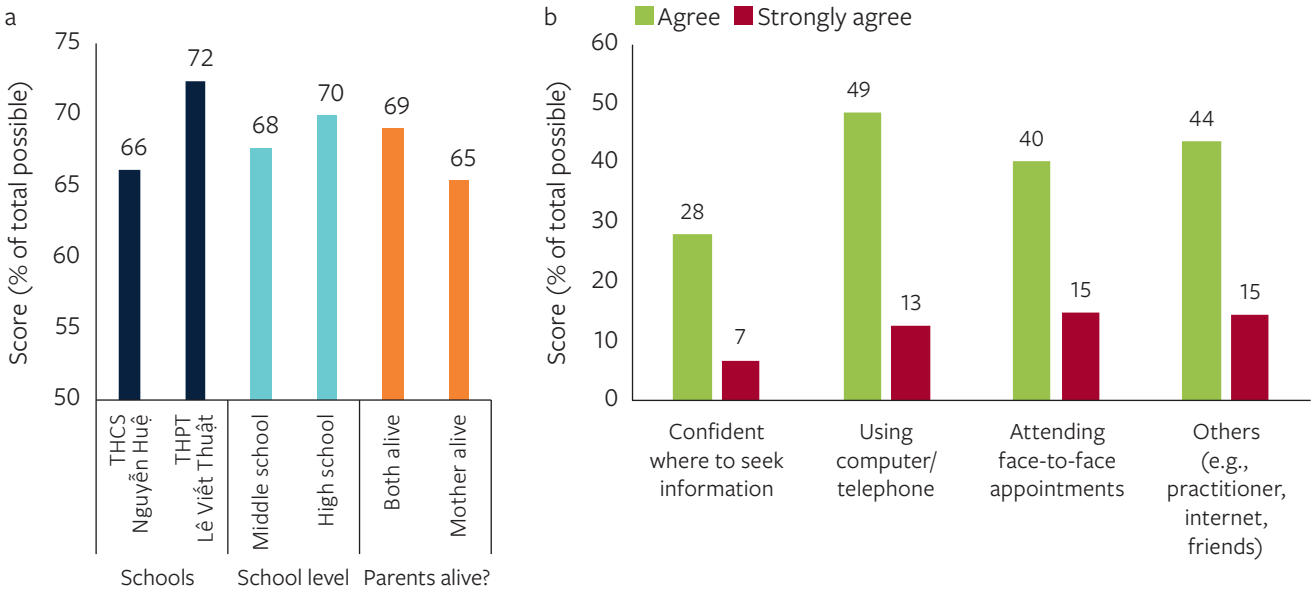


We also asked about knowledge of sources of information on mental illness. The average score was 69%, indicating some level of confidence. However, only 35% of respondents were confident about where to seek information (Figure 13). Respondents were most confident in their ability to use the computer or internet (62% agree or strongly agree) while slightly less confident to attend a face-to-face appointment (55% agree or strongly agree). We found wide significant disparities across the eight schools included in this study ($F=2.253$, df = 7, $p<0.05$), which shows the heterogeneity in school selection.[32] High school students had significantly greater knowledge of sources of information on mental illness than middle school students ($t=-2.174$, df = 819, $p<0.05$). Children who only had a mother alive appeared to have less knowledge than children with both parents alive, but this was not statistically significant ($t=1.322$, df = 33.282, $p=0.195$). There were no statistically significant differences between girls and boys or according to SES, age group, religion, or with whom the children live. In summary, the only clear difference appeared to be between school level and across different schools in our study sites.

Knowledge of sources of information on mental illness is also linked with mental health outcomes. Level of knowledge is lower among respondents with high risk of mental ill-health on the SDQ emotion subscale ($F=3.03$, df = 825, $p<0.1$), higher among respondents with high psychosocial well-being ($F=37.55$, df = 826, $p<0.001$) and lower among respondents at risk of depression ($F=40.64$, df = 831, $p<0.001$).

32 This is in effect a strength of the study, since the interventions will be tested in quite heterogeneous settings.

Figure 13 Key differences in (a) knowledge of sources of information on mental illness, and (b) types of resource respondents are confident using



In the qualitative research, adolescents were asked about their awareness of mental health services or programmes for adolescents. Some reported that they are aware of psychiatric hospitals. This was particularly the case for adolescents in Nha Trang, which can be explained by the fact that there is a relatively well-known psychiatric hospital in the province and respondents were also able to name its location (Dien Phuoc). They learnt about the hospital through hearing about it on the radio; one respondent mentioned doing some charity work there and one parent mentioned knowing someone who works there as a doctor. This relatively widespread knowledge about the psychiatric hospital was confirmed by a key informant who works there.

As described elsewhere (ODI and UNICEF Viet Nam, 2018), schools in Viet Nam sometimes offer mental health-related services to their students. A couple of adolescent respondents in Nha Trang indicated that there is a psychological counselling office or room at school. A few respondents in Vinh also indicated that there is a headteacher and other teachers who are responsible for psychology or counselling at school. They report that these teachers are very empathetic and helpful, with some suggestions that they also attended some form of training to support this role.

> My school has its own psychology teacher, so those students will usually be helped.
>
> At my school, if the teacher knows, she quietly helps. It's like she knows that and then she would make an appointment to meet that friend and talk.
>
> (Participants in FGD with 16–18-year-olds, Nha Trang)

Adolescents mentioned some other school-based services or gave examples of schools being used

as a platform to address and/or promote mental well-being, including: a problem support hotline that provides information on violence prevention and sex education; a 'confession forum' where students can confide and share their problems; a 'talk show' about mental health; a programme called 'listen to teenagers' that visits secondary schools and encourages students to talk and parents to listen (the respondent learnt about the programme from TV); visits to secondary schools (in Vinh) by psychologists from Hanoi to talk about subjects such as psychology, education and child development; and a mailbox that students can use to submit anonymously any questions or concerns related to mental health.

Beyond the school, a few adolescent respondents in Vinh indicated that there is a hotline phone number that focuses on child protection issues. They noted that it was relatively easy to contact (one could also text the number) and some also knew the number (911), with some having heard about it from the radio (see also ODI and UNICEF Viet Nam, 2018). While most had not tried calling it, they perceived it to be useful in providing mental-health related advice.

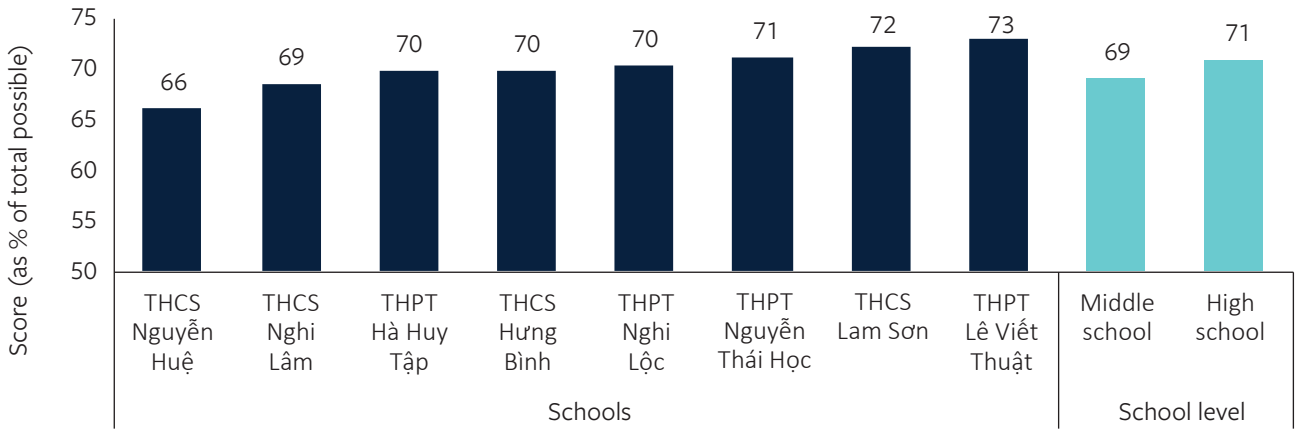
Despite a few adolescents being aware of the existence of these mental health services, most had not heard of any mental health services available to them. Most respondents did not know where to find information about mental health, most have never tried to find such information, and most do not know about school-related services to support mental health, and were even surprised to hear (in the case of one adolescent) that their school has a counselling office. Parents also expressed the same sentiments, with most not knowing about mental health services available for adolescents, but also noting that they are 'too busy working' so do not have time to engage in such matters.

6.2 Experiences of accessing formal and informal services

Our survey contained seven questions investigating attitudes towards seeking professional psychological help. It appears that most students have a positive attitude towards this (see 'Items in the questionnaire' in Figure 14). As many as 79% say that if they were experiencing a serious emotional crisis, they would be sure that psychotherapy would be useful. Just over two-thirds (68%) disagree that talking about problems with a psychologist is a poor way to get rid of emotional problems. And as many as 64% think they may make use of professional counselling in the future. Overall, there seems to be a positive attitude towards seeking professional help. We did not find any statistically significant differences by gender, age group, school level, SES, or religion. However, there was a statistically significant difference across the study sites ($F = 2.167$, $df = 7$, $p < 0.05$), and a low but significant difference between middle and high school students, with the latter having a more positive attitude ($t = -1.787$, $df = 733$, $p < 0.1$).

The majority of adolescent respondents in the qualitative research have not used formal mental health services provided through a psychiatric hospital or clinic, as most have felt that they did not need professional mental health support; even if they did feel they needed such support. However, – and in contrast to the findings from the survey, although not so to other literature exploring these issues (Giang, 2006; Nguyen et al., 2010) – they reported that they would probably not have sought it. The main reasons for not seeking formal help include fear of embarrassment, lack of awareness and information, and lack of confidence. Other reasons noted by adolescents include fearing that their problems are not serious enough, that they are unable to go on their own, and that they lack time.

Figure 14 Key differences in attitudes towards seeking professional psychological help



Items in the questionnaire	% Agree or strongly agree
If I were experiencing a serious emotional crisis, I would be sure that psychotherapy would be useful.	78.6%
A person with an emotional problem is not likely to solve it alone; he or she is more likely to solve it with professional help.	73.7%
I would want to get psychological help if I were worried or upset for a long period of time.	68.3%
I admire people who are willing to cope with their problems and fears without seeking professional help.	65.0%
I might want to have psychological counselling in the future.	63.7%
If I thought I was having a mental breakdown, my first thought would be to get professional attention.	55.5%
Talking about problems with a psychologist seems to me as a poor way to get rid of emotional problems.	32.6%

> Firstly, I don't ... it's embarrassing going there [to seek out mental health services]. And I think it's just a trivial issue, no need to be exaggerated. (IDI with 16-year-old girl, Nha Trang)

One key informant also indicated that culture in rural areas poses a challenge to adolescents accessing mental health services because, for example, seeing a psychiatrist is seen as a luxury rather than a normal course of action as a response to such kinds of illness. The same respondent also went on to say that possibly as a result of this perception, mental health services are often not available in rural areas; they are focused in the cities and where services are available in rural areas, their quality is questionable. All of this makes it challenging for adolescents who may require such support (see also MoH and Health Partnership Group, 2015).

As also identified in the literature (see, for example, Niemi et al., 2010), fear, stigma and discrimination around mental ill-health also prevents adolescents and their families from seeking or following through with treatment;

adolescents do not want to be labelled as 'crazy', for example. Similarly, one parent (mother of an adolescent) indicated that they would not feel comfortable having their adolescent children go to the psychiatric hospital if they just have mild mental ill-health; they feared that records of having been in a psychiatric hospital may have negative effects on their children's future.

> That [psychiatric] hospital I think there are only serious patients in there, they don't take care of minor mental problems like that. Firstly, it may have bad effects on children in the future when they have families whose records will note that they have been to this hospital before. Things like that ... and surely they would never allow you to go into that hospital. If your children have any issue, then they will still have treatment for them in silence. If my children are in that situation, I would not feel ok if I put them in that hospital. (FCS with 38-year-old mother of 17-year-old girl, Vinh City)

More in keeping with findings from the survey, a few adolescents and parents in the qualitative research shared that they would consider using mental health services if required, particularly if suggested or recommended by trusted adults such as teachers or parents. One key informant also perceived that adolescents today are more likely to access psychiatric hospitals for mental health services than in the past. This was explained by the fact that nowadays people are more aware about mental health. The respondent further reported that adolescents find out about the hospital through recommendations or online. Box 2 highlights some examples of girls who did seek treatment in a psychiatric hospital.

The majority of adolescent respondents also reported not having used formal mental health support services at school. Adolescents noted various reasons, including that school personnel are unapproachable, that they would rather not discuss their problems, and that the age difference between teachers and students also makes it difficult for students to come forward and discuss their challenges, suggesting that it might be helpful for schools to bring in someone younger to discuss such issues with adolescents.

When asked about the mailbox scheme that appears to be present in some schools in Nha Trang (see Section 6.1), students reported that the scheme is not well-maintained, that teachers will not necessarily read the letters written by students, and that teachers rarely mentioned this scheme or encouraged its use. Furthermore, respondents feared that writing down their challenges would make their issues known to teachers and that they may not treat that information confidentially.

Accessing informal services to treat mental health challenges (which, in this context, may include using traditional remedies or taking part in support groups) did not elicit many responses in the qualitative research. Only one key informant noted that people would rather go to 'fortune tellers' or 'ghost catchers' than seeking out formal mental health services. Another adolescent, when probed, mentioned that he would rather just speak to people who had gone through mental ill-health experiences than seek out other alternatives.
In terms of support groups, when probed, one adolescent noted that she would need her parents' approval to take part in such a group, while another thought that these groups would not be effective because adolescents would be 'timid' and reluctant to share their problems in such a setting.

Box 2 Experiences of accessing a psychiatric hospital

A few female study respondents reported having accessed mental health services or a psychiatric hospital in the past.

One 14-year-old girl in Nha Trang shared that a few years ago, her mother took her to a psychiatric hospital because she had severe headaches. The doctor concluded that the headaches were due to excessive studying and could be treated with acupuncture. The respondent indicated that the headache problem subsided after her parents allowed her to stop taking extra classes.

A 15-year-old girl from Vinh City received treatment at the psychiatric hospital when she suffered from depression for a couple of years. In her case, her sister first took her to the general hospital because she was experiencing chronic headaches, but she was then referred to the psychiatric hospital. The respondent indicated that the treatment did not involve pills but was about 'relaxing and hanging out'; she stopped going to the doctor and got better.

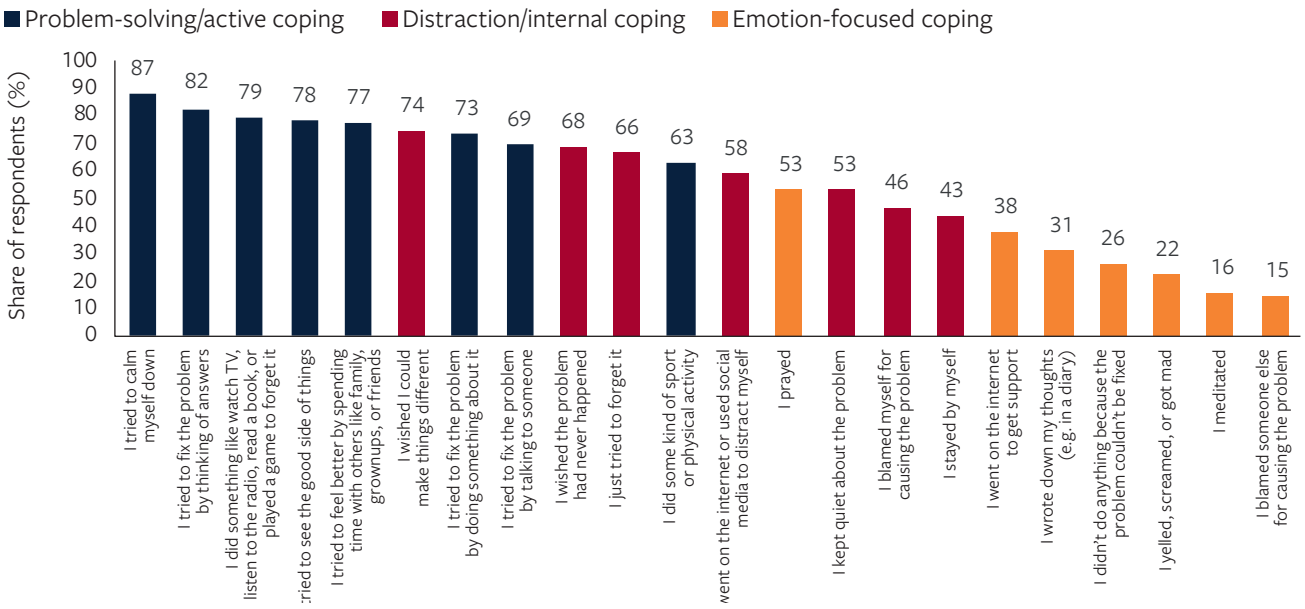
Finally, a 14-year-old girl from Vinh City shared that she had suffered from emotional disorders that made her paranoid, scared and depressed. Her parents took her to various services to seek treatment. After seeing a doctor at Bach Mai psychiatric hospital and receiving treatment, the respondent's mental health improved. Her mother took her to most of the medical check-ups, with her father accompanying occasionally. The girl explained:

> I'm fine now. Much better than before. Back then, I was paranoid, uhm ... I was scared and depressed and things. I had emotional disorders, and my parents were terrified. They took me everywhere trying to find a cure, but nothing worked out. Then ... I went to Bach Mai hospital and met that doctor, the right doctor, then ... I was properly treated, and ... I took medicine regularly, and I got better... at the hospital, I took a psychological test with questions about my health ... my mom and my dad [came with me to the hospital]. My dad comes with me occasionally, but mostly it's my mom. (IDI with 14-year-old girl, Vinh City)

6.3 Coping strategies and behaviours

In our survey, we asked respondents what they did the last time they were feeling tense or facing a problem or difficulty. They indicated the extent to which they used positive and negative coping mechanisms from a list of 22 items from the Kidcope scale (Figure 15). The most popular options, cited by over 80% of respondents, were trying to calm down or thinking of answers to try and fix the problem. The least popular responses, cited by fewer than 30% of respondents, were inaction because they could not fix the problem, yelling, meditating or blaming someone else.

Figure 15 Positive and negative coping activities used when last feeling tense or facing a problem or difficulty



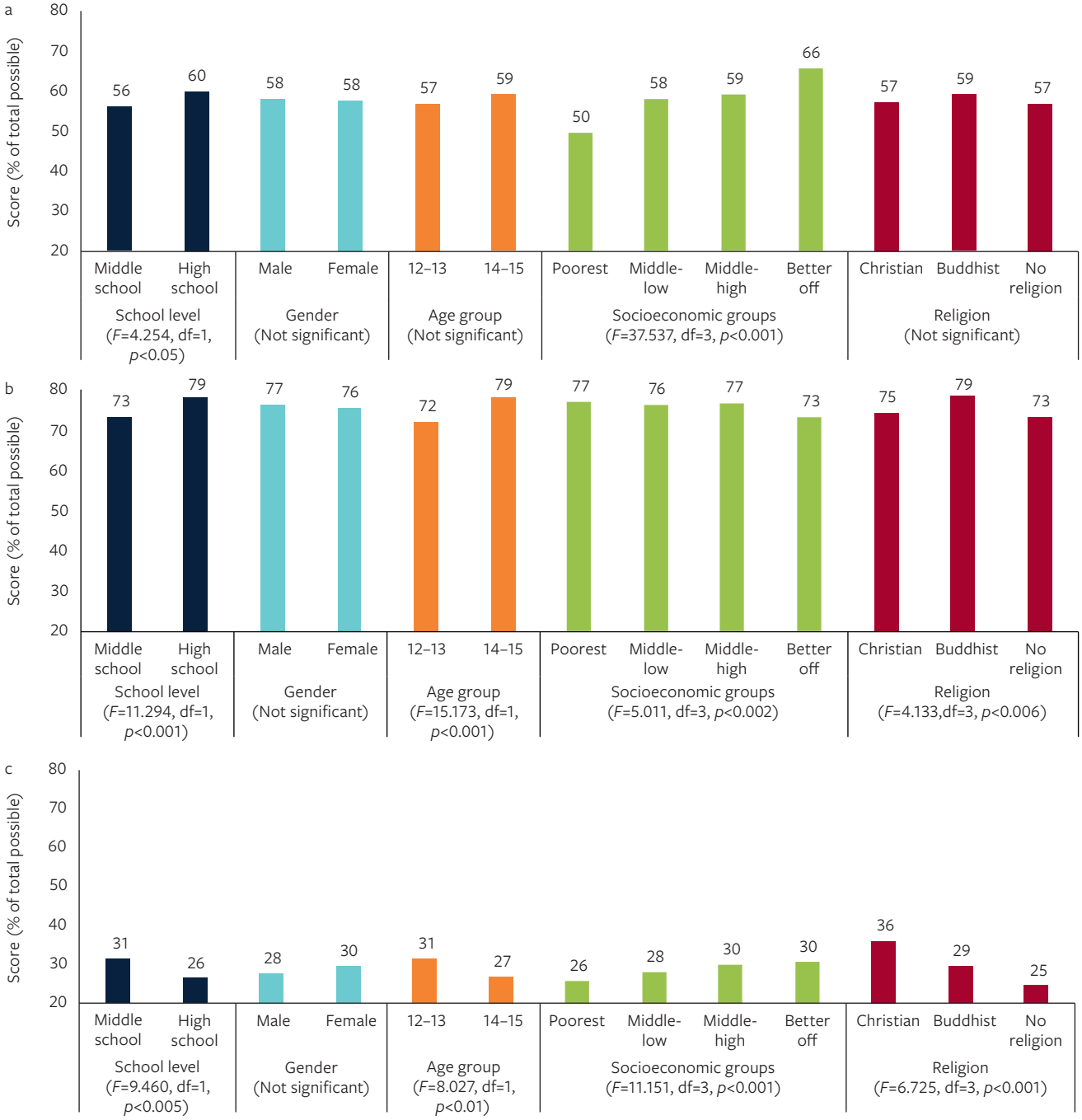
Note: Problem-solving/active coping responses are coloured in blue; distraction/internal coping responses are coloured in red; and emotion-focused coping responses are coloured in orange. These three dimensions were the results of exploratory factor analysis to identify the latent structure.

Three underlying factors were identified based on factor analysis: (1) a factor grouping problem-solving or active coping mechanisms (such as trying actively to find solutions to the problem); (2) a factor grouping distraction or internal coping mechanisms (such as wishing the problem had never happened, wishing one could make things different, looking for distraction on the internet); and (3) a factor grouping emotion-focused coping mechanisms (such as emotional discharge, or trying to calm oneself by praying, meditating or writing down one's thoughts).[33] We found a positive and significant correlation between distraction or internal coping mechanisms and emotion-focused coping mechanisms (person correlation = 0.34, $p < 0.01$). There was a low but significant correlation between problem-solving or active coping and internal coping mechanisms (person correlation = 0.084, $p < 0.05$). No significant correlation was observed between emotion-focused coping mechanisms and problem-solving or active coping mechanisms.

33 A three-factor solution produced the clearest structure while retaining high reliability for the final scales. An alternative solution produced five distinctive factors, but reliability was lower, and four factors will only contain two items. We preferred the three-factor solution with 7 or 8 items in each scale, and higher reliability. The output of a five-factor solution produced the following structure: Factor 1 = emotion-focused; Factor 2 = problem-solving; Factor 3 = support seeking; Factor 4 = wishful thinking; Factor 5 = distraction. A three-factor solution roughly combines factors 2 and 3, and factors 4 and 5. The final scales were computed by aggregating the items that best loaded in each factor in the three-factor solution. For example, the item 'I wrote down my thoughts (e.g. in a diary)' loaded in both 'emotion-focused coping' and 'problem-solving/active coping', but it has greater factor loading in the former. Presumably, in Viet Nam, writing down one's own thoughts is used to both deal with emotions and organise thoughts when finding a solution. The factor analysis finds it has greater association with the former among our respondents.

Overall, problem-solving or active coping mechanisms were more common, followed by distraction or internal coping mechanisms, while emotion-focused coping mechanisms were relatively rare. Problem-solving or active coping mechanisms were more common among high school students or older respondents, among those with lower SES, and among Buddhist children (Figure 16).

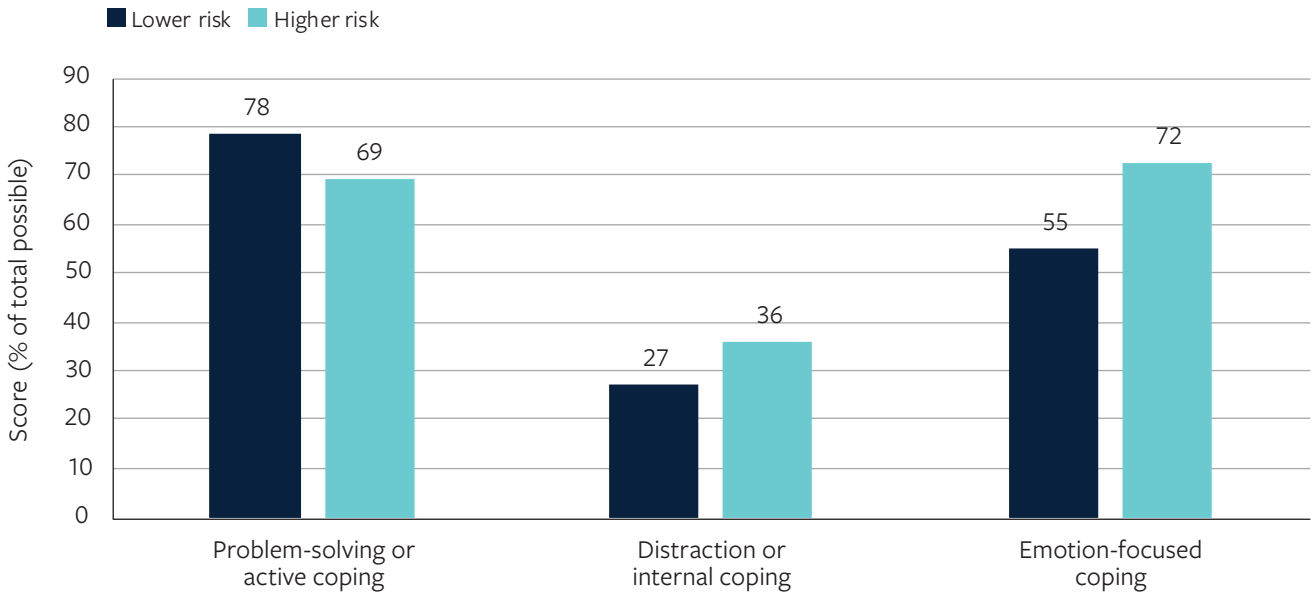
Figure 16 Risk of mental ill-health (SDQ emotion subscale) and key differences in coping strategies: (a) problem-solving or active coping mechanisms, (b) distraction or internal coping mechanisms, and (c) emotion-focused coping mechanisms



Distraction or internal coping mechanisms were more common among those with higher SES and among high school students. Emotion-focused coping mechanisms, while rare, were more likely among younger respondents (aged 12–13) or middle school respondents, and among those with higher SES and of Christian religion.

We found the expected association between mental health and use of specific coping mechanisms (Figure 17). Emotion-focused coping mechanisms were more common among respondents with high risk of mental ill-health ($F = 67.452$, df = 1, $p < 0.001$), as were distraction or internal coping mechanisms ($F = 19.516$, df = 1, $p < 0.001$). By contrast, problem-solving or active coping mechanisms were more common among respondents with lower risk of mental ill-health ($F = 21.866$, df = 1, $p < 0.001$). There is a 0.342 Pearson correlation between the scale on mental ill-health (SDQ emotion) and the scale on emotion-focused coping mechanisms, a correlation of 0.192 with distraction or internal coping mechanisms, and –0.164 with problem-solving or active coping mechanisms (all significant at $p < 0.01$). High risk of mental ill-health is correlated with distraction or internal coping mechanisms (0.263) and emotion-focused coping mechanisms (0.227), and negatively (but not significantly) associated with problem-solving or active coping mechanisms. Prosocial (SDQ) is only slightly but significantly associated with problem-solving or active coping mechanisms (0.080). These results tell us about the relation between various coping mechanisms and mental health. We expect the project to increase the use of a diverse range of coping mechanisms, with students using them more flexibly, to reduce their risk of mental ill-health.

Figure 17 Percentage risk of mental ill-health (SDQ emotion subscale) by coping mechanisms



6.3.1 Positive coping strategies and behaviours

Adolescents in the qualitative research reported a wide range of activities to distract themselves from feeling distress as well as to calm themselves. Activities included watching TV shows and films, playing video games, listening to music, going out with friends, spending time with friends and family, using the phone and internet, playing sports, studying, reading, taking a walk and drawing.

Spending time with friends was the most frequently reported form of distraction. Playing video games and watching TV/films were also common activities. Playing video games was mostly reported by boys as a way to de-stress and socialise with friends, while watching TV/films as a way to distract from troubles was more commonly reported by girls. Listening to music (usually on their phones) to relieve stress was mostly reported by girls. Some adolescents reported that they spent time studying during the Covid-19 pandemic to distract themselves (see Samuels et al., 2021).

The majority of adolescents reported talking to friends who would comfort and counsel them, and give them advice and suggestions when they felt stressed or anxious. A couple of adolescents also noted how their friends had talked them out of committing suicide (see also Sub-section 4.1.1).

> For me, my friends do the counselling. They support me with those things.
> (IDI with 13-year-old boy, Nha Trang)

However, some adolescent respondents also noted that when they reached out to friends, the responses were sometimes not helpful and had no effect. Others also noted that they felt that friends could not support them all the time, as they were not reliable. Others were also reluctant to share their problems because of a lack of trust, a fear that their friends would not keep things confidential, and a sense that their friends would not understand them, with some boys also noting that this could lead to conflict. Other times they mentioned that when they tried to reach out to friends, they were ignored, while other times they felt their friends overreacted, which made them reluctant to reach out again. Finally, some did not have close-enough friends with whom they thought they could discuss their anxieties, so they just kept things to themselves.

> Even though we're pretty close to each other, I can't tell them all ... I don't want to tell them all, even if I'm close ... I'm afraid they will tell many people. Not fully trusting in them, in general, I have to be careful in my words ...
> (FGD with 15-year-old girls, Vinh City)

Speaking to immediate family members was another common coping strategy reported by adolescents – they acted as a sounding board, were supportive and provided advice. While most adolescents of both sexes reported turning first to their mother to share their problems, a gendered pattern was nevertheless in evidence, with girls speaking more to mothers and boys to fathers. Perhaps the divide and distance between fathers and daughters was more evident and increased as girls become older, as noted by both an adolescent girl and a father:

> Like I'm a girl, so it's easier to talk to mom. And with dad then ... I'm still scared of him. Although he is a person, like he ... gives me

> many things. Like … he can still solve my problems, but I'm a little shy talking to him. (IDI with 15-year-old girl, Vinh City)

> There is a boundary between father and daughter, so I'm not as close to her as her mom … [she] only shares with her mom. (FCS with 54-year-old father of 17-year-old girl, Nha Trang)

Others, however, also noted that they could confide in both parents and that it depends on the personality of the parents – that is, they would seek advice from the parent that is more understanding and even-tempered. Thus, even girls reported turning to their father for advice if they were the calmer of the two parents.

However, some adolescents reported that they would not talk to their parents about their problems, and this was confirmed by parents in group discussions. On the one hand, some adolescents reported that they did not want to share because they thought their family could not help and they would rather handle their problems on their own. But on the other hand, there was a more widely held perception that parents did not understand or care about their children's mental health or emotional well-being, that children are scared to raise such issues with their parents as they will just be scolded, that parents will not take these issues seriously. and that all parents want is for their children to do well at school and they will continue to put pressure on them to do so. This is corroborated by parents' responses, who tend to view their children as 'having it good' (for example, they do not have financial concerns, all they have to do is do well in school). There is also the view, noted especially by parents, that there is a large divide between the generations – all of which makes dialogue and understanding difficult. This results in adolescents avoiding speaking to their parents about their mental health challenges, also fearing that if they did so, it would cause the adolescents to feel even more sad.

> Parents will scold if you talk about those problems.
>
> So I dare not tell them anything.
>
> If I tell them, they'll get angry and then scold me.
>
> If I talk about it, my mother says it is just a trivial thing. So don't … bother.
>
> (FGD with 17-year-old girls, Nha Trang)

Other family members also act as sources of support, and we observed a gendered pattern in this regard. Adolescent girls often confided in their (usually older) sisters and sought their advice and support, with some also noting that the responses provided by their sisters were more helpful than those of their parents. In turn, boys often confided in their (usually older) brothers. Often, these older siblings also acted as role models as they were doing well in school. One respondent noted how her sister had taken her to the doctor when she was suffering from depression (see Box 2; Section 6.2).

Grandparents and cousins were cited as another source of advice and support. Again, the same gendered pattern was evident, with girls more likely to be close to their grandmother and female cousins, while boys were more likely to be close to their grandfather. A good number of girls reported being close to their grandmothers

and going to them for support, also when they felt that their parents did not care very much or were not available for them. Other adolescents (of both sexes) reported that their cousins and grandparents had more time for them, gave them good advice, and made them feel supported and therefore also less stressed.

> I'm closest to my grandmother ... She often asks me to go with her to have some coffee or some meals [we talk] about school ... about my brother or sister's studying ... I usually stay at her house and play with her [I share with her] ... when my parents scold me or when I have a problem at school. (IDI with 17-year-old girl, Nha Trang)

Beyond the family, some adolescents reported speaking to their teachers about their problems, noting that they would be very understanding and helpful.[34] Teachers also confirmed that students sometimes did speak to them about their issues or that they were aware of the challenges that some face. One older girl, for instance, shared her experience of her teacher realising her distress and providing her with emotional support and advice that stopped her from committing suicide. In particular, the respondent felt that she could not share her academic pressures with her parents due to the larger-than-usual age gap between her and her parents. However, teachers also reported that many students do not want to share and that sometimes it is difficult to know who is struggling with mental ill-health. Similarly, as one teacher noted, while they have a counselling team at the school, they cannot force children to take up the service.

Some adolescents noted that they do not think teachers are effective at handling mental health issues. On the one hand, some reported that they were shy and scared to talk to teachers, and that they thought teachers did not have time to deal with these kinds of issue. On the other hand, as also noted by a teacher key informant, teachers were not always sufficiently trained or had the right approach for addressing these kinds of issue. There was also a sense that teachers might deal with the immediate symptom or trigger, such as if they see someone being bullied, but that they do not necessarily deal with the underlying problem. Also, if they reprimand a bully, it is likely that the victim will face a backlash, leading to further bullying.

> Well, a majority of teachers do not know about that, so they cannot solve these problems. If they know, they won't solve it thoroughly.
>
> They solve at some level ... For example, if someone is bullied, he tells his teacher about this. Immediately, he can be threatened by the bullies.
>
> (FGD with 15-year-old girls, Vinh City)

6.3.2 Negative coping strategies and behaviours

Adolescents in the qualitative research reported using a number of negative coping strategies to deal with their mental health challenges. Many kept their problems to themselves and did not want to share with anyone. Reasons given included that they are generally reserved and quiet and do not like communicating, that they think no one

34 In the schools that were part of our study there are more female than male teachers.

would understand their problems, that they do not have someone to talk to, and that they do not want to make other people sad or worried. At the same time, they were aware (as confirmed by a mental health provider) that keeping problems to themselves can only make things worse, and makes them become even more introverted and unable to speak about their problems.

> Having no one to talk to will pile up my sadness and it will come back and explode once again someday. I remember how impotent I was back then that it was hard to describe. (IDI with 16-year-old girl, Nha Trang)

Some adolescents – and more so girls – responded that their sadness or stress causes them to want to isolate themselves, which entails largely staying in their room at home alone. A few adolescents indicated that they did not want to go home or would want to move out. This was because of the stressful and unhappy family environment that was mentioned by many respondents as a key source of their sadness, with some even moving out of their parental home to stay with other relatives, including grandparents. Poor school results were cited as another reason why adolescents wanted to isolate themselves.

Sleeping was another coping strategy mentioned by adolescents in the qualitative research to release their stress. Conversely, others mentioned that their stress caused insomnia. More girls (particularly older adolescents) seemed affected by this than boys. Many put their sleep problems down to school, with worries about their performance and results keeping them awake at night. Others said they worry about their families and their future, which also results in insomnia. Some adolescents also mentioned that the Covid-19 pandemic had disrupted their sleep patterns and other routines, staying up late at night, playing games or sleeping during the day (see Samuels et al., 2021).

Skipping meals was cited as another coping strategy, especially by those who had been body-shamed by their family and friends. A common sentiment (as found elsewhere, see ODI and UNICEF Viet Nam, 2018) affecting girls in particular is the need to conform to a certain body image, whereby being thin is viewed as being beautiful. To achieve this, girls feel they have to skip meals. While more girls than boys reported skipping meals, there were also boys who reported doing so, including one 14-year-old who explained how his family tells him he should not be fat:

> Uhm, my family talked about that ... Like ... It's bad when I'm getting fat, I shouldn't be fat ... I feel unconfident about myself ... I've tried so many times [to change things], but it barely worked ... I try not to eat. (IDI with 14-year-old boy, Nha Trang)

While most adolescents in our qualitative research did not report turning to harmful substances (sucha as smoking and alcohol) to cope with their mental health challenges (also reflecting the survey responses),[35] they did know of people

35 A small percentage of respondents reported engaging in harmful substance consumption: only 7% have ever engaged in smoking cigarettes, 2.5% in drug use, and 30% in alcohol. Despite these low percentages, we found a statistically significant association between engaging in smoking cigarettes and mental ill-health (on the emotion dimension of SDQ) ($F = 6.365$, df = 1, $p < 0.05$), but no statistically significant association with drug use or alcohol (see also Figure 18).

who did, and/or had seen evidence of the harmful effects of such behaviour via the internet, with some also noting that these methods were not helpful and can be addictive. Some spoke of knowing people who had started smoking to deal with the stress caused by a relationship break-up; one 17-year-old boy mentioned that he had tried to smoke because he felt sad and he thought it would relieve him, but in fact it put him in 'even more discomfort'. There was a perception that men and boys drink alcohol more than women and girls, and that they would hang out in groups to drink, and do this also when they are sad.

Suicide ideation appears to be common, according to respondents in our qualitative research. Most adolescents reported having friends or acquaintances who have had suicidal thoughts, with some noting that they themselves had had suicidal thoughts in the past. Most of those who mentioned suicidal ideation were generally older (that is, of secondary school age). A couple of adolescents reported that they had made a plan for how they would commit suicide, some also using the internet to work out the best method; however, they did not go through with it after speaking to their friends (see also Box 1, Sub-section 4.1.1). Causes of suicidal thoughts and suicide itself ranged from adolescent girls wanting to get a boy's attention after a failed love affair/ relationship or after the boy had broken up with them (this was reported by participants in an FGD with 16-year-old girls) to a key informant noting that neglecting or not addressing a mental illness could have tragic consequences, including suicide. But perhaps the most common cause cited was parental pressure or having unsupportive (or even abusive) parents. This was noted by both adolescents and key informants, with one key informant noting that the three suicides in that area in the previous year had been mostly due to family pressures.

> ... if the children don't get timely support, and the illness is worse, then it will lead to the thing that ... they will kill themselves, leading to the path of suicide, or leaving home, or they would hang out with street children, which easily leads to breaking the law ... they will be easily manipulated, easy to be lured ... (KII 18, Vinh City)

Many adolescents and some key informants also cited self-harming as a negative coping strategy. Although most adolescents reported not self-harming or not knowing others who do it, some reported that they had self-harmed or had seen others doing so on social media, specifically on Facebook. Witnessing their classmates self-harming was relatively common. School or academic pressures were noted as a key factor leading adolescents to self-harm, as was wanting attention from parents, or a failed romantic relationship. One 15-year-old girl (from Vinh City) noted that when she hit her arms and injured them, she 'felt a little less angry, less sad'.

> It was in grade 7, when a person cut his arm because another person was angry with him.
>
> Many times, in grade 7 too – [name of child]'s girlfriend. When they broke up, she cut her arm.
>
> (FGD with 16–17-year-old boys, Nha Trang)

Our survey found that more than a quarter (28%) of respondents reported having occasionally self-harmed while 2% reported self-harming frequently. We found no statistical differences between boys and girls, across age groups or by SES. But there is a clear and statistically significant association between mental ill-health (SDQ emotion subscale) and engagement in self-harming ($F=20.963$, df=4, $p<0.001$) (Figure 18). Half of respondents with a high risk of mental ill-health have engaged in self-harm, compared with only 25% among lower-risk respondents; and when they do, they do it more frequently (8.2% frequently, weekly or daily, compared with 1% among lower risk respondents [$X^2=56.190$, df=4, $p<0.001$]).

Behaving in a violent way was also reported as a negative coping mechanism. Many adolescents (of both genders) in the qualitative research reported hitting and breaking things as a response to depression or anger. Not only did they often hurt themselves in the process, but it did not necessarily help them to reduce distress or anger. Getting into fights was mentioned by key informants, who reported that some adolescents (largely boys) get into fights because they do not know how to cope with their emotions. In our survey, involvement in gang violence was part of the SDQ; however, it does not seem to be associated with mental ill-health (on any of the SDQ subscales) (see Figure 18).

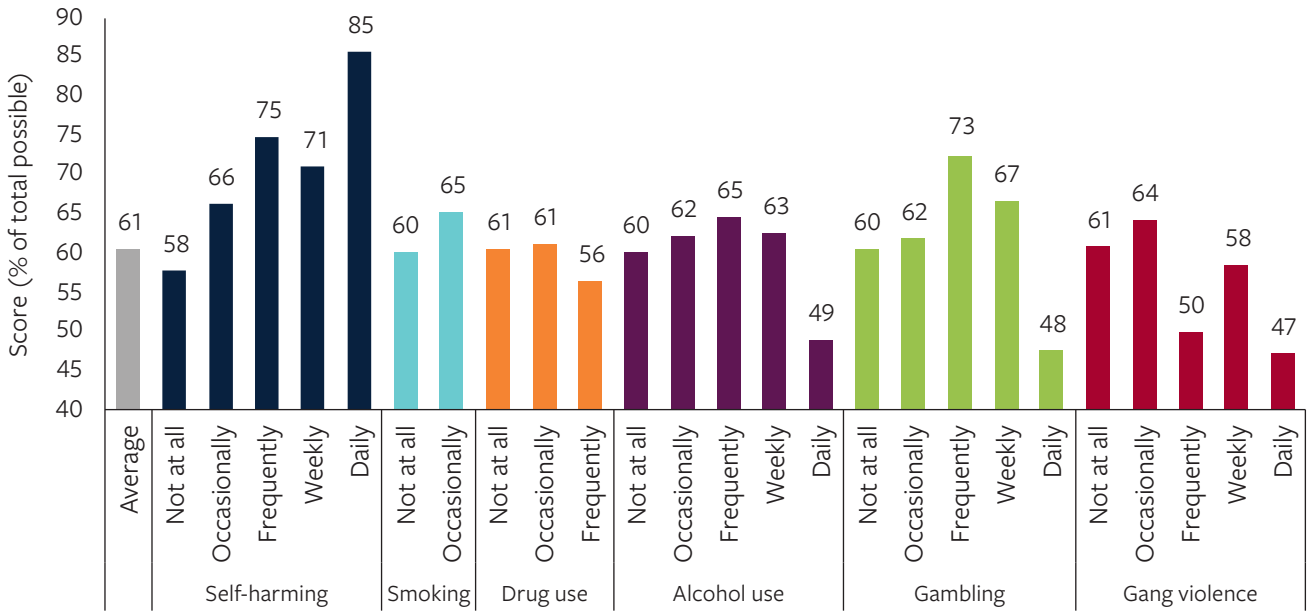
> There are even some students at school when they discuss about friendship, love, study, and because of pressure they can beat up their friends, insult their friends verbally and be offensive to them. It is a kind of offense to the student's mental health, there are many cases, and if only they learned to better control themselves in term of psychology, there wouldn't be cases as such. (KII8, Nha Trang)

Other negative coping strategies or symptoms of mental distress mentioned by respondents included spending too much time on the internet or phone (see also Sub-section 6.4.3), erratic behaviours, committing illegal acts, misbehaving in public**,** and crying a lot (largely girls), with the latter helping to relieve some distress:

> I will cry ... after crying, I will forget and overcome it.
>
> I will cry and when I'm done crying, I generally feel some relief, then rethink what happened to me.
>
> (FGD with 16–17-year-old adolescents, Vinh City)

Figure 18 shows the risk of mental ill-health by various negative or harmful coping strategies. Some of the findings have been referenced already in the earlier discussion. However, it is interesting to note that findings from the survey show a significant association between gambling and mental ill-health (on the SDQ emotion subscale) ($F=2.101$, df=4, $p<0.05$), although this was not reflected in the qualitative research.

Figure 18 Risk of mental ill-health (SDQ emotion subscale) by various harmful coping behaviours



Note: Some categories have few responses. The only statistically significant differences are for self-harming ($F = 20.963$, df = 4, $p < 0.001$), smoking ($F = 6.365$, df = 1, $p < 0.05$) and gambling ($F = 2.75$, df=814, $p < 0.05$).

6.4 Technology usage

In this section we first provide a brief overview of ownership and usage of different forms of technology and then describe the positive and negative aspects of this technology in terms of adolescent mental health.

6.4.1 Ownership and usage of technology

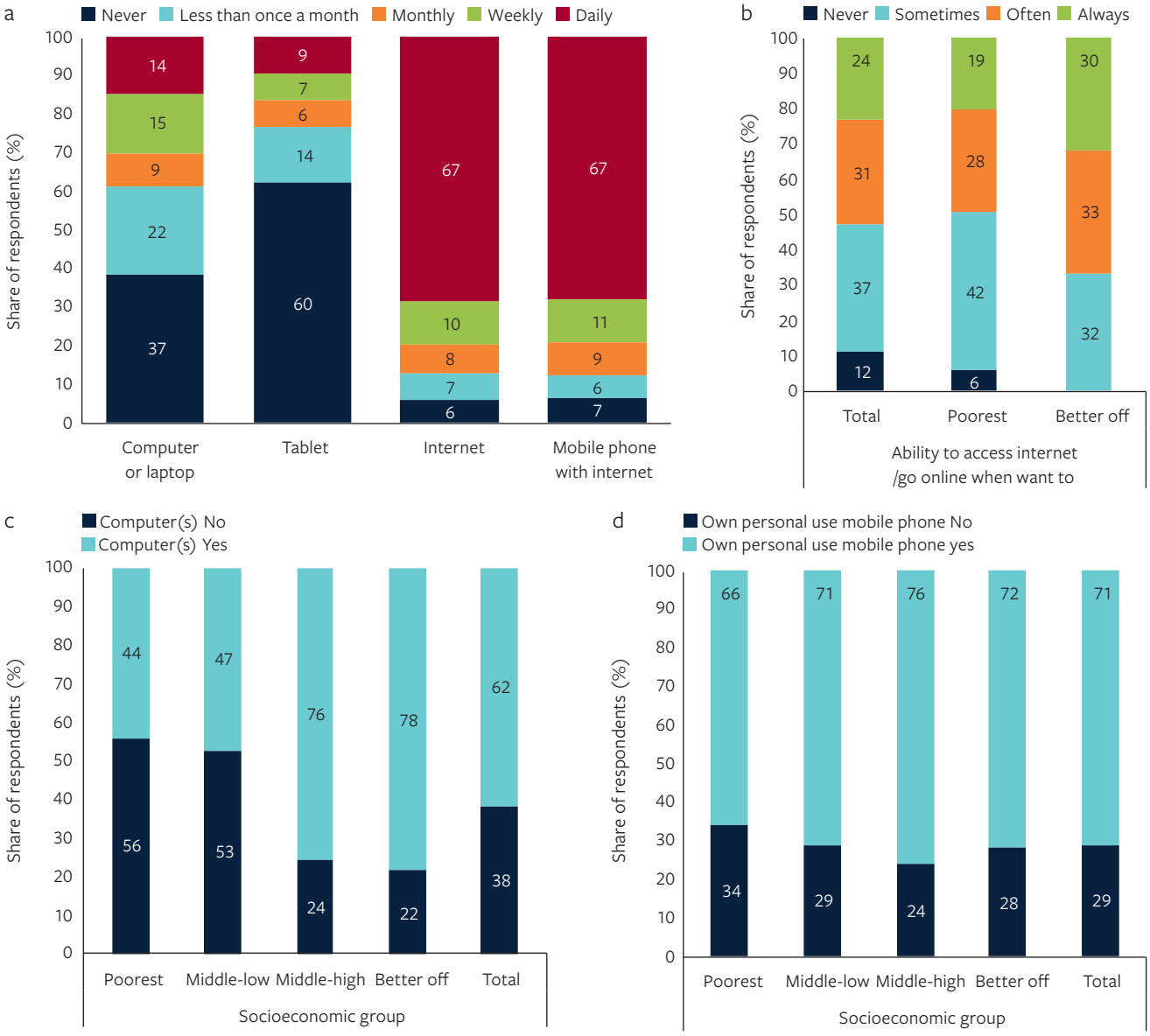
Most adolescent respondents across our sample (according to both the qualitative research and the survey) have a smartphone, and even if they do not own one themselves, they are able to use a parent's phone. Thus as many as 71% of respondents in our survey reported owning a mobile phone, and the proportion is high across all socioeconomic groups (Figure 19d). As many as 67% have access to a smartphone daily, and only 7% indicated never having had access at all (Figure 19a). Studying, playing games and communicating with friends were the most frequently mentioned uses of smartphones according to our respondents in the qualitative research (in that order), and in both study sites (see Annex 11 for details from the qualitative research).

Fewer adolescents have access to (and even fewer own) a computer, according to both the qualitative research and the survey. According to the survey, 38% of adolescents live in a household without a computer, rising to 56% among children in the poorest households (Figure 19c). However, many adolescents reported being able to access the internet or go online (with many in the qualitative research noting they can access the internet via family members' devices), with only 12% in the survey indicating they never have the ability to (Figure 19b). Findings from the survey also show high levels of internet access for adolescents in all socioeconomic groups, with the poorest children

having slightly less access (Figure 19b). However, access is still not regular for a good percentage of respondents (Figure 19a). If they do have access to a computer, a laptop was the most frequently mentioned kind of computer, and they mostly used it for studying (see Tables A12 and A13 in Annex 11 for further details from the qualitative research).

Facebook and Messenger were the most frequently mentioned digital platforms and/or applications used by adolescents in both sites, according to the qualitative research. In Vinh City, this was followed by YouTube and TikTok, and in Nha Trang, this was followed by Zalo, gaming apps and YouTube (see Table A14 in Annex 11).

Figure 19 Regularity of (a) access and use of digital devices, and (b) internet, and ownership of (c) household computer, and (d) personal use mobile phone, by SES



6.4.2 Positive aspects of technology

According to respondents in the qualitative research (adolescents, parents and key informants), technology was seen to have a positive effect on adolescent mental health in two key dimensions: relieving stress and allowing adolescents to interact, feel less lonely and 'talk' to more people; and providing access to information, services and support for studies.

Social media – including surfing the web, Facebook and just 'chatting'– was seen as helpful for adolescents as a way of relaxing, feeling less lonely, staying more connected and/or belonging to an online community. It was also seen as a way of dealing with sadness (among our respondents, girls perhaps tended to speak of it in this way more than boys). There was also a sense from girls and boys alike that, often, online friends understand them better and that it was easier to 'text' or 'write' than to speak, especially for those who were shy and found it difficult to share things in person (the latter also being confirmed by key informants). One girl also noted that through watching videos online, she had learnt how to communicate better ('to improve myself') and was able to gain more friends, which made her happier and more confident. Key informants also observed how students used the internet to relieve stress through 'ranting' about things that were affecting their lives, presumably perceiving it as a safe space in which to express their feelings.

> I think technology can provide us with crucial information to help us free our mind and help us find the solution for our daily life. If not, I can still listen to music or watch movies on my laptop. (FGD with 16-year-old boys, Vinh City)

> I think those devices ... they help me to ... to forget about my sadness. And secondly, thanks to them, I have ... I know a lot of resources, such as resources for entertainment ... So it's easier for me to forget my difficulties. It's like getting lost in another world. (IDI with 16-year-old girl, Nha Trang)

> I also talk to friends but ones on the internet. Online friends understand me [laughing], but in the real life, there are no friends who really do. (FGD with 17-year-old girls, Nha Trang)

Most respondents mentioned access to information and services as a positive aspect of adolescents' increasing use of technology. Respondents noted (although girls more so than boys) that adolescents can use the internet – specifically YouTube, Facebook and Instagram – to find information about how to relieve mental stress; and some adolescents were aware of moderated sites where they can ask a question (although it was also noted that the response came late). Specific websites mentioned by respondents that support mental health include: Hoa học trò' website; official website of the Youth Union (Đoàn Thanh niên); the Association (Hội thanh niên); and Pioneers Union (Đội thiếu nhi); as well as websites of the parents' association of autistic children and Noza in Nghe An. Some parents and key informants also mentioned that the internet provided wider information (such as information helpful to children's studies) that could also have a positive effect on adolescents' mental well-being. Some noted that technology could be used in schools to support children with learning but also potentially to address mental ill-health.

> Technology will help children a lot in searching for information. As a result, we can design a programme and then implement it at school. (FGD with parents of adolescents, Nha Trang)

> If you use phones, the internet or computers in the right way, they can use that to acquire new knowledge or do research, get updated on things. That's if they use it in the right way. (KII 6, Nha Trang)

Our survey asked respondents how likely they were to have looked online for mental health information for themselves or someone else in the previous 30 days. More than 70% reported having looked for information during this period, with as many as 10% looking every day and 12% once a week or more. We found no statistically significant differences according to gender, socioeconomic groups or whether respondents were at high risk of mental ill-health. Older children reported that they had more frequently looked for information than younger children ($X^2 = 10.733$, df = 4, $p < 0.03$). We did find significant differences between schools ($X^2 = 62.504$, df = 28, $p < 0.001$); in some schools, more than 30% of respondents had never looked for information, while in others the figure was as low as 17%, implying that there is a wide diversity across schools, which would be relevant for our project.

Survey respondents with more access to technology (digital devices and the internet) appear to have higher levels of emotional literacy and to be more knowledgeable about sources of information on mental illness (Figure 20a, b). The most important marker is having access to the internet or a smartphone (significant for both scales, at least at $p < 0.05$). Owning a mobile phone is significant only for emotional literacy ($F = 20.398$, df = 1, $p < 0.001$). Access to the internet when needed is less pronounced but statistically significant (at least at $p < 0.05$). Looking for health information in general is associated with higher levels of emotional literacy ($F = 2.859$, df = 4, $p < 0.05$).

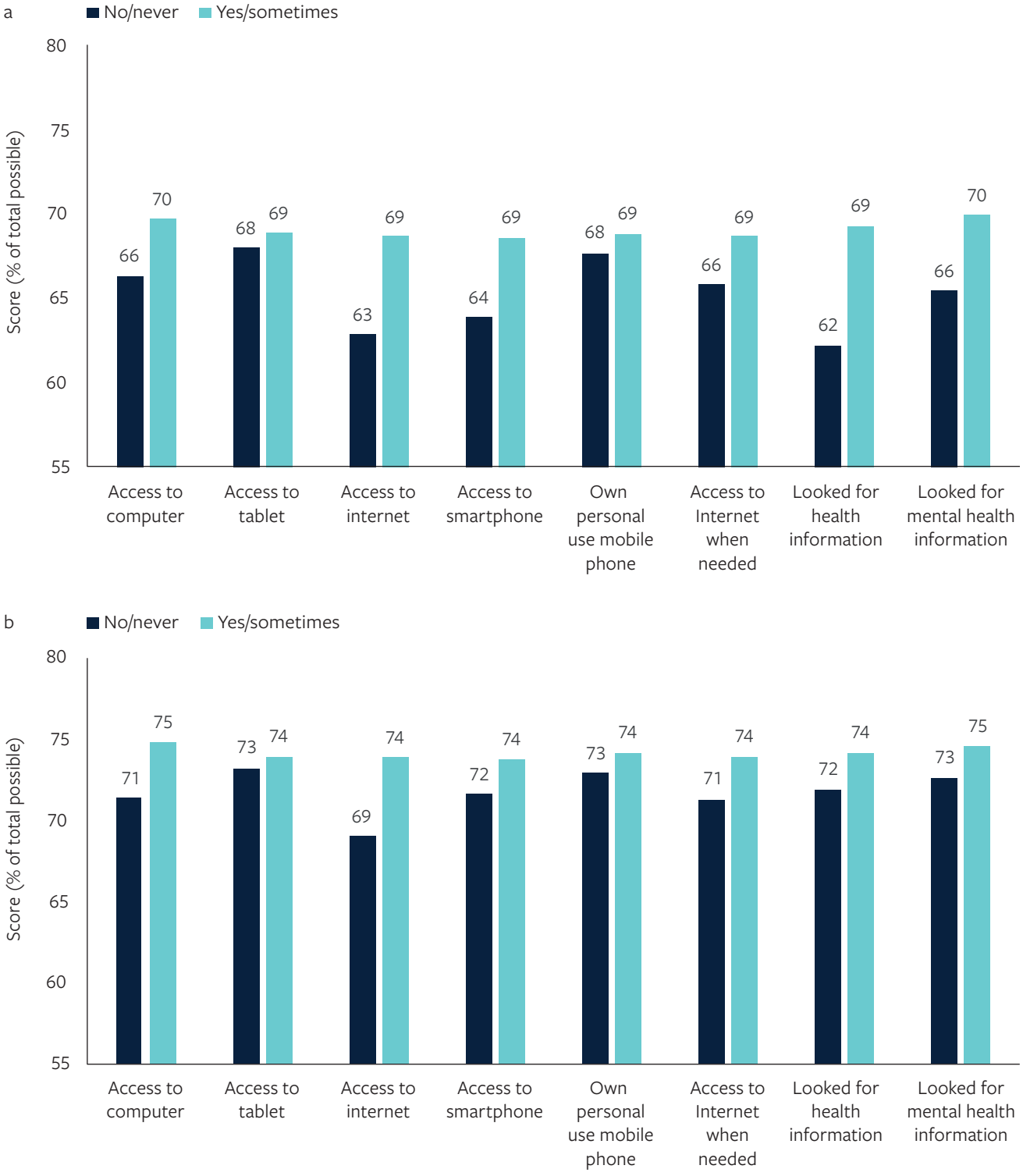
Many respondents in the qualitative research also noted how it was easier to talk about sensitive issues online as adolescents felt it to be more confidential, anonymous, secure and generally less embarrassing than accessing face-to-face services.

> I think it's the internet. We can go there, maybe to a group where you can reach out anonymously and receive help and opinions. (IDI with 17-year-old girl, Nha Trang)

Another aspect of technology that was seen as positive by respondents was the ability to obtain information quickly, from anywhere, and also often get quick responses. Information from the internet was also seen to be more current, regularly updated and independent – that is, it was not influenced by perhaps knowing the context or even the individual. Some key informants who provide mental health services also noted how online access to mental health services and information can help when they have busy schedules and are unable to respond immediately to adolescents' needs. On those occasions, technology can help, although the key informants also noted the importance of combining technological solutions (including text messages for sensitive issues) and face-to-face responses.

> They [online support services] are ubiquitous, convenient ... and confidential. (KII 19, Vinh City)

Figure 20 Access to devices and technology in relation to (a) emotional literacy, and (b) knowledge of what is good for mental health



> Technology is always fast and convenient. When children have unexpected problems or sudden problems, they can immediately search and the app can provide quick and temporary solutions in time of need. (FGD with parents of adolescents, Nha Trang)

> I prioritise using both [technology and face-to-face], since I had some experiences. When I advise, it is better to meet directly to communicate on some topics, but there are some problems they can't speak about, so they feel more comfortable texting, they aren't shy from texting their problem ... (KII 5, Nha Trang)

Technology can help adolescents access specialised services, according to key informants, especially when there are none available in the area where they live (and even if such services were available, adolescents may be reluctant to access them). It is possible, therefore, to search online for a specific symptom or challenge (e.g. insomnia) and receive specific advice on how to deal with it. Similarly, online services can also help with specific addictions such as gaming (as noted by one key informant), as adolescents experiencing addiction can find tailored support and guidance, including through exchanges with others in group chats.

6.4.3 Negative aspects or challenges of technology

A number of challenges related to technology and mental health were identified by all respondents in the qualitative research. Several key informants and parents noted that technology distracted their children and students from their school work and studies, and instead of studying online, 'they will actually be watching movies or even games' (KII 21, Vinh City). There was also the view that children were depending too much on their mobile phones and online games, that they were becoming addicted and living too much in a virtual world, with a blurring of the two leading to difficulties in managing their daily life.

> Nowadays children depend too much on mobile phones or online games, so the virtual life affects a lot of their life. They cannot solve their problems in the reality, and if they do, they are based on the virtual world. They can't even know the nature of those problems. If you want to solve the problem, you have to understand the nature of it. But nowadays many children don't understand it because they always live in the virtual world. (KII 16, Vinh City)

Many respondents in the qualitative research also questioned how effective the internet was for addressing mental health challenges, noting both the pros and cons. As discussed previously, they also suggested that a combined approach (online and face-to-face) would be more helpful, allowing adolescents to be guided in the material they choose to read and/or that the reading material may not be always effective. Similarly, it was also pointed out – by key informants but also by adolescent girls – that websites can be dangerous because the material and advice provided is not checked, supervised, monitored or evaluated, and as such, it is difficult to guarantee the quality of the information provided. Many respondents also noted that the information provided can be inaccurate, fake, or provide confusing, misleading and even dangerous advice (e.g. if a diagnosis and treatment is inaccurate). When accessing the internet on their own, adolescents may not always be able to distinguish between correct and incorrect information, so may end up following bad advice.

> There are many posts that haven't been checked on social sites ... They [adolescents] can't recognise which one is good or bad to avoid or to listen to, so all those things will influence them and make them confused when they get a huge amount of knowledge which comes from the internet. (KII 20, Vinh City)

> In my opinion, the internet is unreliable ... it gives advice but we don't know if we can follow it or not, and when we use technology, if we don't have anyone to share or to comfort me, we should Google it. If we are more open, we can share with our parents or people around us to improve the situation, which is better than sharing on social networks. (FGD with 11–12-year-old girls, Nha Trang)

It was also noted by one respondent that, to be effective, mental health-related support needed to be individualised, and online support was generic and not targeted. In a similar vein, adolescents in mixed-sex FGDs also noted how online and digital communications lacked a personal and emotional connection, and that it was superficial, whereas face-to-face interaction was important to be able to see a person's facial expressions.

> I think talking in person would help understand better, on social networks it lacks emotion.
>
> We can interact more, for example, a person needs a lot of help, that's simply a hug, and they do not have to talk too much, do not have to text long messages.
>
> I think face-to-face communication will be much better. It is more emotional; it is easy to release the emotions and relieve burdens.
>
> (Mixed-sex FGD with 16–18-year-olds, Nha Trang)

Some respondents in the qualitative research raised concerns around safety and security of online sites, as well as the dangers of children accessing sensitive images and other age-inappropriate material. Some mothers noted how they cannot know what their children are viewing online, with websites just 'popping up' whenever, as well as many 'extremely sensitive pictures'. Adolescent girls also observed how the fear of online violence and verbal assaults posed a significant barrier to their use of the internet, not wanting to share anything for fear they will receive abuse.

Several adolescents and key informants highlighted that infrastructural challenges with Wi-Fi and network connections or equipment such as phones and laptops created barriers to use of technology in general, and to addressing mental health issues specifically. Challenges ranged from people not being able to afford internet access at home (especially those living in remote areas), to the internet being unavailable, the cables or connections being broken, and people not having enough battery power to access the internet and/or not having computer. The latter was not mentioned by many respondents, as nearly all adolescents had their own smartphone and did not see themselves as needing a computer, because they could do everything they needed to (including for school) on their phone.

Annex 12 also contains summary tables of adolescents' and parents' perspectives on the advantages and disadvantages of different forms of technology usage (phones, computers and social media).

6.5 Understanding the net impact of coping factors and access to technology on mental health outcomes

Finally, drawing on our survey, we explore the joint impact of all the factors described in previous sections (socio-demographic factors, drivers of mental ill-health and protective factors, coping mechanisms and access to technology) on the measures in the mental health scales: being at risk of mental ill-health according to the SDQ measures (emotional, prosocial, behaviour); being in the top quartile of students in terms of psychosocial well-being (measured by WHO-5); and being at risk of depression (also according to WHO-5). At this stage, the regressions point only to correlations between the variables; we are not able to make any claims as to causation – e.g. whether being at risk according to the SDQ measure makes children more likely to be bullied, or whether the experience of being bullied causes a higher SDQ risk, or whether both claims are true, or indeed whether another factor altogether explains both SDQ risk and the likelihood of being bullied. Nonetheless the relationships we identify are suggestive and highlight several areas on which the intervention might usefully focus in order to bolster adolescent mental health. This multivariate analysis is able to assess the relationship of variables by controlling for other variables, and its interpretation can be supported with theory on the causes impacting mental health.

Overall, we are able to explain around 30% of variation in the SDQ and WHO-5 scores. When controlling for a range of factors (see Annex 6, which contains full regression results), we distil only a small number of factors that appear to exert an independent influence on the SDQ emotion subscale (Figure 21). Emotion-focused coping mechanisms are by far the highest predictor, increasing by 18 times the likelihood of being in the SDQ high-risk category; being a girl triples the risk, being bullied doubles the likelihood, while frequent access to the internet also increases the risk by a factor of 1.7. Conversely, being from the wealthiest socioeconomic quintile halves the risk, relying on someone nearly halves the risk, and problem-solving or using active coping mechanisms also reduces the risk.

Similarly, we analysed the risk of depression (Figure 22). We found that all three coping mechanisms discussed in this chapter are the highest predictors. Distraction or internal coping increases the risk by a factor of 3.5, while emotion-focused coping increases it by a factor of 2.5. Problem-solving or active coping mechanisms reduce the likelihood of depression by 0.1 (90% less likely). In addition, experiencing physical violence from parents increases the likelihood of depression by a factor of 2.2. Being Christian also increases the risk by a factor of 1.9. Being bullied or being a girl increases the likelihood of depression by a factor of 1.4. Conversely, having good knowledge of sources of information about mental health reduces the likelihood of depression by a factor of 0.7, and having someone to rely on reduces the likelihood by a factor of 0.6.

A range of other variables do not appear statistically significant for depression or being classified as at high risk of mental ill-health, but they remain significant for other mental health outcomes (see Annex 6 for full regression results). Living with both parents remained significant and positively associated with psychosocial well-being (WHO-5). School level also remains significantly associated with psychosocial well-being (lower well-being for high school students) and significant also for SDQ emotion subscale score (lower score for high school students). Emotional violence remained statistically significant and

positively correlated with SDQ emotion score and negatively associated with psychosocial well-being. Witnessing intimate partner violence increases the SDQ score for prosocial or behaviour problems. Harmful behaviour remains statistically significant for SDQ emotion score (increasing risk). A handful of variables that appeared relevant in earlier chapters of this report were no longer statistically significant when controlling for other variables – for example, whether mother drinks alcohol, violent punishment by teacher, access to technology, or having a role model.

Figure 21 Factors that predict the likelihood of being in the SDQ high-risk category

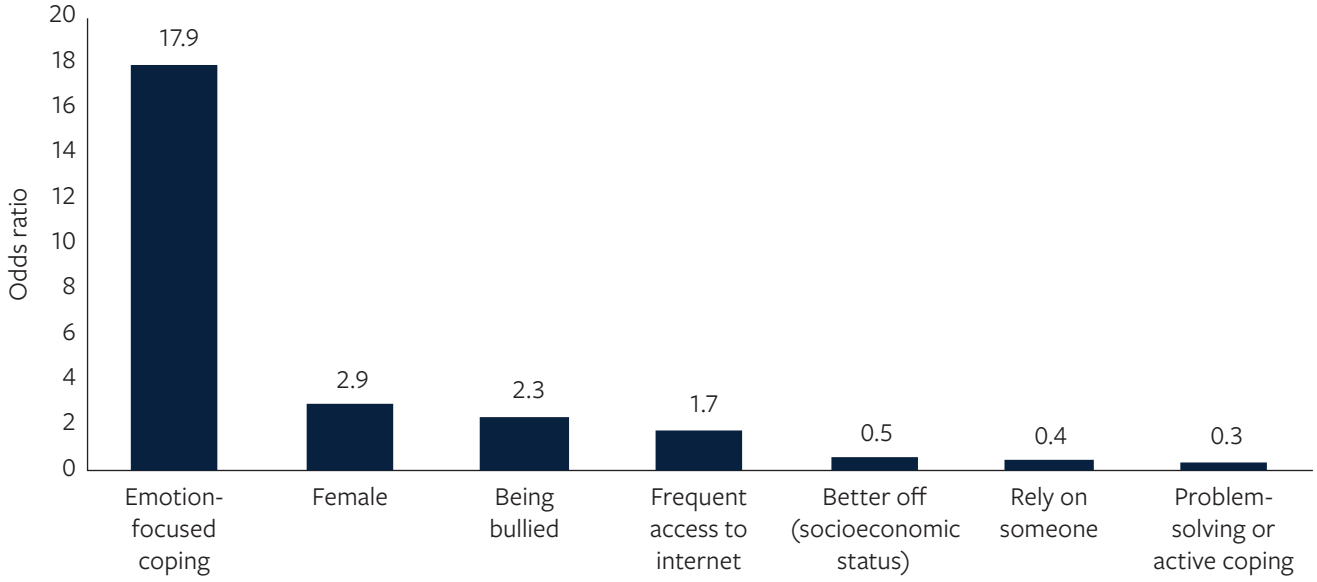
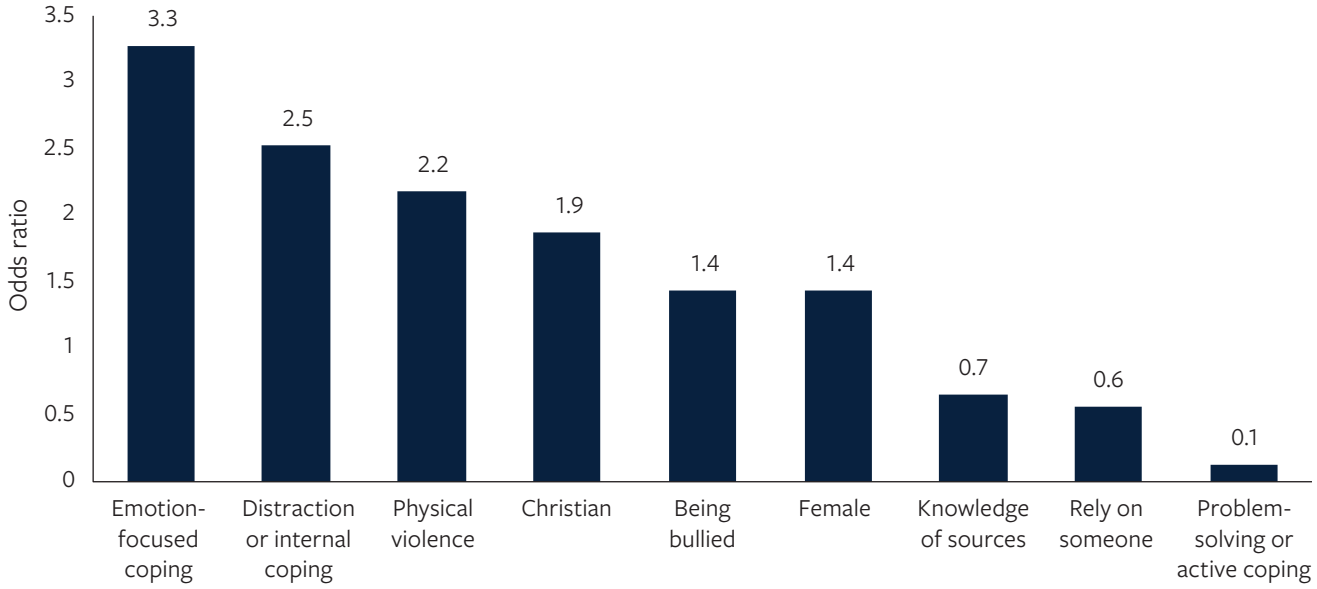


Figure 22 Factors that predict the likelihood of being at risk of depression (WHO-5)



7 Findings, challenges and recommendations

In line with much of the existing literature, our findings from both the qualitative and quantitative research components show that adolescents' mental health and psychosocial well-being is driven by a range of factors, including: being self-confident or having self-efficacy; having a supportive family environment and/or living with both parents; having close friends, connections or role models; and being able to engage in leisure activities. The survey found that relying on other people reduces the risk of mental ill-health by a factor of 0.4 and risk of depression by a factor of 0.6 after controlling for other factors. Knowledge of sources of mental health support reduces the risk of depression by a factor of 0.7 after controlling for other factors.

Risk factors for mental ill-health are often the mirror image of these, with the lack of a supportive family environment and poor social relationships beyond the household increasing the likelihood of mental ill-health. Technology was also identified as a key driver of mental ill-health and psychosocial distress: frequent internet access increased the likelihood of mental ill-health by a factor of 1.7 in the quantitative survey after controlling for other factors. Respondents also reported bullying as a driver of mental ill-health – with the survey finding that those who are bullied are 1.4 times more likely to be at risk of depression after controlling for other factors. In the qualitative research, pressures to perform well academically – placed on adolescents by themselves, their parents and teachers, as well as the wider community – were also widely identified as a driver of mental ill-health, sometimes leading to suicidal ideation and attempts.[36]

Our survey also found high levels of knowledge among adolescents about what constitutes mental ill-health (with variations by age and by school) and of sources of information about mental illness. However, adolescents in the survey were less confident as to where they could seek out information, with the internet emerging as the most popular place among those who did know where to look. When asked, most adolescents in the qualitative research knew about the existence of mental or psychiatric hospitals and some had heard of other mental health services, including the telephone hotline and those provided by schools (psychosocial counselling units, mailbox, etc.). In terms of mental health-seeking behaviour, while nearly two-thirds (64%) of respondents in the survey reported that they would seek the services of a professional counsellor if they had psychological problems (and generally had positive attitudes towards seeking professional help), this was less evident in the qualitative research. Most adolescents reported (and this was confirmed also by parents) that they would probably not seek mental health services. Reasons included fear of embarrassment, stigma, lack of awareness/information, lack of confidence, and a sense that their problems were not serious enough to warrant such attention.

Given that adolescents largely do not seek out formal mental health services and support, coping strategies are key for dealing with mental ill-health. Respondents in the qualitative research reported resorting to a range of coping strategies, including spending time with and speaking to friends, family members and teachers, watching TV, playing

36 Academic pressure was not included in our baseline survey, but this hypothesis can be further tested in the endline survey.

video games (often on their phone) and listening to music. Negative coping strategies included isolating themselves, self-harming, and engaging in erratic and sometimes violent behaviour. The survey found that resorting to emotion-focused coping mechanisms increased by 18 times the likelihood of being at high risk of mental ill-health, while conversely problem-solving or active coping reduced the likelihood of being at risk by a factor of 0.3. In terms of risk of depression, the survey found that distraction or internal coping as well as emotion-focused coping are more common among respondents with risk of depression (increasing the likelihood by a factor of 2.5 and 3.3 respectively). By contrast, the likelihood of depression reduces by a factor of 0.1 when respondents use problem-solving or active coping mechanisms. A majority of respondents in both the survey and the qualitative research either owned a smartphone or had access to one. Respondents have less access to computers, but most are still able to access the internet. In the qualitative research, respondents mentioned a range of positive aspects of technology for mental health, which can be broadly classified into: (1) technology playing a role in relieving stress and allowing adolescents to interact, to feel less lonely and 'talk' to more people; and (2) technology providing access to information, services and support for studies.

Although the qualitative research suggested no difference in access to information online by gender, age or location, the survey found that older children reported that they have more frequently looked than younger children. Differences across sites also emerged in the survey – over 30% of respondents in some schools reported never having looked for information online, while in others, as few as 17% reported never looking for information online. This difference needs to be considered when designing the intervention in the next phase of the project.

The survey also found that respondents with more access to technology (digital devices and the internet) appear to have more emotional literacy and are more knowledgeable about sources of information on mental illness. All of this points to the important role that technology can play in addressing mental ill-health. However, some negative aspects of technology were also mentioned: respondents in the qualitative research expressed concerns that technology distracted students from their school work and studies; that they were becoming addicted and living too much in a virtual world; that the quality of information provided online was not monitored and could be misleading and/or counterproductive; that there were some concerns about security and potential for online violence; and that face-to-face interaction also remained important – all aspects that the intervention in the next phase of the project should take into account. As mentioned earlier, the survey found that frequent access to the internet increases the likelihood of being at risk of mental ill-health by a factor of 1.7 after controlling for other factors.

7.1 Recommendations

Based on our findings and drawing on the secondary literature, we make the following recommendations focusing on adolescents themselves, their families/households, schools, the wider community, service providers and local authorities. We also highlight the role of technology given the focus of our programme of work. Many of these recommendations are interconnected; while there are also recommendations to be made related to the policy environment, given that an extensive political economy analysis was not carried out (and is not the focus of this programme of work), we do not make recommendations at that level. Many of the recommendations will be (and have already been) picked up when designing the next phases of this programme of work. Many

of the recommendations listed below include suggestions of how, and therefore also who, could take this up, and often this relates to those working in the education sector and especially schools and teachers. Other sets of recommendations are specific to certain stakeholders (such as mental health service providers, local authorities). More generally, many of these recommendations could be considered by government and development partners including donors and NGOs.

Individual adolescent level

- Raise awareness among adolescents of the drivers and symptoms of mental ill-health. This can be done through sessions organised at schools but also through clubs and other extracurricular activities.
- Provide information to adolescents on mental health services available to them, including face-to-face and online services. Designated teachers could also provide this information in schools.
- Raise awareness among adolescents of stigma and discrimination, which continues to be a driver of mental ill-health and a constraint to accessing support services. This would include discussion around what drives mental ill-health, its effects and symptoms. This could be organised via schools as well as clubs and extracurricular activities.
- Build the capacity of adolescents on life-skill related themes. These would include building self-confidence, self-esteem and agency, and discussions around puberty, body image and romantic relationships, which have been identified as contributors to adolescent mental distress.
- Build peer support and social bonds among adolescents. Given that friendship and connectedness emerged as critical to support well-being, it is critical to encourage these elements – for example, by developing support groups, clubs or activities with which adolescents can engage.
- Peer counselling could be considered – for example, engaging and training certain adolescents to provide counselling and support to their peers, acting in a leadership or mentorship role.

Household and family level

- Encourage more dialogue and communication between parents and children. This could be facilitated through:
  - providing parenting skills to parents (e.g. via schools)
  - engaging parents more in school-related platforms (e.g. parent and teacher associations)
  - encouraging more parent and child joint activities (e.g. sports, entertainment), which could be done through schools as well as extracurricular activities
  - using role models/examples of families where parents have been supportive (e.g. have allowed their children leisure time, have had constructive dialogues with them) with positive effects on their children.

- Raise awareness among parents (and other family members) of the drivers and symptoms of mental ill-health. This would include:
  - discussions of norms that drive mental ill-health among adolescents, which others may be (inadvertently) promoting
  - providing information about the services that exist and to which they can refer their children.

School, school environment, teachers and headteachers

- Build the capacity of teachers to provide mental health support to students. Teachers are well placed to observe mental health issues among their students, and they can also be the first port of call. Given this, there should be

further training to raise teachers' awareness further, especially of the most common mental health disorders:
  - teachers should be equipped with knowledge of other services to which they can refer students
  - teachers should be trained to recognise and counter stigma and discrimination surrounding mental ill-health.

- Assign specific teachers and/or professional counsellors to address student mental health issues. Considerations of gender and age issues would be important (given that some adolescent girls mentioned that female teachers were more supportive).
- Review and improve existing school-based approaches (e.g. mailboxes, psychological counselling units) for addressing mental distress among adolescents. Where they exist, and working with adolescents to obtain their inputs, these could be adapted to be more effective including (for example) considerations of how they are run, by whom, and how to maintain and address confidentiality and potential backlash.
- Provide more school-based counselling services/units (with experts). For those schools that do not have them, efforts should be made to introduce them, although taking time to learn from the experience of schools where they may have worked better than in others.
- Link with mental health service providers beyond schools. This can include regular invitations to speak to adolescents about mental ill-health, the services available to them and where they can be accessed.
- Advocate for more resources to be earmarked for school-based mental health support. This can be done through raising awareness among provincial educational authorities of the need to appropriately resource mental health services in schools.
- Review workload and academic pressures placed on students – one of the key drivers of mental distress among adolescents. Schools should review workloads, homework, school hours, etc. and ensure that other non-academic subjects (e.g. sports, games) are given sufficient time in the curriculum.

Community level

- Raise awareness at community level of the drivers of mental ill-health among adolescents and adults – for instance, through local associations, advocacy campaigns, media (TV and radio), etc.
- Identify community-based associations or organisations to support adolescent mental health, such as youth unions or women's unions.

Mental health service providers

- Build capacity of mental health service providers to enable them to:
  - better recognise mental ill-health symptoms, including the most common mental health disorders
  - provide age- and gender-appropriate targeted services.
- Advocate to increase the number and capacity of social workers and/or community-based mental health providers, to extend services beyond urban areas and make them more accessible to rural people.
- Raise awareness among mental health service providers of the drivers of mental ill-health (including gendered norms) to enable them to better understand the symptoms and consequences.
- Provide information and raise awareness among mental health service providers of other services to which they could refer adolescents – including both mental health-targeted services (e.g. telephone hotlines), and services promoting adolescent well-being (e.g. youth or sports clubs).

- Link mental health service providers to schools and other community-based organisations (e.g. youth unions). This could allow for easier referral but also enable them to raise awareness about mental health within schools, provide materials, give talks, etc.

Local authorities

- Improve coordination among those providing mental health services for adolescents. This would include coordinating across: different ministries (MoLISA, the Ministry of Education and MoH); NGOs who are working or could play a role in mental health service provision (e.g. youth unions, CBOs, international NGOs); within and between provinces. Coordination mechanisms might include:
  - a provincial cross-ministerial and NGO coordinating group that meets regularly, with a rotating chair
  - a district-level coordinating group that feeds back to the provincial group, again with a rotating chair.

- Raise awareness among local authority staff of the prevalence and drivers of mental ill-health among adolescents. This should emphasise the most common mental disorders, which have tended to be neglected as services have focused on more severe disorders such as epilepsy and schizophrenia. Drivers of mental ill-health that are related to gendered norms should be included in awareness-raising programmes.
- Advocate for an increase in resources for mental health generally and for the most common mental disorders, at the level of staffing (including psychologists and counsellors) but also resources for mental health hospitals and services beyond the cities, including community-based mental health services.

Radio, TV, (smart)phones and computers

- Increase the use of technology to promote messages related to mental health. TV and radio were mentioned as being key for dissemination, given that all households have them; among other things, study respondents felt that more talk shows that discuss adolescent mental health would be important, and could be promoted by local authorities as well as schools.
- Promote digital approaches to address mental ill-health, as the anonymity they afford could enable adolescents to access mental health-related information and resources more readily. This might include online discussion groups (e.g. via Zalo, Skype) and access to online information and materials.
- Monitor online material and sites to ensure that accurate information is provided and that adolescents are not exposed to dangerous materials or at risk of online abuse.
- Adults (parents and teachers) need to engage with adolescents so that they do not become addicted to being online, to playing games, etc.
- Ensure blended (digital and face-to-face) approaches to supporting mental health and psychosocial well-being. While digital can be more confidential, face-to-face approaches also have value, so a combination of the two would be optimal.

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