NCSS
National Council of Social Service

30 ANNIVERSARY

Understanding the Quality of Life of Children and Youth

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NCSS President's Message

Ms Anita Fam, NCSS President

One of my most memorable experiences in the social service sector has been my stint as vice-president of AWWA. The AWWA TEACH ME service, now known as the AWWA Community Integration Service, comprises a mix of therapy, casework, and other services to enable children with disabilities in mainstream schools to develop their full potential and to promote integration with their peers without disabilities. Working in this area showed me that all children are equally precious, regardless of ability, health, background, and services accessed. All the children at AWWA have aspirations, lived experiences, and the same needs to feel safe, happy and loved. While we may see different children coming through our doors due to various challenging life circumstances, it is important not to define them by their experiences. It follows then that our efforts to improve their well-being must look beyond their presenting challenges.

I am singularly pleased to present the NCSS Quality of Life Study on Children and Youth, as it is a significant milestone in the quest to bring all of us one step closer to that vision. This study was a massive undertaking by NCSS which involved interviewing more than 10,000 children and youth, including those with special educational needs, mental health conditions, and chronic illnesses, to gain a holistic understanding of the determinants of the quality of life of young people. This study builds on earlier work by NCSS in 2015 on the Quality of Life of Vulnerable Adults study, and extends our upstream knowledge of vulnerable groups, to potentially inform early interventions in the earlier years.

With this report, I hope that we can establish the needs of children and youth with greater clarity and objectivity, and therefore address these needs in a more targeted manner. I recognise that the journey ahead towards improving the quality of life of our children and youths will require concerted coordination among stakeholders in the people, public and private sectors. I wish to thank everyone involved in the hard work of bringing up, guiding and counselling children in one way or another. I am also grateful to our team of advisors for sharing their expertise, as well as the many children and youth and their caregivers who have contributed to this study.

It is my sincere hope that the insights offered by this report will inspire parents, caregivers, educators, youth workers, volunteers, and other social service professionals to consider how each of us can contribute towards enabling all of our children and youth to be empowered to live with dignity in a caring and inclusive society.

NCSS Chief Executive's Foreword

Ms Tan Li San, NCSS Chief Executive Officer

Children are shaped by the environment they live in and their interactions with those around them. The Quality of Life approach allows us to better understand how circumstances present in their lives impact their well-being. As a mother myself, I have witnessed first-hand the multitude of factors contribute that shape a child's growth and development.

The NCSS Quality of Life Study on Children and Youths adopts an evidence-based, holistic view to understand what drives the well-being and quality of life of different groups of children and youths in Singapore. In order to understand the aspirations, needs and stressors that children and youths and their caregivers face, the study team adopted the KIDSCREEN Quality of Life framework, and conducted a quantitative survey, along with focus group discussions.

The insights from this study may be used to guide social service providers, funders, and other stakeholders that work within the social service landscape to better adapt our focus, programmes, and services to empower children and youths towards realising their fullest potential. Among other applications, the insights have contributed towards national initiatives such as the Enabling Masterplan 3 (2017—2021), which had charted the development of programmes and services in the disability sector and aimed to improve the quality of life of individuals with disabilities, support caregivers, and to build an inclusive society. The findings from this study will also inform the implementation of the Social Service Sector Strategic Thrusts, a five-year strategic roadmap that was developed to ensure that the social service sector remains relevant and responsive to the evolving needs of the population.

I am grateful to our team of advisors for sharing their expertise from their relevant fields of research, statistics, psychology, social work, disability and mental health. I would also like to thank all respondents for sharing their opinions and experiences by participating in this study.

Practitioner's Perspective

Professor Ho Lai Yun *JP, BBM(L)*

Emeritus Consultant, Singapore General Hospital
Duke-NUS Medical School, Singapore
Yong Loo Lin School of Medicine, National University of Singapore

Singapore has made remarkable achievements in improving child health in the last 57 years since it became a sovereign nation. In UNICEF's annual reports on "The State of the World's Children", Singapore has been among the top countries for the lowest infant mortality rates and under-5 mortality rates in the world. Childhood mortality rates in Singapore have fallen to very low levels. Other population-based indices must be used to enable proper evaluation of "how we are doing" as a community in the provision of holistic care to our children. A number of "new morbidities" have been identified to pose major challenges to child health in the next few decades. They are: chronic medical illnesses, developmental disabilities, learning problems, injuries and neglect, behavioural disturbances and disorders, unhealthy lifestyles, and social and emotional disorders.

The basic needs of young people are universal: a healthy start in life, an ongoing nurturing relationship with positive role models, safe and supportive communities to learn and to grow, developmentally appropriate experiences tailored to individual differences, a marketable skill through effective education and a stake in the well-being of their communities. Looking after the developmental health of the children will ensure the nation's wealth in the future. A concerted national effort is required to promote the children's capacity to achieve their potentials, and to avoid poor outcomes in health, education, behaviour and crime, and their huge costs to society.

Singapore became a signatory to the United Nations Convention on the Rights of the Child (UNCRC) in 1995. In 2015, early childhood development became part of the Sustainable Development Goals (SDGs). These global goals include a commitment to ensure that, by the year 2030, all children will have equitable access to quality early childhood development and learning opportunities.

Between 2017–2019, the National Council of Social Service conducted a study on the Quality of Life (QOL) of Children and Youths in Singapore, including those with special developmental needs. This is an important milestone in understanding their well-being and the environment in which they grow up. We are favourably benchmarked against the international standards.

COVID-19 is the first truly global crisis we have seen in our lifetime. The pandemic affects every person — children most of all; and its social, economic and health impacts will reverberate for years to come. But, there are opportunities unveiled. It has unlocked attention on global youth mental health. Climate change is the other planetary crisis that will not wait. Bridging the digital divide can help bring quality education for all. We must reimagine strategies to ensure our children are well protected and their basic needs are being met with. Future QOL studies would be one of the ways to reflect the effectiveness of the measures adopted by each nation.

Executive Summary

The Study on Quality of Life (QOL) of Children and Youth by the National Council of Social Service (NCSS) is the first nationwide study in Singapore that adopts a common framework to investigate the well-being of children and youth, both with and without health conditions (i.e., chronic illnesses, mental health conditions, or developmental or special educational needs). From 2018 – 2019, over 10,000 surveys were administered across households, schools, hospitals, and social service agencies (SSAs). The summary of key findings are:

Overall Findings

1. Overall, quality of life of children and youths (under 18 years) in Singapore was comparable to their peers in other countries.
2. Factors that were associated with higher overall quality of life included: (i) absence of health/developmental conditions, (ii) younger age, (iii) higher household income per capita, (iv) not receiving income assistance, (v) more time spent with father, and (vi) having adult supervision from the immediate or extended family.

Among Children and Youth without Health/ Developmental Conditions (79% of full sample)

3. Their highest quality of life scores were in the domains of Social Acceptance and Moods and Emotions.
4. While the majority of children and youth without health/developmental conditions have a good quality of life, about 1 in 20 of could do with more support.
5. For children and youth without conditions, positive family functioning and psychological well-being are the most important factors for their quality of life.

Among Children and Youth with Health/ Developmental Conditions (21% of full sample)

6. They had lower quality of life scores than their peers without health/ developmental conditions.
7. They faced challenges in the areas of independence and social inclusion due to their condition.
8. For children and youth with conditions, positive psychological well-being and social inclusion are the most important factors for their quality of life.

Feedback on Services

9. Generally, parents / caregivers found the services being accessed by their child/ youth to be useful. Government-Funded Early Intervention (EI) Centres and Special Education Schools (SPED) were well-received among parents and caregivers caring for children and youths with developmental / special educational needs.
10. 1 in 3 (36%) children and youths with health / developmental conditions expressed the need for additional services.
11. Parents and caregivers would prioritise resources on physical and psychological well-being, and academic education over other factors like peer and parent relationships, or financial resources for their child / youth.

Together with earlier studies by NCSS to understand the well-being of other vulnerable groups such as adults with disabilities, adults with mental health conditions; seniors, and caregivers, this study on the Quality of Life of Children and Youth in Singapore serves to support a person-centred and ecosystem approach towards service, resource, and strategy planning in the social service sector.

An Overview of Children and Youth in Singapore

As of 2021, there were a total of

739,054

children and youths
aged 17 years and below.

This comprises about **one in five** of the resident population in Singapore.[1]

Children and youths in Singapore generally perform well compared to their peers internationally, especially in the area of academic achievement.[2] They also benefit from good healthcare and nutritional provision.[3]

Since 2000, the infant mortality rate in Singapore has been stable and remains below 3.0 infant deaths per thousand live births. This compares well internationally with the infant mortality rate in other developed economies.[4]

In 2021, Singapore was ranked as the best country in the world for children and youth to grow up in, based on indicators such as childhood mortality rate, out-of-school children and youth, population displaced by conflict, and child homicide rate.[5]

Children and youths in Singapore, like others around the world, experience unique needs, potential stressors and protective factors that can impact their overall health and well-being. This will be explained in the following sections.

Health and Developmental Conditions

Chronic Illnesses

Examples of major chronic illnesses that have been reported among children and youths in Singapore include immunological disorders, renal disorders, blood disorders,[6] Type 1 diabetes,[7] Type 2 diabetes[8] and skin diseases such as dermatitis.[9]

In 2016, 152 childhood deaths in Singapore were directly attributable to chronic illness conditions.[10]

1 Singapore Department of Statistics. (2021). *Singapore residents by age group, ethnic group and sex, End June.*
2 OECD. (2019). *PISA Country-Specific Overviews: Singapore*
3 Sugianto, R. et al. (2022). Dietary patterns of 5-year-old children and their correlates: Findings from a multi-ethnic Asian cohort. The British Journal of Nutrition. (Note: *All hyperlinks in this section can be accessed via the online version of this report, available on NCSS' website.*)
4 Singapore Department of Statistics. (2019). *Trends in infant mortality rate and related indicators. Statistics Singapore Newsletter Issue 1.*
5 Save the Children (2021). Global Childhood Report 2021
6 Club Rainbow. (2020). *Major illnesses affecting rainbow children.*
7 Lee, W.W.R. et al. (1998). *The incidence of IDDM in Singapore children.*
8 Lee, W.R. (2000). The changing demography of diabetes mellitus in Singapore. *Diabetes Research and Clinical Practice.*
9 Epidemiology & Disease Control Division, Ministry of Health, Singapore; Institute for Health Metrics and Evaluation (2019). *The Burden of Disease in Singapore, 1990–2017: An overview of the global burden of disease study 2017 results.*
10 Ministry of Social and Family Development, Singapore. (2017). *Singapore's Fourth and Fifth Periodic Report to the United Nations Convention on the Rights of the Child.*

Health and Developmental Conditions

Developmental Issues/Needs, Special Educational Needs and Disabilities

For young children aged below 7 years:

Young children aged below **7 years** may be experiencing developmental issues/needs if they show a level of development that is much **lower** than their peers.[11]

Examples of developmental issues diagnosed by KK Women's and Children's Hospital (KKH) and the National University Hospital (NUH) include **speech and language delays, learning difficulties and autism spectrum disorders.**[12]

Other examples of developmental issues include: global developmental delay, sensory impairment, cerebral palsy, difficulties with motor skills, Down Syndrome, disruptive behaviours, emotional problems, intellectual disability and attention-deficit/hyperactivity issues.[13]

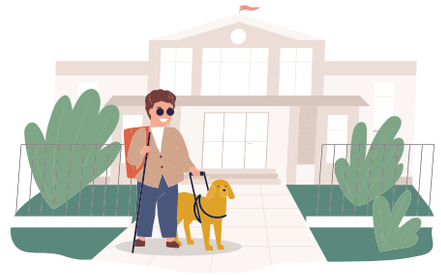
Local estimates of young children diagnosed **with developmental issues/needs** range from **1.4%** (for those aged below 4 years)[14] **to 3.2%** (for those aged below 7 years).[15]

Early intervention offers specialised support for young children who may be experiencing developmental needs[11] and aims to increase their developmental growth potential.[16] Approximately **3%** of young children below 7 years are referred to the **Early Intervention Programme for Infants and Children (EIPIC)** each year.[17]

[11] Ministry of Education, Singapore (2022). https://www.moe.gov.sg/special-educational-needs/understand
[12] Yeo, S. (2021, September 13). More young kids diagnosed with developmental delays in Singapore. *The Straits Times*.
[13] Ministry of Social and Family Development and Early Childhood Development Agency. (2022). *Parents' Guide for Early Intervention.*
[14] Ministry of Social and Family Development, Singapore. (2017). *Media release on statistics on children with special needs and intellectual disabilities.*
[15] Ministry of Social and Family Development, Singapore. (2011). *Definition of disability and prevalence rate of persons with disabilities in Singapore.*
[16] SG Enable. (2022). *Enabling guide: Early intervention programme for infants & children (EIPIC) and development support plus (DS-Plus).*
[17] Choo, C. (2019, January 29). More affordable, targeted early intervention programmes for children with developmental needs. *Today Online.*

For school-going children aged 7 years and above:

- Children are said to have special educational needs when **they receive an official diagnosis of a disability**, require different and/or additional resources beyond what is conventionally available, and show more difficulty in learning, or difficulty using educational facilities, or other impairment in social, academic, physical or sensory functioning.[11]



- In 2019, it was reported that there are about **32,000 students** of school-going age in Singapore with Special Educational Needs (SEN),[18] with about 80% in mainstream schools and about 20% in Special Education (SPED) schools. SPED schools offer more intensive and specialised support to children who may have moderate-to-severe SEN.[11]

- In 2018, **2.1% of the student population** were reported to have sensory impairment, physical impairment, autism spectrum disorder or intellectual disability.[19]

- Children with intellectual or physical disabilities may also **face emotional or behavioural issues**, which could negatively impact their personal functioning (e.g. academic achievement) and social functioning (e.g. peer and family relationships).[20,21,22]

[18] Choo, C. (2019, September 30). The big read: Where kids with and without special needs learn together – and it's not in Singapore. *Channel NewsAsia.*
[19] Ministry of Education, Singapore (2015). This is based on the number of reported cases of students with sensory impairment, physical impairment, autism spectrum disorder and intellectual disability.
[20] Ogundele, M.O. (2018). *Behavioural and emotional disorders in childhood: A brief overview for paediatricians.*
[21] Dekker, M.C., Koot, H.M., van der Ende, J., & Verhulst, F.C. (2002). *Emotional and behavioural problems in children and adolescents with and without intellectual disability.*
[22] Dababneh, K.A.H. (2012). *The socio-emotional behavioural problems of children with cerebral palsy according to their parents' perspectives.*

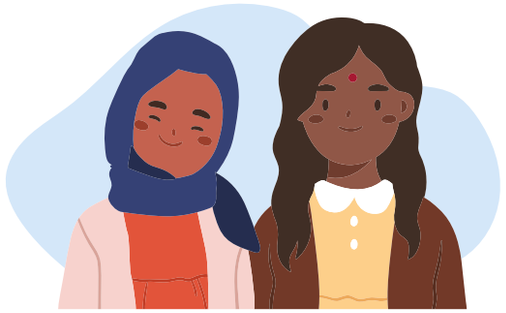
Mental and Emotional Well-Being

- About **12.5% of school-aged children** aged 6 to 12 years in Singapore have emotional issues (e.g. anxiety, depression) and/or behavioural issues (e.g. delinquent behaviours, aggressive behaviours).[23]

- Mental health conditions were the most commonly associated condition for ill health among **children and youths aged 10–19 years**, based on the 2017 report on the burden of disease in Singapore.[9]

Peer Relations and Support

- Local studies and reports suggest that peers are an important source of **social and emotional support** to children and youths.[24,25,26,27]



- In the 2018 Programme for International Student Assessment (PISA), it was reported that over **90% of 15-year-old students** in Singapore had anti-bullying attitudes. 26% of reported to have experienced peer bullying at least a few times a month[28].

[23] Woo, B.S.C. et al. (2007). *Emotional and behavioural problems in Singaporean children based on parent, teacher and child reports.*
[24] Singapore's Children Society. (2008). *Children's social and emotional well-being in Singapore.*
[25] Cheung, H. S., & Sim, T. N. (2017). *Social support from parents and friends for Chinese adolescents in Singapore.*
[26] Yeo, L.S., & Tan, S.-L. (2018). *Educational inclusion in Singapore for children with physical disabilities.*
[27] Chew, J., Carpenter, J., & Haase, A.M (2019). *Living with epilepsy in adolescence – A qualitative study of young people's experiences in Singapore: Peer socialisation, autonomy, and self-esteem.*
[28] Yuen, S. (2017, October 10). Singapore has third highest rate of bullying globally: Study. *The Straits Times.*

- As of 2021, local initiatives to **build positive peer relationships and minimise bullying incidents** in schools include Character and Citizenship Education to inculcate kindness and empathy in students, training teachers on positive classroom culture, investigating bullying and establishing clear school rules and disciplinary frameworks.[29]

- Furthermore, schools and Institutes of Higher Learning in Singapore are **establishing a peer support structure,** in which appointed student peer support leaders are supported by school staff to look out for their fellow students and peers, listen actively to them, and encourage positive coping strategies such as seeking help from teachers and counsellors.[30]

- **Peer support** is also important to cultivate for children and youths with health/developmental conditions. In 2018, a local study found that children with physical disabilities reported experiencing poorer peer relations than their typically developing peers[31]. Similarly, the teachers of children with physical disabilities tended to rate these students as having more peer problems than the teachers of typically developing children[31].

[29] Ministry of Education, Singapore. (2021). Parliamentary reply: Anti-bullying and anti-cyberbullying policies in school.
[30] Ministry of Education, Singapore. (2021). Parliamentary reply: Peer support network programmes.
[31] Chng, G.S., Li, D., Chu, C.M., Ong, T., & Lim, D. (2018). Family Profiles of Maltreated Children in Singapore: A Latent Class Analysis. *Child Abuse & Neglect, 79, 465-275.*

Family and Parent Relations

- **Families offer an important source of support** to children and youths in Singapore,[31,32] and Singapore residents generally perceive their families as being close-knit.[33]

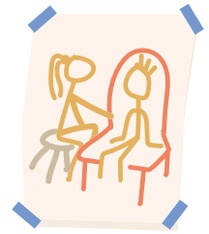
- It was found that children whose parents divorced **may experience poorer longer-term outcomes** compared to children whose parents remain married. In 2020, a study by the Ministry of Social and Family Development reported that children whose parents divorced were: less likely to get married, more likely to get divorced if married, less likely to obtain a university degree and tended to earn less when compared to children whose parents remained married.[34]

- 2022 has been dedicated as the Year of Celebrating SG Families (YCF). This is a **whole-of-society movement** that aims to celebrate families and nurture a family-friendly ecosystem.[35] It includes celebratory events like the launch of the FamilyTrees initiative to celebrate family bonds by planting a tree for the birth of new babies, National Family Week to reiterate the importance of family bonding and the launch of resources on family values.

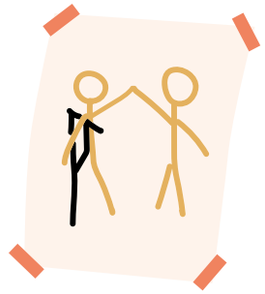
[32] Ho, L.Y. (2009). *Raising Children in Singapore: A Paediatrician's Perspective.*
[33] Ministry of Social and Family Development, Singapore. (2022). Research and Data Series. Statistics and Data Tables: Strengthening Families.
[34] Ministry of Social and Family Development, Singapore. (2020). *Intergenerational effects of divorce on children in Singapore.*
[35] Ministry of Social and Family Development. (2022). 2022 Dedicated as the Year of Celebrating SG Families.

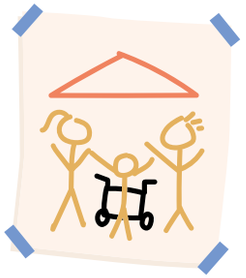
Moving Forward

- It is important to understand how local trends and statistics reflect the needs, contexts and overall well-being of different groups of children and youth as they grow up in Singapore. It is also important to consider both children and youth without conditions and those who experience varying degrees of health/developmental conditions.



- A better understanding of the needs and well-being of children and youths in Singapore will allow policy-makers, social service agencies/professionals and all other stakeholders who work with children and youths to conceptualise effective solutions and to continue to tailor/targeted resources, services and/or interventions to meet their evolving needs.





Introduction

Regardless of health conditions, disabilities or special educational needs, all children are born unique, with different physiques, moods and inclinations about what they like and dislike. As they grow up, their personhood is shaped by the environment that they live in and the interactions that they encounter through their family, school, community and the wider society. Thus, to better understand the factors that influence well-being of children and youth, it is important to holistically study their needs, lived experiences and interactions across the ecosystem.

In line with this objective, NCSS conducted the Quality of Life Study on Children and Youth (under 18 years old) in Singapore in 2018. This is the first nationwide study in Singapore that adopts a shared framework to investigate the needs and well-being of children and youths across diverse health and socioeconomic strata, and across the entire span of childhood. In doing so, the study offers an evidence-based and holistic understanding of the aspirations, needs, stressors and different aspects of life deemed important to the well-being of all children and youth in Singapore.

Through this research, it is hoped that learnings can be translated into initiatives and solutions to enable all children and youth to fulfil their potential, and for them to grow into a generation of young adults who show healthy development not just physically, but also mentally, emotionally and socially. It is also hoped that the results of this study would enable NCSS and other social service stakeholders to assess the impact of existing and future initiatives and identify trends for future planning.

About NCSS' Quality of Life Studies

NCSS supports a person-centered and ecosystem approach towards helping individuals achieve quality of life. This is also the value which underlies the Social Service Sector Strategic Thrusts (2022–2026), a five-year roadmap for the social service sector.[36]

Person-Centred

A *person-centered* approach is based on the belief that an individual has the capacity to understand, articulate and work through problems, and make decisions on how to overcome them. Furthermore, when considering the aspirations of the individual, a person-centred approach regards him/her as a person first, without making any assumptions about their disadvantage or what he/she needs.

Ecosystem

Addressing individuals in a holistic manner means viewing them as being connected to different contexts that influences and impacts every aspect of their lives. In other words, individuals are part of an *ecosystem* which comprises of their caregivers and family, the community and the society.[42] Thus, to holistically understand the needs of children and youth, their interactions with their ecosystem must be taken into account, which would enable the formulation of more targeted solutions.

[36] National Council of Social Service (2022). *4ST Roadmap for the Social Service Sector (2022-2026).* (Note: All hyperlinks in this section can be accessed via the online version of this report, available on NCSS' website.)

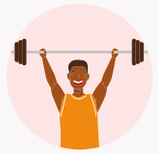
Quality of Life

Well-being is a multi-faceted concept, and the quality of life of an individual can be optimised by meeting a core set of diverse, essential needs that are unique to this individual. Research has shown that the assessment of quality of life is subjective [37,38], and that different individuals perceive their needs and prioritise them in different ways.

The World Health Organisation defines Quality of Life as:[39]

"An individual's perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns".

For children and youth, a prominent measure of Quality of Life is the KIDSCREEN framework.[40] KIDSCREEN identifies a core set of 8 domains that covers the physical, emotional, social and behavioural aspects of the quality of life of children and youth,[41,42] namely:



Physical Well-Being

Psychological Well-Being

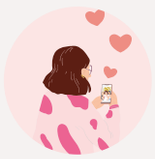
Moods and Emotions

Autonomy and Parent Relation

Financial Resources

Social Relations and Peers

School Environment



Social Acceptance

Through ensuring good quality of life in these domains of life, our vision as aligned to the Social Service Sector Strategic Thrusts (2022 – 2026) is for every child and youth to be empowered to live with dignity in a caring and inclusive society.

[37] Blatt, B. (1987). *The conquest of mental retardation.*

[38] Taylor, S & Racino, A. (1991). *Community living: Lessons for today.*

[39] World Health Organisation. (1993). *Study Protocol for the World Health Organisation Project to Develop a Quality of Life Assessment Instrument (WHOQOL).*

[40] The KIDSCREEN framework was first developed in the European Union. Since then, it has been validated cross-culturally and is used in many countries in Asia, Africa, Australia, and North and South America.

[41] Ravens-Sieberer, U. et al. (2014). *The European KIDSCREEN approach to measure quality of life and well-being. in children: Development, current application, and future advances.*

[42] More information on the Quality of Life (QOL) domains for children and youths will be presented later in the report.

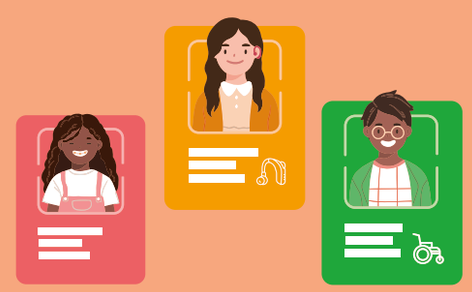
NCSS Quality of Life Study on Children and Youth in Singapore

Research Objectives

The Quality of Life Study for Children and Youth aims to:

1

Understand the profiles and gaps of different groups of children and youths in Singapore, including those with health/developmental conditions;



2

Understand factors to improve the Quality of Life of children and youths in Singapore, including caregiver and family relationships;

3

Provide service planning and development insights to better support children and youths;

4

Guide strategies, focus areas and resource planning in the children and youth sector

Method

This study was carried out in two stages, comprising a quantitative survey and qualitative focus group discussions.

Quantitative Survey

Data Collection

Participants for the quantitative survey were obtained through **random sampling** of children and youths (under 18 years old) without health or developmental conditions from households through the Department of Statistics,[43] and through **convenience sampling** of children and youths with chronic illnesses (CI), mental health conditions (MHC), or developmental needs/special educational needs (DN/SEN) from hospitals, social service programmes, and schools. Due to the convenience sampling approach, the findings for children and youths with health/developmental conditions may not be fully generalisable.

Sampling Frame for Study

Without Health/ Developmental Conditions

Random selection was used to obtain a sample of children and youth without health or developmental condition for the study.

With Health/Developmental Conditions

To ensure that children and youths with health and/or developmental conditions were adequately represented in the sample, additional convenience sampling was employed from households, hospitals, SSAs and special needs schools.

Without Health/ Developmental Conditions

7921

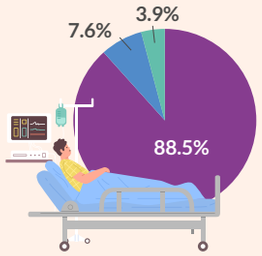
Early Childhood (1-6 years)
51.9%

Pre-Teenager (7-12 years)
29.8%

Teenager (13-18 years)
18.3%

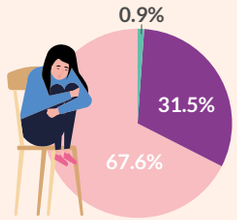
With Chronic Illnesses (CI)

410



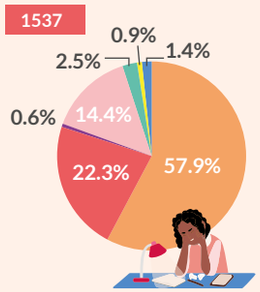
With Mental Health Conditions (MHC)

108



With Developmental Needs /Special Educational Needs (DN/SEN)

1537



Legend:

- Households
- Club Rainbow
- Social Service Agencies (SSA)
- KK Women's and Children's Hospital Clinics
- Institute of Mental Health, (Child Guidance Clinic)
- Special Education (SPED) Schools
- Government Funded Early Intervention (EI) Centres

Note. We also obtained very small samples with specific needs, such as those with incarcerated parent(s). These samples were not used in the current analyses.

[43] To manage for participation bias over the course of data collection, soft quotas were used for age, gender, ethnicity, residential area and housing type. Further statistical techniques were also used during analysis to weigh the sample according to the 2020 Singapore Census population norms for age, ethnicity and gender.

Subtypes of Respondents' Conditions

Category	Conditions Covered in the Sample
Chronic Illnesses (CI)	Diabetes, Cancer, Respiratory Disorders (e.g. Asthma, Lung Diseases), Neurological Disorders (e.g. Epilepsy, Convulsion, Parkinson's Disease)[44]
Mental Health Conditions (MHC)	Depression (Major Depressive Disorder/Dysthymia[45]), Mood Disorders (Generalised Anxiety Disorder, Panic Disorder), Obsessive-Compulsive Disorder, Post Traumatic Stress Disorder
Developmental Needs /Special Educational Needs (DN/SEN)	Specific Learning Difficulties (e.g. Dyslexia, Dyscalculia, Attention-Deficit Hyperactivity Disorder), Physical Disabilities, Sensory Disabilities, Autism Spectrum Disorder, Intellectual Disabilities, Global Developmental Delay

The survey was administered face-to-face, between a survey administrator and a child/proxy respondent. Caregivers or familiar adults[46] completed most sections of the survey as proxy respondents. However, children and youths aged 7 years and above were encouraged to respond by themselves on their quality of life. The final sample comprised 10,042 responses.[47] Details of the sample can be found in Annex A.

Qualitative Focus Group Discussions

To gain deeper insights into the questionnaire findings, NCSS met with 18 youth and 44 caregivers of children and youth with health/developmental conditions or from households in need. Participation was voluntary and anonymous. In the sessions, participants discussed their or their care-recipients' experiences with different quality of life (QOL) domains, factors that would enable for a more positive QOL, and suggestions on how to improve their experience in specific QOL domains. Findings were analysed through thematic coding and select quotes are included in this report, which reflect salient sentiments that emerged from the discussions.

[44] Other chronic illnesses reported by children and youths in this study include: leukaemia, brain tumour/other malignant cancers (e.g. lymphoma, neuroblastoma), heart conditions (e.g. heart disease, angina), chronic pain (e.g. migraine headaches), chronic bowel conditions (e.g. stomach ulcer, enteritis), and other chronic illnesses (e.g. eczema, blood disorders, skin conditions).

[45] This refers to persistent mild depression.

[46] Caregivers in this research are defined as individuals who are (1) informal caregivers i.e. not paid to provide caregiving; (2) caring for persons with a health condition; (3) providing care in 2 or more of the following areas: (i) financial support; (ii) psychological care; (iii) physical care; (iv) social care.

[47] Some very small samples of children and youths referred from other partnering agencies had also been surveyed, such as those from Specialised Schools, and those with incarcerated parents. Unless otherwise specified, these samples have not been used for analyses in this report.

Measures

Respondents completed the following instruments in the quantitative survey. Details of the instruments are in Annex B.

KIDSCREEN:[49]
To assess the child/youth's subjective quality of life, **all** respondents completed this instrument.

DISABKIDS Chronic Generic Module (DCGM):
To assess the areas of coping that are specific to the child/youth's health condition, only children and youths **with** health/developmental conditions completed this instrument.

FACES-IV:[50]
To assess the family dynamics of children and youths in the general population, only familiar adults to children and youths **without** health/developmental conditions completed this instrument.

World Health Organization Disability Assessment Schedule Functioning Packet (WHODAS):
To understand the child/youth's level of functioning, only children and youths **with** health/developmental conditions completed this instrument.

Demographic Packet:[50]
To understand the child/youth's health and educational information, their family's structure and socioeconomic situation, and their service use and preferences, **all** respondents completed this instrument.

Separately, **caregivers** of children and youths with health/developmental conditions completed the WHOQOL-BREF instrument as a measure of their quality of life.

[49] Children and youths aged 7 years and above were encouraged to self-report on this instrument. For children aged 6 years and younger, responses were proxy-reported by the child's parent/caregiver.
[50] Responses to this instrument were proxy-reported by the child's parent/caregiver.

Key Findings

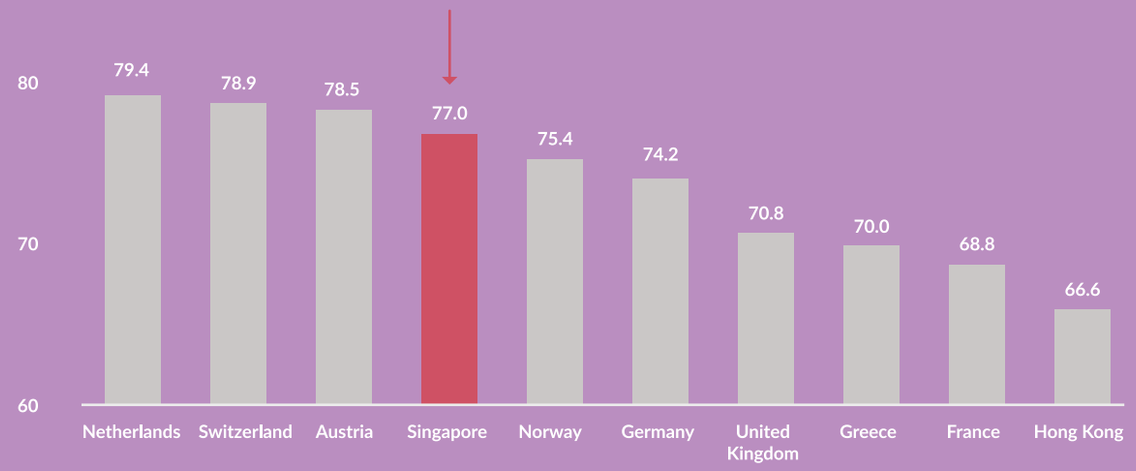
ACROSS ALL CHILDREN AND YOUTHS SAMPLED

Finding #1:

Overall, quality of life (QOL) of children and youths (under 18 years) in Singapore was comparable to their peers in other countries.

- Compared to published studies using the same KIDSCREEN measurement tool in other Organisation for Economic Co-operation and Development (OECD) or Asian countries, the QOL scores of children and youths in Singapore are about average.[51,52,53,54,55]

Average KIDSCREEN Scores (Scaled to 100) by OECD and Asian Countries



[51] Studies employed the KIDSCREEN-52 or KIDSCREEN-27 versions whereas Singapore's score is based on scores from the KIDSCREEN-30 questionnaire.
[52] Tzavara, C. et al. (2012). *Reliability and validity of the KIDSCREEN-52 health-related quality of life questionnaire in a Greek adolescent population.*
[53] Haraldstad, K. et al. (2011). *Health related quality of life in children and adolescents: Reliability and validity of the Norwegian version of KIDSCREEN-52 questionnaire, a cross-sectional study.*
[54] Ng, J.Y.Y et al. (2015). *Psychometric properties of the Chinese (Cantonese) versions of the KIDSCREEN health-related quality of life questionnaire.*
[55] Robitail, S. et al. (2007). *Children proxies' quality-of-life agreement depended on the country using the European KIDSCREEN-52 questionnaire.*

Finding #2:

Factors that were associated with higher overall quality of life included:

Health/Developmental Conditions

Children and youths without any health/ developmental conditions had a significantly higher quality of life.

Age

Children and youths who were younger had a significantly higher quality of life.

Household Income Per Capita

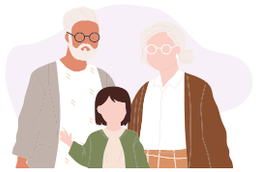
Children and youths from families with a higher household income per capita had a significantly higher quality of life.

Income Assistance

Children and youths from households who did not receive income assistance had a significantly higher quality of life.

Time Spent with Father

Children and youths who spent more time with their fathers had a significantly higher quality of life.



Adult Supervision

Children and youths who did not have any adult supervision, or who were supervised by adults who were not from their immediate family/a grandparent (e.g. nanny, afterschool care, aunts, or uncles) had a significantly lower quality of life.

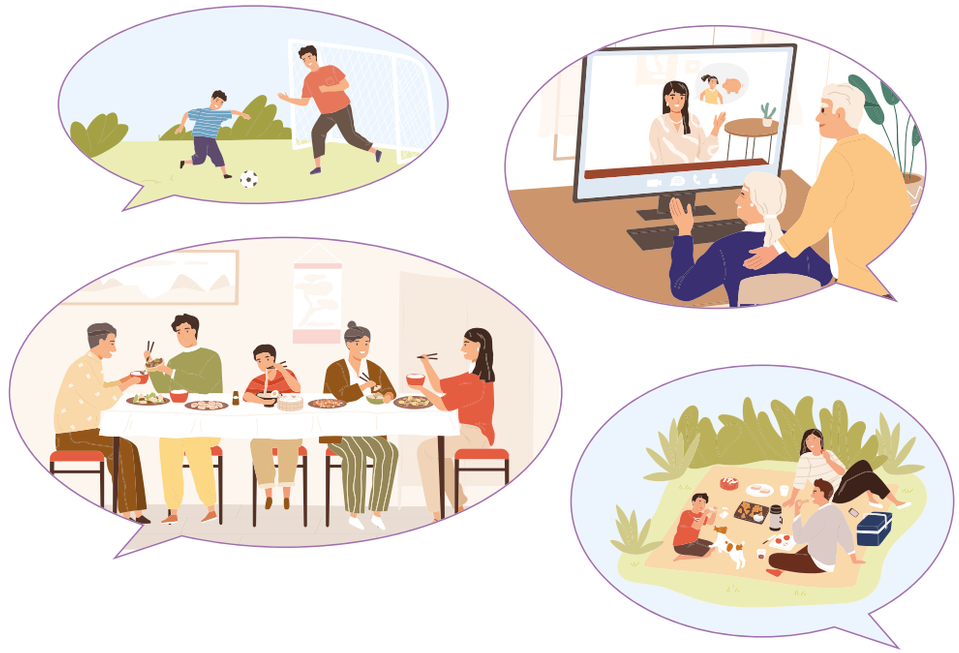
Factors that were the strongest predictors of overall quality of life for children and youth were: absence of health/developmental conditions, higher household income and more time spent with father.

Implications for Children and Youth from Non-Intact Families

Non-intact families refer to families with parents who are not married. This includes parents who are divorced/separated, parents who have never been married, or parents who are widowed.

Children and youth from non-intact families were found to have a significantly lower quality of life. However, when time spent with father was included into the regression model, family intactness was no longer a significant factor. This points to the importance of *time spent with fathers* for children and youths from non-intact families.

Ensuring that non-intact families have *adequate financial resources*, and that the child/youth is supervised *by an immediate family member or a grandparent*, are also factors that could buffer the well-being of children and youth from non-intact families.



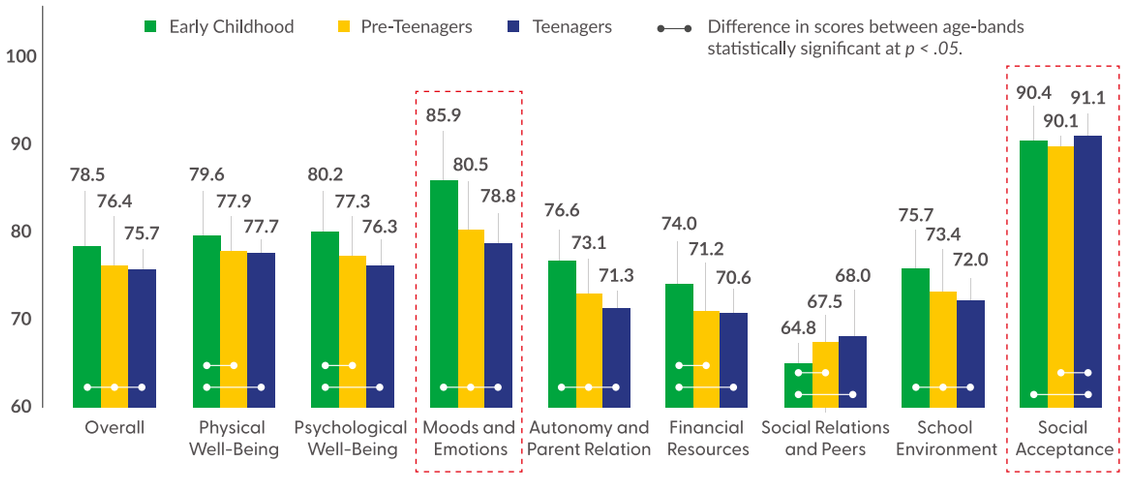
FOR CHILDREN AND YOUTH WITHOUT HEALTH/DEVELOPMENTAL CONDITIONS

Finding #3:

Among children and youth without health/developmental conditions, their highest quality of life (QOL) scores were in the domains of *Social Acceptance and Moods and Emotions*.

- QOL scores for children aged 6 years and below (i.e., early childhood) were significantly higher than pre-teenagers (i.e., 7 – 12 years) and teenagers (i.e., 13 – 17 years) in most QOL domains.[56,57]

Mean Weighted KIDSCREEN Domain QOL Scores for Children and Youth without Health/Developmental Conditions by Age Band



Focus group participant, Amir,[58] aged 17 years, described the importance of spending time and mutual support in peer friendships.

"Social support and peers is all about someone willing to spend time and help you through your tough times."

Focus group participant, Sam,[58] aged 17 years, shared his difficulties in relying on friends.

"I learned to not share stuff with my friends. [...] Even though you have my trust, I'm scared that [you will] use what [I shared] against me."

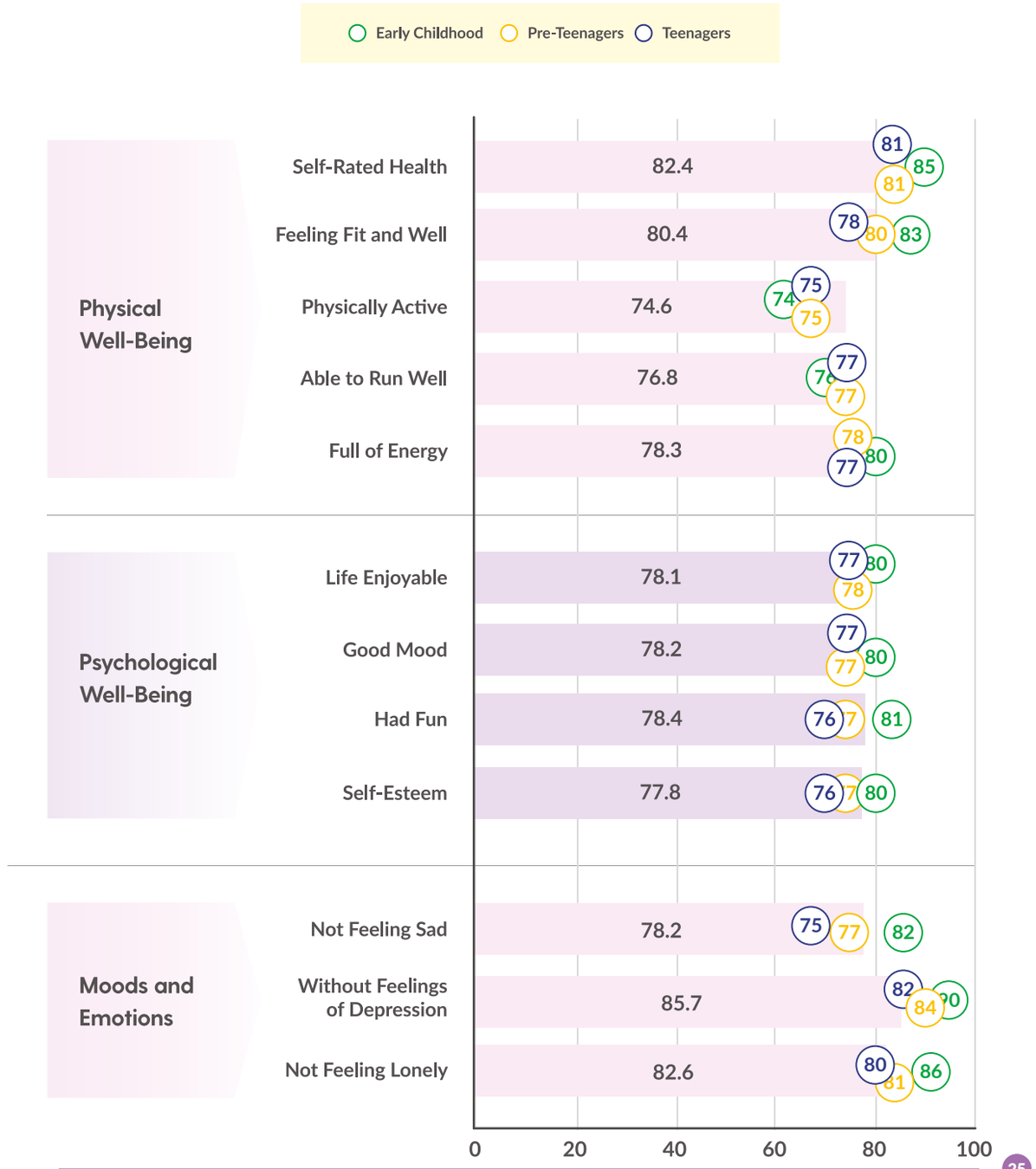
[56] Children and youths aged 7 years and above were encouraged to respond to self-report on this instrument. For children aged 6 years and younger, responses were proxy-reported by the parent/caregiver.

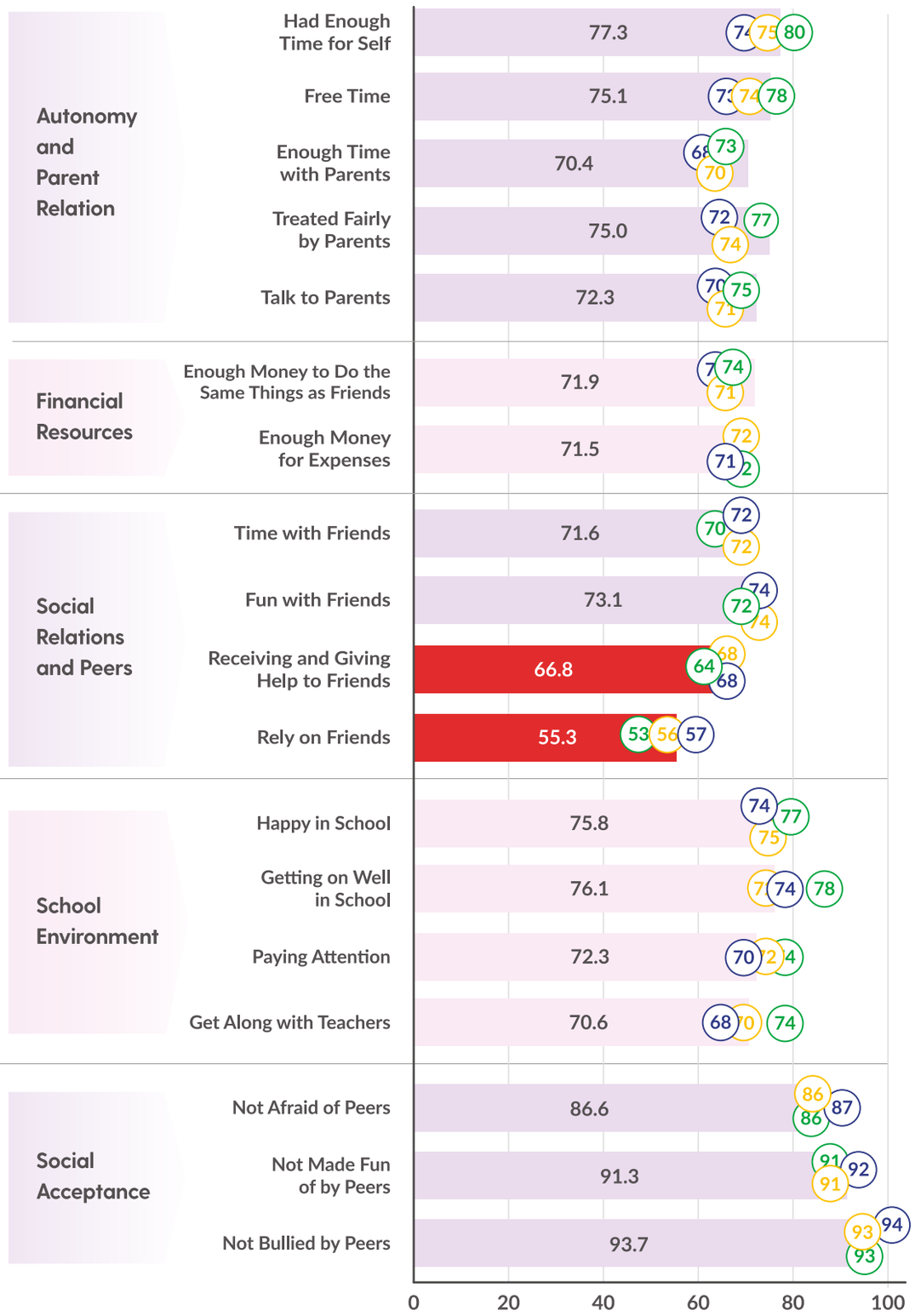
[57] *Note.* For children and youth without conditions, the sample was weighted by the 2020 Singapore Census population norms for age, ethnicity and gender to boost the representativeness of the study sample. The weighted sample size by Age Band was Early Childhood (n = 2335); Pre-Teenagers (n = 2047); Teenagers (n = 1586). In total, the weighted sample size was: n = 5968. Analyses and results for children and youths without health/developmental conditions reflect the weighted sample.

[58] To protect the identities of participants, pseudonyms rather than actual names are used.

At the facet level, children and youth without health/developmental conditions reported lowest quality of life (QOL) scores in ***Relying on Friends and Receiving and Giving Help to Friends.*** This is seen in the horizontal bar chart below, with these lowest facet scores indicated in red.

Mean Weighted KIDSCREEN Facet QOL Scores for Children and Youth without Health/Developmental Conditions by Age Band





Note. The bars in red reflect where the lowest QOL facet scores are reported on average.

Finding #4:

While the large majority of children and youths without health or developmental conditions have a good quality of life, about 1 in 20 of could do with more support.[59]

Children and youth who do not have any health or developmental conditions may still experience varying degrees of quality of life (QOL). Their unique demographic, household and family factors may interact together to influence their well-being and needs.

Latent profile analysis (LPA) is a statistical technique that is used to uncover mutually exclusive subgroups within a population. In this study, LPA was used to identify profiles of children and youth without health/developmental conditions. This helped to differentiate children and youths with greater needs from the others, based on responses to the KIDSCREEN QOL tool.

Three profiles of children and youth were identified:

Archetypes **Prevalence in Weighted Sample**	At Risk QOL *n* = 327 (5.5%)	Average QOL *n* = 4,176 (70.0%)	Good QOL *n* = 1,466 (24.5%)
Mean QOL Scores Across Domains	Most Negative	Neutral	Most Positive
Physical Well-Being	48	77	89
Psychological Well-Being	47	76	90
Moods and Emotions	62	82	88
Autonomy and Parent Relation	44	72	86
Financial Resources	49	71	82
Social Relations and Peers	51	64	77
School Environment	50	71	86
Social Acceptance	70	92	91

[59] Analyses and results for children and youth without health/developmental conditions reflect the weighted sample after weighting for age, gender and ethnicity as per the 2020 Singapore Census norms.

Demographic, household and family factors for the three profiles included:[60]

At Risk QOL	Average QOL	Good QOL
Higher proportion of children and youths who lack any supervision/caregiver[61].		**Lower proportion of "latch-key" child scenario** (i.e., without any supervision).
Lower proportion with one or both parents as primary caregiver.		**Higher proportion with one or both parents as primary caregiver.**
Higher proportion of non-intact families[62].		**Higher proportion of families with married parents.**
On average, spends **less time with father** per week.	**Represents the profile of the average child without conditions with positive quality of life (QOL).**	On average, spends **more time with father and mother** per week.
Higher proportion of families with a monthly household income of over $12,000.		**Higher proportion of families with a monthly household income of over $12,000.**
		Lower proportion of families with a monthly household income of $2,000 and below.
Higher proportion of service users[63] particularly helplines, sports/arts/games groups, and case management/ counselling.		**Lower proportion of service users.**

[60] All results reflected in the table are statistically significant (as compared to other profile groups), as tested with chi-square or Kruskal-Wallis tests. All results are weighted by the 2020 Singapore census population norms for age, ethnicity and gender. Both "At-Risk" and "Good" QOL profiles had a higher proportion of families with a monthly household income of over $12,000 relative to families in the "Average" QOL profile, suggesting that the relationship between household SES and child/youth's QOL may be complex or have other mediating factors.

[61] Caregiver was defined as person who looks after the child most of the time.

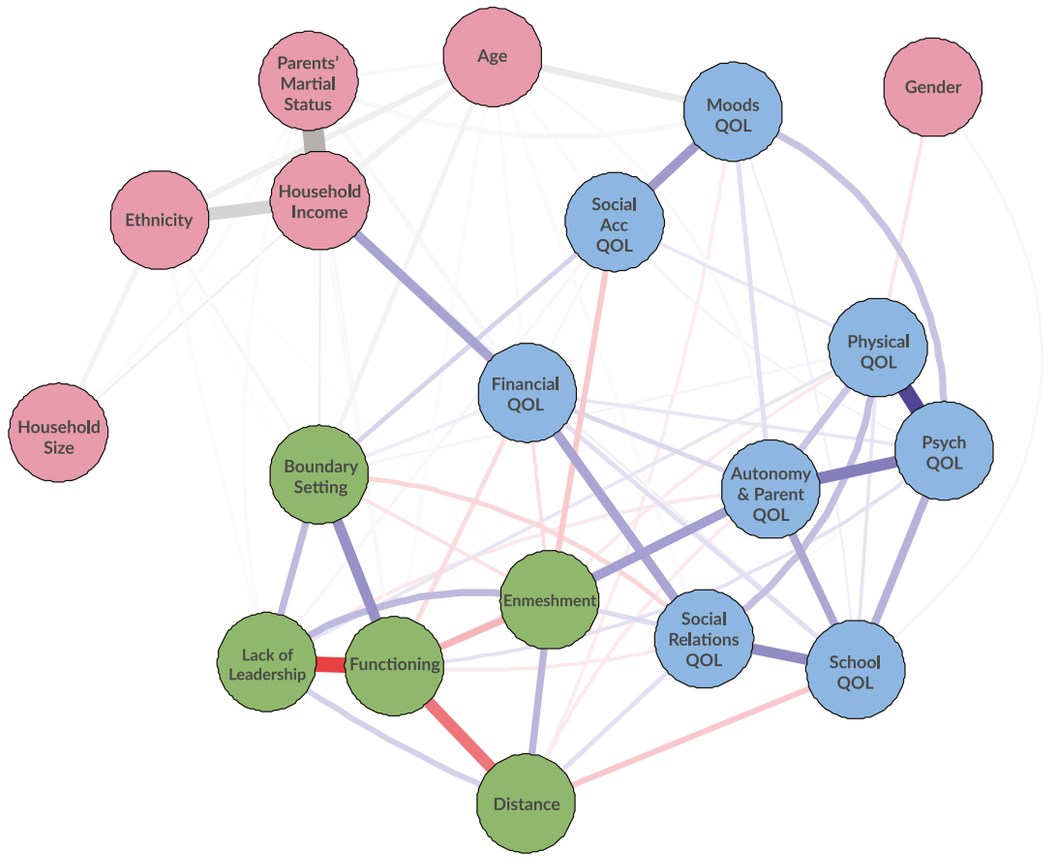
[62] Non-intact families refer to families with parents who are not married. This would include parents who are divorced/separated, parents who have never been married, or parents who are widowed.

[63] Service users refer to those using general services (i.e., helplines, tuition, mentoring, interest groups [sports, arts, games], case management and counselling, life skills programmes, others).

Finding #5:

For children and youth without health or developmental conditions, positive family functioning and psychological well-being are the most important factors for their quality of life.

A network model was generated to examine the relationships between the demographic factors, family dynamics and quality of life (QOL) for children and youth in the general population.



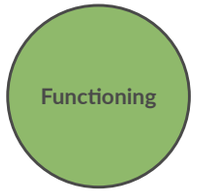
Legend

Demographic Factors
- Child/Youth's Age
- Child/Youth's Gender
- Child/Youth's Ethnicity
- Household Income
- Household Size
- Parents' Marital Status

Family Dynamics (from FACES-IV instrument)
- Functioning
- Boundary Setting
- Enmeshment
- Lack of Leadership
- Distance

Quality of Life (QOL) Domains (from KIDSCREEN instrument)
- Physical Well-Being QOL
- Psychological Well-Being QOL
- Moods and Emotions QOL
- Autonomy and Parent Relation QOL
- Financial Resources QOL
- Social Relations and Peers QOL
- School Environment QOL
- Social Acceptance QOL

Network models are a way to graphically represent the structure and pattern of relationships between variables. A circular node represents a variable and an edge (line) represents the relationships between two variables. Blue edges represent positive associations, red edges represent negative associations, and grey edges represent connections involving categorical variables with multiple levels.



- **Positive Family Functioning,** which refers to the family's ability to solve problems and spend time together, was found to play a key role in children and youths' quality of life.

- **Psychological Well-Being** was also identified as one of the most important factors for children and youths' quality of life, connecting to other quality of life domains, including Physical Well-Being, Moods and Emotions, Autonomy and Parent Relation, Family Functioning and School Environment.

Focus group participant Jun Wei,[58] aged 18 years, described how he valued spending time together with his family.

"For me, I would like just one day, for one day, my parents just take a break from work, get together, then go for gatherings, that I can invite my loved ones... and we just relax, talk to each other, have a good time eating. That's what I want for one day."

Focus group participant Mark,[58] aged 17 years, whose father is incarcerated, described how his family situation affected his mental and social well-being.

"I was very extroverted back then. But afterwards, when [my father] went back in, I slowly turned more introverted...I realised, [there is] no point being so happy all of a sudden."

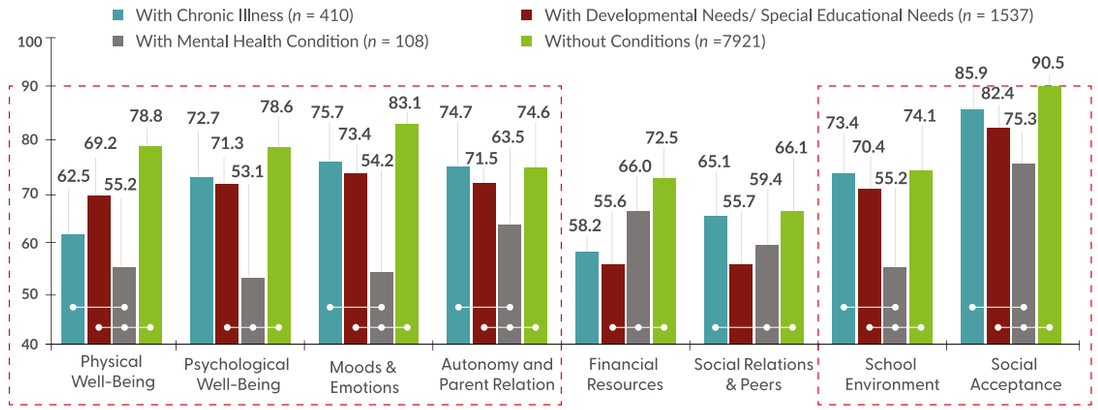
FOR CHILDREN AND YOUTH WITH HEALTH/ DEVELOPMENTAL CONDITIONS

Finding #6:

Children and youth with health/developmental conditions (e.g. chronic illness, mental health conditions, or developmental needs/special educational needs) had lower quality of life (QOL) scores than their peers without conditions.

- In particular, those with mental health conditions showed significantly lower QOL scores than their peers in many aspects of their well-being, including the domains of **Physical Well-Being, Psychological Well-Being, Moods and Emotions, Autonomy and Parent Relation, School Environment** and **Social Acceptance QOL.**

Mean KIDSCREEN Domain QOL Scores for Children and Youth by Health/Developmental Condition

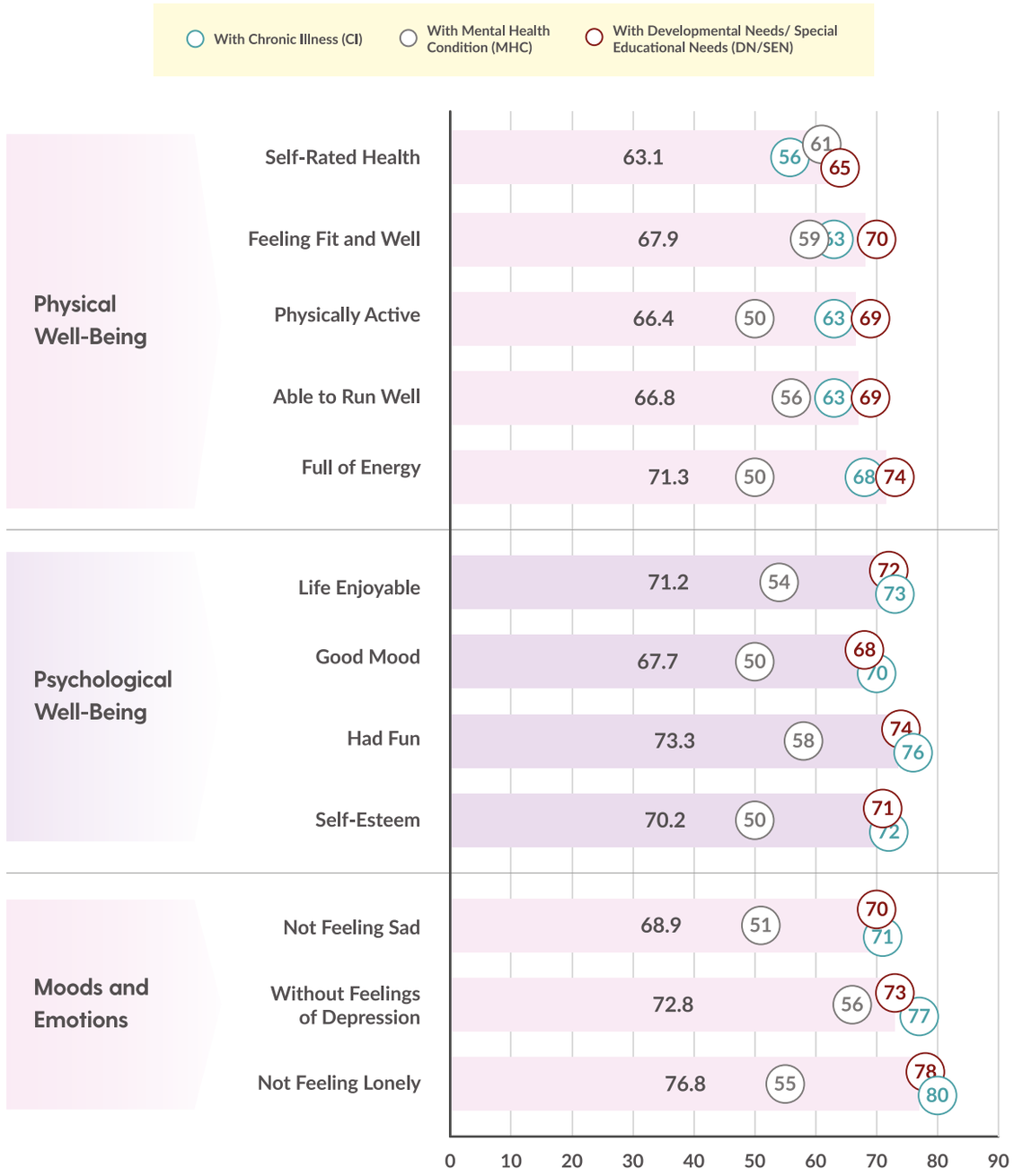


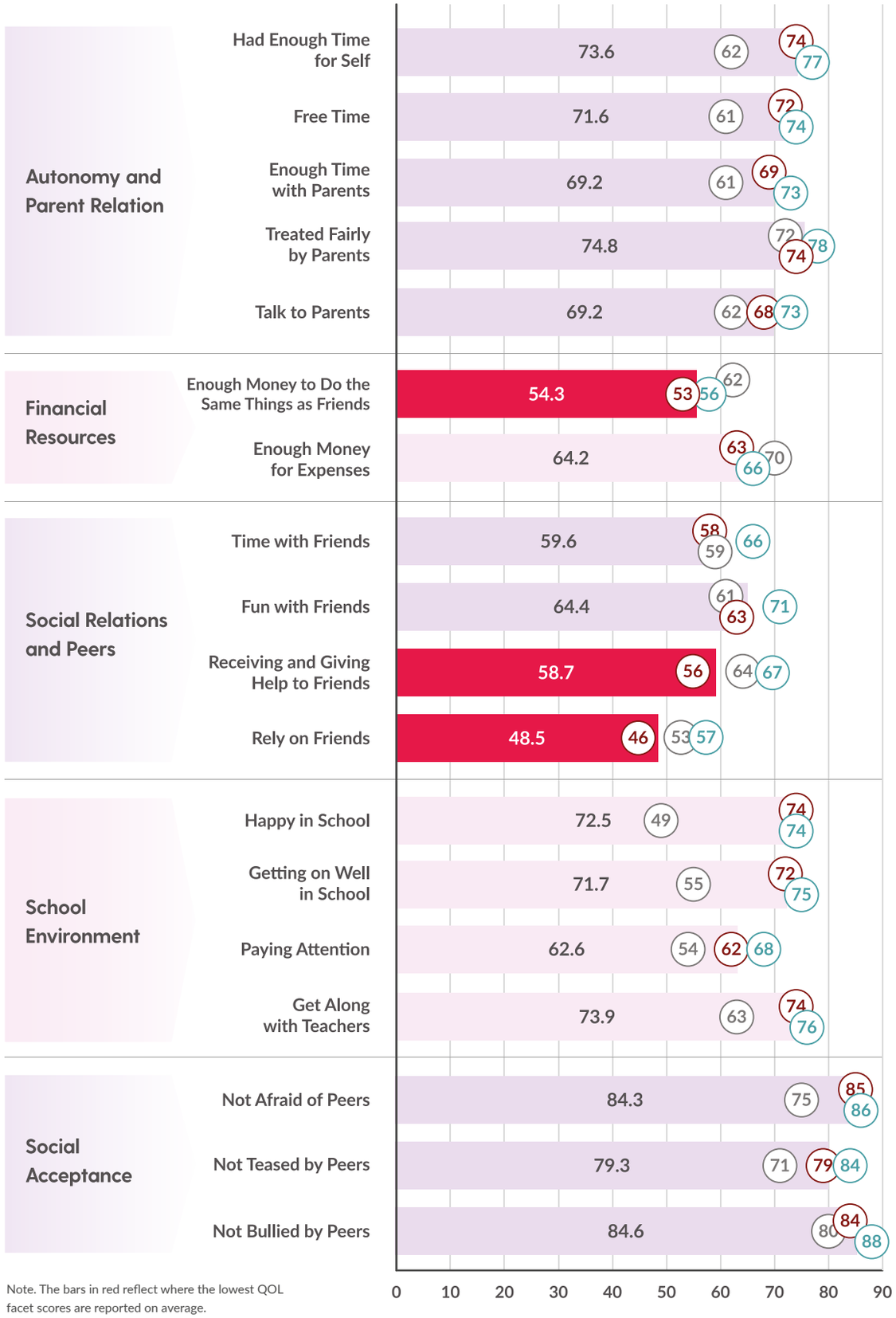
The lowest scoring QOL facets by health status were:

With Chronic Illness	With Mental Health Condition	With Developmental Needs/ Special Educational Needs
Self-Rated Health; Enough Money to Do the Same Things as Friends; Relying on Friends	Self-Esteem, Physically Active; Full of Energy; Good Mood	Relying on Friends; Enough Money to do the Same Things as Friends; Receiving and Giving; Help to Friends

Overall, children and youth with health/developmental conditions reported lowest quality of life (QOL) facet scores in *Relying on Friends, Receiving and Giving Help to Friends, and Having Enough Money to do the Same Things as Their Friends*. This is seen in the horizontal bar chart below, with these lowest facet scores indicated in red.

Mean Weighted KIDSCREEN Facet QOL Scores for Children and Youth with Health/Developmental Conditions by Condition Type



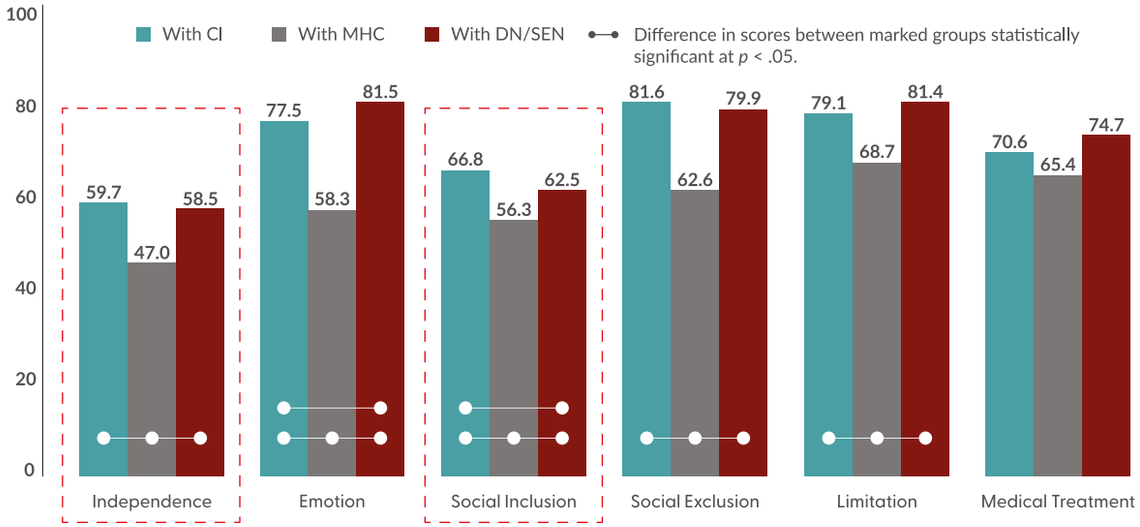


Note. The bars in red reflect where the lowest QOL facet scores are reported on average.

Finding #7:

Children and youths with health/developmental conditions faced challenges in the areas of *independence* and *social inclusion* due to their condition.

Average DCGM Scores for Children and Youths by Health/Developmental Condition (Controlling for Child/Youth's Functioning and Demographic Characteristics)



Note. One-way ANCOVAs were conducted to examine for differences in DCGM scores between preteens after controlling for demographic factors (i.e., child's age, gender, ethnicity, housing type, parents' marital status, and household income per capita) and the child's functioning (i.e., WHODAS functioning score).

- The DCGM tool assesses the child/youth's ability to cope in various domains of their lives as a result of their condition. Thus, a low score in the area of social inclusion means that the child/youth perceives that his/her peers do not accept him/her or regard him/her as competent due to his/her condition.
- In particular, children and youth with mental health conditions (MHC) reported facing significantly more challenges than their peers with other conditions in multiple areas, including independence, emotion, social inclusion, social exclusion and medical treatment.

Focus group participant Li Ying[58] describes her son, who has Autism Spectrum Disorder and goes to a Special Education school, and his difficulties faced.

"I think for ASD kids, socialising with peers is always a challenge. Up to today, [my son] still doesn't know his friends. When I ask him about his friends, maybe just the names—other than that, he can't tell me much. Socialising is probably a challenge."

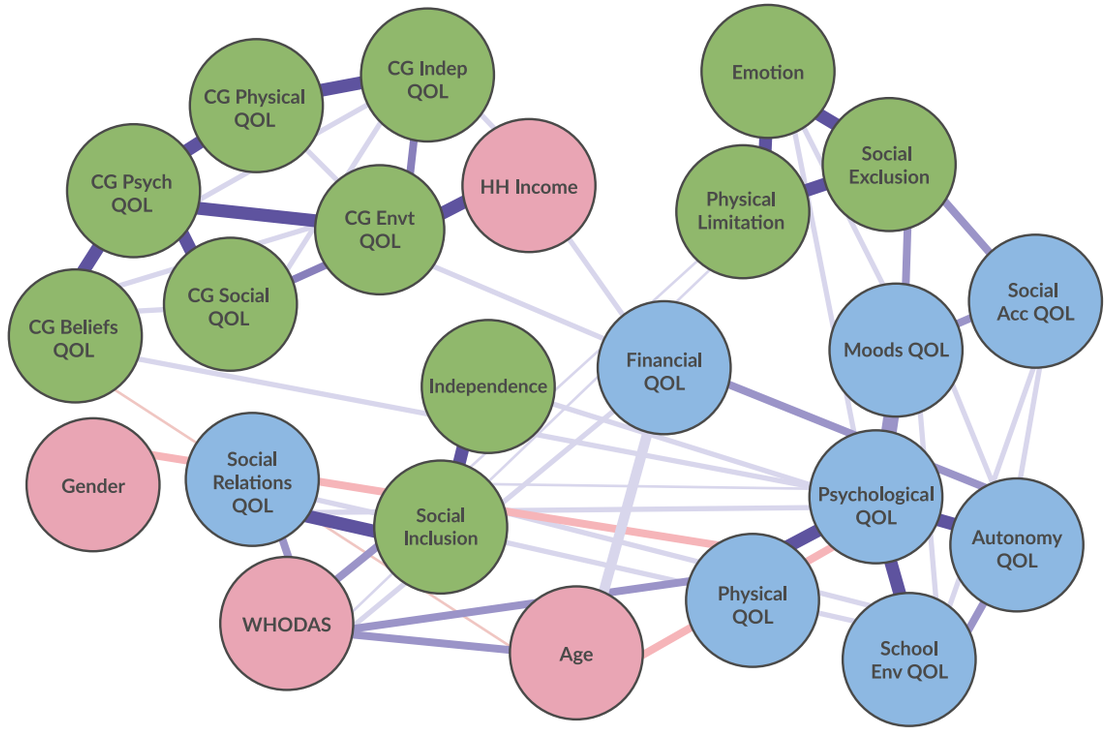
Focus group participant Hana[58] describes her son, who has intellectual disability and goes to a Special Education school, and the difficulties he faced.

"When he was younger, he actually [...] wanted to join, but he didn't know [...] how [to] socialise with them, so [he was] excluded...eventually, he became more introvert(ed)."

Finding #8:

For children and youth with health/developmental conditions, positive psychological well-being and social inclusion are the most important factors for their quality of life.

A network model was generated to examine three groups of factors surrounding children and youths with health/developmental conditions.[64] **Static factors** are relatively "fixed" and include biological factors such as the child/youth's condition, gender and age. **Dynamic factors** can be somewhat altered and include the child/youth's coping needs and caregivers' quality of life (QOL). **Child/youth's outcomes** refer to scores on the child/youth's QOL domains.



Legend

Static Factors
- Child/Youth's Age
- Child/Youth's Gender
- WHODAS Functioning
- Household (HH) Income

Dynamic Factors (from DISABKIDS Chronic Generic Module and Caregiver's WHOQOL-BREF)
- Independence DCGM
- Emotion DCGM
- Social Inclusion DCGM
- Social Exclusion DCGM
- Physical Limitation DCGM
- CG Physical QOL
- CG Psychological QOL
- CG Environment QOL
- CG Social Relationships QOL
- CG Independence QOL

Quality of Life (QOL) Domains (from KIDSCREEN instrument)
- Physical Well-Being QOL
- Psychological Well-Being QOL
- Moods and Emotions QOL
- Autonomy and Parent Relation QOL
- Financial Resources QOL
- Social Support and Peers QOL
- School Environment QOL
- Social Acceptance QOL

[64] Please refer to the explanation in Finding 5 for details on nodes and edges in the network model.

WHOQOL-BREF was a 26-item instrument administered to adult caregivers (CG) of children and youths with conditions. It measures caregivers' perceived state of well-being in the last two weeks in six domains of quality of life (QOL), as reflected in the network model.

The factors below were identified as potential points of intervention to effect a positive shift in the QOL of children and youth and their families:

Psychological well-being of children and youth was connected to other domains of their QOL, including parental relationships, peer relationships and school-related well-being.

Social Inclusion (i.e., feeling competent and accepted by their peers) is also identified as a coping-related factor which would make a strong contribution to improving QOL across multiple domains.

Psychological well-being of caregivers was connected to other domains of their QOL, including the quality of their social relationships, perceptions of their environment, personal beliefs and physical well-being.

Furthermore, caregivers' Environmental and Beliefs QOL are directly linked to specific areas of the child/youth's well-being.

- The physical and living environment, and financial resources of caregivers (CG Envt QOL) is directly linked to the child/youth's perceptions of financial resources (Financial QOL).

- The ability of caregivers to cope with their difficulties and ascribe meaning to personal experiences (CG Beliefs QOL) are related to the child/youth's perceptions of positive emotions and life satisfaction (Psychological QOL).

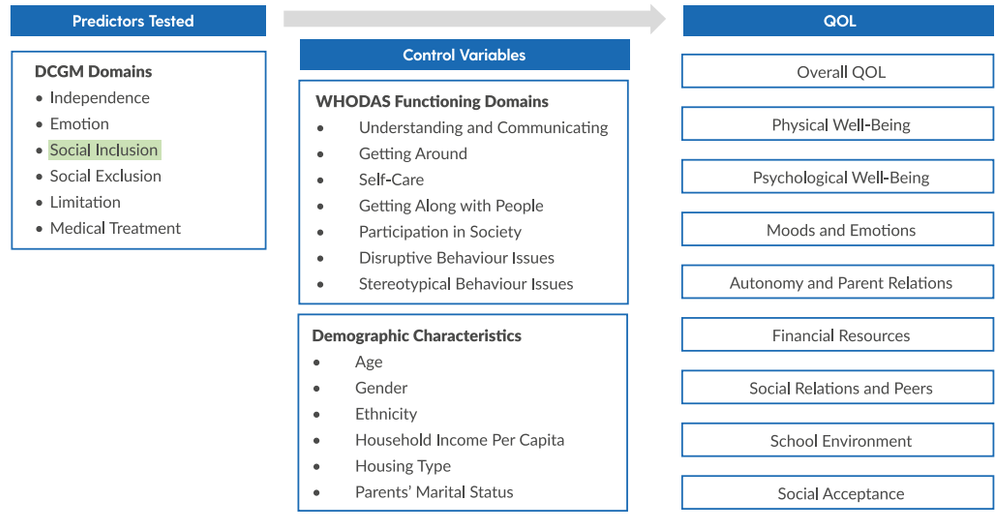
Among the domains of coping/functioning relating to the child/youth's condition, social inclusion was identified as the factor that would make the strongest contribution to quality of life (QOL).

Hierarchical multiple regressions were conducted to identify the coping-related factor, among the DCGM domains, that would make the strongest contribution to improving the child/youth well-being for each condition type.

→ For those with **chronic illness**, social inclusion and social exclusion were identified.

→ For those with **mental health condition**, social inclusion and independence were identified.

→ For those with **developmental needs/ special educational needs**, social inclusion, social exclusion, and emotions were identified.



Note. Among the DCGM domains, which assess areas of coping/functioning relating to the child's condition, **social inclusion** was identified as the factor that would make the strongest contribution to QOL.

Focus group participant June[58] describes the value of social inclusion to her son, who has Autism Spectrum Disorder and attends a Special Education School.

"If my son [were] accepted and [able] to go to any place that he loves to, without being [...] ostracised, [without] people staring at him [...] I think that is quality of life to me."

Focus group participant Dewi[58] describes the development of her daughter's psychological well-being as learning safe and appropriate ways to express emotions. Her daughter was diagnosed with Intellectual Disability and attends a Special Education school.

"They're not only just experiencing [the mood]; there is also how they express it, based on the moods and emotions they're going through."

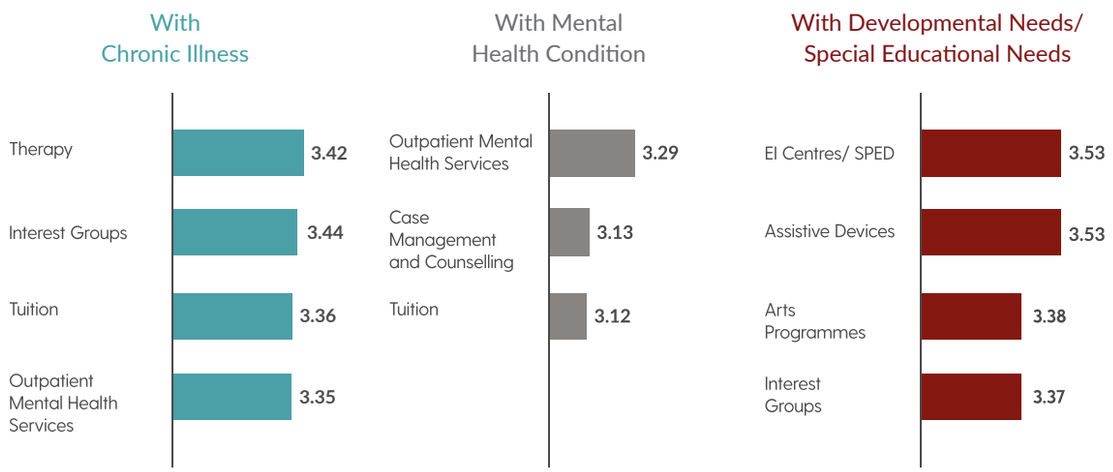
SERVICE UTILISATION FOR CHILDREN AND YOUTH WITH HEALTH/DEVELOPMENTAL CONDITIONS

Finding #9:

Generally, parents/caregivers had found the services being accessed by their child/ youth to be useful. Government-Funded Early Intervention (EI) Centres and Special Education Schools (SPED) were well-received among parents and caregivers caring for children and youths with developmental/ special educational needs.

On average, parents/caregivers found the services accessed by their child/youth to be useful, with an average rating of **3.41** based on a scale of 1 (Not Useful at All) — 4 (Very Useful).

Services and Programmes with Highest Usefulness Ratings, by Health Status



Note. Based on parent/caregiver rating for service(s) used by their child/youth. Rating was done on a scale of 1 (Not Useful at All) — 4 (Very Useful).

Finding #10:

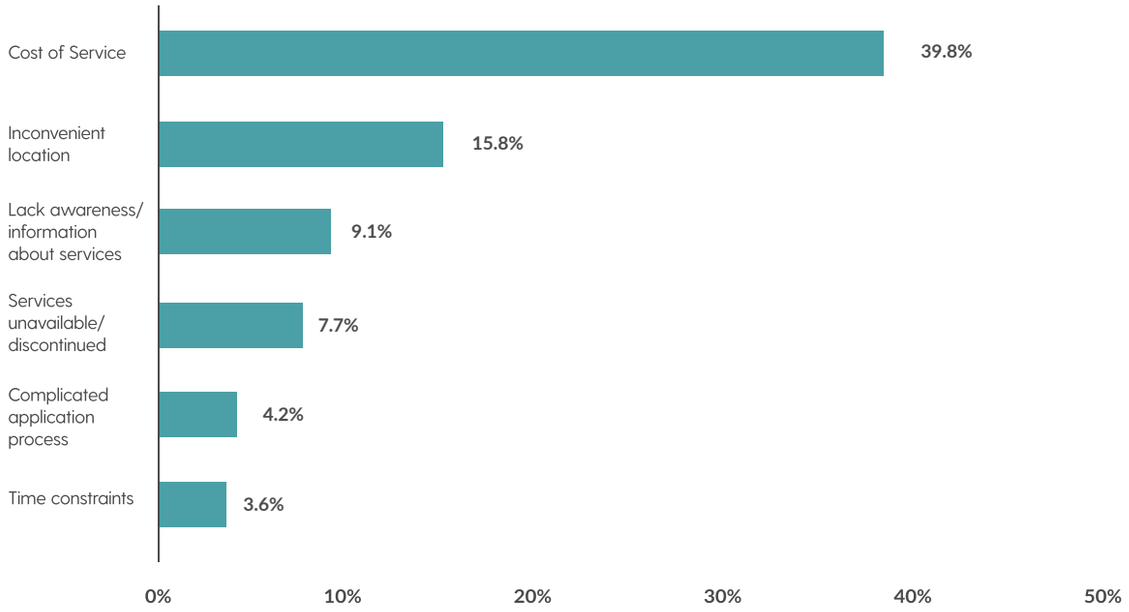
1 in 3 (36%) children and youths with health/developmental conditions expressed the need for additional services.

The most-commonly requested service type by parents and caregivers for their child/youth with conditions were:

With Chronic Illness	With Mental Health Condition	With Developmental Needs/ Special Educational Needs
1. Therapy 2. Government assistance and subsidies 3. Interest groups	1. Tuition 2. Therapy 3. Caregiver training	1. Therapy 2. Interest groups 3. Tuition

However, caregivers perceived some barriers to using additional services. **Cost of service** was the most frequently cited reason for not using the needed service, followed by **inconvenient location**, and **lack of awareness or information** about the service.

Perceived Barriers to Service Use, Cited by Caregivers of Children and Youth with Health/Developmental Conditions

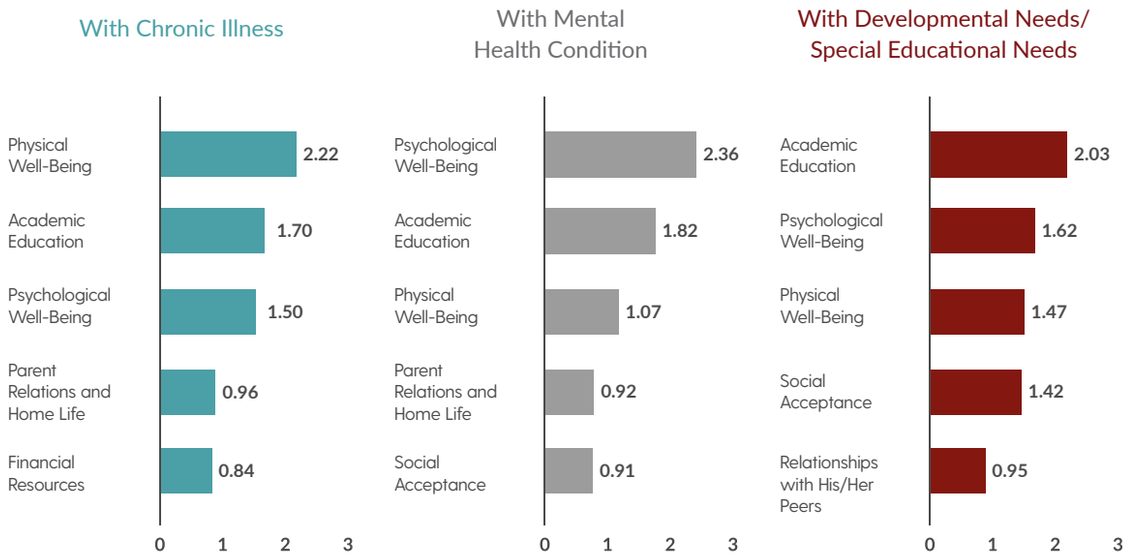


Finding #11:

Parents and caregivers would prioritise resources on physical well-being, psychological well-being, and academic education over other factors like peer and parent relationships, or financial resources for their child/youth.

"You are given a total of 10 tokens to spend on your child/youth. You need to decide how to allocate these tokens for their following benefits, according to their value of importance. Please choose how you would allocate them in the following areas."

For children and youth with conditions, the top area varied with their health/developmental condition:



The Children and Youth Service Landscape

The major social services which cater to children and youths are tabled below.

Domain	For General Needs of Children and Youths
Academic Support	• Free tuition/befriending services (e.g. Project Lightbulb[65])
Children and Youth Development	• Drop-in Activity Centres • Enrichment and life skills • Mentoring • Positive Child and Youth Development (e.g. KidSTART[66] , Singapore Children's Society[67])
Mental and Emotional Support	• Casework and Counselling (e.g. Care Corner Counselling Center, Children's Society, Family Service Centres) • Mental health education and outreach (e.g. Do You M.I.N.D? by TOUCH Community Services) • Mental health support programmes (e.g. ACE Star by Calvary Community Care) • Programmes for children with socio-emotional needs
Financial Support	• Scholarships/Sponsorships (e.g. "Reach for the Stars" by Children's Wishing Well[68]) • Subsidised Groceries (e.g. FRESH by Children's Wishing Well[4]) and Computer Equipment (e.g. NEU PC Plus[69])
Support for the Protection of Children and Youth[70]	• Children and Young Persons Homes[71] • Fostering Agencies[72]
Support for Youth-at-Risk[73]	• Integration support after discharge from MSF Youth Homes • Preventive programmes
Workforce Preparation	• Internship/apprenticeship opportunities • Leadership development

[65] For at-risk children and youths from needy or disadvantaged families.
[66] For low-income families with young children up to 6 years old.
[67] No eligibility criteria specified.
[68] For students from low-income families, or those whose parents may be ill, incarcerated, or absent from their lives
[69] For full-time students whose gross monthly household income not exceeding $3,400 or per capita income not exceeding $900.
[70] For additional information, see here. (Note: All hyperlinks in this section can be accessed via the online version of this report, available on NCSS' website.)
[71] For additional information, see here.
[72] For additional information, see here.
[73] Youth-at-risk are youths who have been subjected to risk factors for anti-social and self-destructive behaviours, including lack of positive adult guidance/ supervision, family criminality/disruption/dysfunction, or those who show traits such as conduct issues and poor response to school intervention.

Domain	Specialised Services for Children and Youth with		
	Mental Health Condition	Chronic Illness	Developmental Needs/ Special Educational Needs
Early Intervention, Education & Vocational Development	• Job Preparation and Support (e.g. Job Club by IMH)	• Primary School Preparation (e.g. Arc Children's Centre) • School Transition • Tuition (e.g. Club Rainbow)	• Development Support – Learning Support (DS-LS) Programme • Development Support Plus (DS-Plus) Programme • [NEW] Inclusive Support Programme (InSP) Pilot • Early Intervention Programme for Infants and Children (EIPIC) • Enhanced Pilot for Private Intervention Providers (EPIP) Programme • Integrated Child Care Programme (ICCP) • Preparation for mainstream schools (e.g. Eden School) • Mainstream schools that support hearing loss or visual impairment and barrier-free access • Specialised Programmes (e.g. SA Deaf) and Special Education Schools • School-to-Work Transition Programme • On-the-Job Training and Mentorship (e.g. MINDS' Senior Programme)
Emotional Support	• Mental health and support services (e.g. Integrated Youth Service @ Care Corner)	• Casework and Counselling	

Domain	Specialised Services for Children and Youth with		
	Mental Health Condition	Chronic Illness	Developmental Needs/ Special Educational Needs
Financial Support	• Chronic Disease Management Programme		
	• Counselling Subsidies (e.g. Counselling and Care Centre)	• Funds and Grants (e.g. Brain Tumor Society, Children's Society)	• Financial Assistance (e.g. SEN Funds, SPED Financial Assistance Scheme) and Scholarships
Social Integration	• Integration into the community (e.g. YouthReach by Singapore Association for Mental Health (SAMH))	• Social Integration and Youth Programmes (e.g. Club Rainbow)	• Disability Registry Identity Card • Enrichment (e.g. Me Too! Club) • Inclusive Playgrounds (Children in Action) • Special Student Care Centres (e.g. MINDS)
Therapy	• Expressive therapies (e.g. YouthReach by SAMH) • Psychological therapies (e.g. Children's Aid Society)	• Occupational therapy • Physiotherapy • Speech therapy	
			• Educational therapy (e.g. Care Corner)
Other Services		• Home- or Centre-based Hospice Care • Palliative care (e.g. Star PALS) • Resources (e.g. Family Resource Center by Club Rainbow)	• Disability Homes

Information and Referral

Belle, Beyond the Label Helpbot For mental health services and resources[74]	**Community Health Assessment Team** For mental health resources • 6493 6500 or email CHAT@mentalhealth.sg	**Youth GO! @ Fei Yue** For resources or referral to services • 6762 2779 or youthgo@fycs.org
KK Women's and Children's Hospital (KKH) Department for Child Development Website Telephone: • 6886 0776 (Sengkang Clinic) • 6536 0350/6438 1142 (HPB Clinic)	**National University Hospital (NUH) Child Development Unit** Website Email: cdu@nuhs.edu.sg Telephone: • 6665 2530/2531 (Jurong Medical Centre) • 6769 4537/4637 (Keat Hong)	**Early Intervention Resources** Resource on early intervention services
MOE Customer Service Centre For school-related enquiries 6872 2220 • Resource on special educational needs (SEN)	**MSF Consolidated Hotline** For information on schemes, services and support for children, youth and families. 1800-111-2222	**SG Enable** For information on services and support for persons with disabilities 1800 8585 885 • Enabling Guide

[74] All hyperlinks in this section can be accessed via the online version of this report, available on NCSS' website.

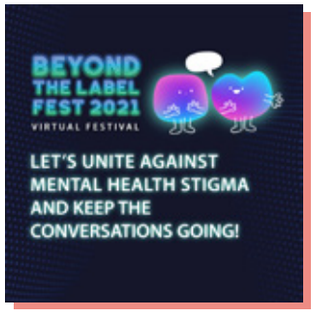
Helplines

Fei Yue Community Services For online counselling services	**Care Singapore** For referral to counselling services 6978 2728	**TOUCH Community Services** For counselling: 1800 377 2252
SOS Crisis Hotline 1800-221 4444	**Singapore Children's Society** For advice and information 1800 2744 788 or online chat	**National Anti-Violence Helpline** For reporting family violence, abuse and neglect 1800 777 0000

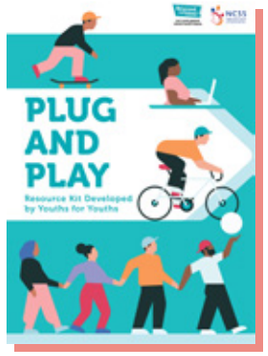
What Can We Do?

As a result of these research findings, NCSS and the Government are working towards enhancing support for the health and well-being of children and youth, including targeted efforts towards the mental health of youth.

NCSS' Beyond The Label (BTL) movement aims to improve public attitudes and remove stigma towards persons with mental health conditions, with the help of partners in the community.

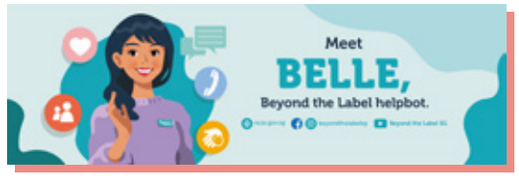


- In the latest edition of BTL in Sep 2021, the focus was on addressing stigma, empowering youths, and promoting family and community support for youths with mental health conditions.



- The BTL Plug & Play toolkit[75] offers resources for youths to kickstart their own anti-stigma initiatives.

- NCSS has also collaborated with Youth Alliance to curate a series of BTL e-Escape room episodes as a resource for youths to learn about the struggles of those facing mental health conditions and the importance of peer support.



- In 2019, NCSS also launched Belle, Beyond the Label Helpbot, for the public to easily access mental health resources and services such as 24-hour helplines, counselling services and caregiver support.

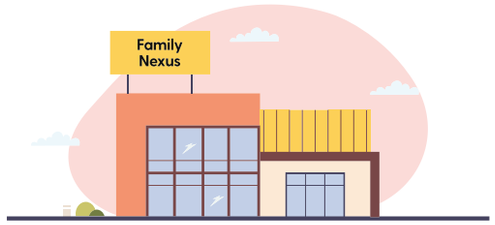
[75] All hyperlinks in this section can be accessed via the online version of this report, available on NCSS' website.

The Government has also launched various taskforces to oversee efforts and support that are relevant to the health and well-being of children and youth. These include the Interagency Taskforce for Mental Health and Wellbeing (TMW) and the Taskforce on Child and Maternal Health and Well-Being (CAMHW). The TMW oversees and coordinates efforts on mental health and well-being issues from a whole-of-government perspective.

- The TMW will partner and empower parents with knowledge on mental health and well-being, as well as parenting tips and strategies, so that they can confidently and effectively support their child's mental well-being.

- The TMW is also working with agencies, social media and technology companies, as well as social service organisations, to create awareness on positive ways to harness the potential of digital technology and social media and promote a healthy online peer support culture.

CAMHW looks into the support for women and children, and one of their key thrusts is to translate evidence-based findings into policies and programmes to address health risks and promote health and well-being.



- In the coming years, CAMHW will be piloting an integrated family support programme called "Family Nexus" at four sites, where families can access varied social-health services at a community node near their homes to reduce the need for visiting multiple sites for different services.

- CAMHW is looking into providing a one-stop evidence-based resource portal — Parent Hub, to support parents and caregivers to nurture healthy habits among the children. Resources on Parent Hub are designed to be easy to adopt and practical, allowing parents to better provide for their child's and youth's health and well-being.

Aside from the above initiatives, everyone plays an important role in contributing to the well-being of children and youths in Singapore. Here are some suggestions for what you can do:

If you are a...	You can...
Child/Youth	Be open to confiding in others when you are troubled or face difficulties. Keep a lookout for your peers who may be experiencing mental or emotional issues. If you or your peers need help, reach out to friends, families, teachers, or **social service agencies**[76] that provide services to children and youths (e.g. SHINE Children and Youth Services, Youth Guidance Outreach Services, Lakeside Family Services, Life Community Student Care) or go to your nearest **Family Service Centre.**[77] Learn about disabilities and health conditions[78] and help a friend with a condition feel heard and valued by taking the extra step to ask how they would like to play, learn, or spend time together.
Child/Youth with Conditions	Continue to speak up about your unique needs and experiences, and actively participate in your community. Learn more about the **educational opportunities**, **vocational training**, **special student care centres** and play activities that are uniquely designed to support you in Singapore. For a start, you can explore **therapeutic horse riding**, the seven **inclusive playgrounds** in Singapore and the **Very Special Arts** programme.
Service Provider	Strengthen partnerships and adopt innovative strategies to conduct effective outreach to children and youth. Networking and collaborating with counterparts in the sector can transpire fresh ideas on how to enhance service quality. Link up with other social service agencies in the community to identify potential gaps in existing services, prevent duplicating services, and identify providers whom you may collaborate with. Build capabilities to deal with emerging issues that are pertinent to children and youth (e.g. mental health and cyber wellness). This could take the form of co-creating services with your clients, giving them a voice, and empowering them to make decisions.
Grassroots Worker	Design interesting and meaningful community activities that are inclusive towards children and youths with and without conditions, including dialogue sessions to understand their needs and concerns. Encourage children and youths to tap on their own talents and initiative in the process. Seek to develop strategies and programmes for outreach and early detection of emotional or mental distress among children and youths in your community, including those from disadvantaged backgrounds.
Caregiver/Family Member	Be open to confiding in others when you face difficulties. Reach out to friends, family or **service providers** for help. There are many **programmes and resources** available for children and youths with conditions and their caregivers, to help alleviate some of your responsibilities.
Member of the Public	Participate in **public campaigns** and **volunteering opportunities** such as those provided by the **SG Cares Volunteer Centres** to promote the inclusion of children and youths with disabilities and other conditions. Recognise the abilities and talents in every child/youth, with or without conditions. Learn about disabilities and health/developmental conditions and help a child/youth feel valued by taking the extra step to ask how they would like to play, learn, or spend time together.

[76] See the NCSS website or Social Service Navigator. All hyperlinks in this section can be accessed via the online version of this report, available on NCSS' website.
[77] See the FSC e-locator.
[78] See the SG Enable and NCSS websites.

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References

Blatt, B. (1987). *The Conquest of Mental Retardation.* USA: Pro Ed.

Cheung, H. S., & Sim, T. N. (2017). Social support from parents and friends for Chinese adolescents in Singapore. Youth & Society,49(4), 548-564. *https://journals.sagepub.com/doi/abs/10.1177/0044118X14559502*

Chew, J., Carpenter, J., & Haase, A.M. (2019). Living with epilepsy in adolescence – A qualitative study of young people's experiences in Singapore: Peer socialisation, autonomy, and self-esteem. Child: Care, Health, & Development, 45(2), 241-250. *https://pubmed.ncbi.nlm.nih.gov/30693552/*

Choo, C. (2019, January 29). More affordable, targeted early intervention programmes for children with developmental needs. Today Online. *https://www.todayonline.com/singapore/more-affordable-targeted-early-intervention-programmes-children-developmental-needs*

Choo, C. (2019, September 30). The big read: Where kids with and without special needs learn together – and it's not in Singapore. Channel NewsAsia. *https://www.channelnewsasia.com/singapore/big-read-kids-with-and-without-special-needs-learn-together-1328056*

Club Rainbow. (2020). Major illnesses affecting rainbow children. *https://www.clubrainbow.org/illness-summary*

Dababneh, K.A.H. (2012). The socio-emotional behavioural problems of children with cerebral palsy according to their parents' perspectives. International Journal of Adolescence and Youth, 18(2), 82-104. *https://www.tandfonline.com/doi/full/10.1080/02673843.2012.655443*

Dekker, M.C., Koot, H.M., van der Ende, J., & Verhulst, F.C. (2002). Emotional and behavioural problems in children and adolescents with and without intellectual disability. *Journal of Child Psychology and Psychiatry, 43(8),* 1087-1098. *https://pubmed.ncbi.nlm.nih.gov/12455929/*

Epidemiology & Disease Control Division, Ministry of Health, Singapore; Institute for Health Metrics and Evaluation (2019). The burden of disease in Singapore, 1990–2017: An overview of the global burden of disease study 2017 results. *https://www.healthdata.org/sites/default/files/files/policy_report/2019/GBD_2017_Singapore_Report.pdf*

Chng, G.S., Li, D., Chu, C.M., Ong, T., & Lim, D. (2018). Family profiles of maltreated children in Singapore: A latent class analysis. *Child Abuse & Neglect, 79,* 465-275. *https://www.sciencedirect.com/science/article/pii/S0145213418301029*

Haraldstad, K., Christophersen, K.-A., Eide, H., Nativg, G.K., Helseth, S., The KIDSCREEN Group Europe (2011). Health related quality of life in children and adolescents: Reliability and validity of the Norwegian version of KIDSCREEN-52 questionnaire, a cross-sectional study. International *Journal of Nursing Studies, 48(5),* 573-581.

Ho, L.Y. (2009). Raising children in Singapore: A paediatrician's perspective. Annals of the Academy of Medicine, Singapore, 38(2), 158-162. *https://pubmed.ncbi.nlm.nih.gov/19271046/*

KIDSCREEN Group Europe. (2006). *The KIDSCREEN Questionnaires – Quality of life questionnaires for children and adolescents.* Pabst Science, Lengerich.
Lee, W.R. (2000). The changing demography of diabetes mellitus in Singapore. *Diabetes Research and Clinical Practice, 50 Suppl 2*:S35-9 https://pubmed.ncbi.nlm.nih.gov/11024582/

Lee, W.W.R., Ooi, B.C., Thai, A.C., Loke, K.Y., Tan, Y.T., Rajan, U. et al. (1998). The incidence of IDDM in Singapore children. *Singapore Medical Journal*, 39(8), 359-362. *http://www.smj.org.sg/article/incidence-iddm-singapore-children*

Ministry of Education, Singapore. (2021). Parliamentary reply: Anti-bullying and anti-cyberbullying policies in school. *https://www.moe.gov.sg/news/parliamentary-replies/20210201-anti-bullying-and-anti-cyberbullying-policies-in-schools*

Ministry of Education, Singapore. (2021). Parliamentary reply: Peer support network programmes. *https://www.moe.gov.sg/news/parliamentary-replies/20210225-peer-support-network-programmes*

Ministry of Education, Singapore (2022). Understand your child's special educational needs. *https://www.moe.gov.sg/special-educational-needs/understand*

Ministry of Social and Family Development and Early Childhood Development Agency. (2022). Parents' guide for early intervention. *https://go.gov.sg/ecda-parentsguide*

Ministry of Social and Family Development, Singapore. (2011). Definition of disability and prevalence rate of persons with disabilities in Singapore. *https://www.msf.gov.sg/research-and-data/Research-and-Statistics/Documents/EM_Chapter1.pdf*

Ministry of Social and Family Development, Singapore. (2017). Media release on statistics on children with special needs and intellectual disabilities. *https://www.msf.gov.sg/media-room/Pages/Statistics-on-children-with-special-needs-and-intellectual-disabilities.aspx*

Ministry of Social and Family Development, Singapore. (2017). Singapore's fourth and fifth periodic report to the United Nations convention on the rights of the child. *https://www.msf.gov.sg/policies/Children-and-Youth/Documents/Singapore%20-%204th%20and%205th%20periodic%20UNCRC%20Report.pdf*

Ministry of Social and Family Development, Singapore. (2020). Intergenerational effects of divorce on children in Singapore. *Research Series Paper No. 01/2020. https://www.msf.gov.sg/research-and-data/Research-and-Data-Series/Documents/Research_Series/MSF_Research_Series_Intergenerational_Effects_of_Divorce_on_Children_in_Singapore.pdf*

Ministry of Social and Family Development, Singapore. (2022). Research and data series. Statistics and data tables: Strengthening families. https://www.msf.gov.sg/research-and-data/*Research-and-Data-Series/Pages/default.aspx*

Ministry of Social and Family Development. (2022). 2022 Dedicated as the Year of Celebrating SG Families. *https://www.msf.gov.sg/media-room/Pages/2022-Dedicated-As-The-Year-Of-Celebrating-SG-Families.aspx#1*

National Council of Social Service. (2022). 4ST roadmap for the social service sector (2022-2026). *https://www.ncss.gov.sg/press-room/publications/detail-page/social-service-strategic-thrusts-(4st)-(2022-2026)*

Ng, T.P., Fung, D.S., Chan, Y.H., Lee, Y.P., Koh, J.B., Cai, Y. (2007). Emotional and behavioural problems in Singaporean children based on parent, teacher and child reports. *Singapore Medical Journal*, *48(12)*,1100-1106. *https://pubmed.ncbi.nlm.nih.gov/18043836/*

Ng, J.Y.Y, Burnett, A., Ha, A.S., Sum, K.W. (2015). Psychometric properties of the Chinese (Cantonese) versions of the KIDSCREEN health-related quality of life questionnaire. *Quality of Life Research*, *24*, 2415 – 2421.

OECD. (2019). Programme for International Student Assessment (PISA) results from PISA 2018 (Country-specific overviews: Singapore) *https://www.oecd.org/pisa/publications/pisa-2018-snapshots.htm*
Ogundele, M.O. (2018). Behavioural and emotional disorders in childhood: A brief overview for paediatricians. *World Journal of Clinical Paediatrics*, *7(1)* 9-26. *https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5803568/*

Ravens-Sieberer, U., Herdman, M., Devine, J., Otto, C., Bullinger, M., Rose, M., & Klasen, R. (2014). The European KIDSCREEN approach to measure quality of life and well-being in Children: Development, Current Application, and Future Advances. *Quality of Life Research*, *23(3)*, 791-803.

Robitail, S., Simeoni, M.-C., Ravens-Sieberer, U., Bruil, J., Auquier, P., The KIDSCREEN Group. (2007). Children proxies' quality-of-life agreement depended on the country using the European KIDSCREEN-52 questionnaire. *Journal of Clinical Epidemiology, 60(5)*, 469.e1-469.e13.

SG Enable. (2022). Enabling Guide: Early intervention programme for infants & children (EIPIC) and Development Support Plus (DS-Plus). *https://www.enablingguide.sg/im-looking-for-disability-support/therapy-intervention/early-intervention-programme-for-infants-children*

Singapore Department of Statistics. (2021). Singapore residents by age group, ethnic group and sex, end June. *https://tablebuilder.singstat.gov.sg/table/TS/M810011*

Singapore Children Society. (2008). Children's Social and Emotional Well-Being in Singapore. *https://www.childrensociety.org.sg/resources/front/template/scs/files/singapore.pdf*

Sugianto, R., Wong, S.F., Toh, J.Y., Tint, M.T., Colega, M.T., Lee, Y.S., et al. (2022). Dietary patterns of 5-year-old children and their correlates: Findings from a multi-ethnic Asian cohort. *The British Journal of Nutrition 127(5)*, 763 – 772. *https://pubmed.ncbi.nlm.nih.gov/33910654/*

Taylor, S. & Racino, A. (1991). *Community Living: Lessons for Today.* In Meyer, L., Peck, C., & Brown, L. (Eds.), Critical issues in the lives of people with severe disabilities, 235–238. Baltimore: Paul H. Brookes.

Tzavara, C., Tzonou, A., Zervas, I., Ravens-Sieberer, U., Dimitrakaki, C., & Tountas, Y. (2012). Reliability and validity of the KIDSCREEN-52 health-related quality of life questionnaire in a Greek adolescent population. *Annals of General Psychiatry, 11(3)*, 1 – 7.

World Health Organisation. (1993). Study Protocol for the World Health Organisation Project to Develop a Quality of Life Assessment Instrument (WHOQOL). *Quality of Life Research, 2(2), 153-159.*

Yeo, L.S., & Tan, S.-L. (2018). Educational inclusion in Singapore for children with physical disabilities. *Asia Pacific Journal of Education, 38(2),* 175-186. *https://repository.nie.edu.sg/bitstream/10497/20870/1/APJE-38-2-175.pdf*

Yeo, S. (2021, September 13). More young kids diagnosed with developmental delays in Singapore. *The Straits Times. https://www.straitstimes.com/singapore/parenting-education/more-young-kids-diagnosed-with-developmental-delays-in-spore*

Yuen, S. (2017, October 10). Singapore has third highest rate of bullying globally: Study. *The Straits Times. https://www.straitstimes.com/singapore/education/republic-has-third-highest-rate-of-bullying-globally*

Annex A: Sample Description

Demographics	Without Health/ Developmental Conditions (*n* = 7921)	With Chronic Illness (CI) (*n* = 410)	With Mental Health Condition (MHC) (*n* = 108)	With Developmental Needs/Special Educational Needs (DN/SEN) (*n* = 1537)
Gender				
Male	51.0%	61.5%	42.6%	74.9%
Female	49.0%	38.5%	57.4%	25.1%
Age				
Early Childhood[79]	51.9%	37.0%	0.0%	23.0%
Pre-Teenagers[47]	29.8%	33.7%	26.9%	46.5%
Teenagers[45]	18.3%	29.3%	73.1%	30.5%
Ethnicity				
Chinese	69.1%	56.8%	75.0%	63.4%
Malay	16.9%	30.0%	13.0%	25.3%
Indian	10.8%	11.5%	8.3%	9.5%
Others	2.5%	1.7%	3.7%	1.8%
Not Declared	0.7%	-	-	
Housing Type				
Rented Room/HDB 1-2 Room	4.0%	9.5%	2.8%	7.1%
HDB 3-Room	14.1%	11.7%	13.0%	17.4%
HDB 4-Room	38.0%	42.5%	31.5%	33.5%
HDB 5-Room/ Executive	31.7%	24.4%	36.1%	27.6%
Private Housing/ Others	12.2%	11.9%	16.6%	14.4%
School Type				
Government-Funded Early Intervention (EI) Centres	-	0.2%	-	22.4%
Special Education School (SPED)	0.1%	15.1%	1.9%	61.4%
Pre-School/ Kindergarten	34.1%	22.7%	0.0%	0.5%
Mainstream Schools	50.2%	50.5%	93.5%	15.7%
Specialised School & Others	0.2%	1.2%	1.8%	-
Not Declared	15.4%	10.3%	2.8%	-

Note. Base numbers for percentages are children and youths from the relevant health status/condition type (i.e., column). Mainstream schools were taken to refer to Primary Schools, Secondary Schools (e.g. Normal Academic, Normal Technical, Express streams, Integrated Programme/ International Baccalaureate) and Pre-University (e.g. Junior College/Millennia Institute, Institute of Technical Education, Polytechnic, and University).

[79] Early Childhood was defined as 1-6 years, Pre-Teenagers as 7-12 years, and Teenagers as 13–17 years.

Annex B: Glossary of Survey Tools

KIDSCREEN-30

This is a 30-item scale which asks respondents to rate their perceived state of well-being in the past week pertaining to eight domains of Quality of Life (QOL). Brief descriptions of each QOL domain are shown in the table below. Questions were answered on a five-point scale (i.e., "Never", "Seldom", "Quite Often", "Very Often", and "Always").

KIDSCREEN Domains	Description[80]
Physical Well-Being	The level of the child/youth's physical activity, energy, fitness, capacity for lively activities and overall health.
Psychological Well-Being 	The extent to which the child/youth experiences positive emotions, life satisfaction, and a sense of fun. Examples of positive feelings include happiness, joy and cheerfulness.
Moods & Emotions	The extent to which the child/youth experiences negative emotions, depressive moods, and stressful feelings. Examples of negative feelings include loneliness, sadness and resignation.
Autonomy & Parent Relation 	The opportunities for the child/youth to have leisure time (including freedom of choice in day-to-day activities) and the quality of relationships with the child/youth's parents or parental figures (including self-perceptions of whether the child/youth has been treated fairly).
Financial Resources	The perceived quality of the financial resources of the child/youth, including perceptions on whether his/her financial resources are adequate for activities that are comparable to his/her peers.
Social Relations & Peers 	The quality of relationships with the child/youth's friends or peers, including the support received and experience of positive feelings.
School Environment	The child/youth's perceptions of his/her own capacity for thinking, learning, and concentration, and his/her feelings about school, including the quality of relationships with teachers, and personal satisfaction with his/her overall ability and performance at school.
Social Acceptance 	The child/youth's experience of being bullied and/or teased by peers/friends.

[80] Descriptions adapted from: KIDSCREEN Group Europe. (2006). *The KIDSCREEN Questionnaires – Quality of life questionnaires for children and adolescents.*

FACES-SG

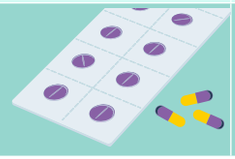
The Family Adaptability and Cohesion Evaluation Scale (FACES IV) examines the child/youth's experience of interactions and relationships in their family in the areas of cohesion (i.e., emotional bonding) and flexibility (i.e., quality and expression of leadership, organisation and relationships around family rules). Questions were answered on a five-point scale (i.e., "Strongly Disagree", "Generally Disagree", "Undecided", "Generally Agree" and "Strongly Agree").

For respondents without health/developmental conditions, five domains of family dynamics emerged from the exploratory and confirmatory factor analyses. Together, these FACES-SG domains can be taken as an adapted version of the original FACES-IV items.

FACES-SG Domains	Description
Functionality	The extent to which family members are able to solve problems and spend quality time together.
Boundary Setting	The extent to which there are clear rules and consequences for wrongdoing.
Enmeshment	The extent to which the family environment feels pressurising and inflexible for the child/youth.
Lack of Leadership	The extent to which there is clear allocation of leadership, roles and responsibilities amongst family members.
Distance 	The extent to which family members operate as separate individuals, instead of as a family unit.

DISABKIDS Chronic Generic Measure (DCGM-30)

This tool was administered to children and youth with health/developmental conditions to assess their coping abilities as a result of their condition in six domains of their lives. Questions were answered on a five-point scale (i.e., “Never”, “Seldom”, “Quite Often”, “Very Often” and “Always”).

DCGM Domains	Description
Independence	The child/youth’s experience of autonomy and their ability to live without impairments despite his/her condition.
Emotion 	The child/youth’s experience of worries, anger and other emotional concerns that are linked to his/her condition.
Social Inclusion	The child/youth’s perceptions of competence and acceptance by his/her peers despite his/her condition.
Social Exclusion 	The child/youth’s experience of stigma or being left out as a result of his/her condition.
Physical Limitation	The child/youth’s experience of functional limitations, and their perceived health status as a result of his/her condition.
Medication 	The emotional impact on the child/youth of taking medication or receiving medical treatment as a result of his/her condition.

WHODAS-CY

This tool was administered to children and youth with health/developmental conditions to assess their levels of functioning in typical day-to-day activities at home, at play, at school, and in the community. Questions were answered on a five-point scale (i.e., “None”, “Mild”, “Moderate”, “Severe”, and “Extreme/Cannot Do”).

WHODAS-CY Domains	Description
Understanding & Communicating	The child/youth’s ability to learn, remember, problem-solve, and communicate with others.
Getting Around 	The child/youth’s mobility (e.g. standing, sitting) at home and outdoors.
Self-Care	The child/youth’s ability to engage in self-care abilities (e.g. personal hygiene, grooming, and getting dressed).
Getting Along with People 	The child/youth’s ability to get along with existing and new peers, and familial adults (e.g. caregivers, teachers).
Home Activities	The child/youth’s ability to complete chores and activities at home.
School/Work Assignment & Activities 	The child/youth’s ability to complete school/work tasks and activities
Participation in Society	The degree to which the child/youth participates in social/ community activities without experiencing stigmatisation due to their condition.
Disruptive Behaviour 	This additional item to the WHODAS measures the extent to which the child/youth requires behavioural support due to disruptive and/or inappropriate behavioural issues.
Stereotypical Behaviour	This additional item to the WHODAS measures the extent to which the child/youth requires behavioural support due to the exhibition of stereotypical behaviours.

Annex C: Glossary of Services

A more comprehensive list of services and programmes can be found in the Social Service Navigator[81] on NCSS' website and SupportGoWhere.

Term	Description
Casework and Counselling	Casework involves assessing the needs of a child/youth and his/her family, as well as developing intervention plans. Individual and family counselling may help them cope with personal, social and emotional challenges. Examples of organisations include: • MSF (Family Service Centres) and Children's Society for children and youths with mental health conditions (MHC) or socio-emotional needs. • Club Rainbow and Children's Cancer Foundation (CCF) for children and youths with chronic illnesses. • Singapore Association of the Visually Handicapped and SPD for children and youths with developmental needs (DN)/special educational needs (SEN).
Children and Young Persons Homes	Provide residential care programmes to children and youths from challenging family circumstances (e.g. abuse, neglect) who are in need of care, protection and/or shelter.
Club Rainbow	Supports children and youth with chronic illnesses and their families in areas such as emotional/financial support, educational assistance, therapy services and resources.
Disability Homes	Provide long-term residential care, therapy, and activities for children and youth with disabilities who experience neglect or whose caregivers are unable to care for them.
SEN resources by MOE	Offers information for parents to support children and youths with special educational needs (SEN).
Do You M.I.N.D? by TOUCH Community Services	Offers experiences and learning activities for youths to benefit their mental well-being.
Drop-in Activity Centres	Provide a safe and supervised space for children who are not adequately supported at home after school. The centres aim to enhance children's social and psychological development. Examples include Calvary Community Care and MightyKids, Families and Communities by Life Community Services Society.
Early Intervention (EI) Programmes	Offers intervention to help children under 7 years with developmental needs to gain skills to maximise their capability for independence. Relatedly, ECDA has released a 'Parents' Guide'.
Enabling Guide	For information and advice on schemes, services, supports and resources related to disability.
Enrichment and Life Skills	Includes programmes and activities for character and skill development, such as sports programmes, life skills workshops and training courses. Examples include Club Infinity by Ang Mo Kio Family Service Centre, ACE (Resilience) by Calvary Community Care and Project CABIN by Children's Society.
Fostering Agencies	These are Social Service Agencies (SSAs) that work together with MSF to provide safe and stable care arrangements for vulnerable children. They provide ongoing support to foster parents and facilitate the integration of foster children into foster families.
Mentoring	Mentoring programmes aim to inculcate values and skills in youths and include link-ups with advisors to support and journey with youths. Examples include The GRIT Academy by Lakeside Family Services, TOUCH Leadership & Mentoring.
School Transition	Programmes to prepare children and youth for their eventual return to school if they had to take a break due to their condition, such as Place for Academic Learning and Support by CCF.
YouthReach by Singapore Association for Mental Health	Offers psychosocial support, recovery programmes, and life skills training for youths aged 12 to 21 years with emotional and/or psychological issues and helps them to integrate into the community.

[81] All hyperlinks in this section can be accessed via the online version of this report, available on NCSS' website.

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