Youths in the Digital Space

Centre for Applied Research
Singapore University of Social Sciences

Technical Report

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Summary of Key Findings

SUSS previously conducted a survey on the 19-years-olds youths in 2019. The main difference between this survey and the earlier one is the age coverage. The earlier study focused solely on 19-year-olds, whereas the current study has an expanded target age of 16 to 25 year olds to allow for comparison of behaviour across the different age cohorts. In this edition of the survey, questions regarding digital behaviour as well as financial habits have been added to uncover the behaviours, attitudes, and perceptions of the younger generation due to the influence of social media and technology.

Whilst the objectives of this study may differ slightly from that of the previous one, ultimately, this study also seeks to uncover the changing pattern of behaviour of youths in Singapore. This iteration aims to understand the attitudes of Singaporean youths towards risk, both financial and virtual. The focus on earlier stages of education have lessened in comparison to the previous survey. The long term structural investigative theme is therefore what sets SUSS's Youth Survey apart from similar research projects.

Because of the broader spectrum of respondents and the varying angles from which we are conducting this study, we gain some insight into the types of challenges the youth of Singapore are facing. Whilst we are by no means proposing any clear solutions, an understanding of these challenges would be a useful starting point.

For the most part, the findings are similar to those uncovered in the earlier survey conducted in 2019. Some of the similarities include aspirations for higher education, employment, relationships, as well as marriage and parenthood.

The findings presented are based on the responses of 2,499 respondents aged 16-25.

1.   Educational Aspirations

A key finding in this study is the implication that most youths in Singapore still believe it is necessary to obtain a degree for better employment prospects. This shows that Singaporean youths may still adhere to traditional beliefs about education.

2.   Career Expectations and Motivations

Like the earlier survey on 19-year-olds, most respondents ranked having a meaningful job as the most important factor affecting their choice of career. Good salary prospects ranked second most popular. Apart from having a meaningful job and good salary prospects, the younger generation prioritises the nature of their work and having an environment that is supportive of their development. They are least concerned with whether a company is well-known.

3. Digital Behaviour

Many respondents have accustomed themselves to commercial, everyday use of technology and are comfortable expressing themselves over messaging platforms. Additionally, a majority of respondents enjoy building close relations with the people they meet online and are open to dating other individuals they have met through virtual platforms. Due to COVID-19, there has been a spike in online activity across the various cohorts that responded to the survey.

4. Social Media Usage

Instagram, WhatsApp, and Telegram are the top social media platforms used by more than 90% of the respondents. Respondents are selective about the platforms they use to interact with different social groups such as family, friends and schoolmates or colleagues.

5. Cyber Security and Risk

Results from the study show that 7 out of 10 respondents are confident in their ability to identify scams. Interestingly, almost half the respondents have reported that they have no qualms sharing their personal information with people they meet online. A similar proportion have been noted to share their passwords with another person. The majority also tend to save their bank details or personal information on their internet browsers or frequently visited websites for ease of access. These findings imply that youths have adopted a more laid-back attitude towards such potentially risky behaviour.

6. Gender Differences in Cyberbullying

6 in 10 respondents have experienced negative online behaviour, mainly in the form of negative comments and online harassment. However, there are differences in such occurrences between genders. According to the findings, males seem to be more at risk of in experiencing negative behaviour. While females are less at risk of experiencing negative behaviour, they tend to be more likely to react to such behaviours.

7. Financial Habits and Goals

A quarter of the respondents find their monthly income/allowance insufficient. There are significant differences across age ranges and dwelling types. Most respondents spend the bulk of their money on electronic gadgets, clothes and other items such as food and skincare products. 1 in 5 respondents between the ages of 16 and 19 have indicated interest in starting a business before the age of 25.

8. Financial Planning and Investment

More young Singaporeans are exploring various types of investments. Most respondents invest in shares, Exchange-Traded Funds (ETF) and cryptocurrency which have been reported to be incredibly volatile and risky. There is evidence that this behaviour is driven at least in part by social media influence.

9.   Attitudes towards Marriage and Starting a Family

As with the earlier survey, 9 in 10 respondents plan to get married eventually. A majority of them aim to get married between 25 and 30 years old. A similar proportion of respondents also plan to purchase their first house before their 30s. Many respondents from the Focus Group Discussion (FGD) cited financial stability as an important pre-requisite to getting married and starting a family.

10.   Attitudes toward COVID-19

A large proportion of respondents seem undaunted by the challenges that have arisen due to COVID-19. Most are still positive about acquiring their desired jobs and furthering their careers. Respondents from the NITEC/Higher NITEC route show less optimism in terms of supporting themselves financially during the economic downturn brought about by COVID-19.

The findings provide a glimpse of characteristics synonymous with that of a younger generation who grew up in Singapore during the digital age. Like those from past generations, the youth today see the importance of a good education, a successful career that pays comfortably, a blissful marriage, and starting a family. However, the impact and influence that social media has on youth is in large part responsible for the manner of their interactions.

1. Introduction

16- to 25-year-olds (born between 1996 and 2005) make up approximately 10% of the population in Singapore, regardless of citizenship status. In 10 years, the majority of this group of youths will be contributing to the Singapore labour force. It is important to understand how this generation differs from those in the past. As the first generation of digital natives – those who have grown up in a digital age, they have the potential to wield an enormous influence over the way our society develops alongside the advances in technology.

The aim of studying a specific group or segment of the population is to identify characteristics that differ from the status quo. Furthermore, this allows us to determine if the selected group is a homogeneous set or an agglomeration of highly diverse sub-groups.

The earlier study on 19-year-olds provided a snapshot of the mindset of youths, more specifically pertaining to the challenges that they faced. In this study, we focus on their changing patterns of behaviour to determine if their behaviours and perceptions differ from that of past generations and whether social media and digitalisation have influenced these behaviours. Some differences are discernible across age, gender, education pathways, as well as socioeconomic status (SES). Other differences are based on formed habits, such as sharing of passwords and their preference for meeting people online or face-to-face. We also observed common challenges faced by the younger Singaporean and their attitudes towards them.

As socioeconomic factors play an important role in determining educational achievements and in shaping views, the type of dwelling is often used as a crude but convenient proxy to reflect SES in this study.

In this study, we examine their attitudes towards their future career, digital behaviour, financial habits and goals, and personal beliefs. In this way, we pick out unique characteristics of younger Singaporeans who grew up in a digital age and perhaps, the influence of social media on a generation.

This is a quantitative study based on responses recorded from 2,499 respondents. The primary objective is to uncover the ways in which youth behaviours, attitudes and perceptions have shifted due to the influence of social media and technology. The coverage of this study includes young people who are studying, enlisted/about to enlist in national service, looking for jobs and working full-time. The statistics presented in the rest of this report have been weighted[1] to ensure that the demographic proportions of the sample resemble those of the national population in terms of age, gender, and race.

The report is organised into 8 main sections: (1) Introduction, (2) Motivation, (3) Educational and Employment, (4) Digital Communication and Youth Behaviour, (5)

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[1] The weights are derived from the population compositions of gender and race published by Singapore's Department of Statistics.

Financial Plans and Financial Goals, (6) Perception of Financial Risk, (7) Personal Beliefs and Principles, (8) Attitudes towards COVID-19 Pandemic and closes off with a conclusion. Section 2 explains the reason for and discusses the objectives of the study. Sections 3 – 8 discuss the analysis of responses to the respective topics. Section 9 highlights the selected key findings with concluding remarks. Details of the survey coverage and questionnaire design are given in the Appendices.

2. Motivation

This study is motivated by the desire to gain a better understanding of the changing and changed patterns in the behaviours of youths. The sample comprises youths from different age groups (16 to 25 years old), all who are at varying points of preparation to become contributing members of society.

The respondents are members of Gen Z, successors to the millennials, and regarded as the most tech-savvy generation. They have spent a majority of their years on social media and the internet – making them the first generation to grow up in a digital age. As such, there is much interest surrounding this generation. Specifically, there are many stereotypes about their behaviours, perceptions, and beliefs. By examining these aspects, we can attempt to understand why the youth are behaving this way, and whether the stereotypes are indeed true.

Furthermore, learning about the younger generation allows us to understand the impact of social media and digitalisation and how technology plays a part in shaping their beliefs/perceptions. There has been evidence found on how social media has influenced the purchasing behaviour of this generation. Youths obtain product information from social media for comparison between alternatives (Philippot, 2020). Young people are more inclined to gain financial knowledge through experience, by purchasing the products. We want to uncover more of such examples, of habits formed with the presence of technology.

This study aims to grasp unique behaviours of the younger generation in Singapore, with two main objectives. First, to provide an overview of the behavioural habits of youths in the digital era. Second, to provide a comparison of these behavioural habits across the different cohorts.

In this report, we examine the differences between youths' behaviours and perceptions based on gender, education pathway, Socioeconomic Status (SES) and age group.

3. Education and Employment

Many studies examine the beliefs and attitudes of the younger generation who are on the verge of entering the workforce as valuable employees. A study on Gen Z showed that they prioritised careers with good salary prospects, meaningful work, advancement, and professional development opportunities (Deloitte., 2019).

The results from the current study demonstrate an emphasis on the importance of education, as it is perceived by respondents to be directly related to an improved career prospect. This co-relation follows a similar trend from our past study. Unlike the past study on 19-year-olds who were mainly studying, the current study focuses on youths aged 16 to 25. As this includes young adults who are entering the workforce or currently working, we are privy to the possibility of being able to understand the expectations of this diverse group regarding their career aspirations. This will allow companies to be better prepared for the coming generations of employees.

The following figure shows the proportion of respondents that have yet to acquire a degree.

Figure 3.1 Currently holding a degree
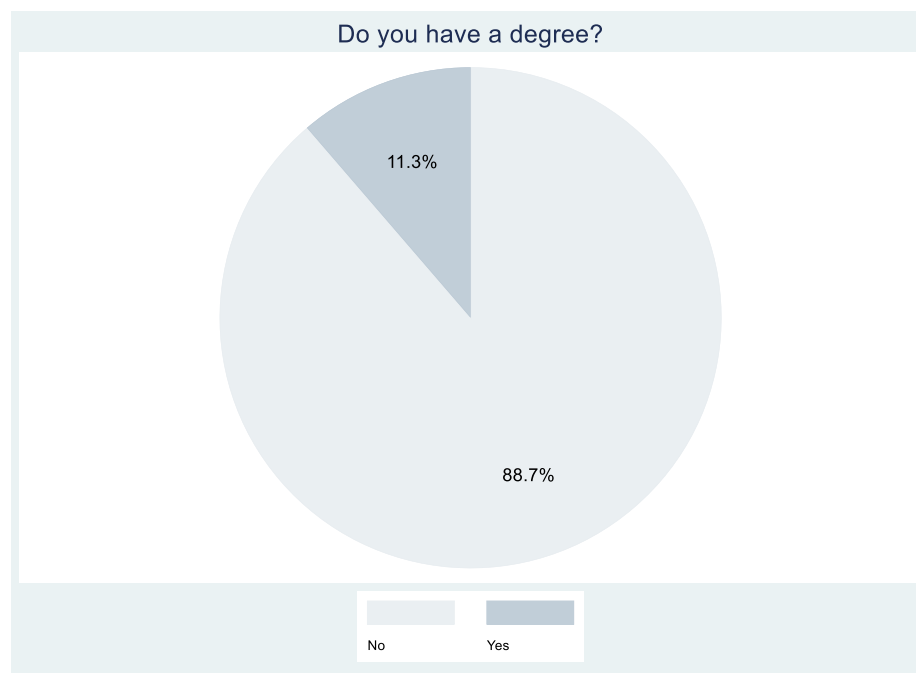
(Sample size = 2499)

Of the 2499 respondents, 89% have yet to obtain a degree. These include respondents who are either in the process of acquiring one or have already been granted a place in a university and are awaiting the commencement of their first term.

The following figure shows the number of respondents who are currently studying in either full-time or part-time courses.

Figure 3.2 Currently pursuing a degree

Are you currently pursuing a degree?

51.07%   48.93%

No   Yes
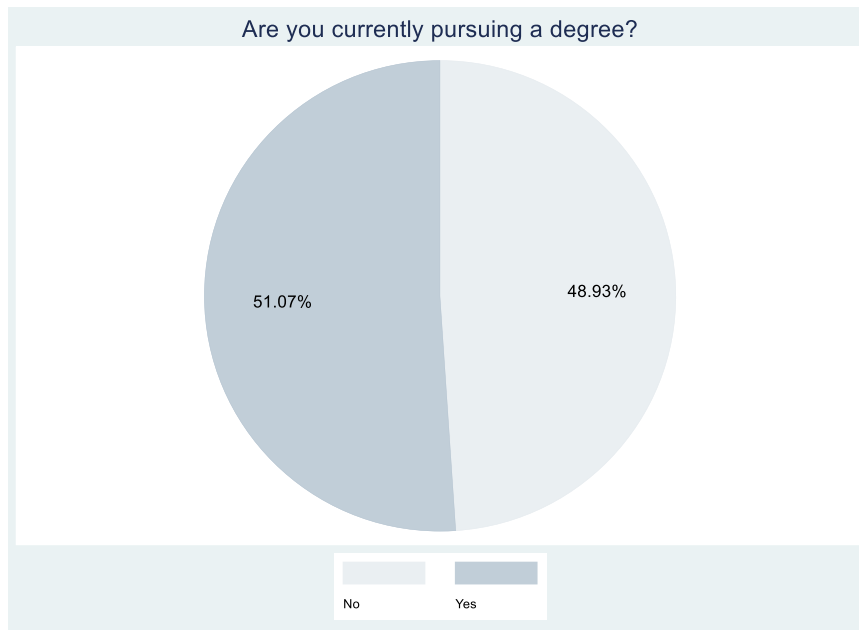
(Sample size: 1667)

Of the respondents that are currently studying either full-time or part-time, half are pursuing degrees.

The following graph shows the number of respondents who wish to pursue a degree. These respondents are either not studying, do not have degrees, or are studying but not pursuing degrees.

Figure 3.3 Wish to pursue a degree

Do you wish to pursue a degree?

7.715%

92.29%

No   Yes
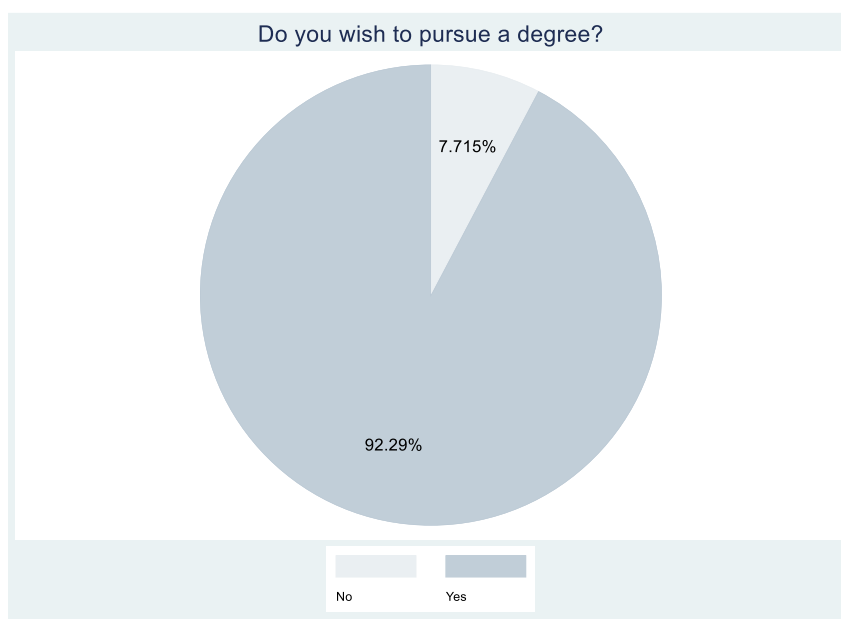
(Sample size: 921)

92% of those who neither have a degree nor are currently undertaking one have plans to eventually acquire the qualification.

The following graph distributes the respondents who wish to pursue a degree based on age.

Figure 3.4 Wish to pursue a degree by age

Do you wish to pursue a degree?

Age	No	Yes
16-19 years old	3.4	96.6
20-24 years old	8.8	91.2
25 years old	22.5	77.5

percent of frequency
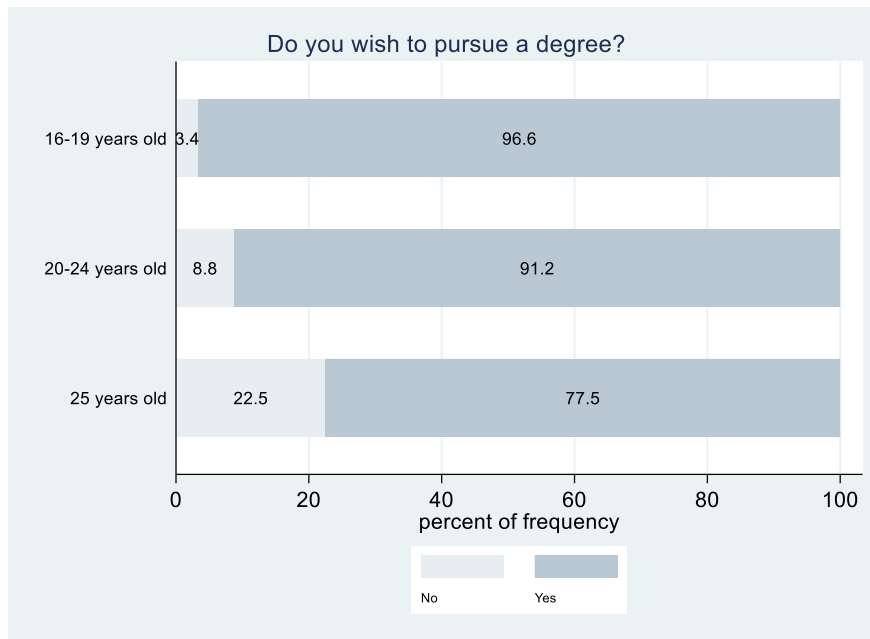
(Sample size: 921)

A clear majority of these respondents wish to pursue a degree. It can be deduced from these results that educational qualifications are still a priority to many younger Singaporeans. The percentage of respondents that wish to pursue a degree decreases with age.

The following graph illustrates the various reasons behind the respondents' desire to obtain a degree. These respondents are either currently pursuing a degree or wish to eventually pursue one.

Figure 3.5 Reasons for pursuing a degree

Reasons for acquiring degree

Reason	Yes	No
Salary Prospects	84.0	16.0
Acquire skills needed	80.3	19.7
To better compete	73.6	26.4
To qualify for job	70.6	29.4
Career change opportunities	53.0	47.0
Status	35.8	64.2
Parents	24.9	75.1
Everyone has degree	24.7	75.3
No other plans	19.6	80.4

percent of frequency
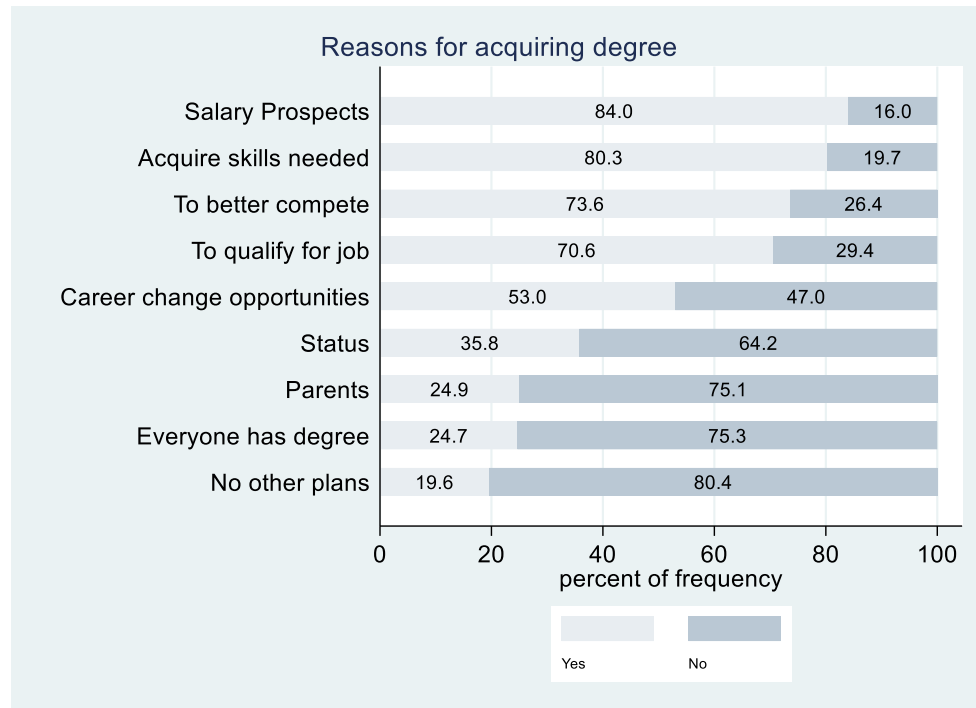
(Sample size: 2053)

Following a similar result trend from our previous survey, respondents are shown to be more concerned with the various aspects of their career as opposed to the social connotations that come with having a degree.

A nation-wide study on youths conducted by the National Youth Council (NYC) showed that most youths today believe possessing a bachelor's degree is the minimum qualification needed to get a decent job, and that this qualification is attainable (National Youth Council, 2021a)[2]. Results from the current survey supported this finding as more youths are pursuing a degree to improve their career prospects.

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[2] National Youth Council (2021a). Youth.sg: The State of Youth in Singapore, Youth and the Future of Work. Retrieved September 25, 2021 from https://www.nyc.gov.sg/en/initiatives/resources/national-youth-survey/

In the following graph, respondents rank the reasons behind why they would choose a job.

Figure 3.6 Top factors that influence respondents' choice of career

Top factors behind choice of job

Factor	percent
Meaningful	39.8
Salary prospects	19.1
Work life balance	11.6
Related to studies	10.6
Career prospects	9.5
Learning opportunities	7.5
Autonomy	0.6
Prestige	0.6
Flexible	0.6
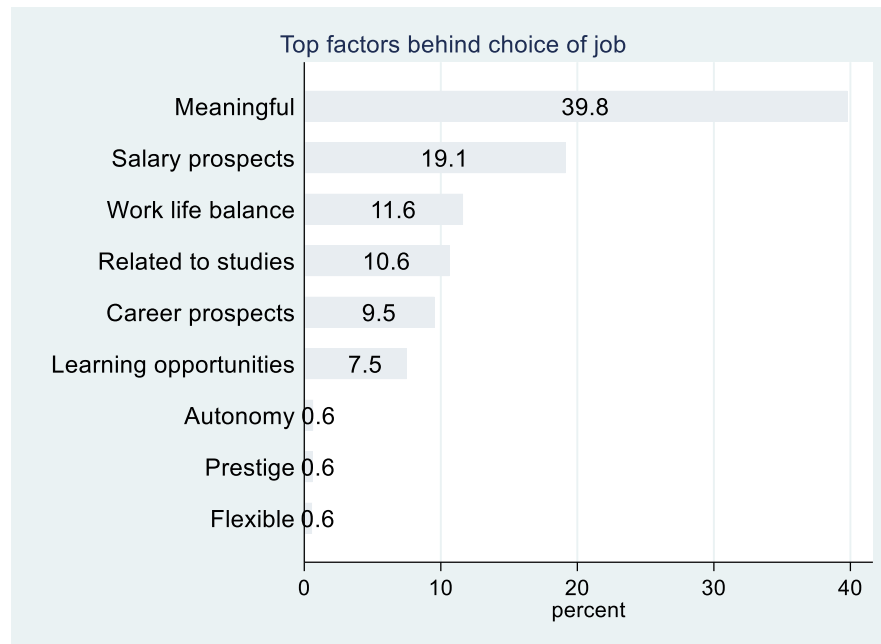
(Sample size: 2499)

The factors behind one's choice of job ranked similarly to that of our previous study, with a meaningful job being twice as popular as good salary prospects.

Gen Z tends to form opinions about a company based on their ethics, practices and social impact, instead of its long-standing reputation (Deloitte, 2019)[3]. This could have influenced their choice of career as they search for jobs that are meaningful and fulfilling to them. Based on the findings from National Youth Survey 2019, youths feel the pressure of finding a job that is fulfilling, which is consistent with their career expectations (National Youth Council, 2021a)[4].

[3] Deloitte. (2019). The Deloitte Global Millennial Survey 2019. Retrieved September 25, 2021 from https://www2.deloitte.com/content/dam/Deloitte/global/Documents/About-Deloitte/deloitte-2019-millennial-survey.pdf

[4] National Youth Council (2021a). Youth.sg: The State of Youth in Singapore, Youth and the Future of Work. Retrieved September 25, 2021 from https://www.nyc.gov.sg/en/initiatives/resources/national-youth-survey/

The following graph categorises the respondents based on their education pathways.

Figure 3.7 Top factors that influence respondents' choice of career based on education pathways
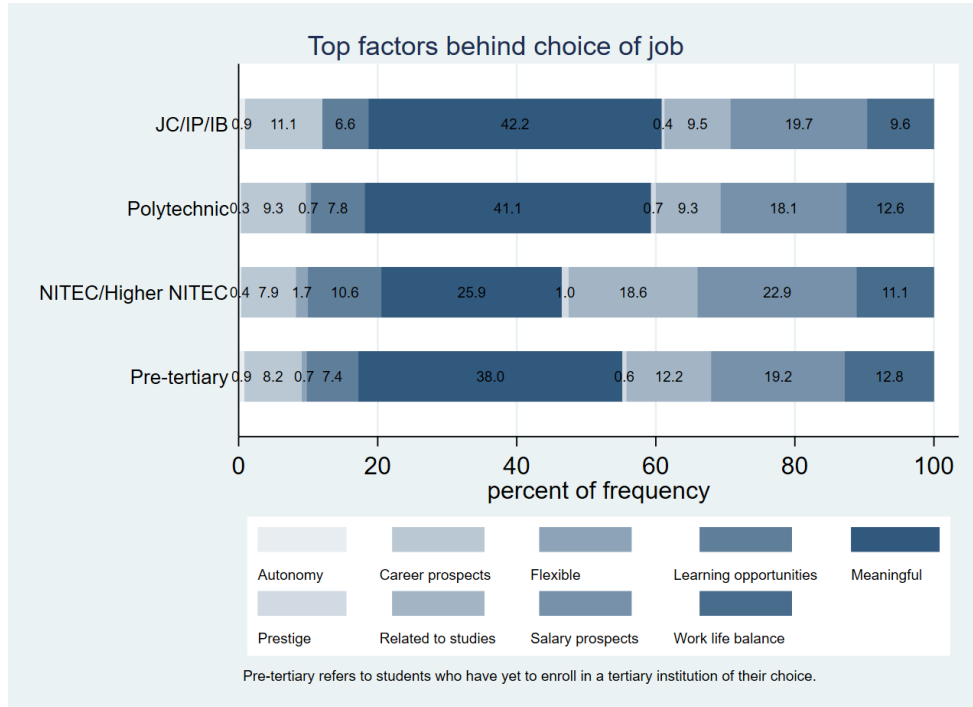
(Sample size: 2499)

The differences between NITEC graduates and Polytechnic or JC graduates are significant when it comes to selecting a job.

Whilst Polytechnic or JC graduates might incline towards a job that provides purpose, NITEC graduates are more concerned with working in a job that is compatible with their skills gained through their years of education.

The following graph shows the distribution of responses by gender of their desired starting salary.

Figure 3.8 Desired Starting Salary by Gender
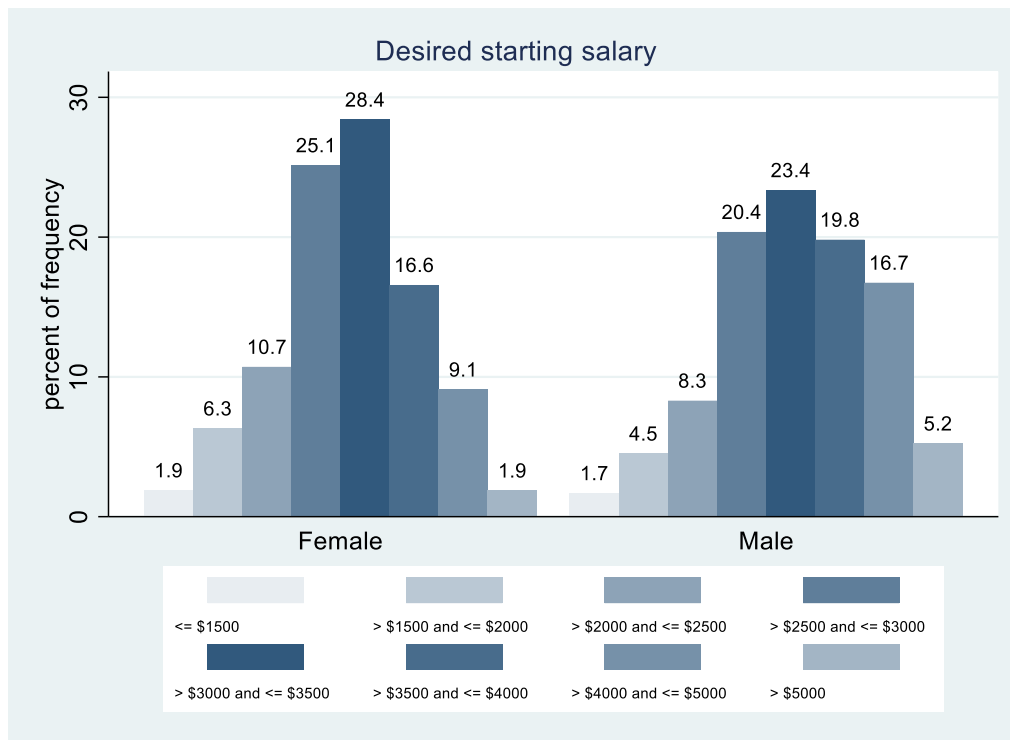
(Sample size: 2499)

On average, female respondents have a lower desired starting salary as compared to male respondents. The overall desired salary distribution bears a close resemblance to the results from National Youth Survey 2021 for the same age groups (National Youth Council, 2021a)[5].

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[5] National Youth Council (2021a). Youth.sg: The State of Youth in Singapore, Youth and the Future of Work. Retrieved September 25, 2021 from https://www.nyc.gov.sg/en/initiatives/resources/national-youth-survey/

The following graph shows the desired starting salary for those not working.

Figure 3.9 Desired Starting Salary based on those that are currently not working

Desired starting salary for non-working, but studying respondents

(Sample size: 998)

There is no significant difference between the desired working salary for those not working but studying and the rest of the respondent population. This shows that, on average, the desired starting salary is the same across the board, regardless of whether one is employed or not.

The following graph depicts respondents' attitudes towards taking on the role of a full-time social media influencer.

Figure 3.10 Social media influencer as the full-time career

Would you consider taking on the role of a full-time social media influencer?

29.56%

70.44%

No   Yes
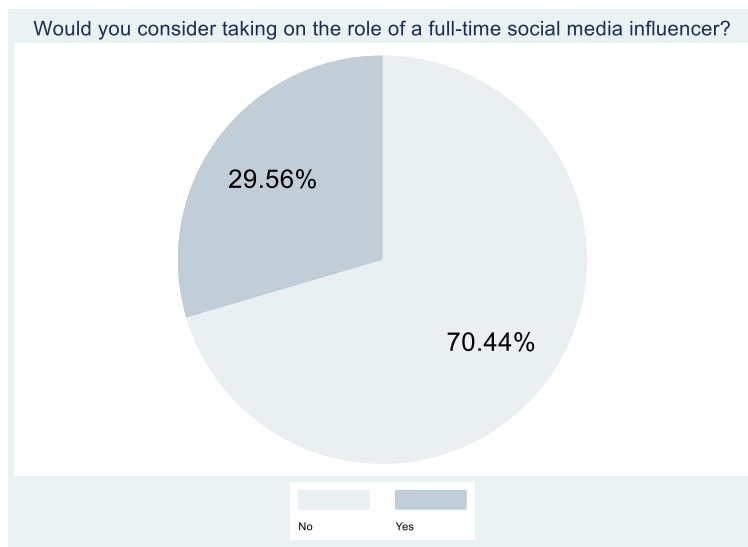
(Sample size: 2499)

3 in 10 respondents do not mind taking on the role of a full-time social media influencer.

The following are a list of reasons why respondents would take on the role of a fulltime social media influencer.

Figure 3.11 Motivations behind taking up the role as a full-time social media influencer

Reasons to take on the role of a full-time social media influencer

More connections	93.2	5.4	1.5
Flexibility	88.2	7.6	4.2
Free products	85.6	12.2	2.2
To grow my brand	82.6	13.8	3.6
More opportunities	82.6	14.8	2.6
Platform to voice out	82.2	13.4	4.4
The job pays well	70.8	22.2	7.0
I like the job	66.2	30.0	3.8
Popularity	54.0	27.8	18.2
It comes naturally	38.6	39.0	22.4

percent of frequency

Agree or strongly agree   Neutral   Disagree or strongly disagree

(Sample size: 723)

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The most popular reason for wanting to become an influencer is the ability to grow their network through the job. This is unlike in a previous study on American members of Gen Z, whose main motivation is to make a difference in the world as an influencer (Morning Consult, 2019)[6]. Other common reasons for wanting to take on the role are job flexibility, as well as the free samples that come with the job.

4. Digital Communication and Youth Behaviour

Members of Gen Z are commonly referred to as Digital Natives, because most of them grew up in a digital age, with little or no knowledge of older technology, such as diskettes and teletext. This section examines the most frequently used social media and online communication platforms by the respondents and their purposes of using these platforms. Furthermore, it also seeks to understand the reasons behind their digital behaviours.

The following are a list of communication platforms used by respondents. The graph displays their relative popularity amongst young Singaporeans.

Figure 4.1 Types of social media platforms used for communication
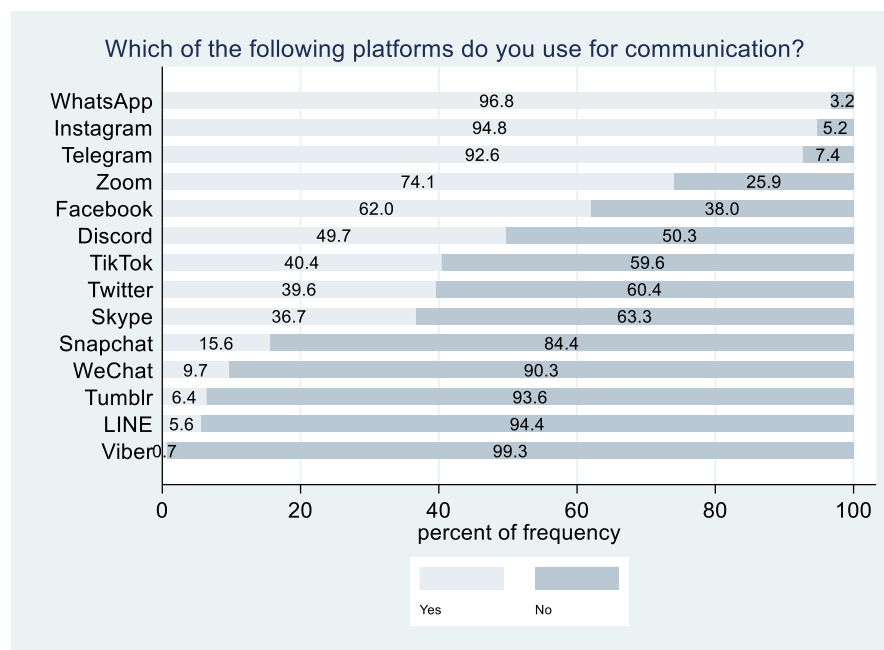
(Sample size: 2499)

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[6] Morning Consult (2019). The Influencer Report: Engaging Gen Z and Millennials. Retrieved September 23, 2021 from https://morningconsult.com/wp-content/uploads/2019/11/The-Influencer-Report-Engaging-Gen-Z-and-Millennials.pdf

The top 3 most popular communication platforms, in order, are WhatsApp, Instagram and Telegram; more than 9 out of 10 respondents use these three applications. Both Telegram and WhatsApp are the top messaging platforms used by the respondents. This is expected due to the rise in use of dark social applications, including social channels such as the private messaging platforms, for users to share privately without being tracked or measured by traditional analytics (Keegan, 2020).[7]

The following graphs show the distribution in popularity of communication platforms across gender.

Figure 4.2 Types of social media platforms used for communication by gender
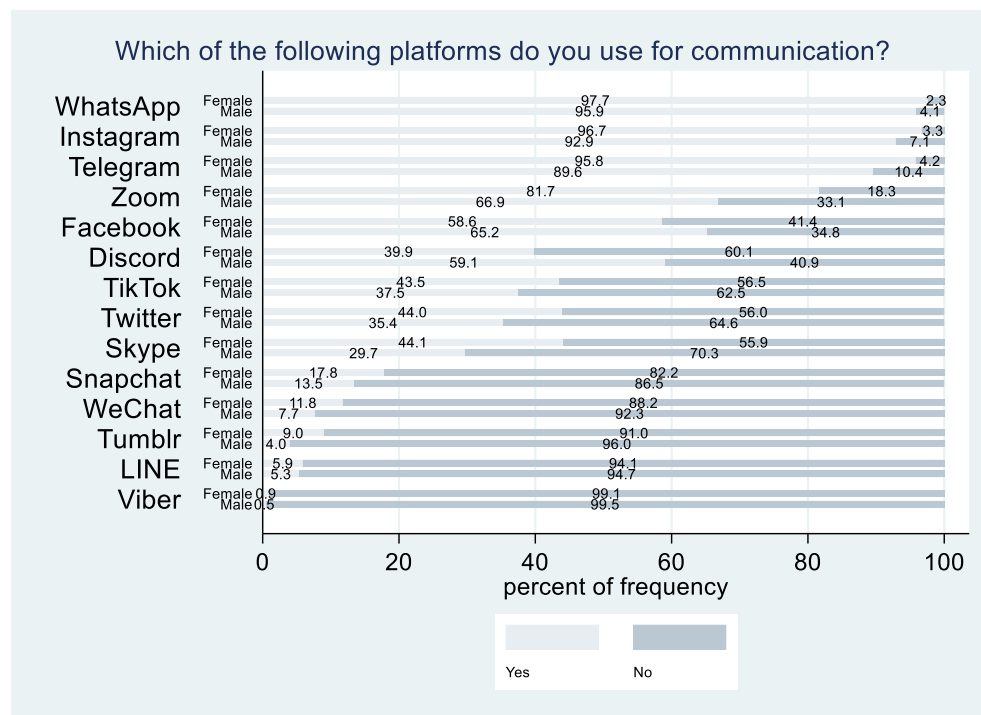
(Sample size: 2499)

There are larger proportions of female users as opposed to male users for all except two platforms – Facebook and Discord, a messaging application commonly used by gamers.

This could be due in part to research pointing towards a larger male gaming population.

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[7] Keegan, M. (2020). How brands in Asia can capitalise on the rise of dark social. In Campaign Asia. Retrieved September 27, 2021 from https://www.campaignasia.com/article/how-brands-in-asia-can-capitalise-on-the-rise-of-dark-social/457944

20

The following graph depicts the groups whom respondents communicate with using the top three communication platforms.

Figure 4.3 Interactions with different social groups using different social media platforms

Who do you communicate with on these platforms

Platform	Mainly or only family	Mainly or only friends	Mainly or only peers	Family, friends and peers
WhatsApp	28.1	11.0	11.9	49.0
Telegram	2.5	65.5	10.0	22.1
Instagram	1.3	80.5	1.4	16.7
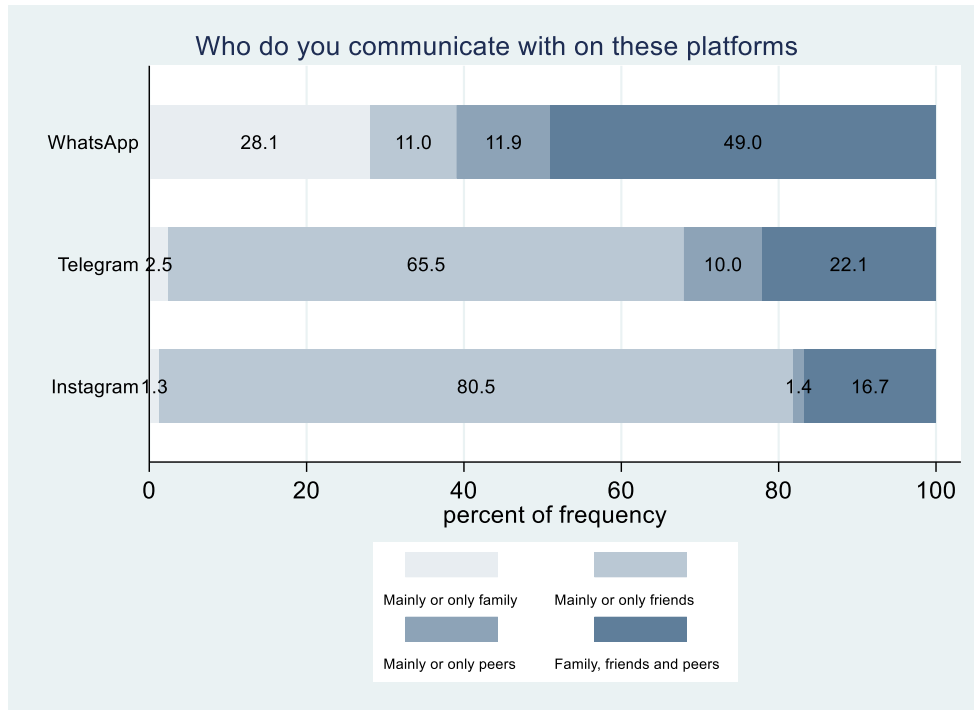
(Sample size: 2499)

Generally, the respondents appear to be selective with the platforms they use when interacting with different social groups.

WhatsApp is the most popular private messaging platform for general communication, with almost half the respondents using it reporting that they interact with family, friends and peers on the application. The other commonly used private messaging platform, Telegram, is usually used for interactions with friends.

Instagram, unlike the other two platforms, is an open sharing platform. Most of its users from this study mainly use it to interact with their friends and very few of them use it to interact with colleagues, classmates, or even family members.

The following graph contains a list of statements that show respondents' inclinations to interactions, both virtual and in real life.

Figure 4.4 Views about the online and offline interactions

Online and real-life interactions

Statement	Agree or strongly agree	Disagree or strongly disagree	Neutral
Comfortable with using emojis and text	89.3	3.5	7.2
Comfortable using eye contact, body language and speech	85.4	5.3	9.3
Willing to date an online acquaintance	52.2	24.3	23.5
More online than face-to-face interactions	48.2	27.6	24.2
Enjoys meeting new people online	41.9	25.4	32.7
Enjoys forging close bonds online	40.9	23.8	35.2
Reserved and won't initiate conversations	34.4	38.0	27.5
Not good at continuing conversations	30.9	44.4	24.7
Difficulty opening up over face to face conversations	30.7	43.4	25.9
Prefers meeting people online	23.9	42.7	33.4

percent of frequency

(Sample size: 2499)

89% of respondents report being comfortable with expressing themselves over virtual messages.

In relation to that, a slightly smaller percentage of respondents are comfortable with expressing themselves whilst engaged in a face-to-face interaction.

Approximately 50% of the respondents also have more online than face to face interactions and are open to dating other individuals they have met through virtual platforms.

This could be due to COVID-19, which has prevented and reduced the number of physical gatherings.

The inability to socialize could be a cause for concern as the newer generation may find difficulties in expressing or communicating themselves properly during physical interactions.

The younger generation seems to be comfortable meeting new people online. This trend was also reflected in the national youth study, where nearly a quarter of its

respondents from similar age groups goes online to connect or network with new friends daily (National Youth Council, 2021b).[8]

The following graph compares online activity engaged in by the respondent before and during COVID-19.

Figure 4.5 Frequency of online activities before and during COVID-19
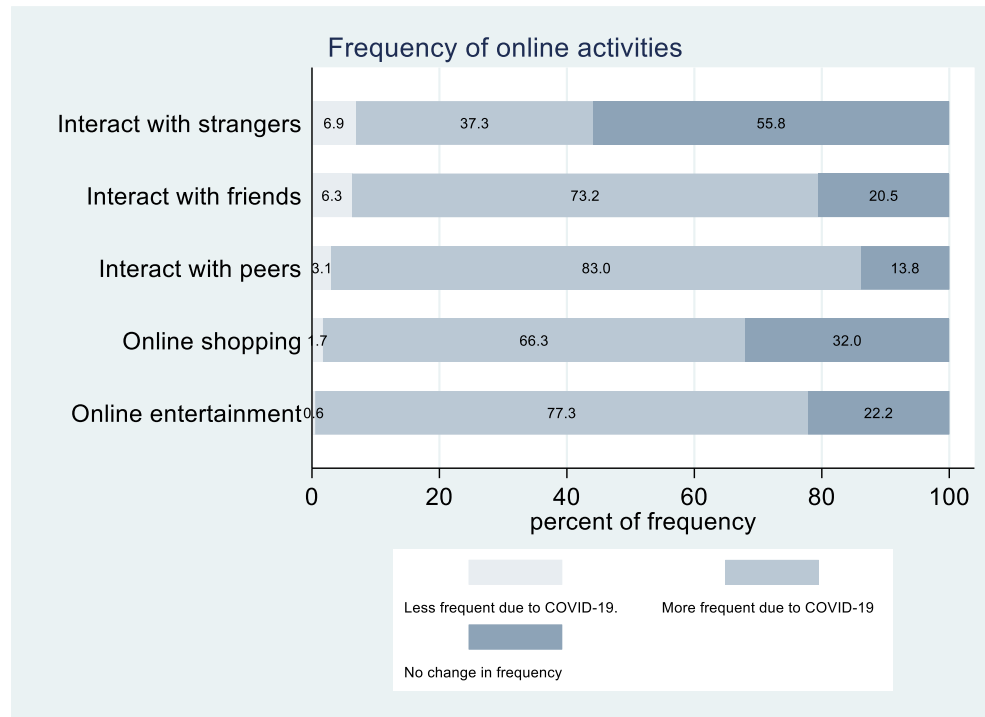
(Sample size: 2499)

The occurrence of the COVID-19 pandemic has resulted in a higher frequency of online interactions as well as use of online services, with the exception being meeting new people through an online platform.

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[8] National Youth Council (2021b). Youth.sg: The State of Youth in Singapore, Youth and Their Diverse Priorities. Retrieved September 25, 2021 from
https://www.nyc.gov.sg/en/initiatives/resources/national-youth-survey/

The following graph shows the percentage of respondents that have experienced negative behaviour online.

Figure 4.6 Encounter with negative behaviour online

Have you ever experienced negative behaviour online?

34.92%

65.08%

No   Yes

(Sample size: 2499)

6 out of 10 respondents have experienced negative behaviour online. With the spike in online interactions due to COVID-19, this could affect the daily lives of Singaporean youth.

The following graph shows the different types of negative online behaviour, colloquially referred to as "cyberbullying".

Figure 4.7 Types of negative online behaviour encountered

Types of negative online behaviour

	Yes	No
Negative comments	90.3	9.7
Harassment	35.0	65.0
Exclusion	28.4	71.6
Virtual threats	25.3	74.7
Leaked information	24.5	75.5
Cyberstalking	17.2	82.8
Instigation	10.6	89.4
Other	3.1	96.9

percent of frequency

Yes   No
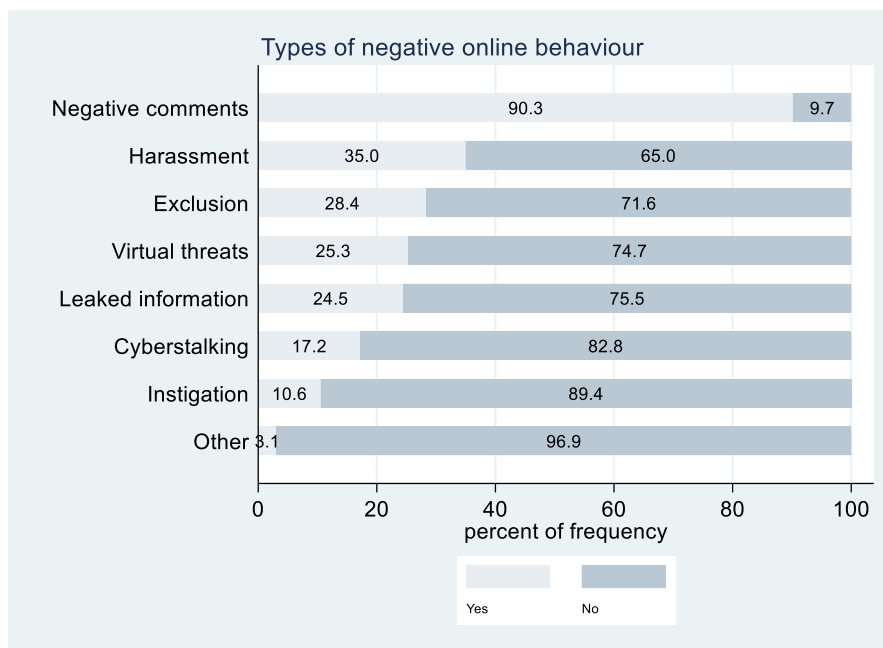
(Sample size: 1536)

The most common form of negative online behaviour comes in the form of comments, with almost 9 out of 10 respondents experiencing this form of behaviour.

The following graph compares the various types of negative behaviour across gender.

Figure 4.8 Types of negative online behaviour encountered by gender

Types of negative online behaviour

		Yes	No
Negative comments	Female	86.9	13.1
	Male	93.0	7.0
Harassment	Female	35.2	64.8
	Male	34.8	65.2
Exclusion	Female	26.8	73.2
	Male	29.6	70.4
Virtual threats	Female	19.9	80.1
	Male	29.6	70.4
Leaked information	Female	21.0	79.0
	Male	27.2	72.8
Cyberstalking	Female	21.1	78.9
	Male	14.1	85.9
Instigation	Female	12.6	87.4
	Male	9.0	91.0
Other	Female	3.6	96.4
	Male	2.7	97.3

percent of frequency
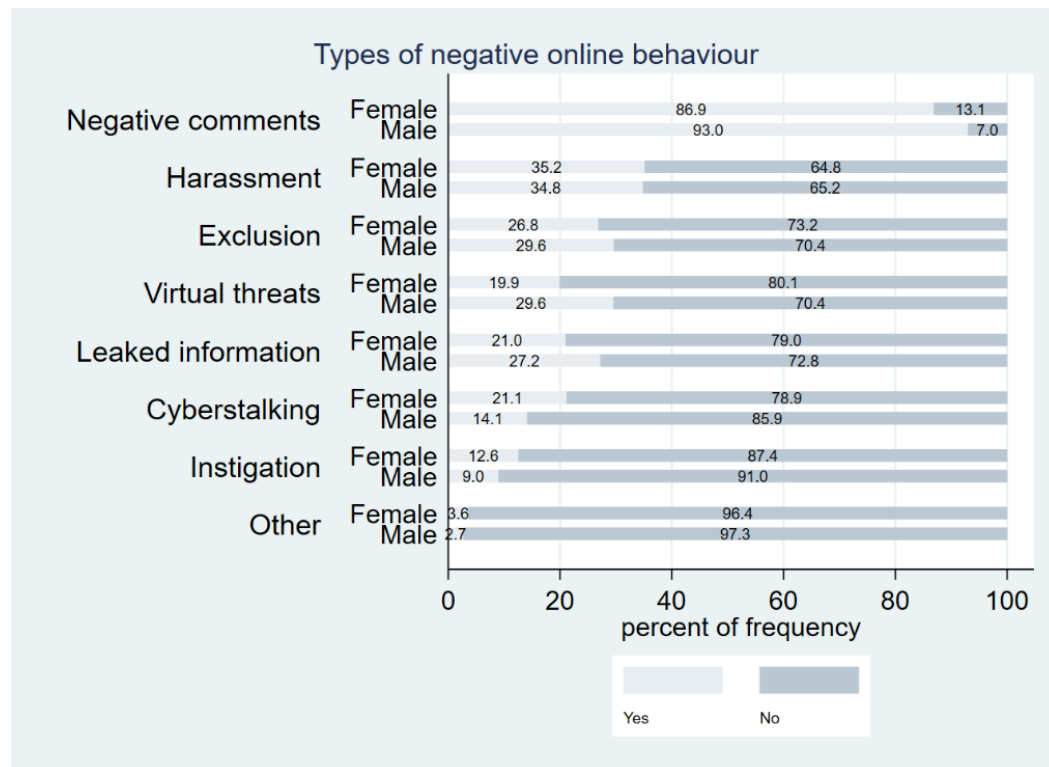
(Sample size: 1536)

Males are more likely than females to report facing various types of negative online behaviour, with the exception of cyberstalking.

The following graph shows the proportions of respondents that have reacted to the negative behaviour that they have encountered online.

Figure 4.9 React to negative online behaviour encountered by gender

(Sample size: 2499 (top), Sample size: 1536 (bottom))

More than half of the female respondents and 70% of male respondents report having experienced negative online behaviour.
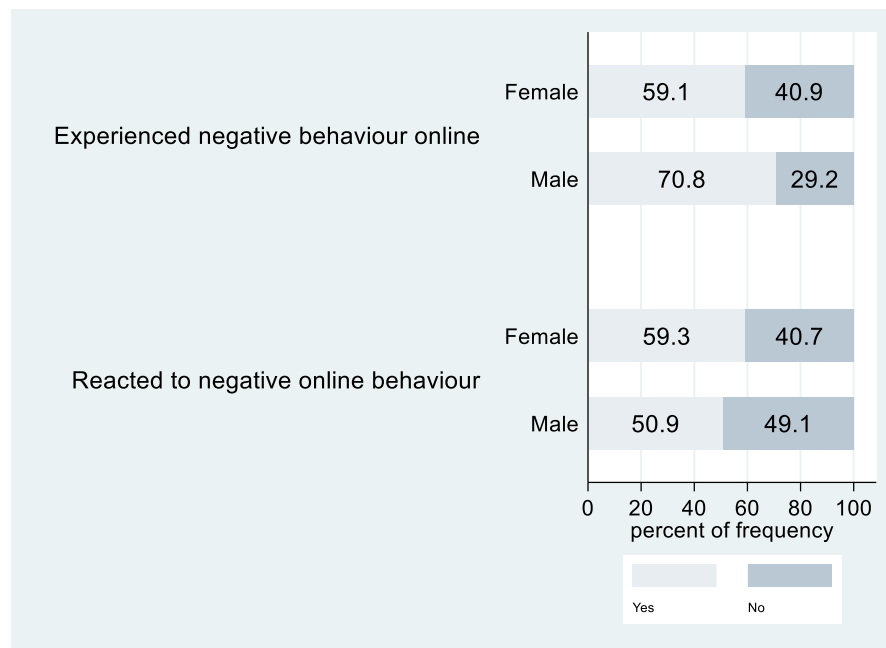
In Figure 4.2, a larger percentage of males were shown to use messaging platform Discord that is popular among gamers; there could be a correlation between gaming and negative online behaviour for male respondents.
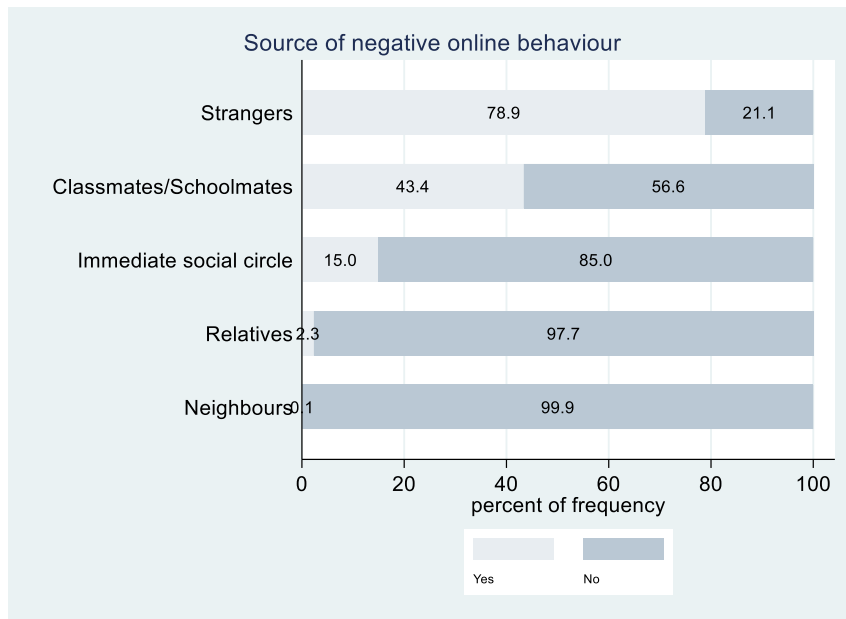
Whilst a larger percentage of male respondents have reported encountering negative behaviour online, the percentage of female respondents who have reported reacting to negative behaviour was significantly larger compared to male respondents. This shows that women are more likely to confide, consult or inform others regarding these online encounters as opposed to men. The findings are like those from the earlier studies. While lesser females experience cyberbullying compared to their male counterparts, they are also more likely to report such negative online behaviour (Li, 2006; Kasahara et al., 2019). [9] The gender differences in terms of cyberbullying were also seen from our past study on youth.

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[9] Kasahara, G., Houlihan, D., & Estrada, C. (2019). Gender Differences in Social Media Use and Cyberbullying in Belize: A Preliminary Report. International Journal of Psychological Studies, 11, 32. Retrieved September 10, 2021 from https://doi.org/10.5539/ijps.v11n2p32

Li, Q. (2006). Cyberbullying in Schools: A Research of Gender Differences. School Psychology International, 27(2), 157–170. Retrieved September 23, 2021 from https://doi.org/10.1177/0143034306064547

The following graph shows the various types of groups that could have perpetuated the negative online behaviour.

Figure 4.10 Source of negative online behaviour

Source of negative online behaviour

	Yes	No
Strangers	78.9	21.1
Classmates/Schoolmates	43.4	56.6
Immediate social circle	15.0	85.0
Relatives	2.3	97.7
Neighbours	0.1	99.9

percent of frequency

(Sample size: 1536)

Respondents who experience unpleasant behaviour online report that the majority of these originated from anonymous sources.

The following graph shows the frequency of respondents' exhibiting negative behaviour towards other individuals in online situations.

Figure 4.11 Respondents' online behaviour towards other individuals

Online behaviour towards other individuals

	Never	Rarely or sometimes	Often or always
Incited others to behave harshly	66.8	32.4	0.8
Behaved harshly towards another	48.1	50.9	1.0

percent of frequency

(Sample size: 2499)

27
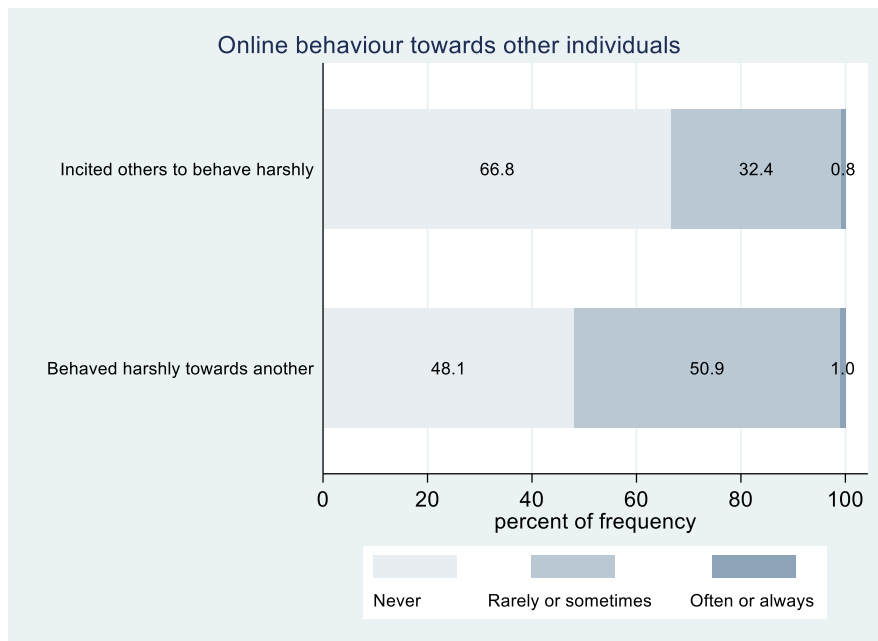
More than half the respondents have exhibited negative behaviour towards another individual in a virtual setting.

The following graph shows how frequently respondents take measures to ensure that their information is kept secure.

Figure 4.12 Views about Cyber risk and Cyber Security

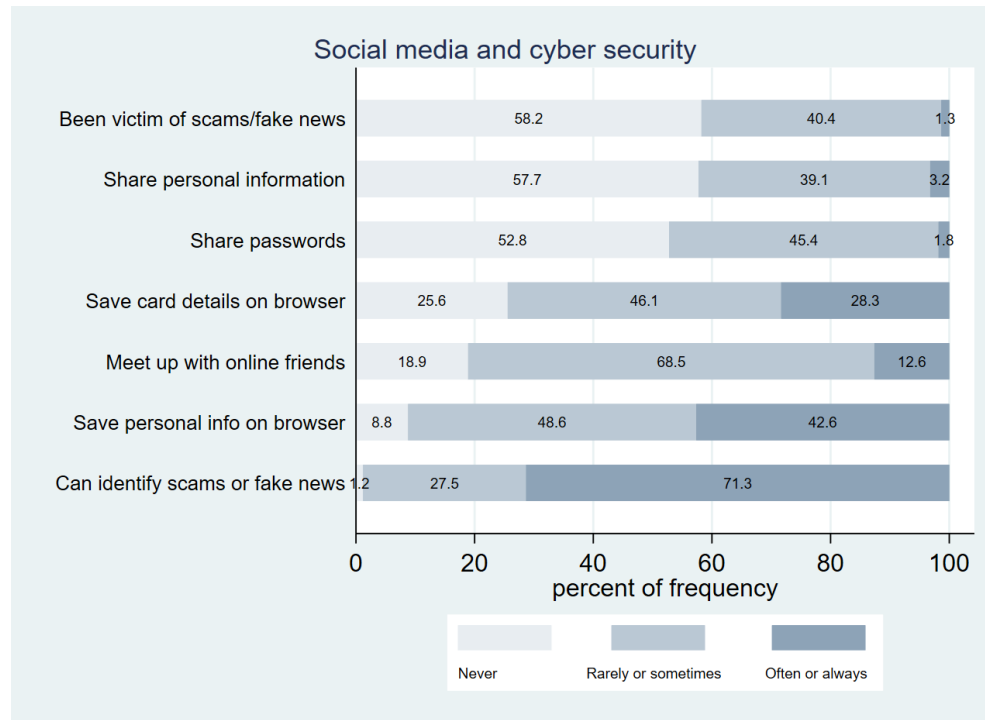
(Sample size: 2499)

Based on the findings in the graph above, respondents seem to adopt a relaxed perspective towards risk, especially when it comes to what most perceive as important; banking details and personal information.

However, as the youth of today are more technologically savvy, they are more likely to be aware of the risks they are taking by allowing the abovementioned information to be widely available. They are also more confident at spotting fraudulent entities, with 7 out of 10 mentioning that they are often confident at identifying scams or fake news.

More than 5 out of 10 respondents have shared personal information with friends they have met online, as well as their passwords with another individual. The findings are consistent with those from the earlier studies, in which youths are found to be more comfortable in sharing their personal information online and are

also less cautious when carrying out online activities (Yeoh, 2019; Sithira & Nguwi, 2014)[10].

The graph below shows their reasons for sharing their password.

Figure 4.13 Reasons for sharing password

Reasons for sharing passwords

	Yes	No
Trust	56.6	43.4
Shared accounts	40.3	59.7
One-time urgent use	39.0	61.0
Convenience	21.3	78.7
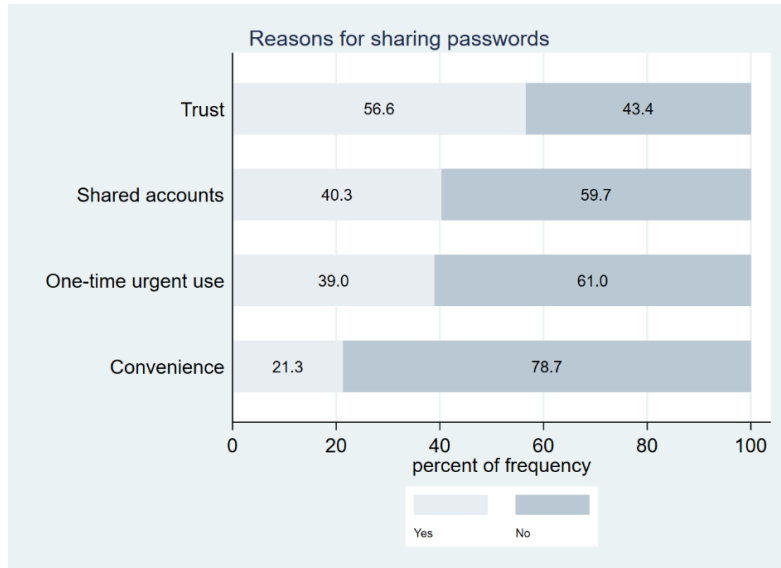
(Sample size: 1180)

6 out of 10 respondents trust the people they share their password with.

8 out of 10 respondents have physically met up with people after having made their acquaintance online at least once (Figure 4.12). The graph below shows the various reasons for doing so.

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[10] Sithira, V., & Nguwi, Yok-Yen (2014) A study on the adolescent online security issues. International Journal of Multidisciplinary and Current Research, 2. pp. 596-601. Retrieved September 20, 2021 from http://ijmcr.com/a-study-on-the-adolescent-online-security-issues/

Yeoh, G. (2019). Are Singaporean Youth Really Obsessed With Sharing Their Entire Lives Online? In RICE Media. Retrieved September 27, 2021 from https://www.ricemedia.co/current-affairs-commentary-singaporean-youth-data-privacy/

Figure 4.14 Reasons to further relationship with online acquaintances

Reasons to further relations with online acquaintances

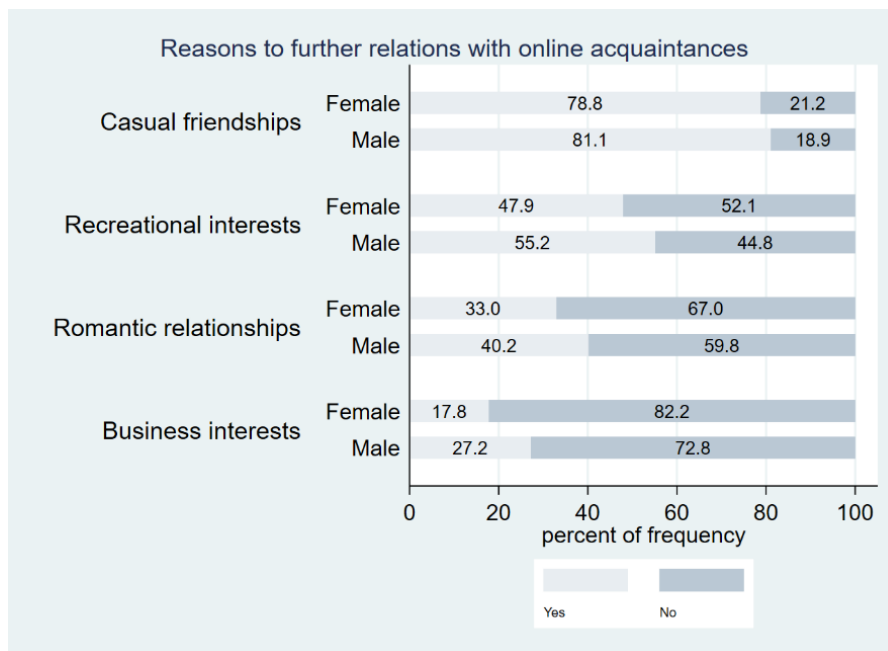|	Yes	No
Casual friendships	80.0	20.0
Recreational interests	51.9	48.1
Romantic relationships	36.9	63.1
Business interests	23.0	77.0
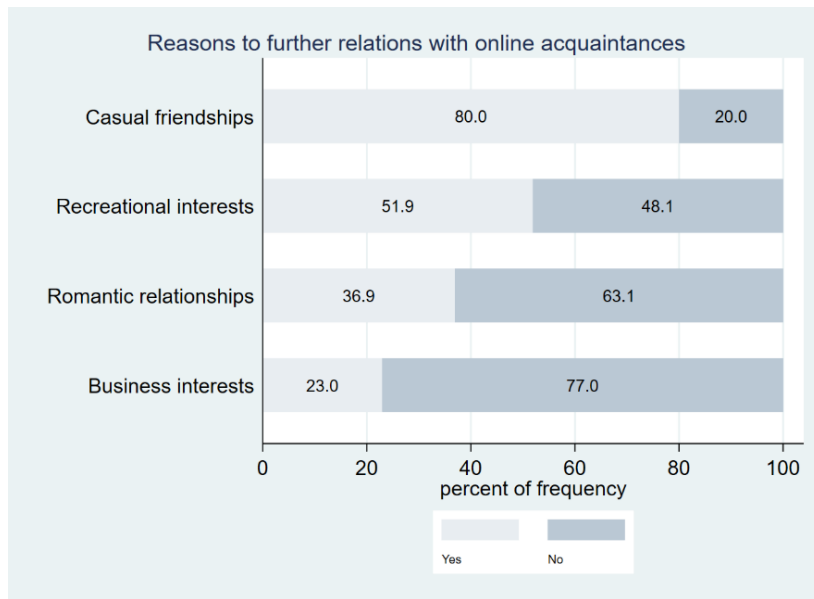
(Sample size: 2026)

80% of those respondents meet online friends in person to further casual friendships, and more than half do so because of similar hobbies/interests.

The following graphs compare the respondents' purposes for meeting up with online friends based on gender and age group.

Figure 4.15 Reasons to further relationship with online acquaintances by gender

Reasons to further relations with online acquaintances

		Yes	No
Casual friendships	Female	78.8	21.2
	Male	81.1	18.9
Recreational interests	Female	47.9	52.1
	Male	55.2	44.8
Romantic relationships	Female	33.0	67.0
	Male	40.2	59.8
Business interests	Female	17.8	82.2
	Male	27.2	72.8

(Sample size: 2499)

Figure 4.16 Reasons for further relationship with online acquaintances by age
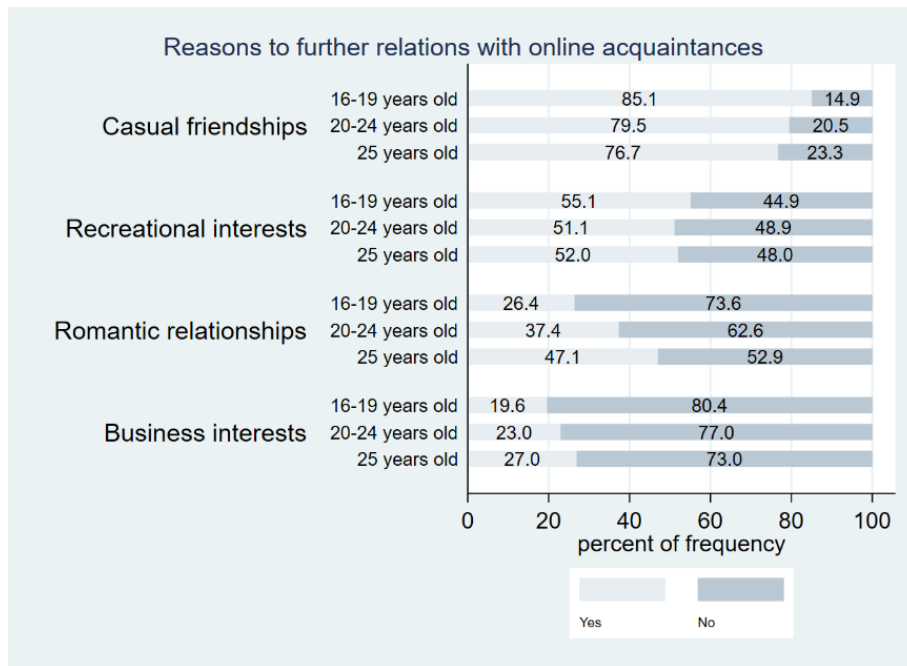
(Sample size: 2499)

There is almost a 10% difference in the proportion of male respondents, compared to females, who report meeting up with other individuals for purposes such as common interests, as well as business and romantic intentions.

Whilst younger respondents are more likely to meet other individuals to pursue casual friendships as well as indulge in shared recreational interests, those in their 20s are more focused on developing romantic relationships and discussing business.

During the FGD held prior to the survey, there were several female respondents who expressed caution when asked about meeting up with individuals they had met online.

5. Financial Plans and Financial Goals

This section sheds light on the financial habits and goals of the younger generation. We look at the amount of money that youths require to fund their lifestyles and daily activities. In terms of financial goals, we investigate the age in which they plan to achieve various milestones including purchasing their first house, purchasing a car, starting a business, and paying off their loan.

The following graph shows how much respondents make or receive on a monthly basis.

Figure 5.1 Monthly income and allowance received
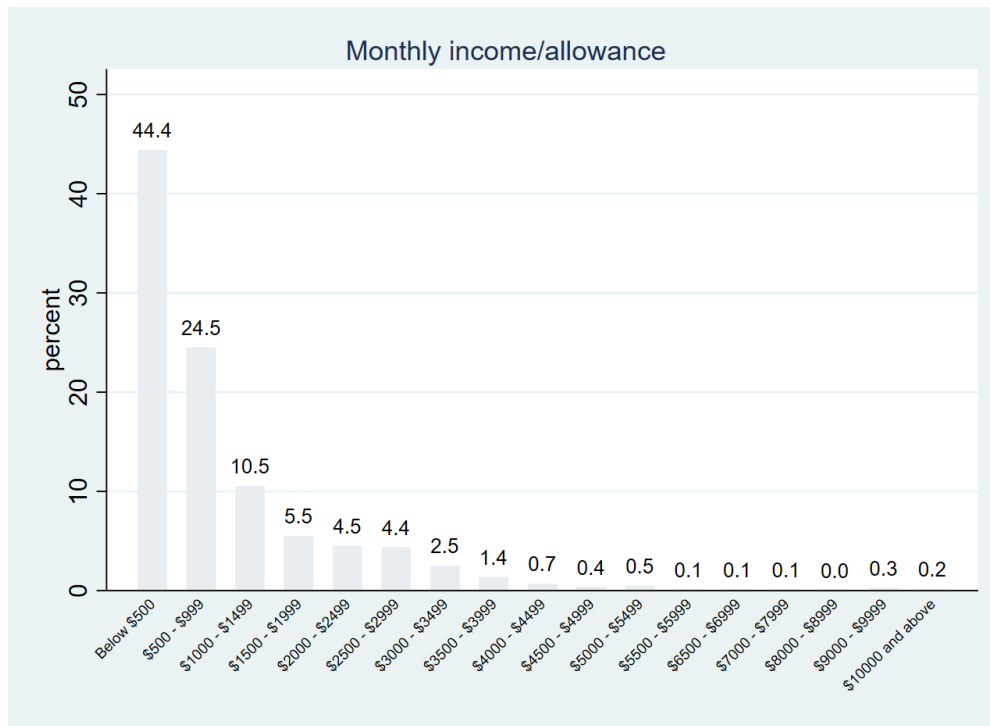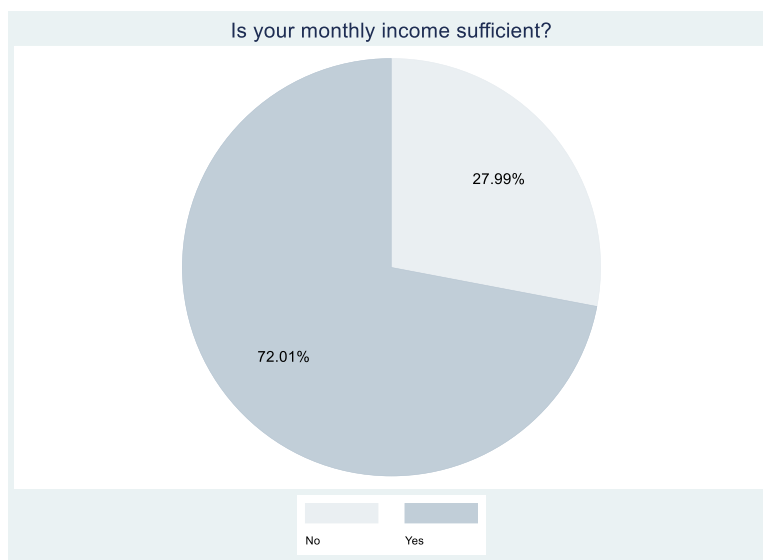

(Sample size: 2599)

Only a quarter of respondents are working full-time. The rest of the respondents are either working part-time or receiving an allowance from their parents.

The following graph shows the proportion of respondents who find their monthly allowance/income insufficient.

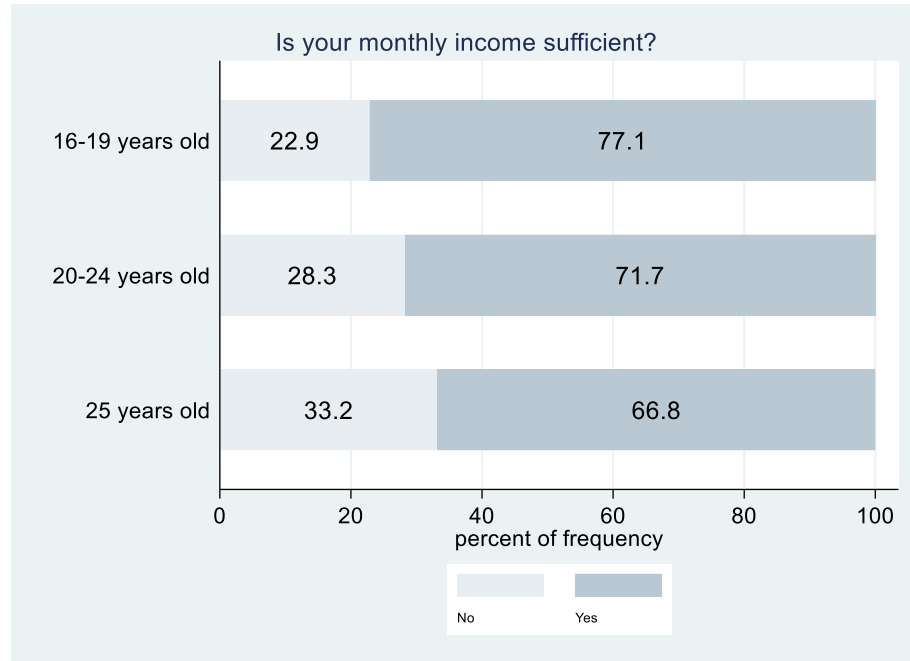*Figure 5.2 Whether or not the monthly income and allowance is sufficient*

(Sample size: 2499)

More than 1 in 4 respondents find the current amount they are receiving each month to be insufficient.

The following graph categorises respondents, by age group, who find their income/allowance to be insufficient.

Figure 5.3 Whether or not the monthly income and allowance is sufficient by age

Is your monthly income sufficient?

Age group	No	Yes
16-19 years old	22.9	77.1
20-24 years old	28.3	71.7
25 years old	33.2	66.8

percent of frequency

(Sample size: 657)

With an increase in age comes a decrease in adequacy of monthly allowance.

A large number of 16- to 19-year-olds are still receiving an allowance and have a substantial amount of additional expenditure covered for by their parents or guardians.

On the other hand, older respondents, especially those in or approaching their mid-twenties, are either working or in university, where the time spent at home is significantly less, and their salaries or allowances are directed at covering a wider range of expenses.

The following graph compares whether income/allowance is sufficient across type of dwelling.

Figure 5.4 Whether or not the monthly income and allowance is sufficient by Type of Dwelling

Is your monthly income sufficient?

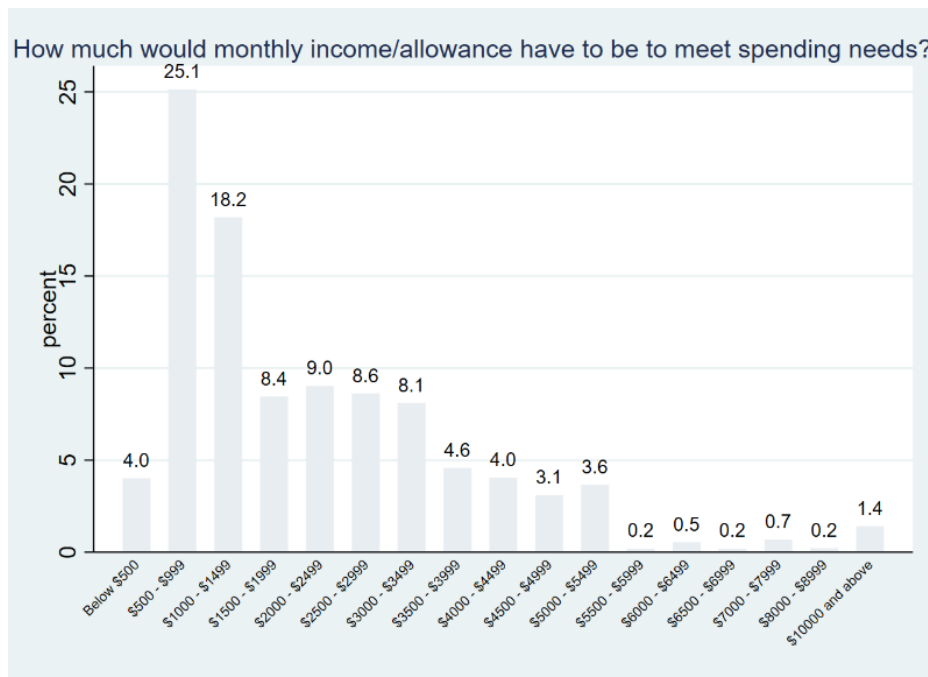| Type of Dwelling	No	Yes
1-3 Room Flat (HDB)	38.2	61.8
4-Room Flat (HDB)	29.0	71.0
Largest HDBs	29.6	70.4
Private properties	18.5	81.5

percent of frequency

No   Yes
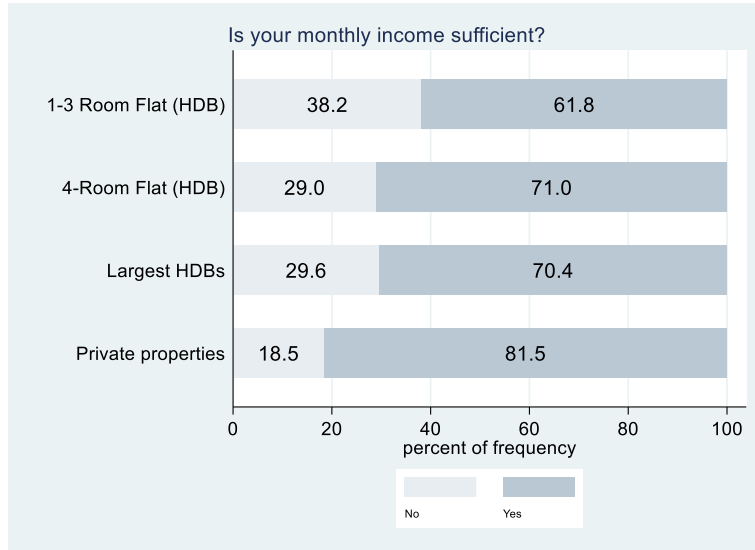
(Sample size: 2499)

2 out of 10 respondents living in private properties find their monthly income/ allowance insufficient. This number increased for those living in public housing.

The following graph shows the distribution of responses by salary range for what respondents believe to be enough.

Figure 5.5 . Monthly income and allowance required

How much would monthly income/allowance have to be to meet spending needs?

| Range	percent
Below $500	4.0
$500 - $999	25.1
$1000 - $1499	18.2
$1500 - $1999	8.4
$2000 - $2499	9.0
$2500 - $2999	8.6
$3000 - $3499	8.1
$3500 - $3999	4.6
$4000 - $4499	4.0
$4500 - $4999	3.1
$5000 - $5499	3.6
$5500 - $5999	0.2
$6000 - $6499	0.5
$6500 - $6999	0.2
$7000 - $7999	0.7
$8000 - $8999	0.2
$10000 and above	1.4

(Sample size: 657)

The most commonly selected amount required to meet spending needs fell under the range of $500 - $999. Based on approximation, respondents would need double their current total monthly income/allowance to get through a month, as nearly half of the respondents reported receiving less than $500 monthly.

The following graph shows the spending range under which respondents' latest, most expensive purchase falls under.

Figure 5.6 Most expensive purchase over the last 3 months

Cost of latest most expensive purchase
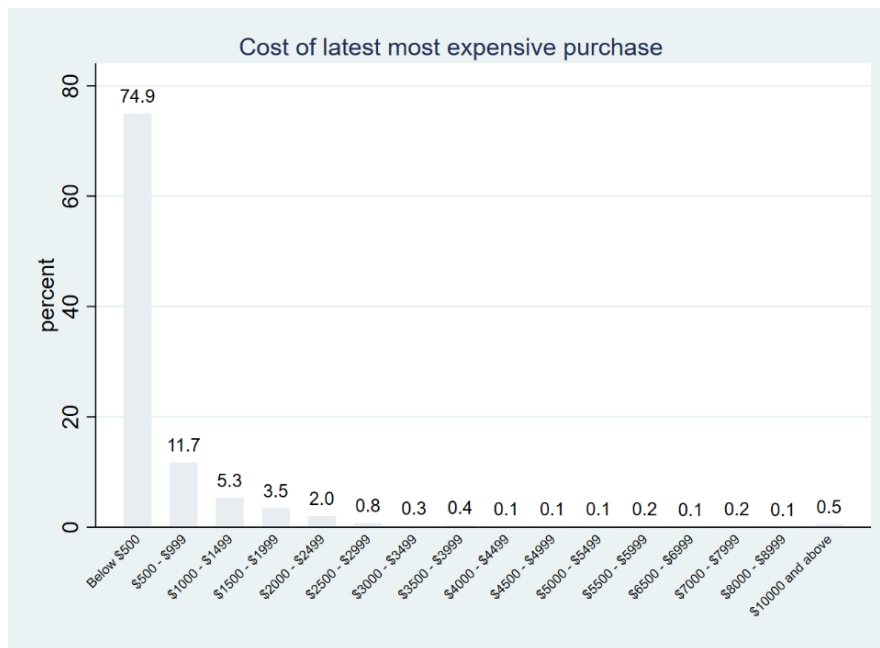
(Sample size: 2499)

When asked what category their most expensive purchase falls under, the respondents' answers are as shown in the following graph.

Figure 5.7 Category of the most expensive purchase over the last 3 months

Category of most recent purchase
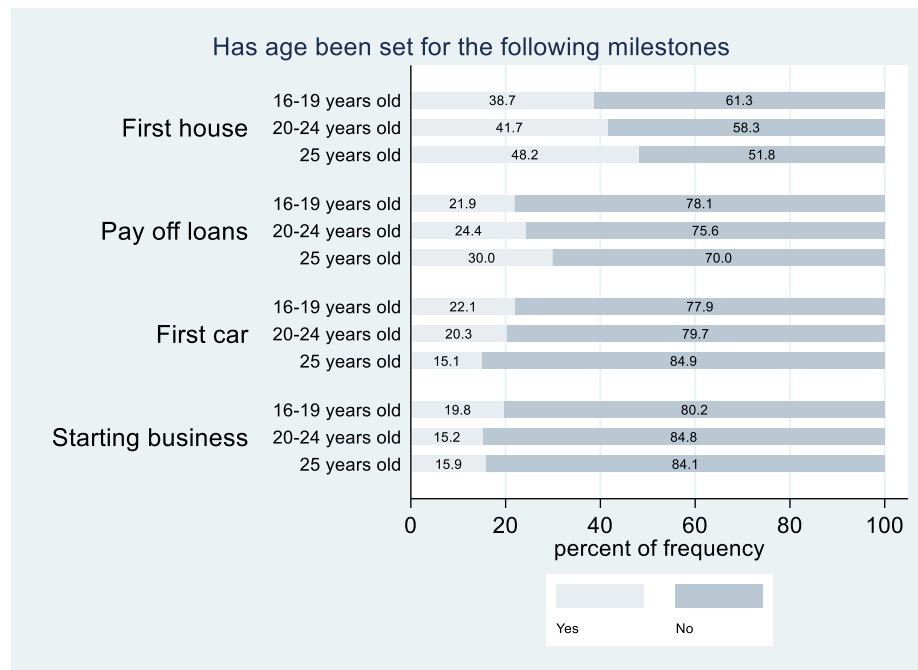
(Sample size: 2499)

35
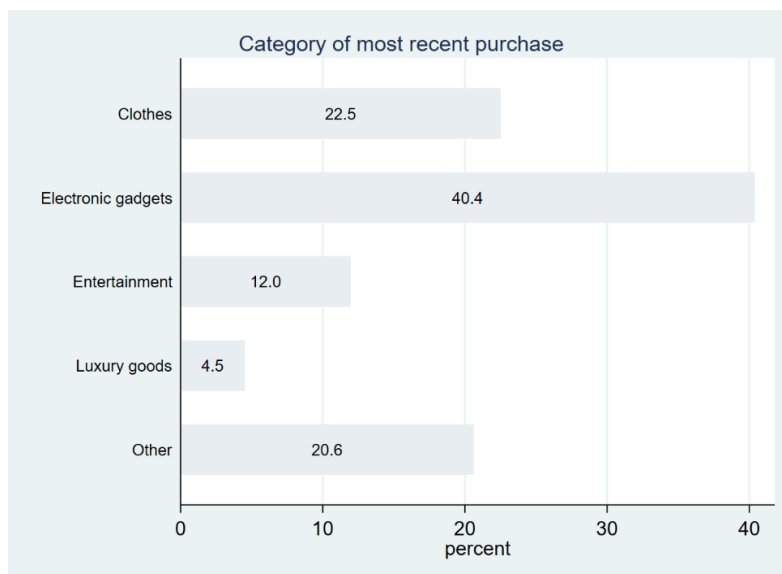
Almost 4 out of 10 respondents' most expensive purchase fell under the electronic gadgets category.

A great number of that selected "Other" mostly spent money on food, beauty products (skincare, specialized toothpaste, etc.) as well as sports equipment or gym memberships and, interestingly, tattoos.

This points towards the younger generation's emphasis on physical appearance, as well as nutrition.

The following graph compares whether respondents from the following age groups have already set an age for the suggested milestones.

Figure 5.8 Having a minimum age to achieve financial milestones

(Sample size: 1024)

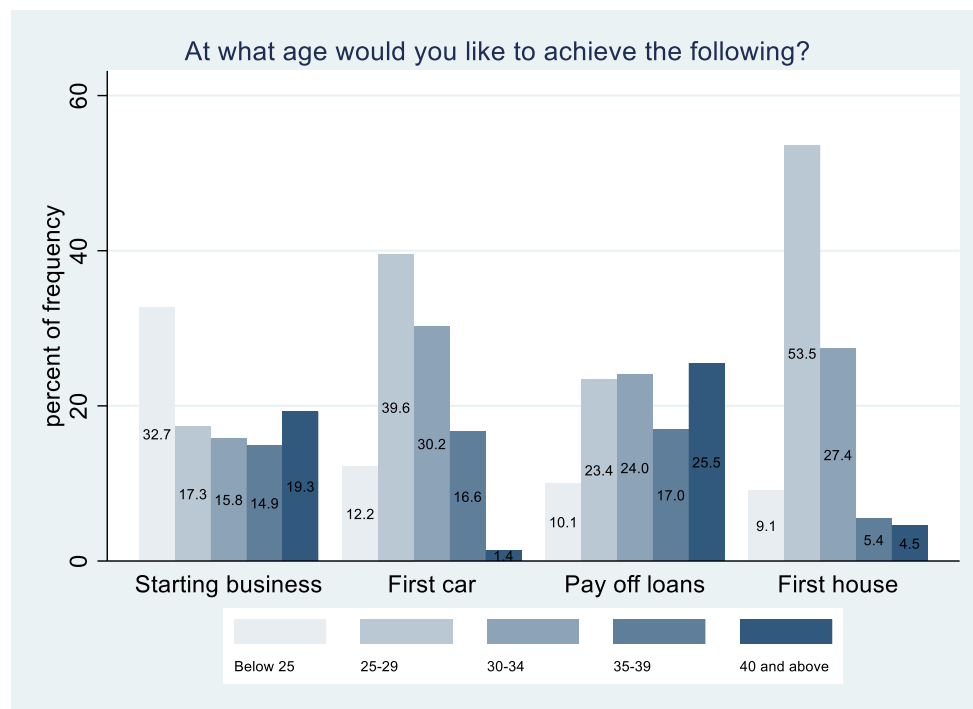The most common milestone that an age has been set for is the purchase of a house.

Interestingly, a large percentage of those below 20 are looking at purchasing their first car as well as starting up a business.

This could be attributed to the younger generation's introduction to different concepts that were previously discouraged, specifically, entrepreneurship - as well as being encouraged to actively put them into practice.

The following graph shows the age range within which various proportions of respondents would like to achieve the previously suggested milestones.

Figure 5.9 Age to achieve various financial milestones

(Sample size: 1024)

The most common milestone set by respondents was the purchase of their first house, with more than 50% who had set an age to accomplish it wanting to do so before their 30s.

Because the specificity of "a business" was not provided, many respondents reported that they would like to start one before the age of 25. There are more youths starting their own business at a younger age. Through social media, young people can reach out to like-minded individuals with similar interests to learn from one another. Perhaps another reason could be due to the lower barrier of entry, as online business facilitates and allows for a low set-up cost, thus allowing young people with limited funds to start their own businesses with good marketing and strong technical skills (Fung, 2021). [11] In addition, social media may have presented more opportunities for the youths.

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[11] Fung, R. (2021). Commentary: Why starting a business straight out of school is the best thing I did. In Channel News Asia. Retrieved September 27, 2021 from https://www.channelnewsasia.com/commentary/gen-z-millennial-starting-business-482726

6. Perception of Financial Risk

There is a rise of personal finance bloggers on various social media platforms that share financial advice and tips that are easy to read and understand. Blogs such as The Woke Salaryman have attracted many young readers and followers. Such blogs have also seen an increase in interest on topics that are related to investing during the pandemic (Yeoh, 2020).[12] These blogs may have contributed to giving rise to better financial literacy among youths.

For instance, many FGD respondents have highlighted the importance in investing and growing their wealth so to counter inflation. In a more recent study, younger Singaporeans seemed to show more confidence in their ability to generate higher interest than the banks by investing on their own (Mathews et al., 2021) [13]. In this section, we examine the investment habits of the youths and the types of investments they engage in.

The following graph shows the percentage of respondents that have investments.

Figure 6.1 Started Investing

Do you invest?

38.58%

61.42%

No   Yes
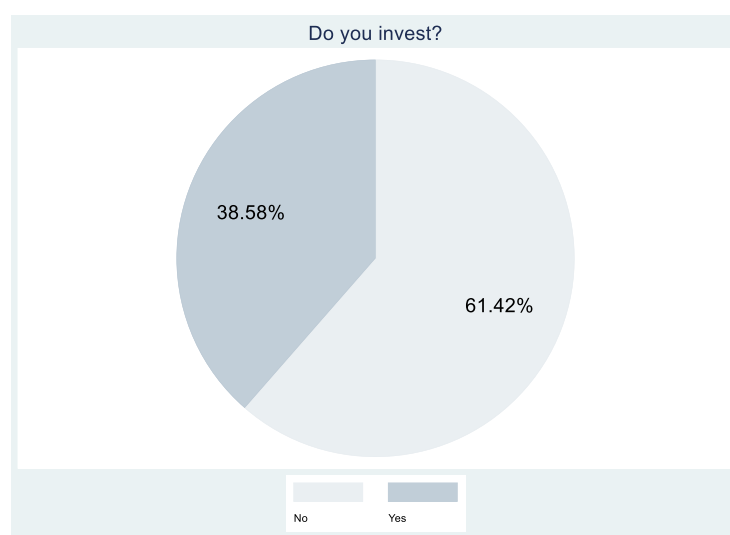
(Sample size: 2499)

Almost 4 in 10 respondents have made some form of investment. Older respondents tend to have more financial freedom. Some have entered the workforce and could have greater exposure to many more avenues of expanding their wealth.

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[12] Yeoh, G. (2020). The rise of personal finance bloggers, out to save financially illiterate millennials. In Channel News Asia. Retrieved September 27, 2021 from https://www.channelnewsasia.com/cnainsider/rise-personal-finance-literacy-bloggers-out-to-save-millennials-705126

[13] Mathews, M., Teo, K. K., Tay, M., & Wang, A. (2021). Lived Experiences in Singapore: Key Findings From the World Values Survey. Retrieved September 24, 2021 from https://lkyspp.nus.edu.sg/docs/default-source/ips/ips-exchange-series-18.pdf

The following graph shows the percentage of respondents from each age group that partake in the suggested types of investments.

Figure 6.2 Types of Investments engaged in

Types of investments engaged in

	16-19 years old	20-24 years old	25 years old
Shares	Yes 60.4 / No 39.6	Yes 61.7 / No 38.3	Yes 71.1 / No 28.9
Exchange Traded Funds	Yes 42.6 / No 57.4	Yes 45.4 / No 54.6	Yes 52.5 / No 47.5
Cryptocurrencies	Yes 47.4 / No 52.6	Yes 43.1 / No 56.9	Yes 48.6 / No 51.4
Forex	Yes 10.6 / No 89.4	Yes 10.0 / No 90.0	Yes 4.4 / No 95.6
Commodities	Yes 13.2 / No 86.8	Yes 7.6 / No 92.4	Yes 5.8 / No 94.2
Futures	Yes 5.2 / No 94.8	Yes 2.5 / No 97.5	Yes 1.8 / No 98.2
Knock-Outs	Yes — / No 100.0	Yes 0.3 / No 99.7	Yes — / No 100.0

percent of frequency

Yes | No

(Sample size: 875)

With the occurrence of COVID-19 kickstarting the trend of home-based businesses, it is no surprise that trading has taken a step up and joined the ranks of activities such as gaming in terms of relevance and popularity amongst youths.

Whilst previously known to be mostly engaged in by those with financial knowledge, this keen interest in the trading is prevalent in popular culture now more than ever.

Even though it was earlier noted that 16-to-19-year-olds had the smallest proportion of respondents participating in trading, the proportion of those involved in trading cryptocurrencies was relatively significant.

The younger generation is more likely to invest in cryptocurrencies as many believe that this form of digital currency will be widely accepted in the future (Ong, 2021).[14] Social media has also played a part in fuelling the rise in interest in cryptocurrency. For instance, many celebrities and influencers have posted content related to these

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[14] Ong, C. (2021). Almost half of Singaporeans polled plan to buy cryptocurrency in the next 12 months. In Yahoo News Singapore. Retrieved September 27, 2021 from https://sg.news.yahoo.com/almost-half-of-singaporeans-polled-plan-to-buy-cryptocurrency-in-the-next-12-months-045048665.html

digital coins. In spite of its popularity amongst youths, it is still a volatile and risky investment (Ang, 2021).[15] This poses a new source of financial risk that youths may be unprepared for.

The following graph shows the percentage of respondents that have taken a loan previously.

Figure 6.3 Ever taken a loan

Have you taken out a loan before?

15.1%

84.9%

No   Yes
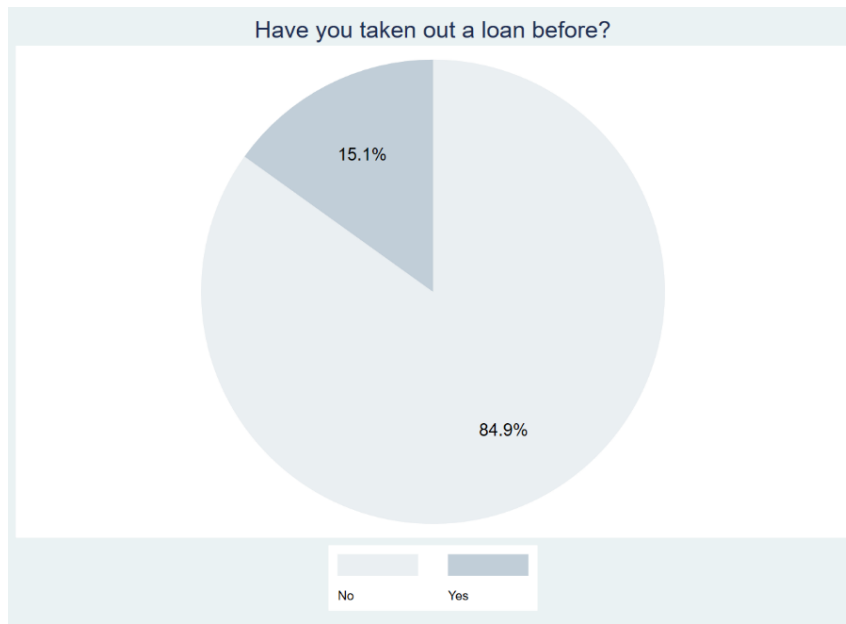
(Sample size: 2499)

About 1 out of 10 respondents have previously taken a loan. Approximately 80% of the respondents have taken a loan, mainly from banks or parents, to pay for their education.

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[15] Ang. J. (2021). Cryptocurrency market in Singapore small compared with stocks and bonds: Tharman.   Retrieved   October   05,   2021   from https://www.straitstimes.com/singapore/politics/cryptocurrency-market-in-singapore-small-compared-to-stocks-and-bonds-tharman

7. Personal Beliefs and Principles

This section seeks to understand the personal beliefs and principles of those aged 16 to 25. This allows us to compare the findings from the earlier study on 19-year-olds for any similarities or differences.

The following figure displays whether the suggested criteria are important for respondents when looking for an ideal partner.

*Figure 7.1 Criteria for ideal partner*
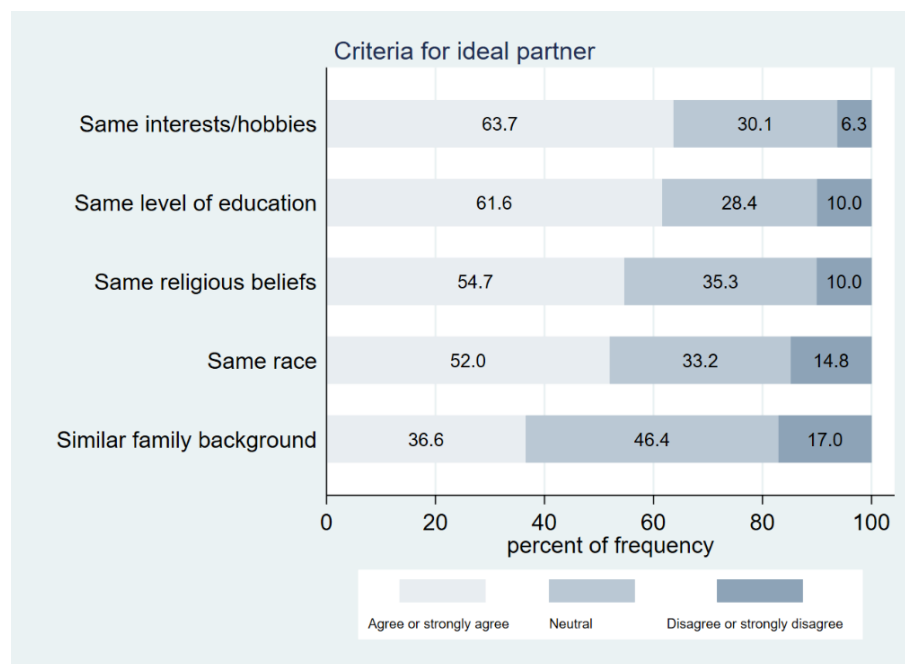
(Sample size: 2499)

All the criteria, except for family background, had more than 50% respondents who agreed or strongly agreed that they are necessary, with having the same interests being the top criterion.

The following graph displays the general attitudes of Singaporean youth towards relationships and parenthood.

Figure 7.2 Views about marriage and kids

Relationships and parenthood
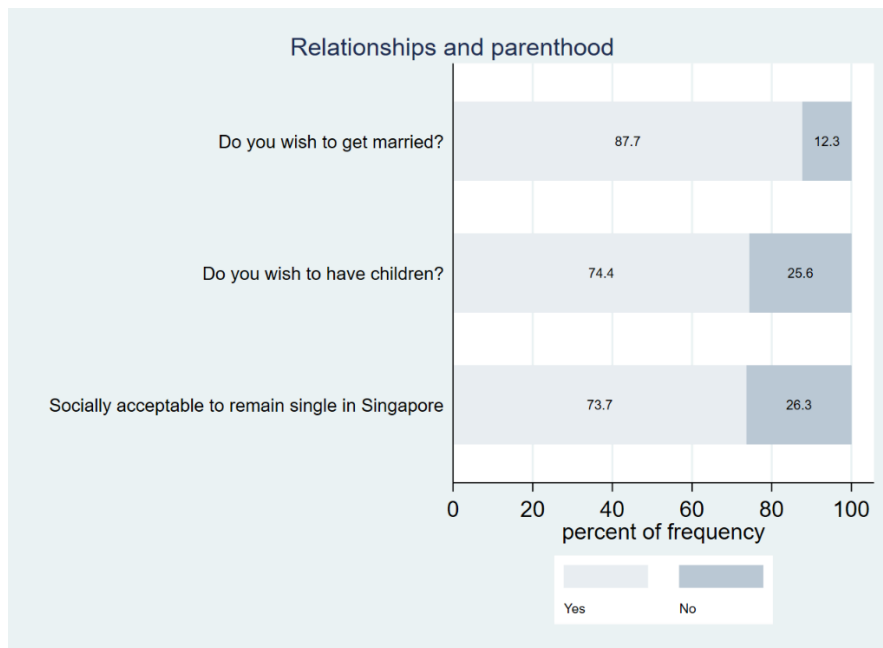
(Sample size: 2499)

When asked about whether it is socially acceptable to remain single, 7 out of 10 respondents agreed. There seems to be an increasing trend of youths who do not see marriage as necessary over the years (National Youth Council, 2021b).[16]

Despite that, almost 90% of respondents still want to get married.

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[16] National Youth Council (2021b). Youth.sg: The State of Youth in Singapore, Youth and Their Diverse Priorities. Retrieved September 25, 2021 from https://www.nyc.gov.sg/en/initiatives/resources/national-youth-survey/

The following graph shows the different views on relationships and parenthood according to gender.

Figure 7.3 Views about marriage and kids by gender
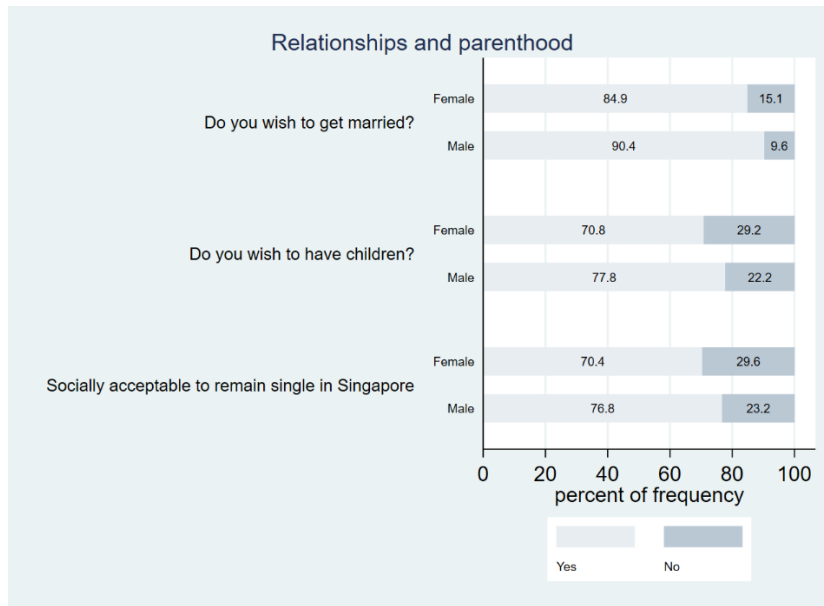
(Sample size: 2499)

The percentage of males who wish to have children and get married is slightly larger than the percentage of females.

In a surprising twist, the percentage of males who believe that it is socially acceptable to remain single also outweigh the percentage of females.

The following graph shows a distribution of responses provided when respondents were asked what their ideal age is to get married.

Figure 7.4 Ideal age to get married
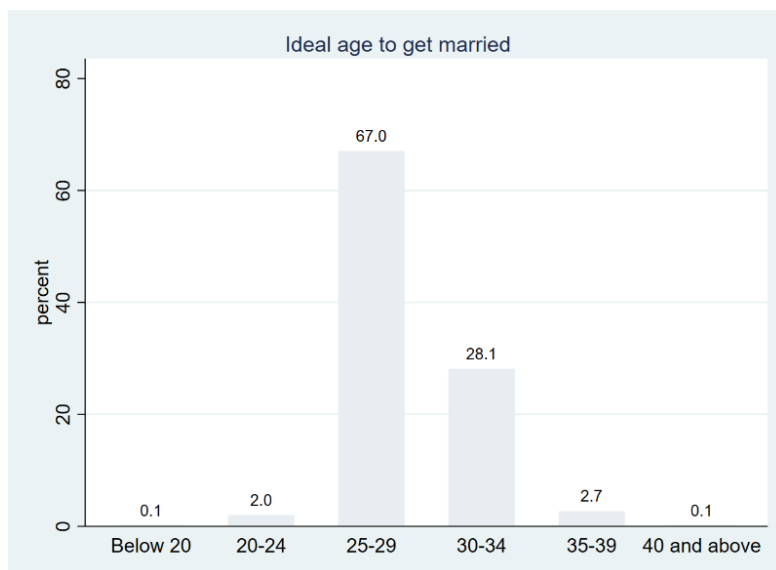
(Sample size: 2159)

The majority of respondents want to get married between the age of 25 and 29.

The average age at which respondents wanted to get married was 28.

A small number of respondents also gave open ended answers, most commonly citing that they have no preferred age as long as they were stable and had found the right partner.

The public housing policy in Singapore is closely tied to marriage as it gives priority to married couples in terms of obtaining favourable housing grants. This is reflected in the milestones set by youths as most of the respondents reported that they plan to get married and purchase their first house between 25 to 29 years old. (Figure 5.9)

The following graph shows the distribution across age groups for respondents who want to have children.

Figure 7.5 Ideal age to have a kid
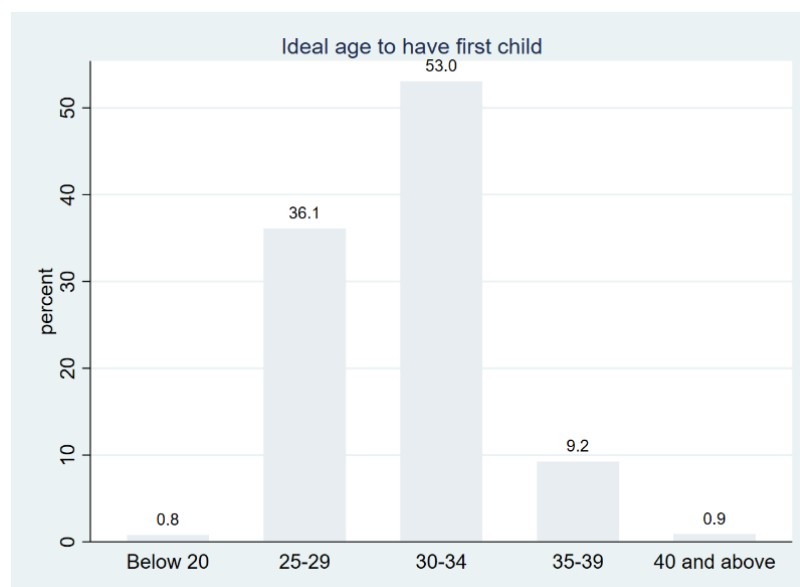
(Sample size: 1800)

The majority of the respondents wish to have their first child between the age of 30 and 34.

8. Attitudes towards COVID-19 Pandemic

The online survey was conducted during the COVID-19 pandemic, and we asked the respondents how they feel about their career, family, and financial status during this challenging period. This section shows youths' attitudes towards the COVID-19 pandemic. The following graph displays the respondents' sentiments regarding the COVID-19 pandemic.

Figure 8.1 Attitudes towards COVID-19
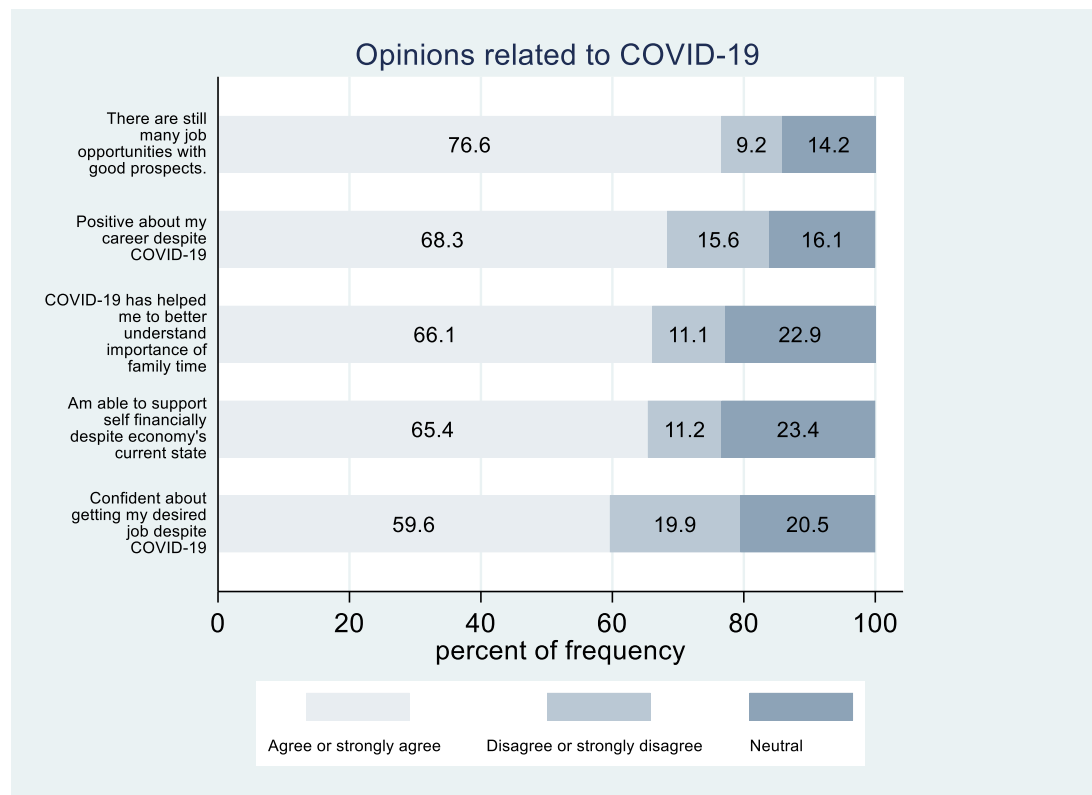
(Sample size: 2499)

Most of the respondents are optimistic despite the current circumstances brought about by COVID-19.

The following graph shows the respondents' opinions according to their various education pathways.

Figure 8.2 Attitudes towards COVID-19 by education pathway
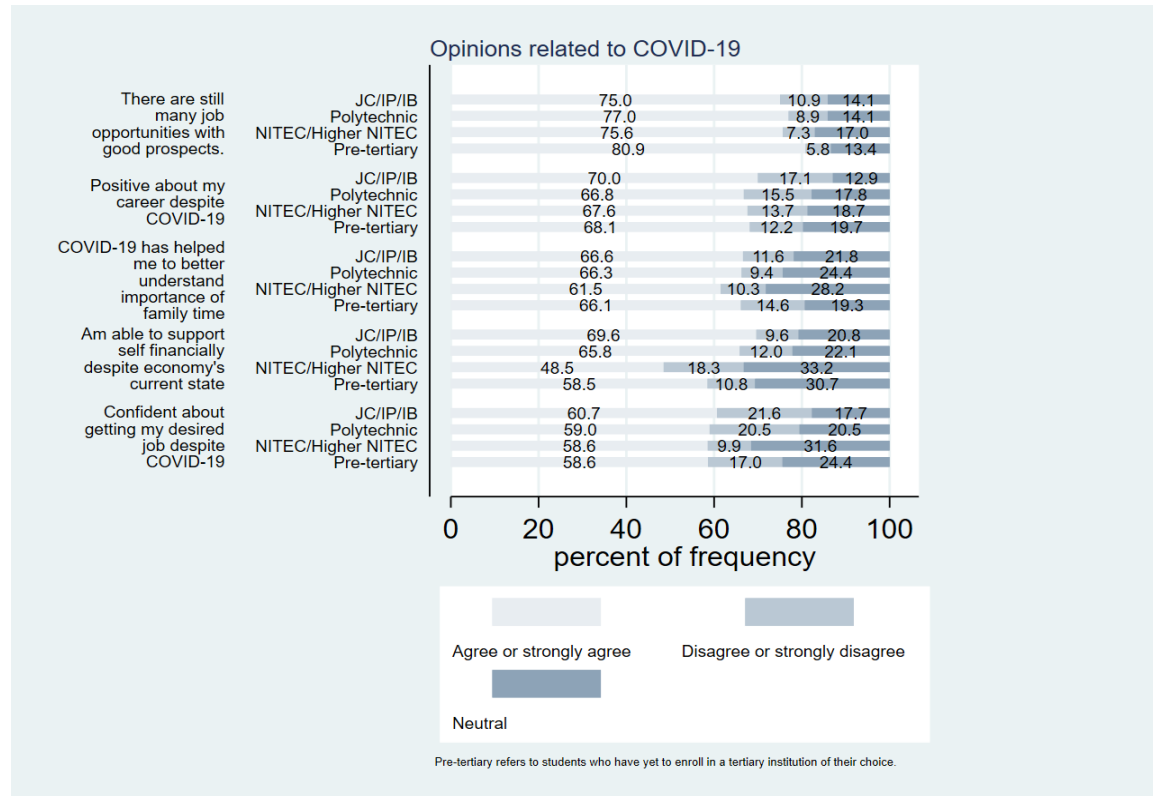
(Sample size: 2499)

A large proportion of pre-tertiary respondents are still positive with regard to the job market. This could be due to their not having entered the job market yet, consistent with the fact that a larger proportion of those below 20 have not held jobs before.

Finally, less than half of those from the NITEC/Higher NITEC route reported being able to support themselves financially in the current economic state due to COVID-19.

9. Conclusion

The findings from this study on youths aged from 16 to 25 years old are similar to the earlier study conducted on 19-year-olds. Most of them see the importance of receiving a good education, getting a job with a purpose and pays well, starting a family and building a successful career just like with previous generations. In addition to the aspirations and beliefs, the findings from the study also provided us a glimpse of youths' behaviours and perceptions influenced by social media and digitalisation.

The conclusion has been broken down into several findings:

Lack of control over life goals

Like with previous generations, most youths still wish to get married and start a family at some point in their lives (Figure 7.2). Many participants from the FGD have cited financial stability as a key pre-requisite to getting married.

Youths' plans to get married and start a family does not differ despite age, which implies that such goals do not change as they grow older. However, some are not able to achieve this due to reasons such as financial status or not being able to meet the right person. Marriage in Singapore is closely linked to its public housing policy. The prices of the Build-To-Order (BTO) flats, frequently sought by the young couples, skyrocketed over the years. Due to the high demand, it usually takes a few applications before one can successfully secure a unit. About 15% of the respondents took up loans, mainly student loans from banks and parents. These highlight the challenges that youths are facing now at their age, things that are not necessarily within their control.

In search of purpose and meaning

The younger generation values jobs that are existentially fulfilling, come with good salary prospects, allow for work life balance, and provide opportunities for advancement and professional development. Nearly 40% of respondents have ranked having a job with purpose as the top factor influencing their choice of job (Figure 3.6).

Young people are now seeking purpose-driven careers. It is important for companies that want to retain relevance to adapt and transform so that they can attract these purpose-seeking individuals. This might cause a shift in the landscape and culture of the future workforce. The younger generation is socially aware, mainly because of extensive exposure to global issues on social media platforms. This may have influenced the collective change in priorities as the most important factor and work towards what they believe in.

Opportunities of digitalisation

Generally, youths seem to be aware of the economic challenges today and most of them recognise the need for passive or secondary income. They are also more interested in items that grow in value instead of those that depreciate over time.

Most of them do not have plans to buy a car (Figure 5.8). Based on the findings, we see that youths recognise the importance in investing to counter inflation (Figure 6.1) Some even have plans to start their own businesses (Figure 5.9). These processes have been simplified due to digitalisation and the convenience of social media. As natives in a digital age, the younger generation seems to be able to recognise and tap on opportunities offered by technology.

Perception of Risk

Digitalisation may have offered opportunities and convenience; it also poses more risk to its users. Knowing the importance of investing does not necessarily mean that youths have the proper foundation to start investing. Interestingly, there have been increasing interest in cryptocurrencies, especially among the youths. While most young people invest in digital coins because they believe that this form of digital currency will be widely accepted in the future, there are still some who choose to invest following the majority (Ong, 2021).[17] Regarding cyber security, a significant proportion of respondents indicated that they do not mind sharing their personal information and passwords with another person (Figure 4.12). This implies that technology and ease of access have made youths more laid-back in general.

Digital Behaviour

This study also highlights digital behaviour, such as being selective with platforms used to interact with different social groups and willingness to meet people online and further relationships with those that they have met via virtual platforms (Figure 4.3, Figure 4.4). In a comparison across different age groups, the younger respondents are more likely to meet other individuals to further friendships or pursue shared recreational interests. Those in their 20s are more intent on developing romantic relationships and discussing business (Figure 4.16).

Young Singaporeans are generally comfortable with social interactions online. In addition, they are quick to adapt to the restrictions posed by the pandemic with online technology. We see an increase in online interactions with friends and schoolmates or colleagues, and an increase in the use of online entertainment platforms and online shopping platforms (Figure 4.5).[18]

These findings highlight the digital tendencies of the respondents and reflect that of their peers.

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[17] Ong, C. (2021). Almost half of Singaporeans polled plan to buy cryptocurrency in the next 12 months. In Yahoo News Singapore. Retrieved September 27, 2021 from https://sg.news.yahoo.com/almost-half-of-singaporeans-polled-plan-to-buy-cryptocurrency-in-the-next-12-months-045048665.html

[18] Entertainment platforms used include Spotify, Netflix, Apple Music, YouTube, etc. Online gaming platforms are also considered.

APPENDIX A – Survey Coverage

A-1. Target Population

The sample comprises 2499 respondents, all of whom were Singapore Citizens or Singaporean Permanent Residents born between 1996 and 2005. Fieldwork was conducted from April to July 2021.

A-2. Fieldwork Implementation

Data was gathered though an online survey platform, Qualtrics. The respondents were recruited through various social media channels, SUSS and SIM student portals, and via the centre's research assistants and contracted fieldworkers. Non-profit agencies were also engaged for further outreach to potential respondents. Valid parental consent was obtained from respondents below 18 years of age. All respondents to the online survey have completed the telephone validation conducted by the research team. The FGDs, involving 54 respondents, were carried out in April 2021 before the quantitative online survey. Participants from those discussions were also recruited in a similar manner, through social media platforms.

A-3. Sample Profile

The following tables summarised the profile of the sample. Table 2.1 gives the breakdown based on respondents' age in year 2021, Table 2.2 gives the gender breakdown, Table 2.3 shows the breakdown based on the race composition, Table 2.4 shows breakdown based on the type of dwelling, Table 2.5 gives the education status of the respondents who are studying and Table 2.6 shows the breakdown of the employment status.

Table 2.1. Age Composition

Age	Count	Unweighted	Weighted
16	13	1%	0.48%
17	42	2%	1.89%
18	108	4%	4.28%
19	254	10%	10.19%
20	339	14%	12.81%
21	437	17%	16.53%
22	337	13%	13.51%
23	343	14%	13.73%
24	351	11%	15.48%
25	275	11%	11.10%
Total	**2499**		

Table 2.2. Gender Composition

Gender	Count	Unweighted	Weighted
Male	770	31%	49.7%
Female	1729	69%	50.3%
Total	2499		

Table 2.3. Race Composition

Race	Count	Unweighted	Weighted
Chinese	2059	82.4%	71.2%
Malay	205	8.2%	18.0%
Indian	147	5.9%	9.0%
Others	88	3.5%	1.9%
Total	2499		

Table 2.4. Type of Dwelling

Type of Dwelling	Count	Unweighted	Weighted
1-3 Room HDB	273	11%	11.9%
4-Room HDB	761	30%	31.5%
5-Room HDB	651	26%	26.4%
Larger HDB and Private Properties	806	32%	29.9%
Others	8	0%	0.3%
Total	2499		

Table 2.5. Education Status

Education Pathway	Count	Unweighted	Weighted
Master's Degree	24	1%	0.89%
Bachelor's Degree	1218	73%	45.10%
A level/IP/IB	85	5%	3.23%
Polytechnic	251	15%	11.20%
NITEC/Higher NITEC	27	2%	1.80%
O' level	13	1%	0.50%
Others	49	3%	1.88%
Total	1667		

Table 2.6. Employment Status

Employment Status	Count	Unweighted	Weighted
Not Working	998		
		40%	39.72%
Working Full-Time In A Permanent Job	325		
		13%	11.76%
Working Full-Time In A Temporary Job	331		
		13%	13.76%
Working Part-Time In A Temporary Job	445		
		18%	17.07%
Working Part-Time In A Permanent Job	97		
		4%	3.55%
Others	303	12%	14.13%
Total	2499		

APPENDIX B - Questionnaire Design

The questionnaire comprised of 74 questions, organised in 5 sections as follows:

- General information (15 Questions)
- Education and Employment (10 Questions)
- Digital Behaviour (17 Questions)
- Financial Habit and Goals (15 Questions)
- Personal Beliefs and Principles (17 Questions)

The actual number of questions that the respondents answered may be less than the total stated above because some questions are conditional. These questions will only appear depending on each individual's answer to the previous question.