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從文化現象過渡至全球衛生議題：繭居者相關特徵之綜觀研究

A shift from a cultural phenomenon to a Global Health Issue: a scoping review on associated characteristics of Hikikomori

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論文中文題目

從文化現象過渡至全球衛生議題：繭居者相關特徵之綜觀研究

論文英文題目

(Thesis English Title)

A shift from a cultural phenomenon to a global health issue: a scoping review on associated characteristics of Hikikomori

本論文係 Alistair Cottrell 君 (學號 R09853015) 在國立臺灣大學全球衛生碩士學位學程完成之碩士學位論文，於民國 112 年 7 月 28 日承下列考試委員審查通過及口試及格，特此證明。

This Thesis is written by fill in Alistair Cottrell (R09853015) studying in the graduate program in the Global Health Program. The author of this thesis is qualified for a master's degree through the verification of the committee.

張鈐尹 (指導教授簽名 Advisor Signature)

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張秀莉

黃格立

摘要

研究目的：

目前，有關「繭居族 (Hikikomori)」的綜合數據非常匱乏，然而近年來，特別是在 2021–2023 年期間，有關繭居族的相關研究發表顯著增加。本研究旨在了解繭居族的相關特性，以提升人們對繭居族的認識，並尋找具體證據以證明繭居族確實是一個新興的全球衛生問題。

研究方法：

本研究為一範域文獻回顧研究 (scoping review) 。以下列學術資料庫進行資料查詢：PubMed、Scopus 和 Web of Science。所有以英語撰寫，並經同儕審核之量性與質性研究皆被納入。本研究更進一步使用 Reddit 網站進行調查，以了解繭居族的個人觀點。本研究依照 Joanna Briggs Institute 所公布的指引進行文獻回顧，所探討的研究問題如下：

1. 年齡與繭居族之間的關係是什麼？
2. 性別與繭居族之間的關係是什麼？
3. 國家與繭居族之間有什麼關係？
4. 影響繭居族的主要因素是什麼？

研究結果：

本範域文獻回顧研究總共納入了 59 個研究。樣本平均年齡為 24.56 歲、男性佔 64.28%，顯示繭居族普遍存在年輕人中，且多以男性為主。此外，有繭居族相關發表的共有 24 個國家，其中，日本佔 31%，其次是美國、中國大陸和香港，各佔 7%。這顯示東亞國家（尤其是日本）與繭居族之間存在正相關。在所回顧的文獻中，共計有 18 個與繭居族相關的因素，其中最常見的是網絡成癮、關係問題、憂鬱、父母問題、失敗感和焦慮。由此可知，繭居族的成因複雜，部分合併其他精神疾病，然而，亦有許多與精神

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疾病無關，而更有可能是因負面生活經驗、遭社會規範拒絕、網路成癮行為...等綜合因素而導致。

結論：

近年來，繭居族在全球不斷增加，並不僅限於與日本文化有關。繭居族的成因和相關特性極為複雜，係透過多種因素共同形成。儘管特定文化因素有助於解釋東亞國家的盛行率上升，但全球化、現代化和網絡成癮等因素將降低文化所造成的影響，並為繭居族盛行率在日本和東亞以外地區的增加提供解釋。

關鍵詞：

青少年社會退縮、繭居族、網絡成癮、憂鬱症、社會隔離

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Abstract

Purpose

The objective of this study is to understand the characteristics in relation to Hikikomori and to find evidence specifically supporting the fact that it is a genuine emerging global health issue. This study aims to analyse and examine the current associated characteristics of Hikikomori in order to create a synthesis on the present understanding of Hikikomori individuals. This study will aid in future research by highlighting specific topics within the field of Hikikomori from which a narrower scoped analysis could be conducted. Currently, there is a significant lack of synthesised data on Hikikomori and in recent years, especially from 2021-2023 there has been a significant increase in the number of published studies that contain epidemiological data on Hikikomori.

Method

The study design for this thesis is a scoping review. The following academic databases were searched: PubMed, Scopus and Web of Science. Qualitative and quantitative studies written in English and academic peer-reviewed journals were included. A literature review is also included and Reddit polls on the r/Hikikomori subreddit online forum were included to better understand the opinions of Hikikomori individuals themselves. The scoping review followed the JBI Protocol for scoping reviews. The review questions for the scoping review are as follows:

1. What is the relationship between age and Hikikomori?
2. What is the relationship between gender and Hikikomori?
3. What is the relationship between country and Hikikomori?
4. What are the main factors influencing the development of Hikikomori?

doi:10.6342/NTU202304082

Data from the scoping review was extracted and put into a table for presentation. Charts were also used to visualize the results for each category which were also qualitatively described.

Findings

The following summarised results were obtained from the scoping review. 59 studies were included in the scoping review. The Mean age was found to be 24.56, indicating a positive correlation between youth and Hikikomori. The percentage of Males was found to be 64.28%, indicating a positive correlation between Male gender and Hikikomori. A total of 24 unique countries with Hikikomori evidence were identified. With Japan making up 31% of the studies, followed by USA, China and Hong Kong with 7% each. Indicating a positive correlation between East Asian countries, specifically Japan and Hikikomori. A total of 18 most common associated factors to Hikikomori across studies was identified, with Internet addiction, offline relationship issues, depression, parental issues, feelings of failure, and anxiety as the most commonly identified, respectively. Hikikomori causes are incredibly diverse, many have comorbidity with other psychiatric disorder, while many do not and can be explained by a combination of adverse life experiences, rejection of social norms and digital addictive behaviours.

Conclusion

Hikikomori is increasingly being seen globally and the argument for it being culturally bound to Japan has greatly deteriorated in recent years. The causes and associated characteristics of Hikikomori are complex. Clearly, there is an interplay of multiple factors, while cultural specific factors can help to explain the increased assumed prevalence in East Asian countries, globalization, modernisation and internet addiction

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both reduce the cultural exclusiveness of these factors which may be more universal in nature in correlation with time and present explanations for increasing Hikikomori prevalence outside of Japan and East Asia.

Keywords

Youth social withdrawal, hidden youth, internet addiction, modern-type depression, social isolation

doi:10.6342/NTU202304082

Contents

doi:10.6342/NTU202304082

doi:10.6342/NTU202304082

List of Figures

doi:10.6342/NTU202304082

List of Tables

doi:10.6342/NTU202304082

Chapter 1

1.1 Introduction

Hikikomori is a Japanese word literally meaning ‘pulling inward’ and is a form of pathological social withdrawal with the essential feature being physical isolation in one’s home. The most widely accepted and used definition for Hikikomori is: ‘the state of avoiding social engagement (education, employment and friendships) with generally persistent withdrawal into one’s residence for at least 6 months as a result of various Factors’ (Malagon-Amor, Corcoles-Martinez et al. 2015). While many different definitions for Hikikomori exist, this is the most dominant definition across current and previous research and is also the definition that I will be using in this thesis when referring to Hikikomori. In addition, authors such as Furlong and Wong indicated absence from work, training or school as another characteristic symptom that often presents with Hikikomori (Furlong 2008, Wong, Li et al. 2015). Finally, Saito Tamaki, a psychologist who is internationally recognized as Japan’s leading Hikikomori expert characterised Hikikomori as individuals who do not maintain interpersonal relationships, excluding close family members (Teo 2010). This prolonged social withdrawal was first studied by Japanese psychologist Yoshimi Kasahara in 1978 as ‘withdrawal neurosis’ or taikyaku shinkeishou (Teo 2010). Later in 1986, Kitao coined the term Hikikomori in the academic setting (Furlong 2008); however, it wasn’t until 1998 that Saito defined the term Hikikomori as a free-standing syndrome with distinct symptoms (Furlong 2008).

The term was once thought, and still is thought to be by many a unique phenomenon in Japan. With such schools of thought stating that Hikikomori only results due to specific

doi:10.6342/NTU202304082

parts of Japanese culture and ideology that act as a catalyst for such cases of extreme social withdrawal to develop. While it is true that Japan may be the country that has the most catalysing factors for Hikikomori development, I argue that it is equally true that to call these factors 100% unique to Japan is hard to justify. Additionally, to consider pathological social withdrawal simply as a cultural phenomenon is hard to imagine in a world where technology is advancing tremendously, social interaction is shifting towards a largely digital realm due to modernisation, internet addiction is becoming more commonplace and globalization is causing a transformation of culture to become more and more intertwined while individualism is thriving at the cost of collectivism. Globalization, Modernisation and Hikikomori will be commonly repeated words in this study, while the definition for Hikikomori has already been given, the definitions for Globalization and Modernisation will be provided here. Globalization will be defined as: "the process in which basic social arrangements (like power, culture, markets, politics, rights, values, norms, ideology, identity, citizenship, solidarity) become disembedded from their spatial context (mainly the nation state) due to the acceleration, massification, flexibilization, diffusion and expansion of transnational flows of people, products, finance, images and information" (Beerkens 2003). Modernisation will be defined as: the transformation from a traditional, rural, agrarian society to a secular, urban, industrial society (KUMAR 2023).

Indeed, while Japan was the origin for Hikikomori, recent data indicates Japan is surprisingly unlikely to be the country with the highest prevalence for Hikikomori. A 2015 cross-sectional telephone based survey in Hong Kong concluded that the prevalence rates of more than 6 months, less than 6 months and self-perceived non-problematic social withdrawal were 1.9%, 2.5% and 2.6% respectively (Wong, Li et al.

doi:10.6342/NTU202304082

2015). Indeed, 1.9% is noticeably higher than the 1.2% estimate for Japan. Furthermore, while most concrete prevalence data exists in East Asian countries, existence of Hikikomori in western countries is becoming more and more commonplace. In total, evidence for Hikikomori was found in the following 24 unique countries: Japan, Hong Kong, Spain, Italy, Canada, Ukraine, Nigeria, Finland, Portugal, Oman, Tunisia, Scotland, USA, Singapore, China, France, Korea, Brazil, Israel, Turkey, Netherlands, Croatia, India, and Taiwan (Figure 4). Indeed, as the years have gone by, more and more evidence has been produced to argue that Hikikomori should no longer be viewed in such a narrow lens and is in fact an emerging global health issue that needs to be given more attention. During the proposed new diagnostic criteria in 2020, Kato et. al also recognized this shift (Kato, Kanba et al. 2020). They stated that Hikikomori has: 'shifted in recent years from being viewed as a typical Japanese problem to an issue that may have global health implications (Kato, Kanba et al. 2020). This shift has been driven by increasing evidence of Hikikomori in epidemiologic studies, clinical case series and media reports from around the world'(Kato, Kanba et al. 2020). I strongly agree with this quote based on the research conducted and argue that Hikikomori once had a strong case for being a culture bound phenomenon, but in recent years it has become very difficult to argue that this is still the current situation.

The gap being addressed in this thesis is that while there have been a significant, but not large, number of studies conducted on Hikikomori and their prevalence in various countries, there is not, to my knowledge, any studies that have attempted to synthesise previous data to create a single access point where the current data on the major characteristics of gender, age, country and associated factors of Hikikomori can be viewed and easily understood. A scoping review will allow this data to be mapped and

doi:10.6342/NTU202304082

summarised which is valuable for future studies, as it will lay the groundwork for what future specific questions could be valuably addressed by a more precise systematic review. This is important as it would allow both researchers and medical professionals to easily gauge the current situation of Hikikomori globally, which countries have evidence for Hikikomori and the main causes for Hikikomori. As an emerging health issue that has a certain degree of ambiguity relating to definition, pathophysiology, associated characteristics, prevalence, diagnosis and cause, a scoping review seems most relevant for this particular topic and will be a valuable resource for future studies in this field.

This paper aims to provide evidence and arguments for the fact that Hikikomori is a genuine, global emerging health issue that is no longer culture bound. The study also aims to identify factors that contribute to heterogeneities in associated characteristics of Hikikomori across studies globally. Hikikomori is a disorder that will only continue to increase exponentially as technology continues to digitise communication and internet addiction will become more commonplace. Hikikomori individuals are naturally hard to contact, given their reclusiveness and disconnection from society, hence in order to reach and treat these individuals it is not only important to understand them but also to spread awareness and data regarding their existence. Multiple studies have indicated that many Hikikomori, when contacted, desire treatment for their social withdrawal. For example, a study conducted in 2015 by Teo et al found that 78% of Hikikomori patients identified as desiring treatment for their social withdrawal (Teo, Fetters et al. 2015). Interesting survey data collected found that 59% of Hikikomori patients were negative towards seeking treatment largely due to thoughts it was ‘pointless’ or ‘useless’ to help their situation while 41% were positive to receiving treatment (Correy 2016).

doi:10.6342/NTU202304082

In order to treat Hikikomori requires effective treatment plans which requires understanding Hikikomori, their complex nature and different causes. The first step, however, is to provide evidence and advocate for Hikikomori being a genuine and emerging global health issue and understanding the characteristics of such individuals. This is an incredibly current and relevant global health issue and this thesis aims to solidify and consolidate previous research to provide a current analysis on the situation while offering new data, in the form of Reddit polls which adds confluence to my hypotheses. It is logical to make contact with and collect data from Hikikomori in the digital realm as this is where they are likely to spend most of their time and find support in contact with fellow Hikikomori who understand their situation.

The order of information in this thesis will be as follows: Following the abstract and introduction will be the Literature review which will identify and discuss past research on the topic of Hikikomori, providing a more in-depth background to the issue and discussion of the reasons for Hikikomori both in Japan and Globally. The Literature review will take a balanced approach to explore arguments for and against Hikikomori being a uniquely Japanese phenomenon based on previous research. Following the Literature review will be the Methods section. Following the methods and results from the conducted scoping review will be the discussion and evaluation of the results and how they support the hypothesis and literature review sections of the thesis. Finally, the conclusion will offer an overview of the research and the impact of the research for Hikikomori and future outlook on this emerging health issue.

doi:10.6342/NTU202304082

1.2 – Reddit Polls

Due to my personal interest in the topic of Hikikomori, in addition to a review of the literature that exists in this field, I decided to conduct a series of Reddit polls to better understand the opinions of Hikikomori themselves. This also served as a rationale and motivation for this study. Reddit is an online forum and discussion website which contains different 'subreddits' for different categories of discussion. One of these subreddits is called r/Hikikomori which is a discussion page for people who are Hikikomori to share and talk with one another. Given the reclusive and often online nature of Hikikomori, it seems logical to explore the online communities in which they are active in order to understand them better. For this reason, to add confluence to my results and understanding of Hikikomori I decided to conduct a series of online, anonymous poll questions on this subreddit, from September 2nd 2022 until April 19th 2023. Each poll was asked separately. Across all 8 polls, a total of 2,439 responses were received and each user can only respond once, with one answer, per account. The following 8 questions were asked to the users of this subreddit: 1: To what extent do you view Hikikomori as being uniquely Japanese?, 2: Which age bracket do you belong to?, 3: What is your gender?, 4: Which continent are you from?, 5: Do you view Hikikomori as a 'problem' or something you are content with?, 6: What do you think the main cause of Hikikomori is?, 7: Do you think Hikikomori is a primary lifestyle or the result of a secondary factor, and 8: Do you think the metaverse / virtual reality is good or bad for Hikikomori? The results to these questions can be seen in Appendix 1 – 8 respectively.

doi:10.6342/NTU202304082

Question 1

For question 1, 362 responses were received. 54% of users voted that Hikikomori is 'not at all' Japanese and is a global problem. The second largest group of users – 26% voted that Hikikomori was originally a Japanese problem but has since evolved to become a global problem. Only 6% of users who voted on r/Hikikomori believed that Hikikomori was predominantly a Japanese problem. These results show strong belief that Hikikomori is a global issue. However, since data in most countries is lacking, it is hard to predict the prevalence globally. The 26% group has strong confluence with what was found in the literature review, with many authors stating that Hikikomori was once a Japanese issue but has since transformed into a global issue.

Question 2

For question 2, 440 responses were received. Of these, the largest group was between the age of 21-25 with 145 votes, the second largest group was between 18-20 with 106 votes. 97 were between 26-30. Only 14/440 were above the age of 40. These results are unsurprising and are almost the same as the results seen in the scoping review, where the mean age was 24.56. These results also have confluence with the literature review, where most Hikikomori cases were found to be young adults.

doi:10.6342/NTU202304082

Question 3

For question 3, 267 responses were received. The largest group were Males, with 154 votes, while Females had 76 votes. Creating a ratio of 66.96% males to 33.04% females. In the scoping review, the result was 64.28% males. Again, these results are very similar to the scoping review and literature review findings where the majority of cases were male, but still with a significant number of females.

Question 4

For question 4, 234 responses were received. The largest group was Europe with 84 votes, followed by North America with 73 votes and Asia with 41 votes. These results are contrary to the scoping review and literature review results, where Asia was the most common continent in which Hikikomori cases were found or expected to be found. However, this is likely due to the fact that Reddit is an American site navigated in English. This will naturally mean more users from America and Europe will be active on Reddit, Hikikomori in Asia may use more specific forums to speak with other Hikikomori. Despite this, There is a broad range of represented continents with Hikikomori prevalence and there is confluence in the fact that it appears to be a very global issue.

doi:10.6342/NTU202304082

Question 5

For question 5, 365 responses were received. This is an interesting question, as it is important to note that while Hikikomori is generally perceived in a problematic manner, there are cases where it is self-perceived to be non-problematic and is simply a different lifestyle choice. This can be categorized as being Egosyntonic in nature, in which the behaviours consistent with Hikikomori are acceptable and fitting with ones own ego or ideal image (Correy 2016). The reverse of this is egodystonic, where the behaviours consistent with Hikikomori would not be acceptable to ones own ego or image and would then be seen as problematic (Correy 2016). In a Mixed-methods analysis of western language tweets on twitter, this alternative, Egosyntonic viewpoint was stated: "despite the growing observation of Hikikomori globally, there has been an alternative viewpoint that Hikikomori does not represent a form of psychopathology, rather it should be considered a nonproblematic self imposed lifestyle of isolation (Pereira-Sanchez, Alvarez-Mon et al. 2019)." Hence, the basis and relevance of this question was formed from this perspective. Here, the largest group with 168 votes voted that they are somewhere in the middle or not sure, followed by 145 voting that it is a problem. 14.25% of users voted that it is not a problem, and that they are content with their lifestyle, thus fitting with the ego-syntonic group of Hikikomori. This is an area that is generally overlooked and not much data on this is available or was discovered from the literature and scoping review sections. One aspect from current literature that could shed some light on this, is whether Hikikomori cases desire and are positive towards treatment. If the majority of Hikikomori cases are ego-dystonic, it would then be logical to assume that they would desire treatment, whereas those who are content with their

doi:10.6342/NTU202304082

lifestyle would feel like treatment is not necessary. Teo et al explored treatment preferences in four countries, here it was found that out of 36 participants, 78% expressed desire for treatment, with the four main treatment preferences being: individual psychotherapy, combined pharmacotherapy, exercise and pharmacotherapy respectively (Teo, Fetters et al. 2015). The majority voting that it is perceived to be problematic is fitting with the current and previous data.

Question 6

For question 6, 424 total responses were received. The results receiving the most votes were Failure, Trauma and Result of other psychiatric/physical illness respectively. Here, internet addiction only received 6.84% of total votes. 34.9% voted for Failure, which included academic failure, career failure and inability to live up to the expectations placed onto them by society. It is difficult to assess exactly why internet addiction seems to have a relatively low representation here when compared to the scoping review and literature review. The other results from this poll largely fit with what was found in the review sections where failure, trauma and comorbidity are frequently seen as reasons for Hikikomori.

Question 7

For question 7, 192 total responses were received. Here, the overwhelming majority voted that Hikikomori was caused by a secondary factor. Only 13.54% voted that it was a primary lifestyle choice not influenced by a secondary factor. It is important to note that this question was not the same as ‘primary vs secondary’ Hikikomori in the sense

doi:10.6342/NTU202304082

that primary Hikikomori are Hikikomori with no comorbidity with psychological illness. In the case of this poll, all secondary factors were considered when voting, not just psychological illness. In this case, it seems obvious that the majority of votes would be towards secondary because any and all secondary factors were considered, and Hikikomori is almost always the result of something, whether it is failure, trauma, internet addiction, illness etc. Hence, this question is more appropriate to again explore ego-syntonic vs ego-dystonic, as the 13.54% who voted that it was a primary lifestyle choice would be those who are content with their reclusive nature, as it was fully done by their own choice and desire to live a life disconnected from the offline world. The majority not being Hikikomori purely by choice is also fitting with the literature review and scoping review.

Question 8

For the final question, 155 responses were received. The metaverse and virtual reality are important technologies to consider in the context of Hikikomori. One one side, they may lead to increased disconnect from offline social interaction as it is another evolution of the digital world. One the other side, this online interaction may decrease loneliness and socializing in an intensely real digital world is still a form of socialisation. Secondly, they may become important tools in the treatment and location of Hikikomori individuals. Here, the opinions of Hikikomori users was quite evenly split. 37 believed that the metaverse and VR would be beneficial for Hikikomori, due to the reduction in loneliness they would enable. The largest group, 48 believed it would be bad, as it would lead to further internet addiction. 33 believed it would be equally good and bad and 37 had no opinion on the matter. There is limited research or data, if any, on the

doi:10.6342/NTU202304082

relationship between the metaverse, virtual reality and Hikikomori. However, as mentioned in the literature review, this year, in February 2023, The Kazoku Hikikomori Japan project announced it will be using the metaverse to help reintegrate Hikikomori back into society. 6 events will be held in Tokyo's Edogawa ward, allowing individuals to join the meeting with their avatar in the metaverse if they desire. Takeshi Saito, the Edogawa Ward Mayor stated that he doesn't think everything will be solved because of the metaverse but it will probably be helpful for some people like those who can't even leave their rooms or interact with other people (Goschenko 2023). This initiative is aimed at helping these Hikikomori take their first steps back into society. Hence, it is an interesting topic with positives and negatives, the future impact of the metaverse and virtual reality on Hikikomori is one that deserves a lot of attention.

doi:10.6342/NTU202304082

Chapter 2

2.1 Literature Review

Contents:

2.2 Hikikomori being unique to Japan

Firstly, I will give a brief overview of the arguments for Hikikomori being unique to Japan, as well as some background on the current Hikikomori situation in Japan. According to epidemiological surveys, the current lifetime prevalence of Hikikomori among young adults is approximately 1.2% in Japan (Hamasaki, Pionnie-Dax et al. 2021). Hikikomori undoubtedly has its origins in Japan and it is hard to argue against the fact that Japanese society and culture have many factors that act as a catalyst for pathological social withdrawal in comparison, especially, to western countries. However, I would argue that the argument for Hikikomori being uniquely Japanese has diminished in correlation with time and thus has shifted from being something once primarily found in Japan but now being seen globally. As we can see in Figures 2 and 3 of the results section, Evidence on Hikikomori has increased significantly with time, and while

doi:10.6342/NTU202304082

evidence prior to 2013 was mostly found in Japan, recent studies outside of Japan have increased dramatically. I believe it is important to explore the reasons for Hikikomori being unique to Japan as well as the reasons for it being a Global issue. This balanced approach will also allow my argument to be more clear and illuminate how it was once seemingly a predominantly Japanese issue but has now changed to be a Global issue.

Additionally, it is definitely true that Hikikomori originated in Japan. The term originated in the 1990s during the 'Lost Decade' and asset price bubble's collapse in 1991. Japan de-industrialized and shed relatively stable manufacturing jobs in the 1990s and 2000s (Toivonen, Norasakkunkit et al. 2011). This had detrimental consequences to many youth in the context of a 'one-shot recruitment system' where those who were not hired immediately upon graduation from high school or university were very rarely allowed to enter the core workforce at a later stage (Toivonen, Norasakkunkit et al. 2011). This economic depression resulted in many individuals, especially the youth who had just entered the workforce, suffer from feelings of shame and failure as they felt they could no longer conform to societal expectations (Toivonen, Norasakkunkit et al. 2011). Despite the rising youth unemployment during this time, due to Japanese social factors, Youth who chose to retreat could do so relatively easily and live a sheltered life at home, giving rise to, and recognition for, Hikikomori being an interesting and unique phenomenon at the time. Traditionally, Japanese society has greatly encouraged immodithymia, but modernization, globalization and the introduction of Western culture have led both to a mixture of cultures and a rising sense of individualism in Japan (Kato, Hashimoto et al. 2016). This rising sense of individualism and globalization amidst a conformist society is also a big topic that will be explored here. Firstly, I will explore the arguments for Hikikomori being a uniquely Japanese issue. I will categorise the

doi:10.6342/NTU202304082

arguments for Hikikomori being uniquely Japanese within the following two categories: 1. Impact of Japanese social and cultural behaviours and 2. Impact of Globalization amidst a conformist, collectivist society.

2.3 Impact of Japanese social and cultural behaviours

In this section, I will explore traditional Japanese social and cultural behaviours that are likely to be significant factors for the initial rise of Hikikomori in Japan. Firstly, I will give a background and general overview of these factors. One cultural aspect thought to be central to Hikikomori acceptance in Japan is 'amae'. Takeo Doi, a psychiatrist and psychoanalyst, described Japanese dependent behaviours with the word amae (Kato, Tateno et al. 2012). The person who is acting amae may beg or plead, or alternatively act selfishly and indulgently, due to security in the fact that the caregiver will forgive this (Kato, Tateno et al. 2012). However, Japan has multiple other social factors that catalyse Hikikomori, such as decreasing desire and motivation within the youth population, economic comfort of Japanese families creating a declining sense of value and work and an increasingly relaxed attitude of child rearing (Teo 2010).

Japan has also witnessed changes in its education system and a move from its traditional disciplinarian base to Yutori education, a system that emphasises the individual and freedom (Kato, Hashimoto et al. 2016). In the corporate world, the collapse of the traditional seniority-based promotion system also had its effects (Kato, Hashimoto et al. 2016). With this, there has been an evolution to an intensely competitive society and a distancing from the traditionally harmonious Japanese sense of group belonging (Kato,

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Hashimoto et al. 2016). These factors have led to many youth 'rebelling' against traditional social norms in Japan such as the salary man lifestyle with some of those who felt feelings of failure resorting to withdrawal from society. Many chose to withdraw from social life completely in order to avoid facing the challenges, changes and hardships of everyday life during this period and resorted to an alternative lifestyle. As mentioned, it is argued that Japanese culture such as amae in combination with the economic depression meant such individuals could resort to Hikikomori lifestyles more easily, as their caregivers would support them and take care of them no matter what.

Here, I will go into more depth about the Japanese social and behavioural factors that catalyse Hikikomori. Takeo Doi argued that child-rearing practices in the West conversely seek to stop the kind of dependence seen in Children due to amae whereas in countries like Japan, Taiwan and Korea young people seem to be more economically dependent on their parents (Kato, Hashimoto et al. 2016). While data on Hikikomori prevalence in Taiwan exists but is lacking, Korea has significant evidence of Hikikomori as can be seen in the results section. This economic dependence is also one of the expressed forms of amae (Kato, Hashimoto et al. 2016). Hence, it can be argued that amae is a significant catalyst for an individual to become Hikikomori as it will allow parents to be more accepting of their child staying at home, in isolation, for longer periods of time in comparison to western countries where this kind of behaviour would be much less tolerated. A 2005 study on Youth Withdrawal in Japan by Yuichi Hattori also sheds some light onto specific social factors that promote Hikikomori (Hattori 2006). 35 clients who met the government criteria for Hikikomori were analysed in this study and showed that the major symptom of Hikikomori was distrust in other people (Hattori 2006). It was concluded that Japanese-style oppressive child rearing and

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education are major factors for causing social withdrawal (Hattori 2006). From the results of her study we can see that distrust of humans was seen in 100% of study participants, 91% experienced emotional neglect by parents who were insensitive to their childhood needs, 54% experienced ijime (bullying) and emotional abuse while there was a vast array of parent-child issues including distrust, loss of secure attachment and fear of self-expression to parents (Hattori 2006). These lead to an inhibition of self-expression both due to emotional neglect and a lack of parent-child communication while Japanese school settings also inhibit self-expression as their authentic emotions and thoughts are reinforced as socially unacceptable (Hattori 2006). Thus, it is argued by Hattori that 'traditional' Japanese families are more likely to have children that develop into Hikikomori for these reasons (Hattori 2006). Indeed, familial issues and school bullying are two commonly seen factors that lead to social withdrawal and this is especially true in collectivist societies, such as Japan, where inter-dependence triumphs over individualism.

Zijia Guo's 2021 article: 'A Review of Social and Cultural Causes of Hikikomori: Collectivism in Japan' sheds more light on these cultural values that catalyse Hikikomori in Japan, while offering insight into additional parts of Japanese cultural values that create a ripe breeding ground for Hikikomori. Here, Guo rightly emphases how Japan is a 'tight' culture owing to its highly collectivist nature where deviations from 'normative' behaviour are highly criticised (Guo 2022). It is also explained how Japanese identity differs to that of the west, due to the fact that their public and private selves may be considerably different since they may intentionally socialise their identity by catering for the expectations from society while in public, in contrast, in the USA, for example, keeping the private and public image consistent with one another is

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encouraged (Guo 2022). Guo also made interesting reference to Hofstede's 1980 study on work-related values in multinational corporations, which allowed him in his 1982 work to identify the following four main dimensions of a nation's culture: 1) Power distance, 2) Individualism vs. Collectivism, 3) Level of uncertainty avoidance and 4) Masculinity and Femininity (Guo 2022). In his study, it was found that Japan had: incredibly high uncertainty avoidance, high power distance and high masculinity (Guo 2022). High uncertainty avoidance implies that the culture in question has a set of rules that are expected to be adhered to while the quality of 'polite' and 'obedient' is of high importance for uncertainty avoidance (Guo 2022). In high power distance cultures: 'parents put a high value on children's obedience' while 'students put a high value on conformity' (Guo 2022). High masculinity implies high frequency of competitions in the workplace and sports and whether or not a male could become an ideal 'salaryman' (Guo 2022).

In conclusion Guo pointed to multiple rationalisations for the prevalence of Hikikomori in Japan. Firstly, the 1990s bubble economy and the 'lost decade' that followed caused pessimism of adults and adolescents (Guo 2022). Secondly, touching on Japan's deep-rooted masculinity where the 'salary man' identity is extremely dominant (Guo 2022). Indeed, the bubble economy caused significant disruption to this dominant form of masculinity and the Hikikomori influx that resulted could be seen as rebelling against this lifestyle, instead choosing a life that is: 'anti-social and devoid of responsibility' (Guo 2022). Thirdly, the impact of peer-rejection, bullying and the 'hands-off' approach of parenting leading to a failed socialisation of identity for children and adolescents. Here a duopoly of issues exist for the development of young Hikikomori (Guo 2022). First is the importance of conformity and group acceptance, when children are

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ostracised due to bullying the emotional trauma in such a cultural setting is significant (Guo 2022). Second is the familial ignorance towards bullying, they would rather hide the problem and ignore it than 'stand out' in society and bring attention towards the issue (Guo 2022). The final rationalisation for Hikikomori is that it is a form of 'mute' active rebellion against Japanese traditional culture and social expectations (Guo 2022). Here, Guo has explored the key areas of Japanese society and culture that have likely led to Hikikomori being such a notable issue in Japan. It is not difficult to see how, in such a collectivist society, these factors can cause significant disruption in the mental health of those individuals who feel they cannot or do not want to conform to the strict social identity to which they are expected to adhere to. Here we can also see that Hikikomori seems to be catalysed by particular Japanese social and cultural behaviours but Globalization and Modernisation amidst a conformist and collectivist society seems to be the more important factor. If this is the recognition, it then seems plausible to assume that while the root cause of Hikikomori and origination of Hikikomori in Japan seem to be cultural and behavioural factors unique to Japan, global social changes may have replaced these factors as being the most important. With this ideology, it is not surprising to see Hikikomori shift from a cultural phenomenon to a global health issue.

2.4 Impact of Globalization amidst a conformist, collectivist society

The impact of Globalization on Japanese society is also particularly apparent and is a valid argument for Hikikomori being unique to Japan. Indeed, the work of Guo in the previous two paragraphs provides a good setting for how Globalization can cause disruptions to Japanese society. Toivonen et al, 2011, published an article exploring this,

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titled: ‘Unable to conform, unwilling to rebel? Youth, culture and motivation in globalizing Japan’ (Toivonen, Norasakkunkit et al. 2011). The article explores the impact of globalization on Japanese youth, both from a psychological and social perspective. Toivonen argues that while Japanese socio-economic institutions have mostly shown resistant reactions to globalization, Hikikomori are unable to conform yet also unwilling to rebel which results in individuals who are deviating from Japanese motivational patterns but equally not becoming more western (Toivonen, Norasakkunkit et al. 2011). He also states that Globalization puts painful psychological and sociological effects upon young people in conformist societies (Toivonen, Norasakkunkit et al. 2011). Cultural psychological studies have shown that conformist environments: 1. Motivate individuals to adjust the self to the situation; 2. Maintain social harmony; and 3. Affirm one’s interdependence with others (Toivonen, Norasakkunkit et al. 2011). This is in direct contrast to how the West typically defines the individual: “a bounded, unique, more or less integrated motivational, and cognitive universe, … clearly set apart from other individuals as well as social context” (Toivonen, Norasakkunkit et al. 2011). Anthropologist Clifford Geertz has also famously argued that this western idea of the individual is quite peculiar, given how human cultures throughout history have typically not shared this view and have put more weight on interdependence (Toivonen, Norasakkunkit et al. 2011). Toivonen thus rightly points out that there is a clear potential for tension between Japanese cultural tendencies and the ‘global values’ that will begin to spread to Japan during this era of globalization and Japan may be the country where the impact of globalization on youth may be most interesting, given its conformist, seniority-based hierarchy and ageing demographic society (Toivonen, Norasakkunkit et al. 2011). Overall, the focal point in his article is to challenge the prior research on Hikikomori by arguing it is actually a result of social

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change interacting with psychological processes (Toivonen, Norasakkunkit et al. 2011). Unlike older work, such as that of Hattori in 2006, where Hikikomori was related to traditional Japanese families and their behaviours and child rearing techniques, Toivonen's work here seems to be one of the first to explore and recognize the impact of social change impacting psychological processes and in a sense, while this can be used as an argument for Hikikomori being unique to Japan, as these social changes may have the most impact on Japanese society, it can also be used to mark the beginning of the recognition that Hikikomori is shifting to be a Global Issue. While traditional Japanese family behaviours are somewhat static and confinable to a nation, the impact of Globalization and social change on society is much more flexible and static and thus more applicable to have a powerful impact on a wide variety of different countries.

The main pathway through which these social changes are interacting with the psychological processes of the Japanese youth is through the labour market, where the impact of the elite's 'hot' reaction to globalization is most evident. Japan's senior government and business elite resisted pressures for change in the labour market by reinforcing the classic 'long-term employment system' (Toivonen, Norasakkunkit et al. 2011). This had a profound impact on the youth for many reasons. Firstly, it largely blocked potential for youth to offer innovative ideas and strategies to increase competition in the global marketplace (Toivonen, Norasakkunkit et al. 2011). Secondly, it has given rise to a one-shot recruitment system where those not hired immediately upon graduation from high school or university are very rarely allowed to enter the core workforce at a later stage (Toivonen, Norasakkunkit et al. 2011). This is largely in contrast to the West, and especially the US, where the labour market is extremely flexible and the long-term employment system is not as important (Toivonen,

doi:10.6342/NTU202304082

Norasakkunkit et al. 2011). According to prominent American sociologist, Robert K. Merton, in any human society the majority of people will be 'conformists' who strive to follow culturally dominant success goals through accepted institutionalised means, such as education and paid work in legitimate occupations (Toivonen, Norasakkunkit et al. 2011). Those who cannot become conformists, for whatever reason, will then become one of the following: Innovators, Ritualists, Retreatists or Rebels, the latter of which was reframed as 'quiet mavericks' by Toivonen due to the Japanese context (Toivonen, Norasakkunkit et al. 2011). This is an interesting way to evaluate those who are unable or unwilling to conform, here, Hikikomori would fit into the retreatists category. In a sense, while Hikikomori are retreatists in a literal sense, unlike Toivonen, Guo proclaimed Hikikomori as being a form of mute active 'rebellion' against social expectations (Guo 2022).

Hikikomori can be defined as being disillusioned with dominant social goals and means, thus reacting with withdrawal from mainstream society with which they cannot conform to. Toivonen rightly notes how 'retreatist' youth in Japan became a notable probably in correlation to the rising youth unemployment in the early 2000's, being out of work would have placed significant social and mental pressure upon these youth, 10-20% of 20-24 year olds were out of work in 2003 which was double the rate compared to the early 1990s (Toivonen, Norasakkunkit et al. 2011). It is argued that the retreatists in this case, have disassociated themselves from the core traditional values of interdependence and therefore don't have reason to follow the 'hot' reactions to globalization that have been exhibited by the elites (Toivonen, Norasakkunkit et al. 2011). As a result, their reactions are replaced by avoidance behaviours, and it is concluded that Hikikomori can be a result of the increasing marginalisation of young people in the labour market rather

doi:10.6342/NTU202304082

than as a pathology and Hikikomori are then the 'disempowered victims of the elites' hot reaction to globalization' (Toivonen, Norasakkunkit et al. 2011). Thus, multiple avenues through which Japan has favourable conditions for the emergence of Hikikomori have been discussed. The most consistently seen avenue is that of the tightly collectivist nature of Japanese society, owing to traditional social and cultural behavioural practices. Here, those who do not fit into the 'ideal' identities, such as those adults who do not conform to the salaryman lifestyle and adolescents and children who face ostracism due to being outside of social norms face the consequences of such a society. The way in which they respond to these challenges will clearly vary, but it is evident that Hikikomori seem to be the result of a rejection, rebellion or unwillingness to adhere to the social status-quo that they are so expected to follow. While earlier work may put more emphasis on traditional Japanese behaviours, such as amae and child-rearing practices, more recent work seems to put more recognition on the impact of Globalization and modernisation amidst such a collectivist society. As we see 'unique' Japanese behaviours both be seen as perhaps not so unique to Japan as we once thought and diminish due to social changes, the argument for Hikikomori being unique to Japan becomes weaker, and the argument for it shifting to become a Global Health issue becomes stronger with time.

2.5 Hikikomori being a Global Health Issue

In this section, I will argue the case for Hikikomori not being a phenomenon unique to Japan. What was seemingly an almost exclusively Japanese phenomenon in the origin stages of Hikikomori, from the 2010's onwards, there has been profound evidence that this is no longer the case. As more and more academic studies have been published on

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the topic of Hikikomori, especially in recent years, as will be visible in the methods and results section of this thesis, epidemiological evidence for Hikikomori outside of Japan, while lacking in terms of population size, is becoming increasingly evident. Aspects of Japanese culture such as amae have transcended cultural boundaries and are seen in many countries worldwide while new factors such as internet addiction, the digitalisation of the world and globalization have all contributed to Hikikomori prevalence outside of Japan. The argument here is that Hikikomori began as an almost exclusive health issue in Japan, but with time, has evolved to be a global health issue. The more recent literature and data greatly supports this hypothesis. For the arguments for Hikikomori being uniquely Japanese, I had stated the following two main categories: Impact of Japanese social and cultural behaviours and Impact of Globalization on a conformist, collectivist society. In this section, I will provide counter arguments to these two points while offering additional main factors that I believe are central to the argument that Hikikomori should now be considered a global health issue.

Indeed, while the unique nature of Japan's labour market may exacerbate the prevalence of new Hikikomori, economic collapse and a ‘one-shot’ recruitment system are not unique to Japan. Globalization may also have a more profound impact on a society like Japan but every country will feel the impact of Globalization to some extent, and many other countries, especially in East Asia are also conformist societies and will share many similar factors to Japan’s ‘tight’ collectivist society. This is to say, the impact of Globalization on collectivist societies is not something that is unique to Japan. Bommersbach and Millard, reasoned that: ‘Globalised trends such as increasing individualism and a shift away from physical forms of communication with the rise of the internet may more accurately explain the presence of Hikikomori in other countries’

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(Bommersbach and Millard 2019). It is logical to assume that Globalization and modernisation will lead to a worldwide shift from collectivism to individualism which will have a positive correlation to the prevalence of Hikikomori worldwide. Patrick Henz argued that the fact that: “in 2019, 36.5 million people lived alone in the United States was less a sign of loneliness, but an active decision based on culture and socialisation, as people value their alone time” (Henz 2022). The overall argument here is that Japanese society has generally more catalysts for the emergence of new Hikikomori compared to other societies and was the first country to view Hikikomori as a national problem. With time, however, it has become clear that Hikikomori is no longer tied to Japan and is now becoming a global health issue. Recent epidemiologic data and media reports have supported this claim. Here I will focus on the following points for arguing that Hikikomori is a Global issue: 1. Impact of Globalization, 2. Internet addiction and Modernisation, and 3. Epidemiologic data from countries outside of Japan.

2.6 Impact of Globalization

Firstly, I will discuss the impact of Globalization, and explore literature sources that discuss the impact of Globalization on societal values worldwide and how this may impact the prevalence and emergence of Hikikomori. Indeed, the same globalization argument that can be used to support Hikikomori being culturally bound to Japan can also be used to argue the case for Hikikomori being a global health issue. In general, it can be argued that all societies around the world have witnessed significant changes in recent times with rising Globalization and Individualism. Green argued that this rise has weakened collective values and social ties (Green 1997). It could be safe to assume that

doi:10.6342/NTU202304082

a weakening of collective values and social ties will have a positive correlation to the number of Hikikomori within and outside of Japan. This is because, in countries that place a high value on conformity, those individuals who feel ostracised or unable to meet societal expectations have a greater ability to silently 'rebel' or retreat from society rather than being almost forced to comply with the rules that shape their society. In countries where individualism is already thriving, a further increase in individualism in combination with modernisation depletes the need for social interaction and connections, leading to an increase in isolation and social acceptability of such a lifestyle.

In the previous section, Guo's work had highlighted Japan's high uncertainty avoidance and masculinity as a key characteristic of why Japan has such prominent Hikikomori prevalence. From Hoftstede's 1980 study on International differences on work related values, the results table shows the Uncertainty avoidance, Individualism, Masculinity and Powder Dimension scores for 31 sample countries. Interestingly, Japan does not score the highest for any category, and not the lowest for Individualism (Hofstede 1980). Belgium, Greece, Poland and Portugal all score higher in uncertainty avoidance while only Slovakia scored higher in masculinity. South Korea scored lowest in Individualism, at only 18, compared to Japan's 46, while also having a high uncertainty avoidance score of 85 (Hofstede 1980). Indeed, South Korea, where the prevalence of Hikikomori is approximated to be around 2.3%, has also received increasing attention lately in Hikikomori research and articles (Lee, Lee et al. 2013). It seems reasonable to assume that many of the social and cultural factors that catalyse Hikikomori in Japan, are not unique to Japanese society, other East Asian countries such as South Korea, Hong Kong, Taiwan and China have especially shown significant Hikikomori emergence and share

doi:10.6342/NTU202304082

some cultural and social characteristics with Japan. In countries that do not possess social or cultural characteristics likely to cause Hikikomori, such as the United States and some European countries, the role of Globalization, modernisation and internet addiction is still showing evidence of increasing Hikikomori individuals.

There is increasing evidence that Hikikomori is no longer culturally bound and is in fact becoming more and more of a global health issue. Globalization can also be viewed as an influencing factor for the transformation of Hikikikomori from a culturally bound issue to a global issue. Bommersbach and Millard wrote an important article in 2019 titled: 'No longer culture-bound: Hikikomori outside of Japan' (Bommersbach and Millard 2019). Here, they discuss a single case study of the first adolescent case of Hikikomori in the USA, a 17 year old Chinese-American male who's profile closely resembled those of Hikikomori found in Japan (Bommersbach and Millard 2019). Following this, they make several significant points regarding the prevalence of Hikikomori globally as well as the issues that result from the current way in which Hikikomori are viewed. They argue that: 'while Hikikomori is likely culturally influenced by several perpetuating factors in Japanese culture, continuing to refer to it as a culture bound syndrome may slow recognition of the syndrome outside of Japan.' (Bommersbach and Millard 2019). Not only this, but continuing to view Hikikomori as a culturally bound issue also risks potential misdiagnoses in other countries as well as pathologizing Japanese culture (Bommersbach and Millard 2019). The more evidence that supports Hikikomori being a global health issue, the more dangerous it becomes to profile it as a cultural phenomenon in terms of both diagnosis and early treatment for these individuals.

doi:10.6342/NTU202304082

Furthermore, A Kato et al. article from 2011 titled: ‘Are Japan's Hikikomori and depression in young people spreading abroad?’ supports the views expressed by Bommersbach and Millard and also helps to explore the impact of Globalization on the emergence of Hikikomori worldwide (Kato, Shinfuku et al. 2011). Here, they state that ‘modern-type depression’ is: ‘characterised by a shift in values from collectivism to individualism; distress and reluctance to accept prevailing social norms; a vague sense of omnipotence; and avoidance of effort and strenuous work’ (Kato, Shinfuku et al. 2011). The shift from collectivism to individualism is a global trend. While modern-type depression is not the same as Hikikomori, many similarities exist. Notably the fact that both modern-type depression and Hikikomori will have difficulties adapting to work and participating in the labour market while both suffer from the shift to individualism in a world where virtual entertainment is becoming more popular (Kato, Shinfuku et al. 2011). In this study, an international survey was conducted in order to discover whether or not the issues of modern-type depression and Hikikomori exist worldwide, not just in Japan. Case vignettes were sent to psychiatrists around the world and the results indicated that both Hikikomori and Modern-type depression was seen in various countries around the world (Kato, Shinfuku et al. 2011). Ultimately, it was concluded that both of these issues: ‘might not simply be Japanese cultural phenomena; rather, they might be indicators of a pandemic of psychological problems that the global internet-connected society will have to face in the near future’ (Kato, Shinfuku et al. 2011). Thus, it seems clear that the impact of Globalization is not a unique factor to Japan’s Hikikomori significance and will impact societies worldwide, many of which share some, but not all of the social and cultural factors that catalysed Hikikomori in Japan.

doi:10.6342/NTU202304082

2.7 The Role of The Internet

Next, the role of the internet and modernisation will be discussed in order to support the view of Hikikomori being a global health issue. It can be said that the current epoch of mankind can be characterised as: 'The Digital Age' (Grangie 2022). Indeed, the COVID-19 pandemic proved the importance of digital communication in allowing us to maintain 'social' interaction with others despite being physically isolated from others. It can be argued that the digital age has provided those who wish to escape from the issues they face in the real world, to an alternative, an escapism to the digital world, where people can receive relief from reality. This has created new addictions such as internet addiction and Hikikomori (Grangie 2022). Grangie explores how different social interaction has become in this digital age, where the 'digital dualism' theory where the physical and digital realms are separate is no longer accurate (Grangie 2022). Instead, it is noted that the digital and physical realms have now merged into one (Grangie 2022). This has never been more true than with the recent invention of the metaverse, which is likely to blur the boundary between physical and digital worlds more than ever before. While digital communication in some way increases the ability for humans to connect with each other, the in-person and physical connection is lost. Grangie explores the innate nature of mankind as a sociable primate species that require human touch (Grangie 2022). Hence, the decrease in physical interaction and increase in digital interaction is a potentially dangerous one for our mental health and loneliness. The result of escaping reality and your own feelings for a place in the controlled digital world of social media, video games and anime, among others, contrary to the unpredictable real world can be "social and mental death" (Grangie 2022). The connection between internet addiction and Hikikomori is unsurprising and is an

doi:10.6342/NTU202304082

associated factor that knows no cultural bounds, acting as one counter argument to Hikikomori being a uniquely Japanese issue.

Internet addiction is a significant factor associated with increased risk of social withdrawal. The positive correlation between modernisation, internet addiction and Hikikomori is straightforward, as individuals become more and more connected to the virtual world of entertainment, in person social interaction will suffer as both the need and desire for such connection gradually diminishes. Extreme internet addiction can lead to social isolation, which, depending on the severity and characteristics of such isolation, can be categorised as Hikikomori. A Hong Kong based study on the social withdrawal characteristics of 12-29 year olds noted that internet addiction was associated with increased risk of social withdrawal (Wong, Li et al. 2015). Multiple other studies on Hikikomori have confluence with this finding, highlighting the importance of internet addiction as a predictor for Hikikomori severity. Their study also showed that the participants did communicate with others through the internet and that being physically invisible and anonymous in online communication could reduce anxiety due to not requiring verbal communication skills (Wong, Li et al. 2015). It is noted that it seems feasible, in terms of treatment and intervention, to engage these withdrawn individuals through digital means (Wong, Li et al. 2015). Regardless of the associated factors for Hikikomori, it is likely that these individuals will spend the majority of their time in the digital world so it is logical that in order to reach and treat these individuals we should enter their world and understand their internet related habits.

In recent years, multiple research articles have chosen to focus specifically on internet addiction and its relation to Hikikomori. In: ‘Internet Addiction, Hikikomori Syndrome,

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and the Prodromal Phase of Psychosis' Stip et al explore a case of 21 year old in Canada, who appeared to fit the criteria for Hikikomori (Stip, Thibault et al. 2016). His trouble began following a failure to win an academic competition, which he was accustomed to winning (Stip, Thibault et al. 2016). Indeed, this feeling of shame or failure within the academic sphere or workplace is a common one amongst Hikikomori in Japan. In this case, the individual spent up to 12 hours per day on the internet in his room, with minimal to no contact with his family (Stip, Thibault et al. 2016). His justification of the internet addiction is that this was just a way of being free, and was actually a 'intergenerational misunderstanding' (Stip, Thibault et al. 2016). It is estimated that up to 56% of Hikikomori individuals may be at-risk of internet addiction (Stip, Thibault et al. 2016). Results of a study done on socially withdrawn youth in Korea seem to support the ideas expressed by Stip et al, here it was found that Hikikomori had significantly higher internet addiction scale scores, among other factors, compared to the baseline control group (Lee, Lee et al. 2013). The results of the Comparison of Young Internet Addiction Scale score between socially withdrawn youth (SWY) and normal controls show that SWY have a 20% higher risk of internet addiction and 7% higher addiction rate compared to the normal control group (Lee, Lee et al. 2013). In their discussion, the importance of internet addiction amongst socially withdrawn youth in Korea was explored. It was noted how youth internet addiction in Korea is a polemical social issue while research has not yet been able to pinpoint whether internet addiction is a primary cause for SWY or is a secondary result of social withdrawal (Lee, Lee et al. 2013). However, the study noted that SWY computer time was twice as long as normal controls and the main internet usage came in the form of gaming, especially First-person shooter and Role-playing games (Lee, Lee et al. 2013).

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It can be said there is likely to be a positive correlation between the virtualisation of the world and social withdrawal. RPG's and their online counterpart, Massively Multiplayer Online Role Playing Games (MMORPG) are infamously addictive genres that allow people to build and create their own character within a specific virtual world and interact with other gamers online with their character. In one sense, MMORPGs can allow individuals to live a separate life with their own online identity, protected by a shroud of anonymity and surrounded by like-minded online players who they may not be able to meet in the real world. This way of living vicariously through an online identity is likely to increase as technology and the capability of games continues to increase and it is not surprising to see a positive correlation between SWY and hours spent gaming as the previous study indicated. In very recent times, the evolution of both the technological and gaming worlds has given birth to the controversial metaverse. This is perhaps the ultimate manifestation of living vicariously through an online version of yourself as it is projected that almost all daily life activities, from shopping to going to work can be conducted, at least to some degree, within the metaverse. Already, scientific articles and discussions have emerged relating to the psychological impact of the metaverse on the human mind, especially in terms of loneliness and social withdrawal.

In 'The psychological Impact of the metaverse' by Patrick Henz, we get a look into the potential future consequences of the metaverse (Henz 2022). Here, reference is made to futurist Faith Popcorn's 1981 coining of the term 'cocooning' meaning to stay inside one's home to hide from a potentially unfriendly physical and social environment (Henz 2022). Henz makes note of the increasing rate at which the line between the physical and virtual worlds is blurring, referencing how musical artists have performed in

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Roblox, one major metaverse platform (Henz 2022). Indeed, musical artists have also performed in other metaverses such as Decentraland, these were particularly popular during covid as they allowed people to ‘attend’ concerts in a world where it was, at the time, otherwise impossible. Henz alludes to the fact that in the future, where this boundary becomes increasingly blurred, whether you attend an activity in the metaverse or in person may become a question of personal budget, just like today's different concert zonings (Henz 2022). It is stated that if cocooning is combined with spending time on the metaverse then humans may regain social contacts or replace human-interaction in the physical world with that found in the metaverse, which would either be with other users or Virtual Being’s (Henz 2022). The same can be said for Hikikomori and socially withdrawn youth as the ever rapidly evolving virtual world creates a pathway for physical experiences and emotions to be felt in a separate world. It is important to note that the digital world also possesses positive aspects when it comes to Hikikomori. If used correctly, this can be an effective avenue through which they can be reached and helped while feelings of perceived loneliness are likely to be lower when interacting online, despite the lack of physical interaction. Indeed, the metaverse is a double-edged sword when it comes to social withdrawal, on one hand it seems most obvious to increase the prevalence of Hikikomori and internet addiction, on the other hand, metaverse and virtual reality based medical solutions may be the only way to reach such individuals, who cannot or are unwilling to be reached in the physical world. We are just beginning to see this in action, with the Edogawa Ward in Tokyo announcing they will use the metaverse to ‘solve’ the Hikikomori problem, by arranging a series of 6 metaverse meetings in 2023 where remote users are able to shield their identity through use of online avatars (Goschenko 2023).

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An article exploring the rising and concerning emergence of Hikikomori in Italy also uses the internet as a primary tool for connecting and understanding these individuals. Marco Crepaldi, Italy's leading expert on Hikikomori founded a Facebook group called 'Hikikomori Italia' which provided support and a form of connection for both Hikikomori individuals and the parents of these individuals (Poletto 2018). The article then proceeds to share some of the comments left by members of the Hikikomori Italy forums. The comments of three young male members were shared. Aldo, 21, expresses how apathy dominates his emotions, has an inverse sleep-wake cycle and has no motivation for change (Poletto 2018). Daniele, 17, shared how his childhood was not pleasant and always felt like he would be judged by others, he cannot remember a single moment where he was happy (Poletto 2018). Crepaldi believes the most likely hypothesis for why these young males choose to abandon their physical social life and search for refuge online can be explained by a quote from Luca, 22: "Internet is a form of contact with the world. You are there. But whoever is on the other side does not expect anything from you" (Poletto 2018). In a nutshell, it's not like a mother screaming to convince her son to go back to school. It's not like a threatening father. It's just a contact" (Poletto 2018). Here, again, it seems the digital world offers a form of shelter for Hikikomori within which their feelings and experiences can be shared in a familiar and comfortable setting, with the feeling of judgement removed, unlike in the real world. A case reported in Portugal of a 22 year old Male shared similar characteristics to those found in Crepaldi's study, with the individual experiencing a prolonged social withdrawal of 4 years in which he spent the majority of time locked in his room with heavy internet use, even blocking contact with family members (Macedo, Pimenta et al. 2017).

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A 24 year old male case in Croatia also shares similar characteristics. Here, Hikikomori was found to be the best diagnosis for this individual (Silic, Vukojevic et al. 2019). The patient had heavy internet and gaming use with severe social isolation, childhood trauma in the sense of bullying and avoidant personality traits (Silic, Vukojevic et al. 2019). A 2019 study done in Ukraine which had 56 patients that met the criteria for Hikikomori also made reference to the importance of the internet for such individuals (Frankova 2019). Here, it was stated that irrespective of the etiology of withdrawal, the: "modern Internet-connected world allows patients to commit "social suicide," as the Internet can satisfy all the needs of those who want to remain alone in their rooms isolated in their "virtual tombs" (Frankova 2019). In: 'a culture-bound syndrome in the web 2.0 era', a 2013 study produces the first know description of Hikikomori in Italy, a 28 year old male (De Michele, Caredda et al. 2013). Here, the authors hypothesise that the most likely reason for the recent emergence of Hikikomori in countries outside of Japan is due to the 'cultural revolution represented by mass communication in the internet era' (De Michele, Caredda et al. 2013). Particularly pointing to immediateness and diffusion of web 2.0 (De Michele, Caredda et al. 2013).

Web 2.0 is often referred to as the stage of the internet in which social media grew rapidly. Web 3.0, a very new term, refers to the next 'transformation' of the internet including blockchain technology, cryptocurrency, virtual reality and the metaverse. Thus, if Web 2.0 is said to be a strong candidate for the emergence of Hikikomori, it seems logical that Web 3.0 and each further transformation of the internet would also have the same impact. In this case, the 28 year old Male lived the last 10 years in almost complete isolation, maintaining contact with the world almost exclusively through the internet (De Michele, Caredda et al. 2013). Finally, a case of a 24 year old Male in

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Oman, from 2005, also fit similar characteristics (Sakamoto, Martin et al. 2005). Here, the male had an inverse sleep-wake rhythm and would stay up all night watching tv or playing video games (Sakamoto, Martin et al. 2005). Overall, it seems clear that the internet, video games, metaverse and social media that is so rapidly evolving is a significant risk factor both for developing social withdrawal but also for the continuation and prolonging of social withdrawal due to the ever increasing lack of necessity to operate in the physical world. Here, I have laid out arguments and evidence found in literature for Hikikomori being unique to Japan and being a global issue, in the first section I laid out the rationality and basis for Hikikomori shifting from a Japanese issue to a global issue resulting more so from social changes due to modernisation and globalization than static traditional Japanese cultural and social behaviours. In the second section I explored the impact of these social changes globally while addressing the ever emerging and significant role of the digital world and its impact on Hikikomori emergence worldwide.

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Chapter 3

3.1 Methods

Expected hypotheses based on literature review

1. The prevalence of Hikikomori will be higher in males than in females
2. Hikikomori will be mostly associated with youth, particularly young adults
3. Hikikomori are predominantly found in East Asian countries but is an emerging issue found globally.
4. The main associated factors of Hikikomori are: Feelings of shame and failure, School bullying, familial relation issues, internet addiction, fragmentation of social structures and comorbidity with other psychological illnesses.

Study Design and Rationale

The chosen methodology for this study is a scoping review, which will be completed according to the JBI protocol for scoping reviews. The rationale for this review is that Hikikomori is a relatively new and emerging health issue, hence a scoping review rather than a systematic review and meta-analysis is more suitable to synthesise current evidence and literature on Hikikomori, where narrower review questions would prove too challenging and unknown given the available data. Hikikomori is a very relevant health issue that is likely to become a larger issue in correlation with time, due to various factors, such as globalization and ways in which social interaction is changing in the modern, digitalisation of the world. For this reason, a scoping review is important to lay a foundation on the current knowledge and understanding of Hikikomori that exists in current evidence.

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Eligibility criteria

Participants

The Population and sample that will be eligible for this study are Hikikomori individuals, either officially diagnosed or unofficially diagnosed by meeting enough diagnostic criteria to be considered Hikikomori. Since the studies included in the review require specific data on Hikikomori the determination of whether these individuals are Hikikomori or not is already determined by the author(s) of these studies, which mostly follow the definition of continuous social withdrawal for at least 6 months.

The Population and sample that will be excluded from this study are any study populations other than Hikikomori.

The inclusion criteria for the language of the studies included requires the articles to be written in English, non-translated articles in a foreign language will not be included in the review.

The inclusion criteria for the time period of the written articles has no bounds, since Hikikomori is a relatively new phenomenon, there are no date restrictions and articles from all dates will be included in the review.

The study focus is on articles that contain at least one case of Hikikomori, in order to extract the relevant data from the article and create a synthesis for associated characteristics of Hikikomori. Articles that simply discuss Hikikomori but do not include at least one case of Hikikomori individual(s) will be excluded.

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Types of Sources

The article must be a research paper or a review paper but not a letter, commentary, systematic or scoping review, meeting abstract or proposal, being published in an academic peer-reviewed journal, both qualitative and quantitative studies are accepted. Published theses will also be eligible for this scoping review.

Search strategy

The search strategy will aim to locate both published and unpublished studies. The identification of articles was conducted on May 13th 2023 by searching the following databases of Web of Science, Scopus and PubMed with the keyword 'Hikikomori' since, in recent times, the number of articles and recognition of Hikikomori as a keyword has increased significantly, keywords such as 'social withdrawal' will not be included in the search, since the aim is to focus on articles that specifically identify the individual(s) studied as being Hikikomori.

The search with Keyword 'Hikikomori' conducted on the 13th of May 2023 yielded 322 results in Web of Science, 343 results in Scopus and 179 results in PubMed. After the initial search, a brief hand search was conducted by viewing the reference lists of included articles and journals which yielded an additional 21 potential studies to be included in the scoping review. In total, there were 397 duplications out of a total 857 sources leaving 468 unique results in total (see Figure 1).

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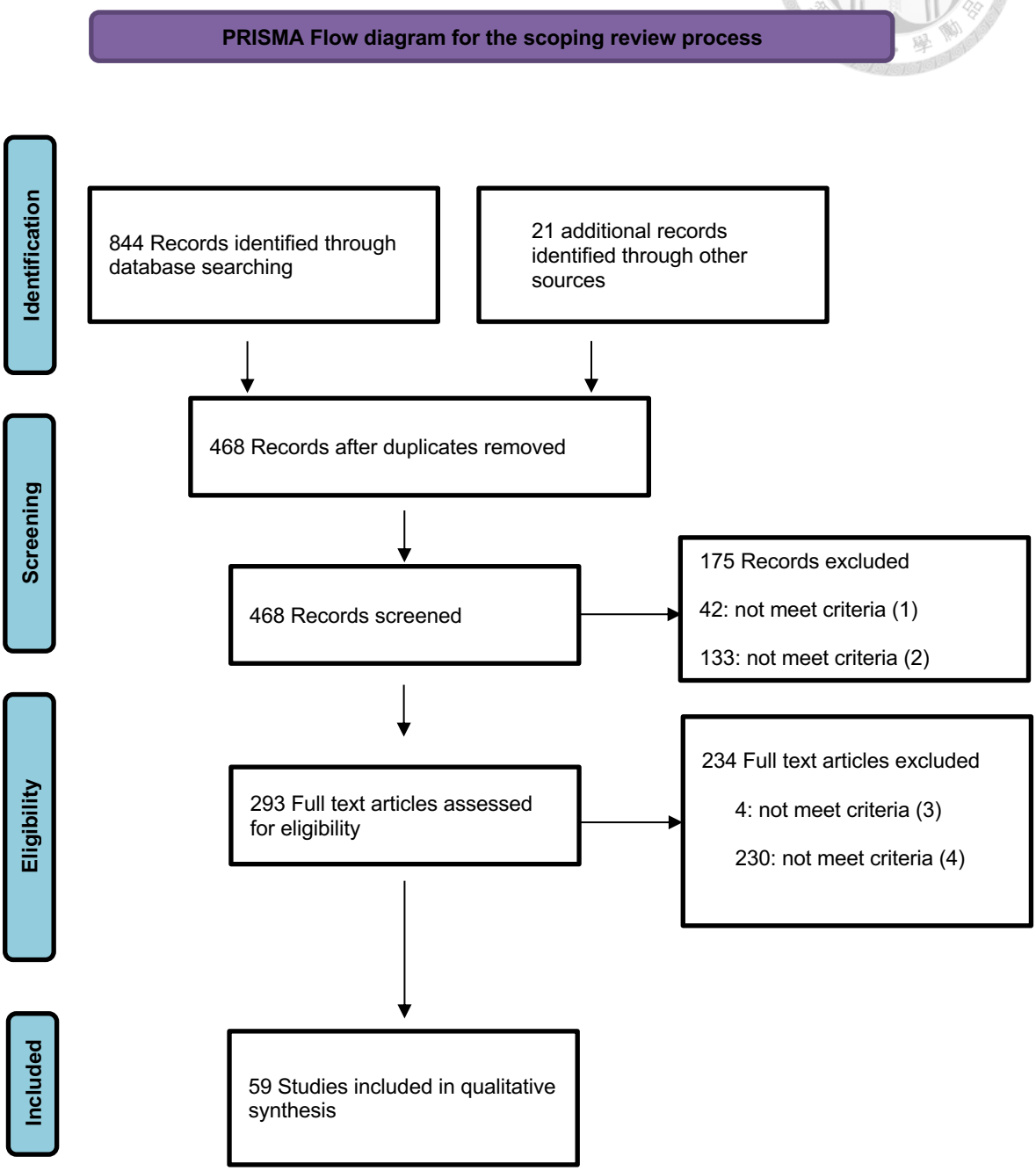

(Figure 1 – PRISMA Flow diagram for the scoping review process)

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Study selection

The articles were reviewed using the following inclusion/exclusion criteria:

(1) the article must be written or translated in English

(2) the article must be a research paper or a review paper but not a letter, commentary, systematic or scoping review, meeting abstract or proposal, being published in an academic peer-reviewed journal, both qualitative and quantitative studies are accepted.

(3) the article must include data that has not already been included in another selected study for the scoping review

(4) the article must be specifically examining Hikikomori and contain relevant extractable data (at least 3 of the following 4 pieces of information: Age, Gender, Country, Main factors for withdrawal) on at least one case (past or present case) of Hikikomori.

The rationale behind excluding systematic or scoping reviews for this study is that it would likely create overlapping data from other studies that would overestimate the overall prevalence and data that exists on Hikikomori. Quantitative and qualitative studies are both accepted, given the relatively new nature of Hikikomori from a research perspective, the overall inclusion criteria were engineered to be broad as a very narrow approach would lead to an extremely limited number of studies. For the same rationale, single case studies were also accepted for this study. The study selection process is outlined in the PRISMA flowchart with reasons for each exclusion.

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Data Analysis and Presentation

The following information was extracted from each article: (1) methodology of study, (2) number of Hikikomori included in study, (3) age of Hikikomori in study, (4) gender of Hikikomori in study, (5) country of Hikikomori in study and (6) main factor(s) influencing the development of Hikikomori in the study (see Table 1). Here, five categories will be discussed from the data presented. Category (0) will visualize the relationship between the year of the published studies and Hikikomori / Hikikomori location. Category (1) will explore the relationship between age and Hikikomori, which according to the hypothesis expects a positive correlation between youth and Hikikomori. Category (2) will explore the relationship between Gender and Hikikomori, which expects a higher prevalence of Males compared to Females. Category (3) will explore the relationship between country and Hikikomori, which expects a higher prevalence within East Asian countries. The Final Category (4) will analyse the relationship between associated factors of Hikikomori amongst the data presented. Here, it is expected that the following factors will be most prevalent: feelings of shame and failure, School bullying, familial relation issues, internet addiction, fragmentation of social structures and comorbidity with other psychological illnesses. This section will also explore ‘primary Hikikomori’: Hikikomori who have no history of psychiatric disorders and ‘secondary Hikikomori’: Hikikomori who have comorbidity with psychiatric disorder(s). Following this, the discussion section will qualitatively describe the overall findings from this scoping review and whether the overall expected hypothesis is supported by the current data. Outlook for Hikikomori and study limitations will also be discussed.

doi:10.6342/NTU202304082

INCLUDED STUDY (AUTHOR(S), YEAR) TABLE 1	TYPE OF STUDY	TOTAL NUMBER OF PEOPLE WHO FIT CRITERIA FOR HIKIKOMORI (N)	MEAN/RANGE OF AGE FOR HIKIKOMORI	PERCENTAGE OF MALE HIKIKOMORI IN STUDY	COUNTRY OF HIKIKOMORI	EVIDENCE OF COMORBIDITY (Y/N) / OTHER FACTORS INFLUENCING HIKIKOMORI DEVELOPMENT
(AMENDOLA AND CERUTTI 2022)	Quantitative study	7	N/A	42.85%	Italy	N Adolescents: low self - esteem, bullying, interpersonal difficulties mourning Adults: bullying, feeling safe at home, rejection of societies rules
(BENAROUS, GUEDJ ET AL. 2022)	Quantitative study	14	14.29	64.29%	France	Y consistent with the features reported in Asian Hikikomori adults anxiety disorder, depressive disorder

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(BOMMERSBACH AND MILLARD 2019)	Single case study	1	17	100%	USA	N Primary Hikikomori, ego-syntonic nature Academic failure/rejection
(BOWKER, BOWKER ET AL. 2019)	Retrospective study	53	16.4	45.28%	Nigeria Singapore USA	Y Loneliness, depressive symptoms, social anxiety, social anhedonia, and lack of parental support
(CAPUTO 2020)	Qualitative narrative study (emotional text analysis)	17	25.17	52.94%	Italy	N Complex of dependency, tendency to introversion, refusal of agency (fear of failure), ambivalence towards intimacy
(CHAULIAC, COUILLET ET AL. 2017)	Retrospective study	66	23.2 20.4 (onset)	80.30%	France	Y 37% schizophrenia, 23% mood disorders, 15% disorders of adult personality, 13% no psychiatric diagnosis, 10% neurotic/stress related, 2% pervasive developmental disorders.

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(CHOI, LEE ET AL. 2022)	Semi structured interviews	15	13-24	N/A	Korea	N Low education level, loneliness, and internet addiction
(CHONG AND CHAN 2012)	Single case study	1	N/A	100%	Canada	N Root cause: strong introverted personality type Secondary factors: over protective authoritarian parenting style, single parent family, bullying, low self-esteem, technology
(COPPOLA 2022)	Netnographic Study	15	21.5	92%	Italy	N High levels of social anxiety, low self-esteem, bullying, social exclusion, body shaming, denial of normative parameters of society

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(CORREY 2016)	Masters Thesis Mixed methods survey, quantitative / qualitative, online survey	61	18 – 21 (27) 22 – 25 (20) 26 – 29 (7) >30 (5)	78.69%	USA Europe Asia South America	Y Childhood trauma, history of mental illness, lack of confidence, hopelessness egosyntonic vs egodystonic
(DE LUCA AND CHENIVESSE 2018)	Clinical case study	1	15	100%	France	N Virtual reality
(DE LUCA, LOUET ET AL. 2020)	Clinical cohort study	30	14.5	83.33%	France	N defensive modality in the face of the challenges that come when entering adulthood fear of confronting others / of the outside world being threatening

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(FONG AND YIP 2023)	Cross-sectional study	184	24.7	31.52%	Hong Kong	N Greater COVID-19 impact, being unemployed, experience of being bullied, and less offline communication Lower levels of selfishness and higher levels of online communication, glorification, and Hikikomori. Suicidal ideation.
(FONG, CHENG ET AL. 2023)	Cross-sectional study	172	19.44	80%	Hong Kong	N Increased daily gaming hours positively correlated to increased risk of Hikikomori
(FRANKOVA 2017)	Qualitative study	26	<18 (11) >18 (15)	N/A	Ukraine	Y 65.4% had at least one psychiatric diagnosis, 34.6% had none Related qualitatively and quantitatively to childhood trauma

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(FRANKOVA 2019)	Clinical study	35	25.6	40%	Ukraine	Y 13/35 = Primary 22/35 = secondary Hikikomori past traumatic and life adverse events in both groups, emotional disturbances, parental divorce, insult/neglect Primary + secondary = largely similar characteristics
(GONDIM, ARAGÃO ET AL. 2017)	Case study report	1	25	100%	Brazil	N Social stressors at time of withdrawal: ending relationship with girlfriend, quitting his job

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(HAMASAKI, NAKAYAMA ET AL. 2021)	Case control study	20	14.1	50%	Japan	N Parental psychiatric disorders, conflict between parent and child, overuse of internet all significantly higher than the control group
(HAREVEN, KRON ET AL. 2022)	Mixed-Methods	121	24.2	70.25%	Israel	Y 78 history of psychiatric diagnosis (most common diagnosis being schizophrenia or other psychotic disorders (30%), followed by OCD (23%), anxiety disorders (22%), and mood disorders (20%) 43 primary

doi:10.6342/NTU202304082

(HATTORI 2006)	Clinical study	35	21.5	71.43%	Japan	N Childhood trauma (bullying, emotional neglect, emotional abuse..) Parent-child relationship issues (distrust, loss of secure attachment, fear..) Distrust of humans, dissociative identities, phobia of humans..
(HU, FAN ET AL. 2022)	Online questionnaire	86	22.85	32.56%	China	N result of the complex interaction between developmental, social, psychological, and employment challenges in China. Loneliness, personality dysfunction, relationship between other psychological disorders unclear

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(HUSU AND VALIMAKI 2017)	Data collected from website popular amongst Finnish youth (internet forum)	422 posts analysed from Hikikomori board of forum (N/A)	estimated to be between 20-30	estimated to be majority male	Finland	N Society being unjust and demanding Sense of failure Lack of self-efficacy
(IMAI, TAKAMATSU ET AL. 2021)	Quantitative clinical study	91	Bi-Modal – Peaked at 20's and 50's	No significance difference between Gender	Japan	N High anxiety levels Lower economic status
(IWAKABE 2021)	Single case study	1	40	100%	Japan	Y Academic failure Work exhaustion Lack of social life, depression, anxiety

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(KASAK, HACIOSMANOGLU ET AL. 2022)	Single case study	1	15	100%	Turkey	N Frequent use of electronic devices and communication withdrawal Failure in high-school exam results Video game addiction Introverted in nature
(KATO, KANBA ET AL. 2016)	Single case study	1	39	100%	Japan	Y lack of accomplishments, feelings of failure, psychosis
(KHIATANI, LIU ET AL. 2023)	Quantitative study	25	15.6	64%	Singapore	N Unspecified

doi:10.6342/NTU202304082

(KONDO, SAKAI ET AL. 2013)	Quantitative study	337	24.2 onset 20.1	74.78%	Japan	Y Family problems, Schizophrenia, mood disorders, anxiety disorders, personality disorders, lack of social participation
(KOYAMA, MIYAKE ET AL. 2010)	Quantitative study	19	22.3	73.68%	Japan	Y 54.5% secondary 45.5% primary
(KRIEG AND DICKIE 2013)	Quantitative case-control study	24	22.84	58.33%	Japan	Y 14 secondary Parental rejection behaviours, ambivalent attachment, shyness, peer rejection all higher than comparison group
(KUBO, AIDA ET AL. 2021)	Single Case study	1	39	100%	Japan	Y Job/career stress, major depression, no social relationships outside family, suicidal ideation Diagnosed with schizo-affective disorder

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(LEE, LEE ET AL. 2013)	Case-control study	41	15	75.61%	Korea	N Depression Inventory, Trait Anxiety Inventory, Social Anxiety Scale, and Internet Addiction Scale scores were significantly higher than those of baseline controls
(LIU, LI ET AL. 2018)	Cross-sectional open web survey	9	less than 18 (1) between 18-24 (5) above 24 (3)	66.67%	China	Y 2/9 secondary Hikikomori group had less offline bridging social capital than the comparison group
(MACEDO, PIMENTA ET AL. 2017)	Single case study	1	22	100%	Portugal	N Blocking contact even with family members, work and school impairment, internet addiction

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(MALAGON-AMOR, CORCOLES-MARTINEZ ET AL. 2015)	Descriptive study	164	36.6	73.78%	Spain	Y personal psychiatric history (74.5%), with psychotic (34.7%) and anxiety (22%) disorders being the most frequent. A total of 39.3% had required previous psychiatric admission.
(MALAGON-AMOR, MARTIN-LOPEZ ET AL. 2018)	Qualitative clinical study (home treatment)	190	39.1	71.58%	Spain	Y Only one case (internet addiction) presented without comorbidity with mental disorder
(MATSUGUMA AND NIEMIEC 2021)	Case reports	2	17.5	100%	Japan	N Not fitting in at school, high psychological distress, loss of relationships, feeling lost in life Anxiety, social pressure

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(MURIS AND OLLENDICK 2023)	Case reports	3	24	100%	Japan USA Netherlands	N Feelings of failure (education, career), introverted personality, over affectionate parents Video game addiction, childhood trauma Longing for solitary life, social isolation, lack of friends
(NAGATA, YAMADA ET AL. 2013)	Semi-structured interview study	27	27.4	44.44%	Japan	Y 15 had lifetime history of major depressive disorder, higher rate of OCD compared to non-Hikikomori group
(NONAKA AND SAKAI 2021)	Case-control study	100	38.6	63%	Japan	N Psychological stress, behavioural disengagement stress coping

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(NONAKA AND SAKAI 2022)	Case-control study	99	44.5	70.71%	Japan	Y Difficulty in social participation, depression, psycho-social issues
(OVEJERO, CARO-CANIZARES ET AL. 2014)	Single case study	1	25	100%	Spain	N Parental divorce, school bullying, cannabis consumption at young age Primary Hikikomori
(ROZA, PAIM KESSLER ET AL. 2022)	Qualitative study	3	42.3 28.7 onset	100%	Brazil	Y All three had depression, financially supported by parents, 2/3 had gaming disorder
(SAKAMOTO, MARTIN ET AL. 2005)	Single clinical case	1	24	100%	Oman	N School bullying, no history of psychological disorder, shyness, frequent video games, reverse circadian rhythm

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(SILIC, VUKOJEVIC ET AL. 2019)	Single clinical case	1	24	100%	Croatia	N Bullying at school (stuttering), defeatist worldview (distrust of humans), video game addiction
(SOUILEM, MRAD ET AL. 2019)	Single case study	1	18 16 onset	100%	Tunisia	N After developing severe acne, locked himself in his room, spent all day on the internet
(STIP, THIBAULT ET AL. 2016)	Single case study	1	21	100%	Canada	N Primary Hikikomori, no medical history Academic failure, internet addiction
(TEO 2013)	Single case study	1	30	100%	Spain	N Secondary to obsessive compulsive disorder Childhood trauma, parents had substance abuse, moral disdain of society

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(TEO, FETTERS ET AL. 2015)	Cross-national case series study	36	27.2	80.56%	Japan USA India Korea	N High loneliness and impaired social network scores
(TEO AND GAW 2010)	Single case study	1	14	100%	Japan	N Primary Hikikomori, no medical history Sudden loss of interest in school
(TEO, NELSON ET AL. 2020)	Retrospective case-control study	24	35.5	58.33%	Japan	N Higher suicidal ideation in Hikikomori group Deficits in social connections, lower reward dependance
(UMEDA AND KAWAKAMI 2012)	Cross-sectional study	15	36.3 25.2 onset	66.67%	Japan	N Higher educational level of parents significantly associated with Hikikomori Families with little socioeconomic disadvantages, maternal PD

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(WONG 2020)	Interview based study	32	17.2	75%	Scotland Hong Kong	N High levels of online interaction, low levels of offline communication MMO video gaming Only 2 felt loneliness, generally content with online interactions
(WONG, LI ET AL. 2015)	Cross-sectional telephone based survey case-control study	44	<18 (15) 18-24 (17) 24> (12)	59.1%	Hong Kong	Y Less psychologically healthy (higher GHQ-12 scores) Majority match with 'primary Hikikomori' Only 4% received psychiatric treatment in the past Bullying, job stress, internet addiction
(WONG, LIU ET AL. 2017)	novel survey through Chinese social media platforms	9	24.4	66.67%	China	N Higher risk of suicidal ideation, less offline social capital

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(Wu, Catmur et al. 2020)	Online survey	94	28.8	46.81%	Taiwan	N Low self-esteem, difficulty in social interaction, difficulties fitting in society, work/school related problems, low mood
(YONG, FUJITA ET AL. 2020)	Cross-sectional population study	164	between 15-39 (48) rest N/A	53.66%	Japan	N Hikikomori men more likely to have severe symptoms of mental illness, poorer self-rated health, distress, suicidal ideation than non-Hikikomori men, but not Hikikomori women Jobless with fewer outdoor frequencies = Hikikomori men Homemaker and no social support = Hikikomori women

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(YONG AND NOMURA 2019)	Survey of Young People's Attitudes of 5,000 residents	58	27.8	65.52%	Japan	Y 37.9% had previous psychiatric history Majority primary Hikikomori History of dropping out from education, history of psychiatric treatment
(YUEN, WONG ET AL. 2019)	Prospective cohort study	104	19.02	59.62%	Hong Kong	Y Low self-esteem, stress, depression, anxiety, hypertension, pre-hypertension

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Chapter 4

4.1 Results

The remaining 293 full text articles were assessed for eligibility. Of these, 4 were excluded for not meeting criteria (3) as the data presented in the study already existed in another study by the author and while not a duplicate source, the duplicate data could not be included for data extraction. Finally, 230 articles were excluded for not meeting criteria (4), while these articles were relevant to Hikikomori, they did not contain relevant extractable data on at least one case of Hikikomori. These articles included studies that were descriptive and qualitative discussions on Hikikomori in general, without specific focus on Hikikomori cases with demographic data. Other articles frequently included data on 'Hikikomori risk' to evaluate the risk of a large group of individuals for developing Hikikomori, this was mostly done through the HQ-25 questionnaire but were not actually in a current or past state of withdrawal. Sometimes analysis was done through the lens of psychiatrists to evaluate if they have seen cases of Hikikomori in their country, or through the lens of Hikikomori parents. It was important to only include studies that focused on present or past cases of Hikikomori in which the sample was clearly defined to meet the criteria for Hikikomori based on widely accepted criteria and definition, articles that explored 'social withdrawal' but not Hikikomori, will often be a less serious form of withdrawal when compared to Hikikomori, whom usually will be defined only as Hikikomori with extreme social withdrawal characteristics for at least 6 months, sometimes 3. Hence, it was important to thoroughly analyse each source to ensure data would be both relevant to the topic and relevant for comparison. All in all, 59 sources qualified for this qualitative synthesis. Here, the five categories explained in the data analysis and presentation section will be presented, with results for each category being both described and visually displayed.

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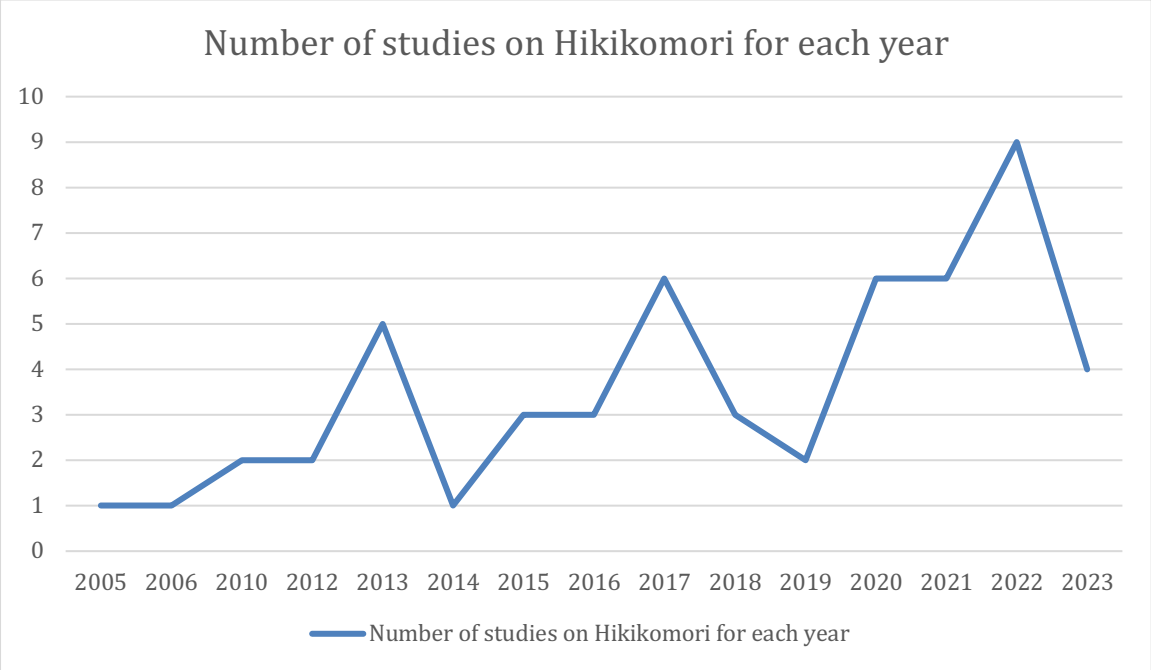
4.2 Category (0): Relationship of published study year and Hikikomori

The rationalization behind this category is that it will help to display Hikikomori as an incredibly relevant and emerging issue, with a significant number of new studies being published in recent years. Of the 59 studies, the year with the most studies on Hikikomori was 2022 with 9 total studies. The second largest number of studies – 6, was found in the years 2021, 2020 and 2017. Figure 2 below shows the trend according to the studies included in the scoping review, with a general uptrend in studies in correlation with time and a peak in 2022. Figure 3 displays the same information, separated by evidence in Japan and evidence outside of Japan.



(Figure 2 – Number of studies on Hikikomori for each year of articles included in the scoping review)

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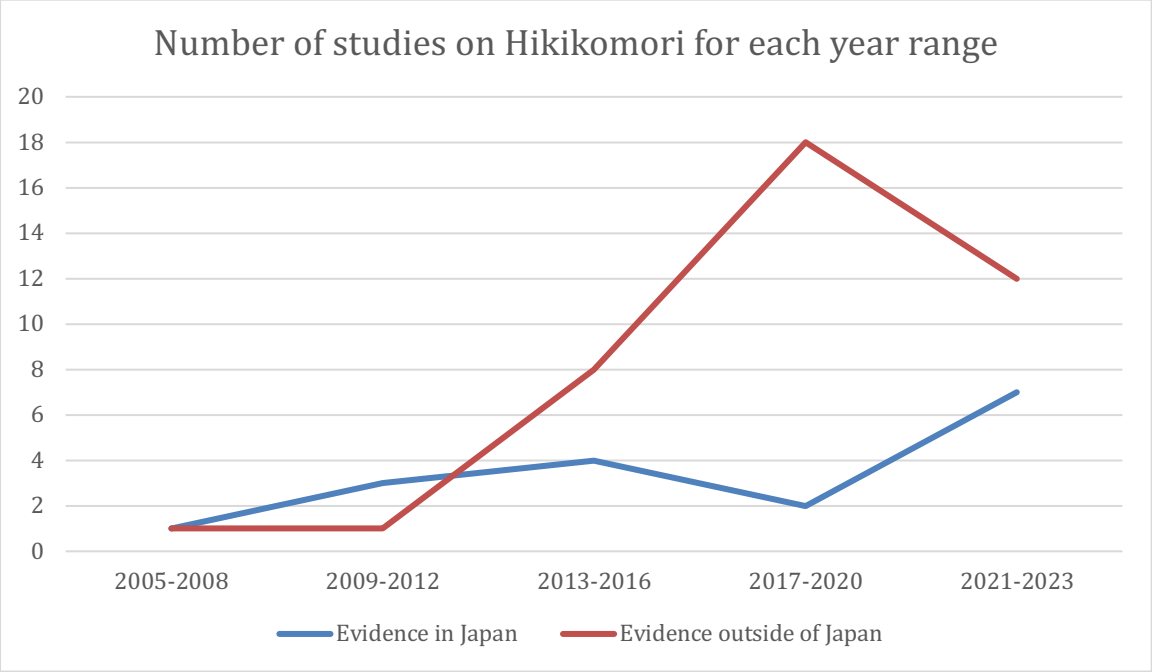

(Figure 3 – Number of studies on Hikikomori for each year range, separated by evidence in only Japan or evidence outside of Japan)

4.3 Category (1): The relationship between age and Hikikomori

From the 59 included studies in this scoping review, the mean age of the included cases can be calculated. 49 out of the 59 included studies included the mean age of the Hikikomori cases in the study, or included age ranges where the mean could be calculated. The other 10 sources either didn't include information on age, or included age data that was insufficient to accurately calculate the mean for said study. The majority of studies included the age as the current age of the Hikikomori in the study, while some used the age of onset, when Hikikomori was first developed, while some included both the current mean age and the onset age. From the 49 studies where mean age was given or calculatable, the overall mean age across all included studies of Hikikomori cases is 24.56. 5 studies included both the mean

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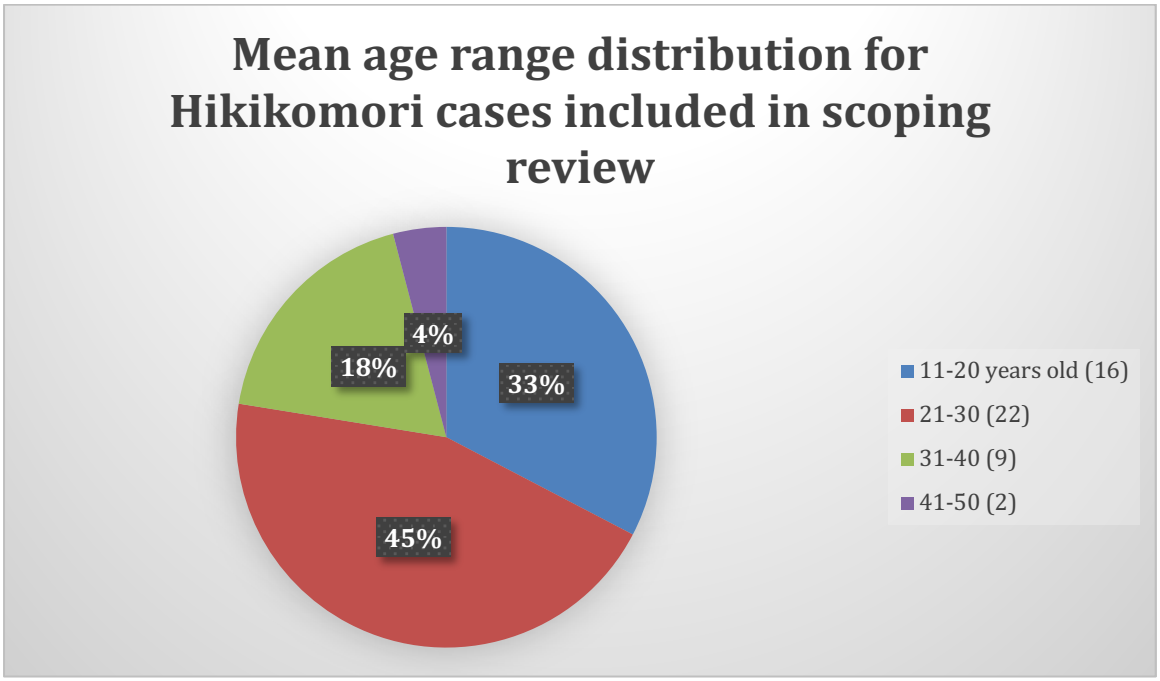
age and the age of onset, here the mean for the difference between the age and age of onset was minus 6.72 years. While this difference is calculated using only 5 studies and does not hold much statistical strength, it is important to acknowledge that while the mean of all included studies is 24.56, the mean age of onset would of course be lower than this. A visual representation of the mean age range distribution can be seen in Figure 4. This data was calculated by using age ranges that I created myself, and the mean age for each eligible study was then placed into the appropriate range.



(Figure 4 – mean age range distribution for the 49 studies included in the scoping review that contained data on age)

4.4 Category (2): The relationship between gender and Hikikomori

Of the 59 studies included in this scoping review, 55 of them included gender data where the percentage of male Hikikomori cases could be calculated or was given in the study. The other

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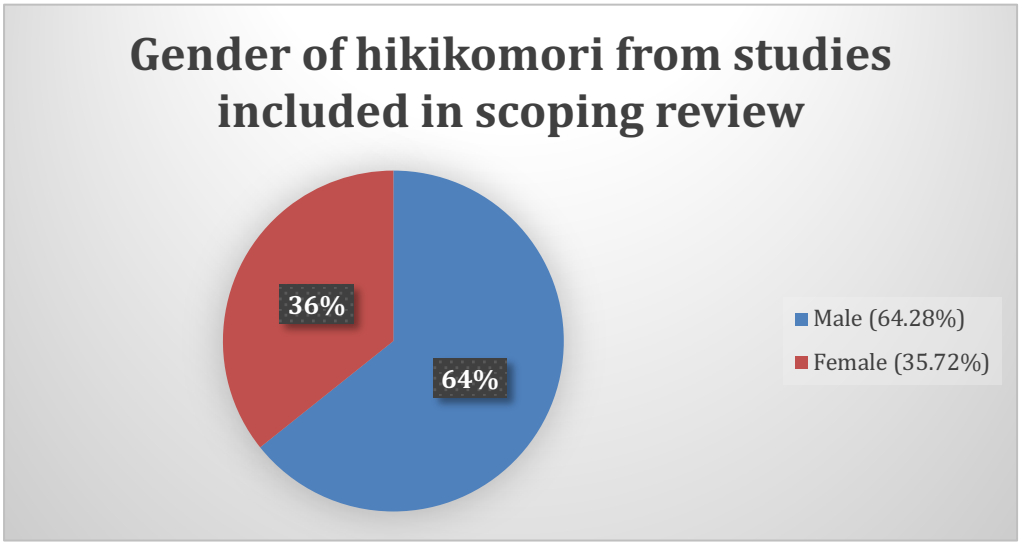
4 studies either included no data, or limited data where gender could not be accurately calculated. Across the 55 studies, the percentage of males ranged between 31.52% and 100%. 16 out of these 55 studies were single case studies, of which, all 16 were single case studies of male individuals. For this reason, a weighted mean percentage of males was calculated, where more weighting was given to the studies that include more cases. The mean weighted percentage for males amongst all 55 studies and 2,555 cases of Hikikomori is 64.28%. Almost 2/3 of Hikikomori cases in this scoping review are male.. Figure 5 displays a visual representation of the male to female ratio for the included studies in the review.



(Figure 5 - Percentage of male and female Hikikomori cases included in the scoping review)

4.5 Category (3): The relationship between country and Hikikomori

All 59 studies that were eligible for this scoping review included data on the country of the Hikikomori included in the study. 24 unique countries with Hikikomori cases were identified. Of the 59 studies, 21 studies included Hikikomori cases in Japan, 5 included cases in each of the USA and Hong Kong, 4 included cases in each of France, China and Spain, 3 included

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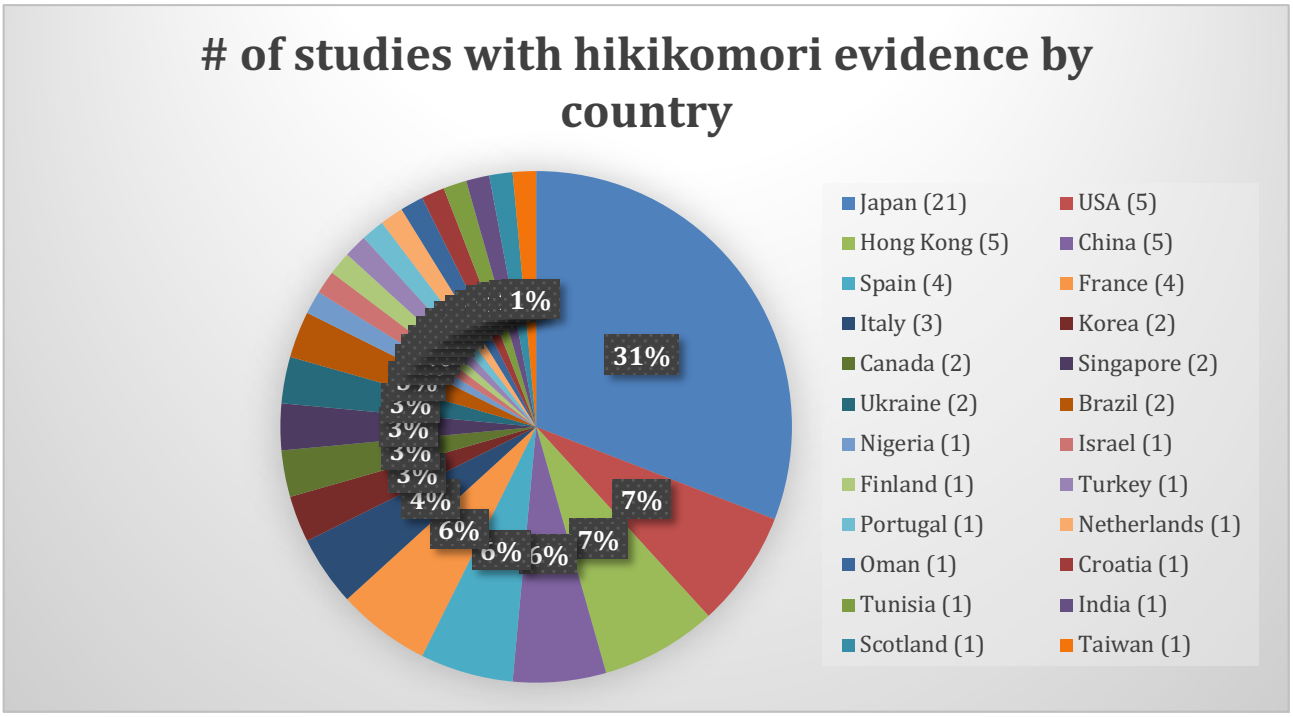
cases in Italy, 2 included cases in each of Korea, Canada, Singapore, Ukraine and Brazil and each of Nigeria, Israel, Finland, Turkey, Portugal, The Netherlands, Oman, Croatia, Tunisia, India, Scotland and Taiwan had one study including cases of Hikikomori in their respective country. By Continent, there were 38 studies with Hikikomori cases in Asia, 19 studies with Hikikomori cases in Europe, 7 studies with cases in North America, 2 with cases in South-America and 2 with cases in Africa. A visualisation of this can be seen from Figure 6. For studies where multiple countries were included, each country would be counted once, which is why the pie chart below contains 69 total numerical points instead of 59.



(Figure 6 – Number of studies with data on Hikikomori cases for each country)

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4.6 Category (4): The relationship between associated characteristics of Hikikomori

Of the 59 included studies in this scoping review, all 59 of them included information on the influencing factors that led to Hikikomori. Of these, 37 of the studies had no mention of comorbidity with psychological disorders and would thus fit the 'primary Hikikomori' category. While 22 explicitly mentioned existence of other psychological disorders in at least one of the cases examined and would thus fit the 'secondary Hikikomori' category. It is important to note that most of the studies included cases that would fit into both categories and even if one case included comorbidity, it would be categorised into the secondary Hikikomori category, because this is exploring if there is any evidence of comorbidity present in the study. Equally, primary Hikikomori categorized studies made no mention of the existence of another psychological disorder, but this does not necessarily mean that zero comorbidity exists. Additionally, the most frequently mentioned factors leading to Hikikomori were also analysed from the data extracted in the scoping review. The following 18 factors were identified in no particular order: bullying, low self-esteem, anxiety, childhood trauma, depression, stress, feelings of failure, OCD, parental issues, personality disorders, schizophrenia, introversion, fear/mistrust of the outside world/humans, suicidal ideation, employment challenges, offline relationship issues, loneliness and internet/video game addiction. Figure 7 depicts this information. We can see that the top 5 most common associated factors to Hikikomori are: 1: Internet/Video game addiction (n = 18), 2: Offline relationship issues (n = 15), 3: Depression (n = 12) and Parental issues (n = 12), 4: Feelings of failure (n = 11) and 5: Anxiety (n = 10).

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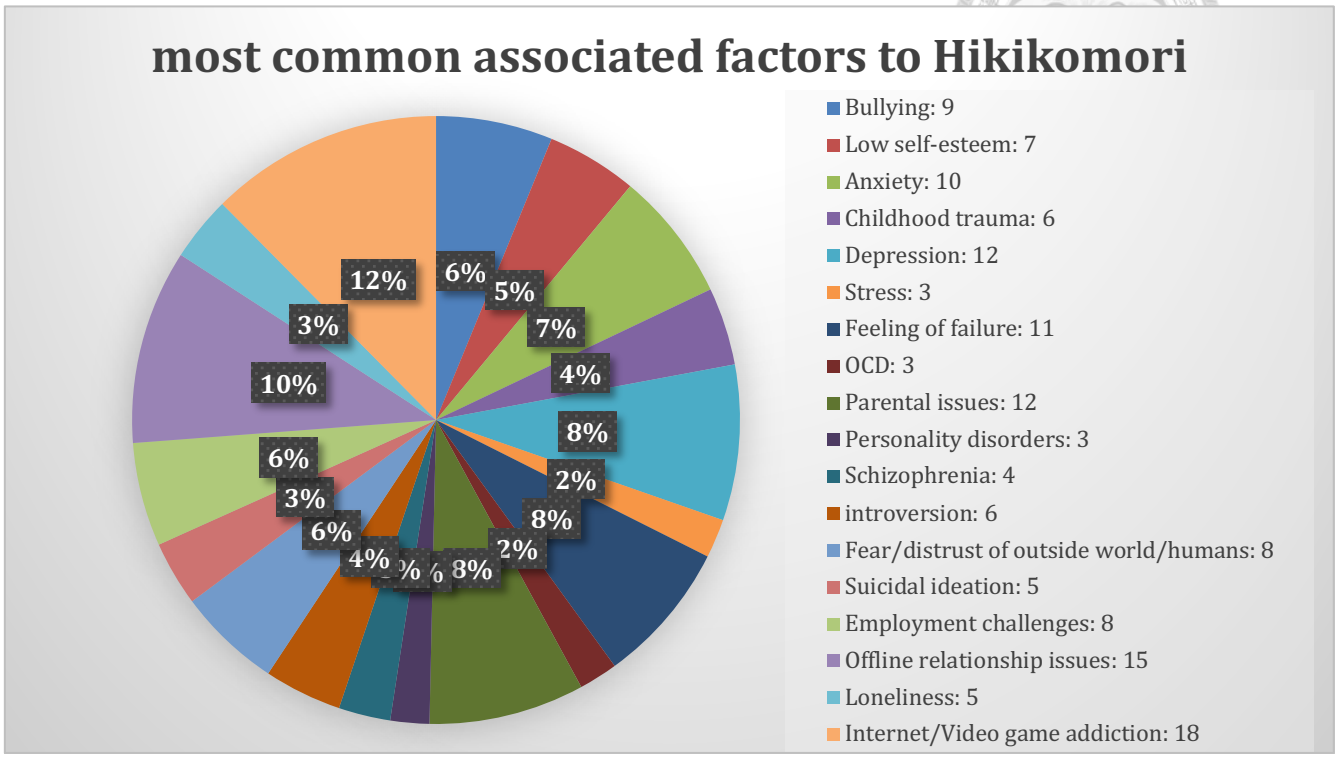

(Figure 7 – most common associated factors for Hikikomori within the review included studies)

4.7 Comments on quality of studies included in the scoping review

Methodology of Studies

Included studies had a wide range of methodologies with a mix between quantitative and qualitative study designs. There were 9 included studies that had a 'large' Hikikomori population size above or equal to 100. The methodologies of these studies were either cross-sectional studies (4) or clinical studies (5). For the cross-sectional studies, data on Hikikomori was found through the use of online surveys, where a large number of young adults would be recruited to take surveys, most notably the Hikikomori questionnaire in order to assess which adults would fit the criteria for Hikikomori. For example, in the case of Fong

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and Yip's 2023 study, 2022 young adults were recruited via an online survey and completed the Hikikomori Questionnaire and validated measures on psychological distress, suicide stigma and suicidal ideation severity and reported their help-seeking behaviours (Fong and Yip 2023). A similar approach was used for other cross-sectional based studies. Nonaka and Sakai's 2021 study had a different method, where data was collected by recruiting participants from a large-scale web based sample managed by a major nationwide internet research corporation: Rakuten Insight, Inc (Nonaka and Sakai 2021). Clinical studies which included case-control and cohort based designs were recruited by records of referrals or directly from the treatment centres themselves. Other popular methods found within the included studies from all population sizes are semi-structured interviews, online forum/social media based analysis and web-based surveys. Many studies with smaller population sizes also used methods similar to those discussed for the larger population studies such as cross-sectional surveys. 16 of the 59 included studies are single case studies, these analyse a single case of Hikikomori who have been treated or are undergoing treatment.

Definitions and Diagnosis criteria for Hikikomori

Due to my study eligibility criteria focusing exclusively on Hikikomori and not other similar types of social withdrawal, the definition of Hikikomori used throughout the included studies has good uniformity. While some studies use slightly different definitions, such as allowing Hikikomori to be defined as a state of withdrawal in which there is at least a 3 month period of isolation, the majority use the most commonly accepted definition which requires a minimum period of 6 months of severe social withdrawal behaviours associated with Hikikomori. In all included studies, the population is described as 'Hikikomori' and thus, according to the authors, have met the criteria to be defined as Hikikomori.

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The diagnosis criteria used for Hikikomori across the studies is less uniform, given the ambiguities surrounding whether Hikikomori is a unique psychological disorder. However, many studies used the HQ-25 Questionnaire to determine whether individuals met the criteria for Hikikomori or not. This Questionnaire, designed by Dr. Alan Teo and Dr. Takahiro Kato and their colleagues is a self-administered questionnaire scored between 0-100, with higher scores indicating more sever symptoms of withdrawal, and below 42 is the cut-off score (Teo et al 2018). The majority of included studies either used the HQ-25 or a variety of surveys and questionnaires to assess the withdrawal behaviours and severity of determined Hikikomori individuals. In some cases, Hikikomori were determined on self-reported length of withdrawal from society, with 6 months being the required duration.

Interpretation of Results and future suggestions

In Chapter 5, detailed limitations are given for each category as well as overall for this scoping review. As mentioned, given the large range of study methodologies that exist in this scoping review as well as the ambiguity that exists surrounding the definition and diagnostic criteria for Hikikomori, caution should be taken when interpreting these results at face value as it is difficult to have strong uniformity across studies given the emerging nature of Hikikomori. A lack of large sample sizes across studies also adds to this issue. Future studies may benefit from a narrower based research question and eligibility criteria to increase uniformity across studies, though this is challenging given the current research that exists, the recent significant increase in studies within this field is promising that this will be more feasible in the future.

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Chapter 5

5.1 Discussion

5.2 Explanation and Evaluation of Results

For the the discussion section, an explanation and evaluation of each of the result categories will be given. Here, potential reasons for the obtained results and a comparison of these results to the hypothesis will be discussed, to determine to what degree the results were as expected or different than expected. Limitations for each category will also be given, as well as overall limitations from the conduction of the scoping review.

Category (1): The relationship between age and Hikikomori

The expected result, according to the hypothesis, for the first category of results is that Hikikomori will be positively correlated with younger age. However, given the vast complexity and associated factors for Hikikomori development, it is also expected that the range of ages will be large as age is not a limiting factor for any of the associated factors for Hikikomori, but younger age will be positively correlated to an increased likelihood of these associated factors.

The ideology behind this hypothesis is multifaceted. Firstly, the explanation of these results in Asian countries will be discussed. Kato et al explored the role of ‘amae’ in the promotion of young Hikikomori. Here, it was argued that compared to Western countries, in countries like Japan, Taiwan and Korea people are more economically dependent on their parents, which is one from of amae (Kato, Tateno et al. 2012). Thus, Hikikomori can be seen as being indirectly promoted by the acceptance of their child to stay at home (Kato, Tateno et al. 2012).

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Indeed, overattachment and overdependence are commonly seen amongst Hikikomori cases. Paul W C Wong et al summarised the reasons why youth Hikikomori is emerging as a problem in China: “the advancement of information and communication technology may further contribute to youth disengagement and withdrawal and exacerbate the “shutting-in” psychopathological mechanism among young people in emerging adulthood (Wong, Liu et al. 2017). Lastly, educational attainment has long been perceived as a priority for many young people in Asian societies” (Wong, Liu et al. 2017). It was also argued that the intense educational pressures on young people in China may create a population who retreat to the safety of social media, online gaming and social withdrawal as a means to disconnect from reality (Wong, Liu et al. 2017). Academic and employment failure are also commonly seen characteristics in Hikikomori cases, and in Asian societies where academic pressures are magnified compared to the West, it is logical to assume that this factor will be more notable amongst young Hikikomori in Asia. Another significant reason for youth Hikikomori in Asia is the impact of Globalization amidst collectivist societies. This may be most significant in Japan, where society is strongly conformist. Toivonen argued that this is a significant factor as to why Japanese youth have rebelled against society, choosing to retreat (Toivonen, Norasakkunkit et al. 2011). It’s argued that Globalization has painful psychological and sociological effects on young people in conformist societies, while the inflexible and long-term employment labour market marginalizes the youth, leading to withdrawal (Toivonen, Norasakkunkit et al. 2011). Teo also supported these claims, giving a trifecta of reasons for the increasing youth withdrawal in Japan: 1: decreasing desire and motivation, 2: declining sense of value of work due to economic comfort of Japanese families and 3: parents becoming less strict on child rearing (Teo 2010).

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Secondly, the explanation for the results of the first category globally will be discussed. Behavioural and mood disorders that are common amongst Hikikomori are more frequently seen amongst young people and emerging adulthood, and these disorders are of course, seen globally and are most often not the result of unique cultural factors. Hence, it is logical to assume that research on Hikikomori will find that there are more young cases of Hikikomori compared to older cases. the impact of technology and the exponential advancement of technology in this 'digital revolution', specifically gaming and internet addiction is more likely to influence and engage the younger generations. Also, school bullying, academic failure and employment challenges are very frequent factors for the development of Hikikomori, as are over attachment to parents, familial issues and childhood trauma which are most likely to have the largest impact at a younger age when the individual has either not entered the workforce or is trying to begin and start their independent life away from home. Internet / video game addiction is perhaps the factor that stands out as being the least culturally bound and is an emerging global health issue. In a 2020 article, Kato et al argued that Hikikomori, in recent years has become more of a global issue culturally unbound (Kato, Shinfuku et al. 2020). The main preface for this change, is that advances in digital and communication technologies, which provide alternatives to in-person interaction will result in Hikikomori becoming an ever increasingly relevant concern (Kato, Shinfuku et al. 2020). This is a very common hypothesis amongst literature on Hikikomori, and has become even more common as time has progressed. Silić et al, in a 2019 article on a Croatian case also stated that Hikikomori has: "spread like a silent epidemic" in recent years (Silic, Vukojevic et al. 2019). The argument here is also that this is largely due to new addictions such as internet, gaming and the increasing temptation of 'life' outside of the real world (Silic, Vukojevic et al. 2019). Thus, psychopathology of Hikikomori will only become more severe as technology progresses. Here, it is logical to assume that the above reasons will lead to a greater number

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of young people with Hikikomori in the scoping review results, which is what was found, with the mean age being 24.56 across all studies.

Limitations for age

Here, some limitations for category 1 of the scoping review will be given. Firstly, since multiple studies focus specifically on young people, due to the assumption that Hikikomori is a predominantly young persons' issue this assumption bias may lead to an overall younger mean age of Hikikomori across studies than would otherwise be the case. Secondly, some studies included the current age of Hikikomori cases in the study, while others included the age of onset of Hikikomori while a few included both. The majority included the current age of cases, and hence it would be logical to assume that age of Hikikomori onset would be significantly lower, which may be a more important measurement. In this sense, this could lead to a slightly higher mean age of Hikikomori. Of course, one limitation that will affect all categories, is the limited overall data available on Hikikomori, given their natural difficulty to reach and reclusive nature. Overall, however, the age is relatively straightforward to examine, and the result is almost exactly as expected.

Category (2): The relationship between gender and Hikikomori

The expected result for the second category, according to the hypothesis is that Hikikomori will be seen more frequently amongst males than females. Hence, a positive correlation between male gender and Hikikomori. However, similarly to age, it is also expected that Hikikomori will be seen amongst females, just to a lesser extent, as gender is not a limiting factor for the development of Hikikomori.

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One reason for this expectation, is due to cultural factors that impact men, especially in Asia, where Hikikomori is estimated to be most common. Uchida argued that young Asian men may have a stronger desire for success combined with a greater need to save face if they are not successful (Uchida 2010). Therefore, they may be more sensitive to failure and more likely to decide to withdraw from society in the face of failure and choose a life of social isolation where the realities of life can be ignored (Uchida 2010). Indeed, countries like Japan hold onto traditional gender roles significantly more than western countries in which societal behavioural expectations of gender are less prominent. In Japan, while these expectations are also beginning to diminish, the man is still largely expected to fulfil the role of being the breadwinner and behave in stereotypically masculine fashion. Therefore, if one cannot fulfil this role, one option in the face of this failure is to withdraw. Another reason for this expected hypothesis is that internet addiction and gaming addiction is significantly more common amongst males than females. A withdrawal from reality to the digital world will be seen more in males. Here, a common theme can be extracted: reasons for Hikikomori prominence in Asia can often be explained mostly by cultural factors and societal expective behaviours, while Hikikomori prominence outside of Asia can be explained mostly due to internet and video game addiction. However, with increasing globalization, both of these factors begin to transcend cultural boundaries, as cultural factors once thought to be unique become more universal in nature while technology, of course, has always been universal. Additionally, while Hikikomori is more frequently seen in men, there are still significant numbers of Hikikomori females. 7/55 of the studies had data in which there were more female Hikikomori cases than male. Studies focusing on female Hikikomori cases are lacking and is an area that deserves more research. One study comparing female and male Hikikomori characteristics found that Hikikomori men were more likely to be jobless and have fewer

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outdoor frequencies while being female Hikikomori were associated more with being a homemaker with no social support (Yong, Fujita et al. 2020). Additionally, the factors that influence Hikikomori development are not mutually exclusive to one gender, they are just, in general, more likely to impact men than women.

This result, too, is largely as expected when compared to the hypothesis. It is, however, slightly below the expectation where the majority was expected to male, 64.28% male compared with 35.72% female is still a significant difference and shows positive correlation between being male and Hikikomori but indicates that this is a health issue that is far from being gender bound. Female Hikikomori may be a population that is overlooked and deserves more attention given the data extracted from this scoping review.

Limitations for Gender

Here, limitations for category 2 of the scoping review will be given. Here, the only limitation that can be identified is the overall limited data on Hikikomori, which makes it difficult to truly estimate the male to female ratio for Hikikomori cases, as more studies and data is released, a more accurate percentage could be calculated.

Category (3): The relationship between country and Hikikomori

The expected result for the third category, according to the hypothesis is that there will be a higher percentage of Hikikomori from East Asian countries, especially Japan, compared to other countries. However, it is also expected that in recent years, evidence from countries outside of Japan and East Asia is increasing. Thus, there is a positive correlation between

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time and emerging evidence globally and a positive correlation between East Asian countries and Hikikomori prevalence.

The reasons behind this hypothesis are due to multiple factors. Firstly, Hikikomori is a problem that originated in Japan and was once, and to some degree still is, considered to be a culturally bound phenomenon. For this reason, a large majority of research and studies on Hikikomori initially focused specifically on Hikikimori in Japan, naturally, regardless of whether Hikikomori truly is more prevalent in Japan this bias in country selection will lead to the current evidence-based research to suggest that it is. Indeed, as explored in the literature review, there are many cultural and societal factors in Japan that act as a catalyst for increased social withdrawal amongst the youth. These include dependant behaviours – amae (parental overdependence, overattachment between parent and child), rigorous education system, competitive and changing labour market and the collectivist nature of society, where deviations from the norm are less accepted compared to the west, amidst globalization and increasing individualism (Furlong 2008, Kato, Tateno et al. 2012). Furlong posits that that initial main cause for Hikikomori in Japan was due to changes in the labour market and support provided by the family and state (Furlong 2008). When comparing the changes in Japan to the West, he argues that youth in both have experienced radical changes, with mass transitions being replaced with more individualised, non-linear processes but Japan had experienced these changes much more rapidly and with a dramatic collapse of traditional structures of opportunity (Furlong 2008). These factors both catalyse Hikikomori development while also allowing and enabling their withdrawal state to continue without the need for re-integration to a normal lifestyle. While these cultural aspects may be most specific to Japan, it is illogical to assume they are mutually exclusive to Japan. Indeed, other countries in East Asia share similar societal characteristics such as Hong Kong, Korea,

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Taiwan, and China, where evidence of Hikikomori is also significant or emerging. As globalization continues and strong, traditional cultural behaviours diminish it is likely that so too, will the emergence of Hikikomori globally when considering cultural or societal associated factors. A major factor contributing to the emergence of Hikikomori globally is that of internet and video game addiction. Of course, this knows no cultural bounds. Neither does comorbidity with psychological disorders which is frequently seen in Hikikomori cases. I would agree with the following, that Hikikomori: "arises from specific socioeconomic and cultural changes in the modern society, not just a Japanese culture-bound social withdrawal syndrome" (Frankova 2019). This idea, that Hikikomori has recently shifted to becoming a global issue is also commonly shared amongst current Hikikomori literature.

The results seen in Figure 3 are also largely as expected according to the hypothesis, with the largest representative being Japan by a significant margin but with a very varied and large range of countries with Hikikomori cases being found. In total, 24 different countries were recognized. This is synonymous with the idea that Hikikomori is a global health issue, not a nation-specific issue tied to cultural behaviours.

Limitations for Country

Here, limitations for category 3 of the scoping review will be given. One limitation is that many studies focus specifically on Japan due both to the significant prevalence in Japan and the assumption that Hikikomori is to some degree a Japanese issue rather than a global issue. This makes it difficult to assess the prevalence globally, as there is limited data in most countries outside of Japan. For example, in many cases outside of Japan, only single case studies are available, it's reasonable to assume there are many Hikikomori cases in almost

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every country worldwide, but current data and research is lacking. In recent years, evidence globally has significantly increased, with this trend, it will become more feasible to assess global prevalence as time goes on.

Category (4): The relationship between associated factors of Hikikomori

The expected result according to my hypothesis, for category 4 is that the main causes of Hikikomori are: feelings of shame and failure (academic, employment), School bullying, familial relation issues, internet addiction, fragmentation of social structures and comorbidity with other psychological illnesses.

The relationship between these factors and Hikikomori are relatively straightforward, as they will all lead to increased withdrawal behaviours, either due to addictive behaviours reducing offline social interaction, low-self-esteem and confidence leading to social avoidance, rejection or rebellion of societal norms or comorbidity with psychological disorders (Chong and Chan 2012) (Kato, Tateno et al. 2012). One proponent of this category is primary and secondary Hikikomori. Primary Hikikomori are Hikikomori whom have no history or present diagnosis of psychiatric disorders, thus they are primary in the sense that there is no comorbidity. Secondary Hikikomori are those whom have history or present diagnosis of psychiatric disorders and their Hikikomori state can thus be attributed to this rather than other factors unrelated to illness. The debate over whether Hikikomori is a unique behavioural disorder or is a psychological disorder resulting from comorbidity is controversial. Current literature reveals a balanced split between primary and secondary Hikikomori, with significant evidence for both sides. Stip et al. thus stated that: “further research is needed to distinguish between primary and secondary Hikikomori and establish whether this is a new diagnostic entity, or particular cultural or societal manifestations of established diagnoses”

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(Stip, Thibault et al. 2016). In studies, however, that have examined the difference between primary and secondary Hikikomori, the limited conclusion is that there are very little if any difference between the characteristics of primary and secondary Hikikomori. This would add weight to the argument that it is a new diagnostic entity that is more likely to develop with the existence of other psychiatric disorders. For example, in a Ukrainian study, Frankova examined the difference in psychological and psychopathological characteristics between primary and secondary Hikikomori (Frankova 2019). Here, 13 primary and 22 secondary Hikikomori were compared, and the results indicated that primary and secondary Hikikomori had largely similar characteristics, both with a high frequency of past traumatic and adverse life experiences (Frankova 2019). Factors such as academic and employment failure, which ranked as the 5th most common mentioned factor relating to Hikikomori in the scoping review, at 8%, may have more impact in East Asian countries, especially Japan, where feelings of shame and failure are magnified, and academic expectations are more profound compared to the West. However, all the most common expected associated factors for the development of Hikikomori are not at all culturally specific factors.

The results shown in Figure 4 are also largely as expected compared to the hypothesis, with internet addiction, parental issues, psychological disorders (depression, anxiety, schizophrenia etc), feelings of failure and childhood trauma among other factors being amongst the most frequently described in current data. This displays the vastly complex nature of Hikikomori with some being closely linked to other psychological disorders, while others seem completely unrelated and are instead a result of a combination of societal, familial, behavioural, and technological factors.

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Limitations for associated factors

Here limitations for category 4 of the scoping review will be given. Firstly, it is difficult to assess exactly what the main causes for Hikikomori are in the studies, while reasons are given, some studies will explicitly state whether there is comorbidity with other illness or not, while others will give no mention to this factor. This makes it difficult to evaluate the degree of primary vs secondary Hikikomori. Another factor to this, is that in cases that have a combination of comorbidity and non-comorbidity related associated factors, it is impossible to determine which factors were more influential in the development of Hikikomori. In some cases, whether Hikikomori is primary or secondary is down to the opinion of the author. Finally, as with the other categories, there is overall limited data on Hikikomori cases available, which will impact the strength of the analysis.

Overall limitations for the scoping review

Here, overall limitations for the scoping review will be given. Firstly, existing data on Hikikomori is limited. Secondly, Hikikomori is a vastly complex issue with differing opinions when it comes to definition and whether it is a unique disorder or the result of other disorders. For this reason, many studies will differ on their definition for Hikikomori, while most use the ‘standard’ definition requiring a minimum of 6 months of social withdrawal, some use 3 months while others use more loose definitions. Without having a standardised definition and diagnostic criteria across studies, it makes it more difficult to examine and compare studies. There are also terms used that are similar to Hikikomori such as ‘Youth

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withdrawal', 'hidden youth' or 'modern-type depression' which were filtered out of the scoping review in order to create more uniformity in the data. In this case, all definitions of Hikikomori were accepted, as long as the author(s) explicitly stated that the cases in question are Hikikomori and not just 'withdrawal', for example. Another limitation is that, despite my best efforts to have no personal bias in the judgement and selection of included articles for the scoping review, this is hard to avoid completely and there are also likely to be studies that were relevant to this scoping review that were not included due to the specific selection process and search strategy.

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Chapter 6

6.1 Conclusion

In conclusion, the results found in this thesis, from the literature review, scoping review and reddit polls all share confluence with one another and support the expected hypotheses laid out in at the beginning of the thesis. These findings lay the current foundation and understanding of Hikikomori and their associated characteristics and is the first review, out of an extremely limited number of synthesized reviews, that focuses on these important characteristics of gender, age, country and associated factors leading to Hikikomori. In recent years, the number of studies on Hikikomori outside of Japan has increased significantly and so too, has the understanding of Hikikomori as a genuine emerging global health issue that deserves more attention. This study illuminates just how complex Hikikomori is, with a wide range of associated factors, psychopathology and demographic information. It is clear that Hikikomori develops for a plethora of reasons, depending on the individual. In some cases, it seems to be the result of our current modern society leading to addictive technological behaviours, in other cases it seems to be a result of rapid global sociocultural changes, parental issues, bullying, childhood trauma, failure and low self-esteem, extreme introversion, disdain and rejection of society or secondary to another psychological disorder. In some cases, Hikikomori is self-perceived to be problematic, while in others it is a lifestyle choice where treatment is not desired or seen as necessary. Despite these complexities, similarities can be found in their characteristics. Hikikomori presents more frequently in males, East Asian countries and young adults while presenting associated factors are frequently shared. Additionally, compared to some years ago, it appears that Hikikomori is now most commonly described as a global issue. Indeed, when Saito first investigated Hikikomori in 2008 by

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emailing mental health professionals around the world, respondents who replied indicated they had never heard of it (Krieg 2016). Four years later, Kato conducted a study in which two Hikikomori case vignettes were sent to psychiatrists in 9 different countries, 123 in Japan and 124 outside of Japan (Kato, Tateno et al. 2012). Here, psychiatrists felt that Hikikomori was seen in all countries surveyed, with no significant difference in causes for Hikikomori across countries (Kato, Tateno et al. 2012). Despite this recognition and evidence of Hikikomori globally there is still a lack of studies and attention towards this issue. Mainstream media largely portrays Hikikomori as a cultural phenomenon still, which risks both pathologizing Japanese culture and overlooking an already illusive by nature group of people worldwide. Recent news articles such as: 'Why is Hikikomori affecting so many young Italians?' (Ledonne 2023) and 'More US Men Falling Victim to Japanese isolation trend, called Hikikomori' (Harris 2023) may be the beginning signs that the mainstream view of Hikikomori is also shifting, by recognizing that it is not an issue unique to Japan. Support for and knowledge of Hikikomori, while improving is still very limited. In order to reach these individuals, we must first understand them. Hikikomori is currently not a diagnosis recognized by the DSM-5, creating a standardized definition and diagnostic criteria for Hikikomori would also aid in future recognition and treatment of Hikikomori. Treatment and location of Hikikomori is challenging by nature, which adds to the difficulty of understanding and researching them. Perhaps online analysis and online treatment will prove successful in the future and time will tell if the benefits of the virtual realm can outweigh the potential dangers of the ever evolving digital world.

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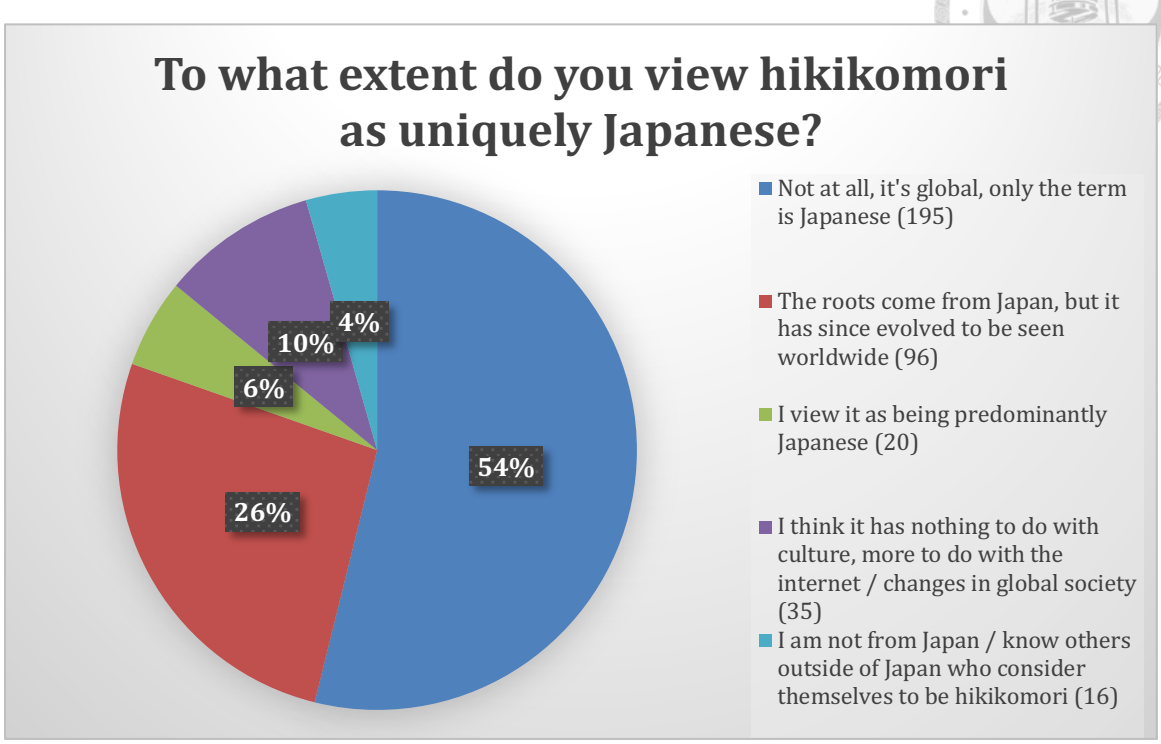
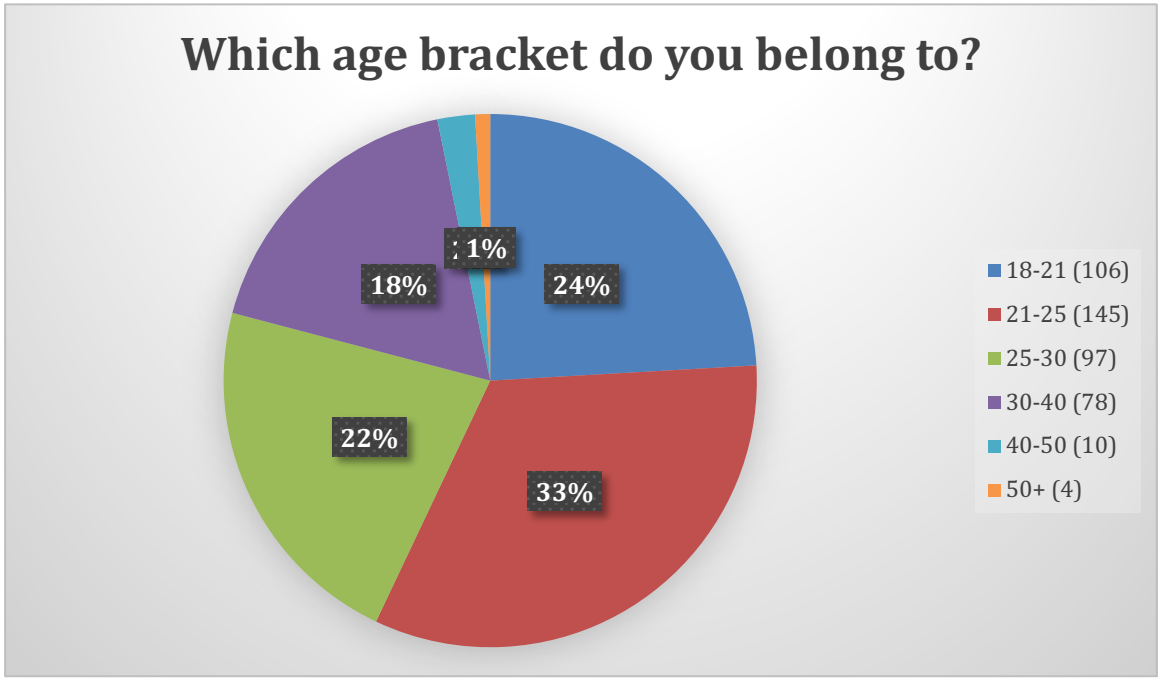
Appendix



(Appendices 1 – Reddit poll result on to what extent users view Hikikomori as uniquely Japanese



(Appendices 2 – Reddit poll result for age of users)

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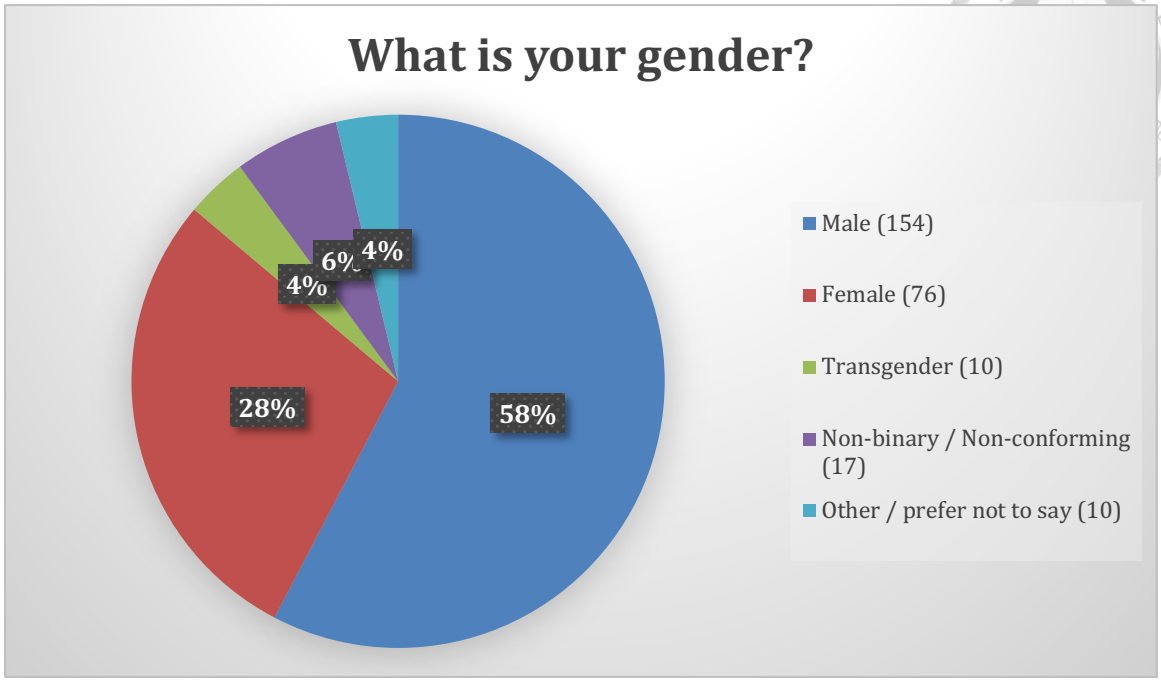
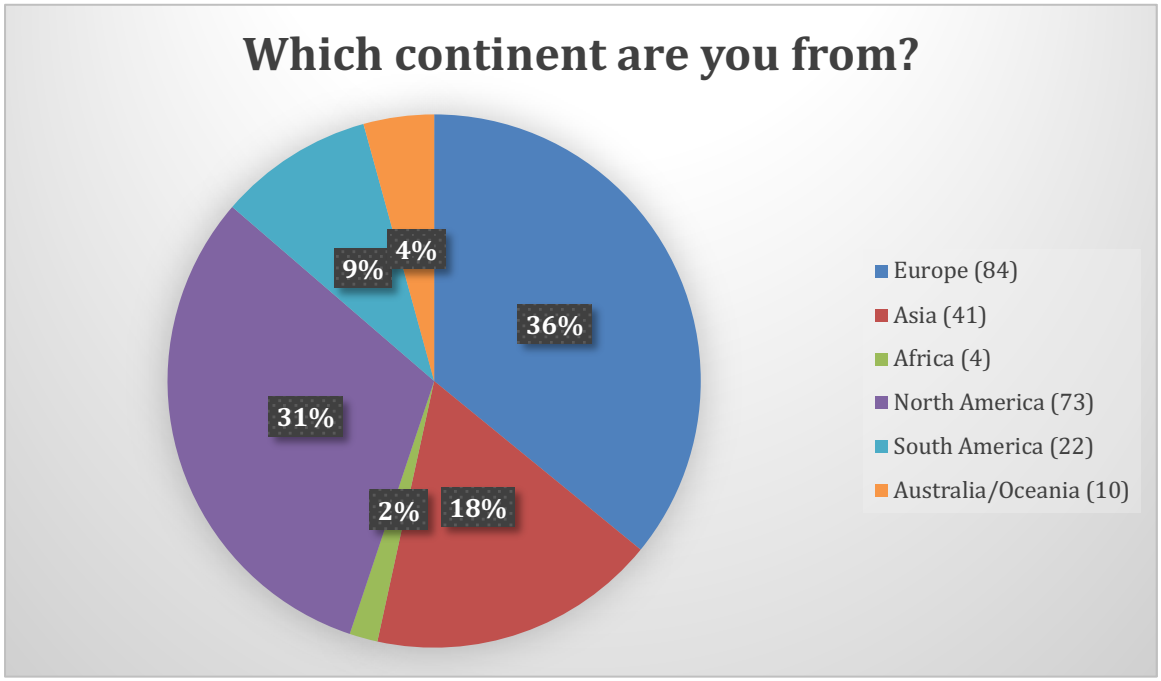


(Appendices 3 – Reddit poll result for gender of users)



(Appendices 4 – Reddit poll result for continent of users)

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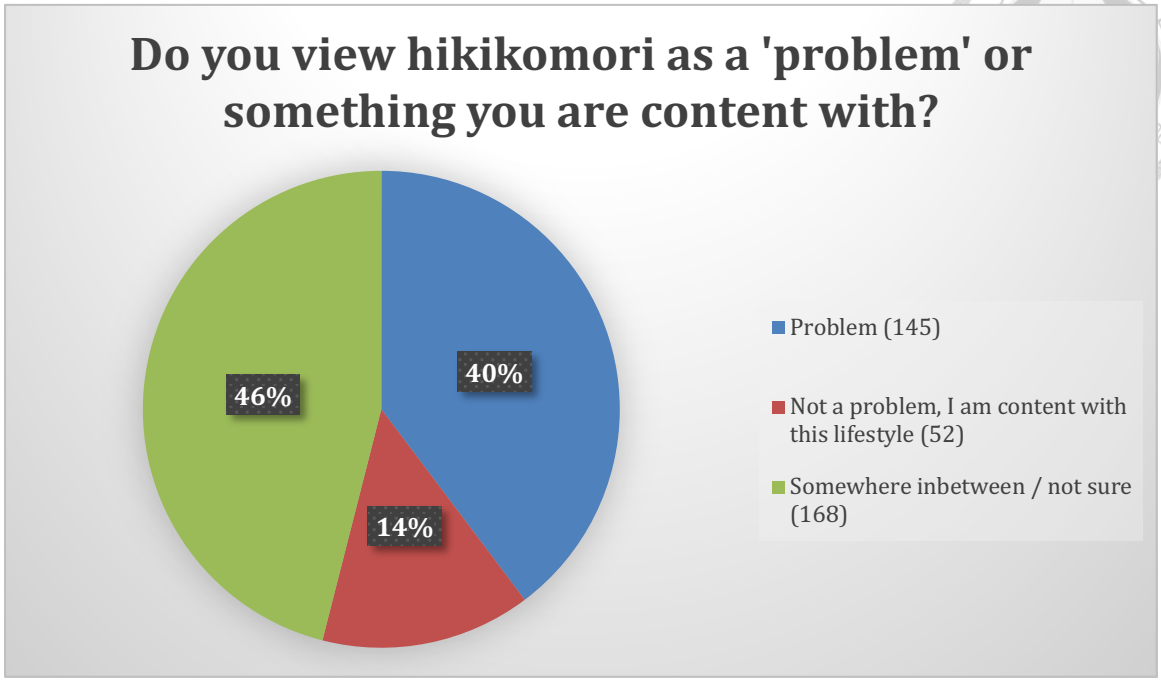
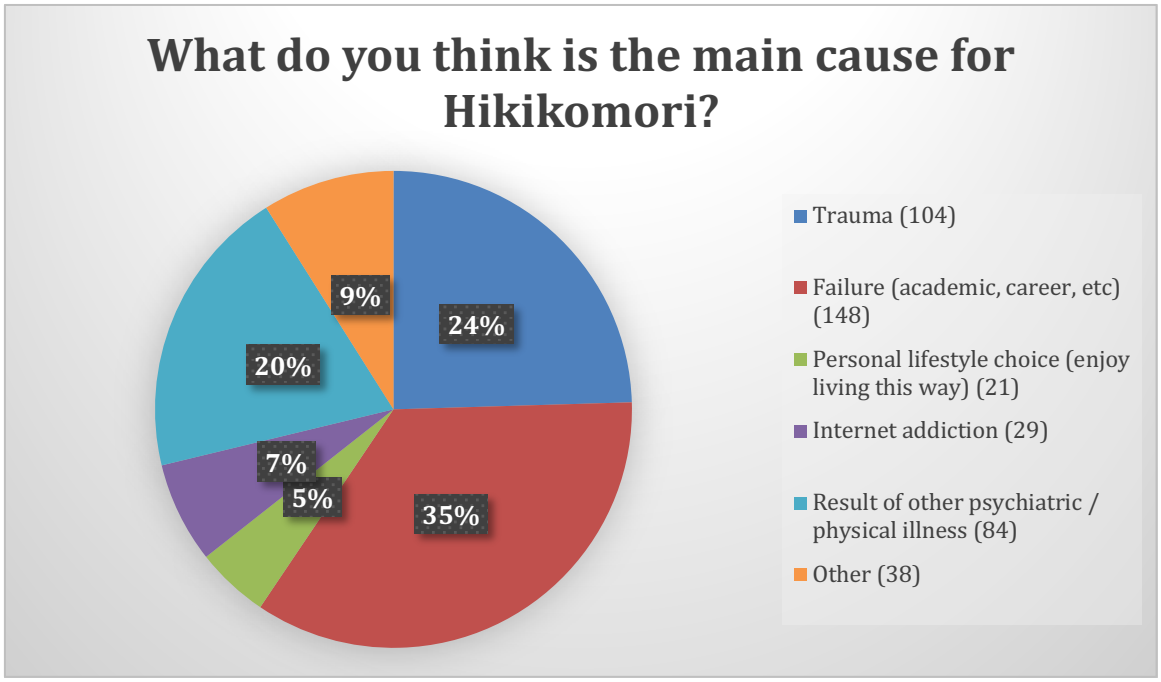


(Appendices 5 – Reddit poll results for whether users conceive Hikikomori as a problem or not)



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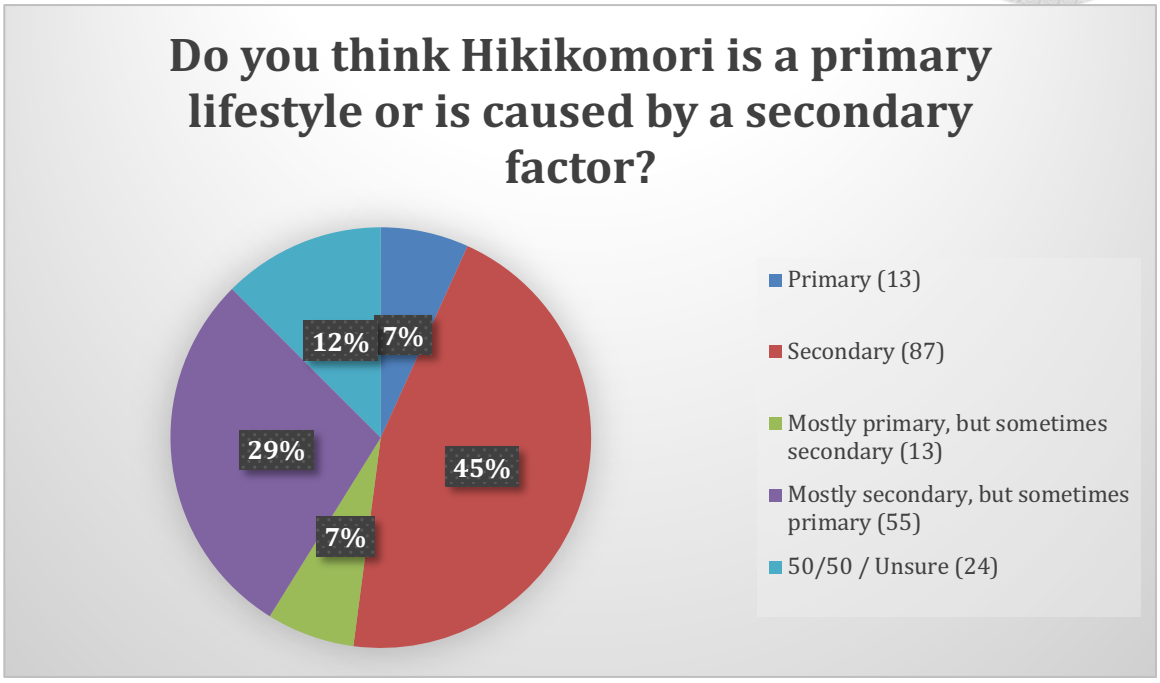
(Appendices 6 – Reddit poll results for what users think the main cause for Hikikomori is)



(Appendices 7 – Reddit poll results for whether users think Hikikomori is a primary lifestyle or is caused by a secondary factor)

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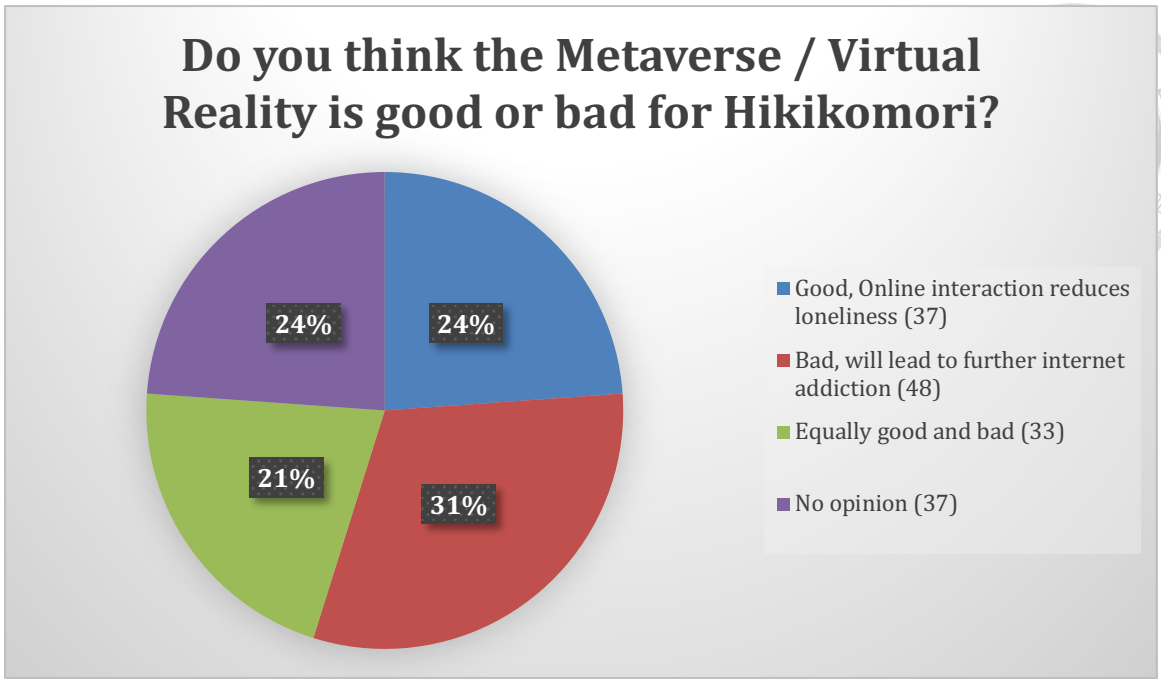

(Appendices 8 – Reddit poll results for whether users believe the metaverse and/or virtual reality is a good or bad development for Hikikomori)

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