Haruki Murakami's Novels as a Predictive Text and a Data-Driven Approach of *Hikikomori* Effects on Tertiary-Level Students From South India

Sowndharya T R, SASTRA Deemed University, India
Abirami Kanagarajan, SASTRA Deemed University, India
P Suganthi, SASTRA Deemed University, India

The Paris Conference on Education 2025
Official Conference Proceedings

Abstract

Hikikomori, extreme social withdrawal, poses a considerable issue for young adults worldwide arising from multiple factors, including familial conflict, harassments and various sociological influences that heighten stress levels. New Historicism is used to analyse a prolific Japanese author known for his unique narrative style - Haruki Murakami's works, as predictive texts in the contemporary global context. It further identifies key contributing factors and organises this phenomenon's effects on students into five distinct stages, while also classifying four levels and typologies of *Hikikomori*, building on existing research in the field. The study employs a quantitative survey using the DASS21 questionnaire, targeting approximately 300 tertiary students in South India to identify factors associated with the emergence of *Hikikomori*. The analysis is validated through Structural Equation Modelling via SmartPLS software. The assessment of mental health is concentrated on three key stressors: familial issues, academic pressures and societal conformity. Additionally, Natural Language Processing in Python is used to suggest Murakami's works as predictive texts. This research serves as a vital resource for stakeholders, including parents, educators, academic institutions and the government, to facilitate the early identification and prevention of individuals susceptible to becoming *hikikomori*. Furthermore, it may be helpful to propose coping strategies for those already experiencing significant levels of depression, anxiety and stress associated with *hikikomori*. The study also positions Murakami's literary works as relevant predictive texts for this phenomenon. Eventually, it aims to enhance societal well-being in alignment with Sustainable Development Goal 3, which advocates for health and well-being for all.

Keywords: *hikikomori*, Haruki Murakami, tertiary level students, SDG 3, SmartPLS software, South India

iafor

The International Academic Forum
www.iafor.org

Introduction

Hikikomori, characterised by severe social isolation is an emerging global issue. Initially it was first reported in Japan in the 1990s, which later grew and was identified in the 2000s.

> The term 'Hikikomori' was derived from two Japanese verbs: 'hiki' means 'to withdraw' and 'komori' means 'to be inside'. It was coined by Japanese psychiatrist Tamaki Saito, who witnessed multiple youths in Japan in the 1990s exhibiting extreme social withdrawal behaviors. (Lin et al., 2022)

"In the early 2000s, Japanese society became aware of the social phenomenon of hikikomori or social withdrawal among Japanese youth" (Takefuji, 2023). Considered not only as a domestic Japanese issue but also as a global social problem and a mental health issue termed as the "silent global health epidemic". Earlier global study on nine countries have shown that 1.2% respondents have experienced hikikomori.

> However, the hikikomori phenomenon was not a domestic Japanese social problem, but a global social and health issue or a global silent epidemic…A total of 1.2 % of respondents experienced 'hikikomori' in their lifetime in Japan. A literature review was conducted on why hikikomori is the global social and health issue. (Takefuji, 2023)

A raise in this problem may also affect the global economy since those affected are adolescents, young adults and even middle-aged people who are individuals that represent a key segment of the society. When such people who work for the societal development, often withdrawing from society or shunning social interactions for extended periods for six months or longer could cause a degradation in the societal development. "The hikikomori phenomenon poses challenges for Japanese families and the economy. The '80–50 problem'highlights the potential financial burden as hikikomori children enter their 50s while relying on aging parents" (Savant, 2024).

Notably, this phenomenon is on the rise in both developed and developing nations, highlighting the urgent need for increased societal awareness and intervention programs. "The phenomenon of hikikomori is considered to be a boundless and global syndrome found across many cultures, but notably, is more common in urban areas and high-income, developed countries" (Hamasaki et al., 2020, 808–817).

The problem of hikikomori or social isolation can be seen in four types namely, the alternative withdrawal, reactionary withdrawal, resigned withdrawal and the cocoon-like withdrawal.

The four types of withdrawal can be defined as:

> The alternative withdrawal is a sort of rebellion towards society, that is experienced in a particularly negative way and as an oppressive entity, bent on limiting one's personal liberty. Often, this type of withdrawal is preceded and determined by a strong existential depression. The reactionary withdrawal is defined as 'a symptomatic reaction to situations of great familial stress'. The hikikomori that are a part of this category live, or have lived, in unfavourable contexts that have contributed in worsening and already pre existing tendency towards isolation. Often they link

their decision to withdraw to an event considered to be particularly traumatic, taken place within the familial environment, or in the scholastic or social environment. The resigned withdrawal is Defined as 'a way to escape from strong social pressures', concerns those hikikomori that aren't able to sustain the pressure for social realization derived from their parent's expectations or, more in general, from society. These hikikomori simply decide 'not to play', refusing to pursue any scholastic, work or social career. They feel so oppressed by other's expectations that they decide to hide, and in so doing alleviating, in part, the suffering. In the cocoon-like withdrawal, the hikikomori looks for an escape, in isolation, from his responsibilities and his duties as an adult. They feel like they're not competent enough to face them and this feeling causes in them a great fear. Existence is approached with a flattening on the present, while thought regarding the future, cause of great anxiety, are refused through a process of avoidance. (The Four Types of Hikikomori: Alternative, Reactionary, Resigned, and Cocoon-like, n.d.)

Along with the types there are also three stages of hikikomori or isolation. The First, Second and Third stages of hikikomori.

In the first stage, the person starts to perceive the social isolation impulse without being able to consciously elaborate it. They become aware of a feeling of discomfort or uneasiness when they interact with other people, finding greater relief in solitude. In the second stage, the person starts to consciously elaborate the isolation impulse and to rationally attribute it to some social interactions or situations. It's in this phase where they begin regularly to refuse requests by friends to go out, to progressively abandon school, where the sleep-wake cycle is completely inverted and the near total of their time is spent in the bedroom and dedicated to solitary activities. In the third stage, the person decides to abandon themselves completely to the social isolation impulse and grows progressively further apart even from the parents and relations formed on the internet. These become for him or her a cause of unease or displeasure, in a way similar to canonical social interactions. (The Three Stages of the Hikikomori: From the First Warning Signs to Complete Isolation, n.d.)

Besides all of these, there are two classifications of hikikomori – the Primary and the Secondary hikikomori. These two types can be defined as, "Primary hikikomori is the one without a comorbid mental disorder and does not fit into a psychopathological structure. Secondary hikikomori is interwoven with comorbid mental disorders" (Dong et al., 2022, 167–173).

The causes for hikikomori could also be other external factors such as psychological problems including post-traumatic stress disorder (PTSD), Agoraphobia to general problems like extreme shyness and family problems; "some of the circumstances that can favor the appearance of Hikikomori syndrome are the following: Family problems, Extreme shyness, Post-traumatic stress disorder (PTSD),Problems linked to anxiety and social phobia, Agoraphobia, Having suffered bullying, Social rejection" (Admin, 2025).

Objectives

The main objectives of the paper are to bring out the types of the types, stages and classifications of hikikomori that are prevalent. Also, to establish India's closeness and causes

to hikikomori through the DASS 21 survey. Additionally, to position the Japanese author, Haruki Murakami's selected novels as relevant predictive texts.

Methodology

The following systematic methodology was employed for the study. First, a literature review was conducted based on 4 criteria and a significant gap was obtained. The DASS 21 questionnaire consisting of 21 questions with 7 questions in each of stress, anxiety and depression categories along with a 11 preceding questions on demographic data. The participants were tertiary level students aged between 16 to 30 years from various regions of South India; the targeted response was 300 but a total of 613 responses were collected via Google Forms. The analysis of the responses was validated through the Structural Equation Modelling using the SmartPLS software. The novels of Haruki Murakami chosen for the study were *Norwegian* Wood, *Colorless Tsukuru Tazaki and his Years of* Pilgrimage, *Kafka on the* Shore and *South of the Border, West of the* Sun. The hikikomori characters were studied from the novels along with the analysis of the causes of the issue. Natural Language Processing in Python was used to establish Haruki Murakami's works as predictive texts.

Literature Review

The study titled "Validating the depression anxiety stress scales (DASS-21) across Germany, Ghana, India, and New Zealand using Rasch methodology" assesses the psychometric properties of DASS-21 in four countries, confirming its reliability and validity for measuring psychological distress (Adu et al., 2025, 363–373). The study titled "Meaning in life buffers mental health risks in South Indian transgender (Hijra) women" shows that meaning in life significantly mediates the links between depression, anxiety, stress and quality of life for transgender women in South India, indicating that enhancing meaning-making can improve their resilience and well-being (PP & Arur, 2025). The article "Sensory processing sensitivity in relation to coping strategies: exploring the mediating role of depression, anxiety and stress" explores how depression, anxiety and stress mediate the link between sensory processing sensitivity and coping strategies among participants (Fernandes & Panwar, 2024). The article "Post debridement – Mental health and body image satisfaction among mucormycosis patients: Concern beyond surgical debridement" studies 56 post-operative mucormycosis patients, who are found with high body image satisfaction, with mild depression, anxiety and stress linked to various factors (Nair et al., 2024). The article "Impact of COVID-19 Lockdown on Mental Health, Physical Activity, and Eating Behaviours Among IT Professionals in India" is a study in Pune that revealed how the COVID-19 lockdown negatively impacted IT professionals' mental health, eating habits and physical activity (Animish et al., 2023, 209–218). The study titled "Mental Health among Automobile industry workers in Chennai - A Cross-sectional Study from a Single Industrial Unit" analyses depression, anxiety and stress in 227 Chennai automobile workers, highlighting associations with demographics and the need for better workplace support (Vinoth et al., 2023, 346–352). The article titled "Prevalence and correlates of depression, anxiety, and stress among high school students in a block of Hooghly district, West Bengal: Across-sectional study" is a study of 812 adolescents in West Bengal who revealed high rates of depression, anxiety and stress, underscoring the need for mental health interventions (Gupta et al., 2023). The study "Farmer Workplace Discomfort Levels Leading to Adverse Mental Health" assesses musculoskeletal discomfort and mental stress in Indian farmers using questionnaires and ANFIS to predict stress under heat (Chauhan et al., 2021, 1–14). The study titled "An online cross-sectional survey of depression, anxiety, and stress among resident doctors working at a

COVID-19 tertiary care center in India" finds that about one-third of resident doctors at a COVID-19 center experienced depression and anxiety, highlighting mental health concerns (Sriperambudoori et al., 2021, 111-117). The study titled "Depression, anxiety, stress and stigma in informal caregivers of People Living with HIV (PLHIV)" taken in Mangalore, found 20% of 150 informal HIV caregivers faced stigma, leading to high depression and anxiety rates (Khan et al., 2017). The article titled "Hikikomori and Religious Psychology: Trauma, Kami, and Forms of Healing in 'Underground' by Haruki Murakami" reads how, in contemporary Japan, the clash of traditional values and modernity gives raise to hikikomori disorder, as explored in Murakami's *Underground*, highlighting recovery through kami (Hang, 2024). The study "Unlocking the Mindware: The Responsibility of Building a Solipsistic Universe in Murakami Haruki's Hard-Boiled Wonderland and the End of the World", analyses how the identity formation in Murakami's work illustrates neuroscience's effect on self and promotes social responsibility amidst capitalism (Shin, 2018, 749–780). The article titled "Loneliness in Haruki Murakami's After Dark (2007): A Focalization Analysis" focuses on how Haruki Murakami uses focalization to depict Mari Asai's loneliness, illustrating her growth and relationship-building for young adults in *After Dark* (Amanda et al., 2019, 35–54). The article "The Existentialist World of Murakami Haruki: A Reflection of The Existentialist World of Murakami Haruki: A Reflection of Postmodern Japanese Society Postmodern Japanese Society" examines existentialist themes in Murakami's novels, critiquing Japan's identity crisis, consumerism, alienation and societal conformity (Garguilo, 2012). The thesis titled "Murakami Haruki's Short Fiction and the Japanese Consumer Society" explores Murakami Haruki's critique of Japan's consumer society through historical context, literature themes and selected short stories (Clements, 2019). The study titled "Effect of Online Learning on Mental Health and Academic Outcomes of Students with Intellectual Disabilities in Higher Education" explores how online learning negatively affects mental health and academic performance in students with intellectual disabilities versus their peers (Shreeharsha et al., 2025, 34–43). The article "COVID-19-related stressors exacerbate food insecurity and depressive symptoms among graduate students receiving campus basic needs services: Cross-sectional findings from seven California public universities" shows that COVID-19 stress worsened food insecurity and depression among graduate students, highlighting the need for better support systems (Martinez et al., 2023). The study titled "Network structure of social withdrawal symptoms in Asian psychiatric patients at high risk of hikikomori: Findings from the REAP-AD3" explores social withdrawal symptoms in Asian psychiatric patients at risk of hikikomori, focusing on how low enjoyment of social interactions is a critical intervention area (Lee et al., 2025). The report study titled "Hikikomori and Internet Gaming Disorder: a Case Report" describes an 18-year-old Indian student facing social withdrawal and gaming disorder, emphasizing the need for tailored interventions (Sunil et al., 2024, 239-242). The study titled "Does the 'hikikomori' syndrome of social withdrawal exist outside Japan? A preliminary international investigation" shows how hikikomori syndrome is acknowledged in multiple countries, influenced by diverse diagnostics and treatment shaped based on cultural factors (Kato et al., 2011).

Research Gap

From the literature survey from the articles published between the years 1998 to 2025, the research gap identified is that, no research works are presented in collaboration of DASS 21 questionnaire and tertiary level students. Additionally, a research work that combines, Haruki Murakami's novels as predictive texts and hikikomori in India is not yet been presented.

Discussion

Out of the 613 participants of the DASS 21 questionnaire, 361 were female and 252 were male participants. The tertiary level students were enrolled from bachelors to post-doctoral programmes that also includes diploma courses like polytechnic. The students were from various academic domains and 406 hostellers and 206 day scholars. 524 participants have siblings and the remaining 89 do not have siblings. 255 participants have both the parents going for work, 355 have only of the parents going for work and 23 have retired parents. 415 participants were living in urban, 31 were from cosmopolitan and 167 from rural areas. Other demographic questions included topics like the participants' age, their income, number of members in their families and their current years of education.

The study employed Partial Least Squares Structural Equation Modelling (PLS-SEM) using SmartPLS to assess the impact of three psychological constructs—Depression, Anxiety, and Stress, on the emerging hikikomori tendency among tertiary-level students in South India. The measurement items were drawn from the validated DASS-21 questionnaire, with Q22 added to assess Hikikomori-related behaviours. The questionnaire has 21 items have a set of three self-report scales, containing seven items divided into subscales with similar content, designed to measure the emotional states of depression, anxiety and stress. The values are set to 0, 1, 2 and 3 with zero being the least. The SEM using SmartPLS is represented below in Figure 1.

Figure 1

Structural Equation Model of Hikikomori Tendency
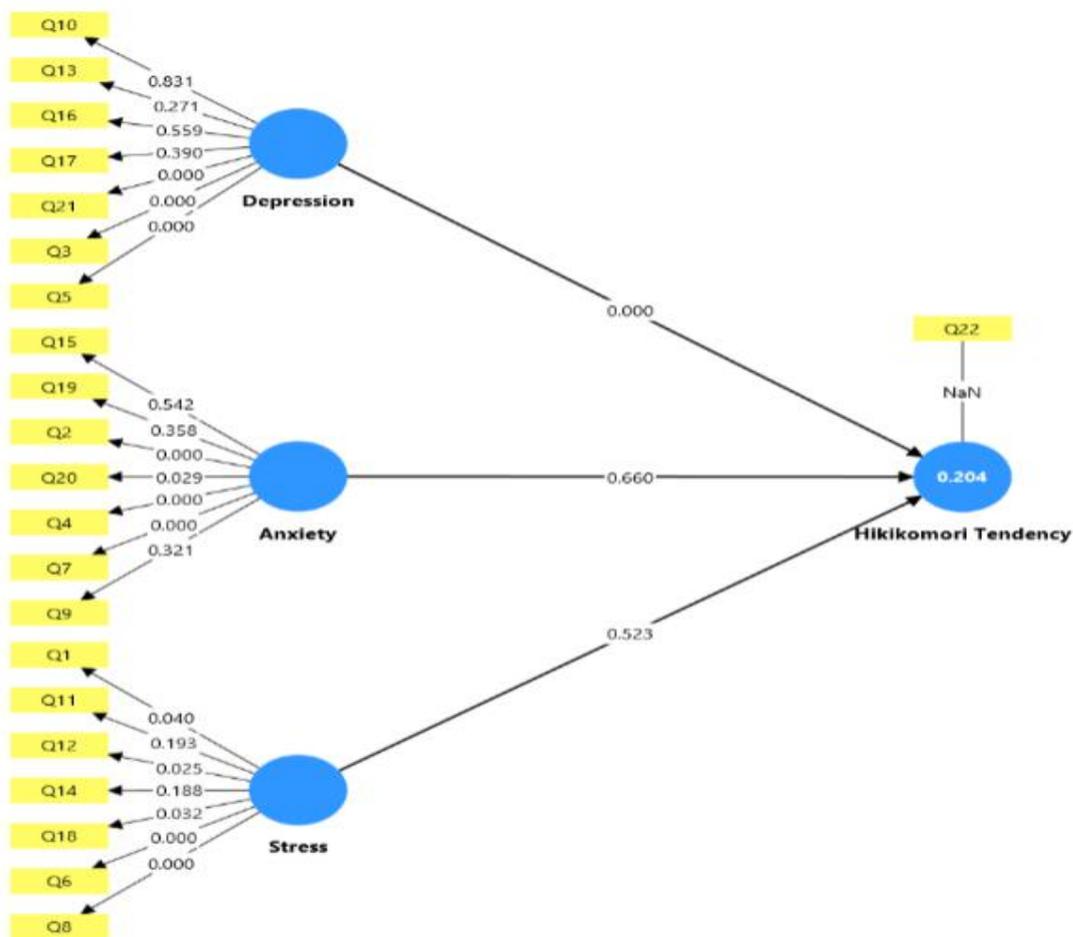
Measurement Model Evaluation

The measurement model was evaluated based on the outer loadings of observed variables on their corresponding latent constructs. Several items demonstrated strong and acceptable loadings—for instance, Q13 = 0.831 for *Depression* and Q19 = 0.542 for *Anxiety*—indicating a satisfactory degree of indicator reliability. However, a number of items such as Q3, Q5, Q4, Q6 exhibited outer loadings of 0.000, suggesting that these indicators failed to capture significant variance in their respective latent constructs within this sample. Despite their poor statistical performance, these items were retained to maintain theoretical consistency with the standardized DASS-21 framework, in alignment with recommendations to avoid post hoc modifications that may undermine conceptual validity.

The NaN (Not a Number) value for Q22, which was designed as a single-item indicator of *Hikikomori Tendency*, likely results from the nature of single-item constructs in SmartPLS. Specifically: SmartPLS typically does not compute outer loadings for single-item constructs because there's no variance to estimate between multiple indicators; Alternatively, missing data during preprocessing or import may have caused Q22 to be excluded from the loading computation, resulting in a NaN. Despite the NaN, the latent variable *Hikikomori Tendency* retained a valid R^2 value (0.204), and the path coefficients from Depression, Anxiety, and Stress to Hikikomori Tendency remained interpretable and significant (e.g., 0.660 from Anxiety, 0.523 from Stress). Therefore, the structural model integrity and conceptual framework were not compromised. Although Q22 yielded a NaN outer loading, this is a known limitation in PLS-SEM software like SmartPLS when modeling single-indicator constructs. As the item was central to the outcome construct *Hikikomori Tendency*, it was theoretically justified to retain it. The overall model's structural paths remained interpretable, and the construct's explanatory power (R^2 = 0.204) supported the inclusion of the variable despite the missing estimate.

Structural Model Analysis

The model's R^2 value for Hikikomori Tendency was 0.204, indicating that 20.4% of the variance in Hikikomori behaviour is explained by the combination of depression, anxiety, and stress. This level of explanatory power is considered moderate and sufficient in behavioural research, especially within exploratory frameworks targeting complex psychological phenomena.

The path coefficients reveal the relative strength of influence from each construct:
- Anxiety → Hikikomori Tendency: β = 0.660
- Stress → Hikikomori Tendency: β = 0.523
- Depression → Hikikomori Tendency: β = 0.000

Interdisciplinary Analysis of Hikikomori Using NLP, Literary Texts, and Mental Health Diagnostics

The four novels of Haruki Murakami, *Norwegian* Wood, *Colorless Tsukuru Tazaki and his Years of* Pilgrimage, *Kafka on the* Shore and *South of the Border, West of the Sun* were selected for the study. 20 key words - lonely living, Physical isolation, Life in supernatural world, Loneliness, Disconnect, Solitude, Isolated communities, Sense of Loss, Struggle to emotional connect, Family disputes, Societal anxieties, Abandonment, Loss of friendship, Loss of close person, Failed love life, Guilt, Toru Watanabe, Tsukuru Tazaki, Kafka, Hajime –

were used from the novels for text mining. The data analysis of the four selected novels was done using the Natural Language Processing (NLP) in Python to bring out the alignment between emotional distribution and sentiment polarity patterns across topics, which is represented in the Table 1.

Table 1
Data Analysis and Results

Topic	Dominant Emotions	Emotional Tone	Sentiment Match	Interpretation
0	Fear, Sadness, Surprise	Emotional, conflicted	Mixed	Separation, ambiguity, anxiety
1	Fear, Trust, Negative	Thoughtful, reflective	Mostly neutral	Human connection, uncertain hope
2	Sparse, low emotions	Detachment	Mild negative	Plot or critique-oriented
3	Surprise, Negative	Quiet intensity	Slightly positive	Truth, breaking points, inner clarity
4	Fear (strong), Anticipation	Anxious intensity	Neutral-mixed	Problems, transitions, internal chaos

Sentiment Polarity Distribution per Topic

The sentiment polarity across topics generated from Murakami's text is shown in Figure 2.

Figure 2
Sentiment Polarity Distribution per Topic
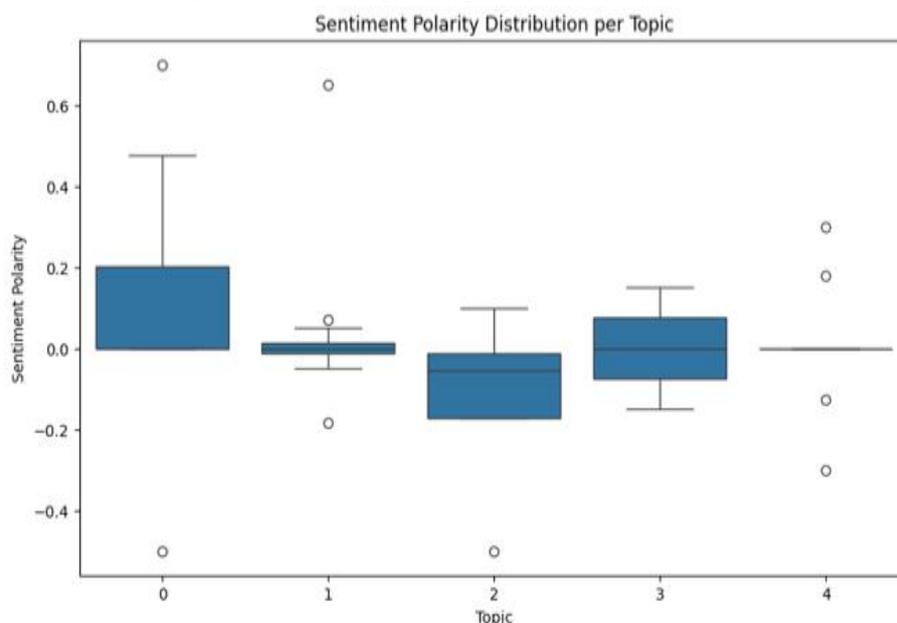
It exhibits a central tendency around neutral to slightly negative sentiments. Topic 0 showed the widest emotional variation, while Topics 2 and 4 clustered around neutral polarity. This reflects the emotional ambiguity and introspective depth typical of Murakami's writing, aligning with the internal states associated with Hikikomori.

The emotion distribution per topic generated using NLP is shown in Figure 3.

Figure 3
Emotion Distribution per Topic
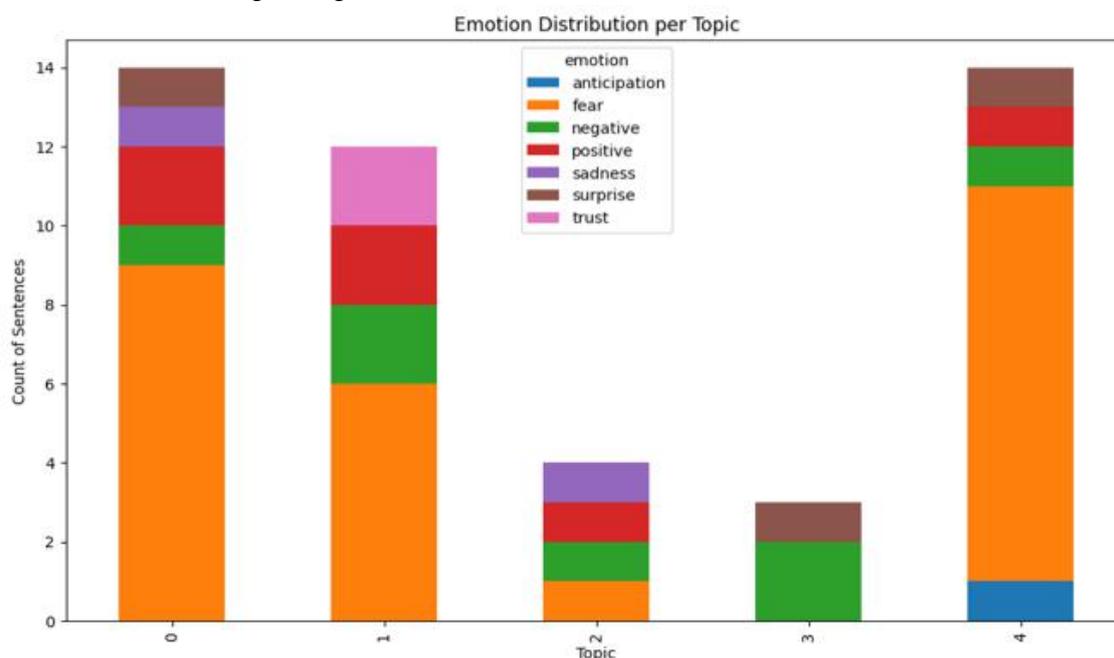
This reveals that there is a prevalence of fear, sadness, and surprise across multiple topics, with minimal representation of positive emotions. This mirrors the psychological profiles of individuals at risk of Hikikomori—marked by emotional withdrawal, anxiety, and emotional uncertainty—supporting the hypothesis that Murakami's narratives can act as predictive texts.

Results

Table 2
Correlating Structural Equation With Topic-Emotion Matrix

Topic	Dominant Emotions	Emotional Tone	Sentiment	Interpretation	PLS Link
0	Fear, Sadness, Surprise	Emotional, conflicted	Mixed	Separation, ambiguity, anxiety	**Aligned with Anxiety → Hikikomori**; shows emotional dissonance leading to withdrawal
1	Fear, Trust, Negative	Thoughtful, reflective	Mostly Neutral	Human connection, uncertain hope	Suggests **ambivalent trust**, potential **inner stress** and the hope for reconnection
2	Sparse, low emotions	Detachment	Mild Negative	Plot or critique-oriented	Possibly aligns with **detached or avoidant coping styles**; **low Depression loading** matches this

Topic	Dominant Emotions	Emotional Tone	Sentiment	Interpretation	PLS Link
3	Surprise, Negative	Quiet intensity	Slightly positive	Breaking points, clarity	Indicates **stress peaks → transformation**, consistent with Stress as a significant predictor
4	Strong Fear, Anticipation	Anxious intensity	Neutral-Mixed	Internal chaos, transition	**High anxiety**, maps directly to strong **Anxiety → Hikikomori path (0.660)**

The results of DASS 21 analysis by the SEM using SmartPLS software show that anxiety is the strongest predictor of Hikikomori behaviour, followed closely by stress, while depression showed no direct effect on Hikikomori tendencies in this model. This pattern is consistent with existing literature suggesting that Hikikomori is more closely related to avoidance, panic, and social apprehension, which are primary symptoms of anxiety rather than depression. The NLP using python resulted that there is a strong alignment between emotional distribution and the sentiment polarity patterns across topics. Fear is a dominant emotion, consistent with themes of isolation. The results also validate Murakami's literary themes of loneliness, disconnection, and existential drift, as emotionally and semantically consistent with Hikikomori - related discourse. New Historicism allows these works to be read not only as cultural artefacts but also as literary diagnostics of emerging mental health conditions in modern societies.

Thus, the study supports targeted psychological interventions aimed at reducing anxiety and managing stress, especially within academic institutions. Rather than solely focusing on depression, which has been traditionally emphasized, the study indicates that pre-emptive strategies should address anxiety and stress management to curb the progression into hikikomori states. The results also validate Murakami's literary themes of loneliness, disconnection and existential drift as emotionally and semantically consistent with Hikikomori related discourse. The intervention of the New Historicist theory allows these works to be read not only as cultural artefacts but also as literary diagnosis of emerging mental health conditions in modern societies through literature and literary works.

Research Implications

This study contributes to the emerging discourse on *Hikikomori* outside of Japan by contextualizing it within Indian tertiary education. The findings reinforce the need to recognize anxiety and stress as early psychological markers of social withdrawal tendencies, while depression showed no direct influence. By combining psychological modeling (PLS-SEM), Natural Language Processing, and literary-cultural analysis—particularly through the narratives of Haruki Murakami—the study offers a novel interdisciplinary approach to identifying and anticipating socio-psychological issues among youth. Emotional patterns such as fear, anticipation, and detachment observed through NLP-based tone analysis align with the quantitative findings, validating the model and deepening insight into the emotional experience of withdrawal. This methodology not only enables early, non-invasive detection of *Hikikomori* tendencies through student narratives but also expands the global understanding

of youth isolation by emphasizing the importance of cultural and contextual relevance in mental health research.

Contributions From This Research

The research also makes a few key contributions as discussed; the study establishes literature as predictive texts. For instance, Haruki Murakami's fictional works are seen as reflective medium for the diagnosis of the withdrawal tendencies in contemporary youth through emotion and sentiment analysis. The study proposes a typological extension of the term hikikomori beyond its meaning as a psychological disorder, through the refined four-types, three-stage framework and the two-classification of hikikomori risk, contextualized for the Indian tertiary education. An empirical validation through the DASS 21 and Structural Equation Modelling is done to validate the familial, academic and social conformity stressors as the key predictors of hikikomori or social isolation tendencies in Indians. The paper also highlights the limitations of current machine learning models in detecting low-prevalence psychological phenomena by underlining the need for better resampling or model tuning strategies that contributes to an AI-driven early detection challenge. As a final key contribution, the study directly contributes to the Sustainable Development Goal 3 by offering ways for early mental health screening and informed intervention strategies aligning with culture.

Recommendations From This Study

The study recommends to include Haruki Murakami's works in the Indian academic curriculum; increased study of literary works by such authors who address current societal issues can create awareness for teacher trainees and academicians about the existence of these problems orienting to mental health. The students on the other hand, can also be educated on the upraising mental health issues who may contribute by offering help to peers who are found to show symptoms of deteriorating mental health. An activity-based curriculum specially tailored based on the identified problem offers more care for the students mental and physical health, ultimately aiming for a better future.

Uniqueness of the Study

The study uniquely represents how literature works as a representation of the current societal issues. Moreover, the inclusion of literary works of authors like Haruki Murakami in the syllabus, who address contemporary youth and the problems they face; this helps for building a better society for the upcoming generation. It also measures the current level of hikikomori in India, simultaneously by bringing out the mental health status of Indian tertiary level students based on their responses to DASS 21. Ultimately, the research explores what can cause hikikomori to students among stress, anxiety and depression.

Conclusion

The study of Haruki Murakami's works, the measurement of hikikomori in India and South Indian tertiary level students using DASS 21 questionnaire reveal that hikikomori is in a beginning stage in India. Teachers, parents and students should start concentrating on this issue by getting and giving awareness. One possible means is through the rapid establishment of support for mental health in academic institutions in first place and awareness programs

for parents and educators for early identification and prevention. Also, frequent health check-up for students should also include the assessment of mental health for a healthier future.

Declaration of Generative AI and AI-Assisted Technologies in the Writing Process

AI was used solely for language enhancement purposes. No other aspect of the research or writing process involved the use of AI or AI-assisted technologies.

References

Admin. (2025, February 28). *Hikikomori Crisis: The alarming rise, 7 key causes*. Insight Therapy Solutions. https://www.insighttherapysolutions.com/articles/hikikomori-triggers/

Adu, P., Popoola, T., Iqbal, N., Medvedev, O. N., & Simpson, C. R. (2025). Validating the depression anxiety stress scales (DASS-21) across Germany, Ghana, India, and New Zealand using Rasch methodology. *Journal of Affective Disorders*, 363–373. https://doi.org/10.1016/j.jad.2025.04.099

Amanda, L., Nafisah, N., & Novianti, N. (2019). Loneliness in Haruki Murakami's After Dark (2007): A Focalization Analysis. *Passage: A Journal of Language, Literature and Culture*, *7*(1), 35–54. https://doi.org/10.17509/psg.v7i1.21254

Animish, J., Arti, M., & Srujana, M. (2023). Impact of COVID-19 lockdown on mental health, physical activity, and eating behaviours among IT professionals in India. *Archives of Psychiatry Research*, *59*(2), 209–218. https://doi.org/10.20471/dec.2023.59.02.04

Chauhan, H., Satapathy, S., & Sahoo, A. K. (2021). Farmer workplace discomfort levels leading to adverse mental health. *International Journal of Social Ecology and Sustainable Development*, *13*(1), 1–14. https://doi.org/10.4018/ijsesd.290314

Clements, J. (2019). *Murakami Haruki's Short fiction and the Japanese Consumer Society* [MA Thesis, University of Kansas]. https://hdl.handle.net/1808/30078

Dong, B., Li, D., & Baker, G. B. (2022). Hikikomori: A Society-Bound syndrome of severe social withdrawal. *Psychiatry and Clinical Psychopharmacology*, *32*(2), 167–173. https://doi.org/10.5152/pcp.2022.22429

Fernandes, L., & Panwar, N. (2024). Sensory processing sensitivity in relation to coping strategies: exploring the mediating role of depression, anxiety and stress. *Discover Psychology*, *4*(1). https://doi.org/10.1007/s44202-024-00214-6

The four types of hikikomori: alternative, reactionary, resigned, and cocoon-like. (n.d.). *HIKIKOMORI ITALIA Associazione Nazionale Ritiro Sociale Volontario*. https://www.hikikomoriitalia.it/p/the-four-types-of hikikomori.html#:~:text=The%20 four%20types%20of%20hikikomori,%2C%20resigned%2C%20and%20cocoon%2Dl ike

Garguilo, M. (2012). The Existentialist world of Murakami Haruki: a reflection of postmodern Japanese society [Honors Thesis (Bachelor of Arts), University at Albany]. In *Scholars Archive*. https://doi.org/10.54014/8YEC-BGSN

Gupta, S., Das, S., Das, M., Banerjee, S., Neogi, R., & Mukherjee, S. (2023). Prevalence and correlates of depression, anxiety, and stress among high school students in a block of Hooghly district, West Bengal: Across-sectional study. *Journal of Education and Health Promotion*, *12*(1). https://doi.org/10.4103/jehp.jehp_1769_22

Hamasaki, Y., Pionnié-Dax, N., Dorard, G., Tajan, N., & Hikida, T. (2020). Identifying social withdrawal (Hikikomori) factors in Adolescents: Understanding the Hikikomori Spectrum. *Child Psychiatry & Human Development*, *52*(5), 808–817. https://doi.org/10.1007/s10578-020-01064-8

Hang, L. T. D. (2024, March). *Hikikomori and religious psychology: Trauma, kami, and forms of healing in Underground by Haruki Murakami*. Paper presented at the Trauma, Crisis and Healing in Vietnamese and Japanese Art and Literature Conference. Retrieved from ResearchGate.

Kato, T. A., Tateno, M., Shinfuku, N., Fujisawa, D., Teo, A. R., Sartorius, N., Akiyama, T., Ishida, T., Choi, T. Y., Balhara, Y. P. S., Matsumoto, R., Umene-Nakano, W., Fujimura, Y., Wand, A., Chang, J. P., Chang, R. Y., Shadloo, B., Ahmed, H. U., Lerthattasilp, T., & Kanba, S. (2011). Does the 'hikikomori' syndrome of social withdrawal exist outside Japan? A preliminary international investigation. *Social Psychiatry and Psychiatric Epidemiology*, *47*(7), 1061–1075. https://doi.org/10.1007/s00127-011-0411-7

Khan, R., Pai, K., Kulkarni, V., & Ramapuram, J. (2017). Depression, anxiety, stress and stigma in informal caregivers of People Living with HIV (PLHIV). *AIDS Care*, *30*(6), 722–726. https://doi.org/10.1080/09540121.2017.1418831

Lee, S., Kim, H. S., Hong, J., Lee, E., Kim, E., Choi, T. Y., Moon, S. W., Jung, S., Yoon, H., Kim, H. S., Baek, J. H., Si, T., Kallivayalil, R. A., Tanra, A. J., Nadoushan, A. H. J., Chee, K. Y., Javed, A., Sim, K., Pariwatcharakul, P., . . . Park, S. (2025). Network Structure of Social Withdrawal Symptoms in Asian Psychiatric Patients at High Risk of Hikikomori: Findings from the REAP-AD3. *Asian Journal of Psychiatry*, 104489. https://doi.org/10.1016/j.ajp.2025.104489

Lin, P. K. F., Andrew, N., Koh, A. H. Q., & Liew, K. (2022). The relationship between Hikikomori risk factors and social withdrawal tendencies among emerging adults— An exploratory study of Hikikomori in Singapore. *Frontiers in Psychiatry*, *13*. https://doi.org/10.3389/fpsyt.2022.1065304

Martinez, S. M., Esaryk, E., Chodur, G., Singh, S., Kalaydjian, S., Bullock, H. E., & Britton, T. A. (2023). COVID-19-related stressors exacerbate food insecurity and depressive symptoms among graduate students receiving campus basic needs services: Cross-sectional findings from seven California public universities. *Stress and Health*, *40*(3). https://doi.org/10.1002/smi.3345

Nair, R., Thomas, P. E., Mohanan, K., Bhawana, K., & Thakur, M. (2024). Post debridement – Mental health and body image satisfaction among mucormycosis patients: Concern beyond surgical debridement. *Journal of Education and Health Promotion*, *13*(1). https://doi.org/10.4103/jehp.jehp_1860_23

PP, A., & Arur, A. (2025). Meaning in life buffers mental health risks in South Indian transgender (Hijra) women. *Mental Health and Social Inclusion*. https://doi.org/10.1108/mhsi-02-2025-0058

Savant, A. (2024, January 25). *Public health succumbed to isolation: Hikikomori's Global Journey Beyond Four Walls - Elets eHealth*. eHealth Magazine. https://ehealth.eletsonline.com/2024/01/public-health-succumbed-to-isolation-hikikomoris-global-journey-beyond-four-walls/#:~:text=Japan%2C%20once%20 poised%20to%20becom e,of%20over%20one%20million%20hikikomori

Shin, H. (2018). Unlocking the mindware. *Positions Asia Critique*, *26*(4), 749–780. https://doi.org/10.1215/10679847-7050556

Shreeharsha, M., Nagesh, P., & Kulenur, S. (2025). Effect of Online Learning on Mental Health and Academic Outcomes of Students with Intellectual Disabilities in Higher Education. *Journal of Intellectual Disability - Diagnosis and Treatment*, *13*(1), 34–43. https://doi.org/10.6000/2292-2598.2025.13.01.4

Sriperambudoori, V., Pingali, S., Tondehal, N. R., Joopaka, A. K., & Molanguru, U. (2021). An online cross-sectional survey of depression, anxiety, and stress among resident doctors working at a COVID-19 tertiary care center in India. *Archives of Mental Health*, *22*(2), 111–117. https://doi.org/10.4103/amh.amh_75_20

Sunil, S., Tripathi, R., Sharma, M. K., Anand, N., Sahu, A., & Kumar, R. (2024). Hikikomori and Internet Gaming Disorder: a Case Report. *Archives of Psychiatry Research*, *60*(3), 239–242. https://doi.org/10.20471/may.2024.60.03.06

Takefuji, Y. (2023). Review of hikikomori: A global health issue, identification and treatment. *Asian Journal of Psychiatry*, *84*, 103596. https://doi.org/10.1016/j.ajp.2023.103596

The three stages of the hihikomori: from the first warning signs to complete isolation. (n.d.). *HIKIKOMORI ITALIA Associazione Nazionale Ritiro Sociale Volontario*. https://www.hikikomoriitalia.it/p/the-three-stages-of-hihikomori-from.html#:~:text= It's%20in%20this%20phase%20where,The%20hikikomori%20isn't%20static

Vinoth, J., Balaji, S., Ganesan, D. K., & Jain, T. (2023). Mental Health among Automobile industry workers in Chennai – A Cross-sectional study from a Single Industrial unit. *International Journal of Occupational Safety and Health*, *13*(3), 346–352. https://doi.org/10.3126/ijosh.v13i3.47093

Contact emails: trsd99@gmail.com
                abirami@src.sastra.edu
                suganthi@mba.sastra.edu