

## Exploration of Hikikomori Syndrome in Young Adults in Lahore: A Preliminary Study

Abia Nazim<sup>1\*</sup>**Abstract**

Hikikomori syndrome is a relatively new psychological problem related with serious social outcomes which has attracted lots of attention from mental health professionals particularly after COVID-19 pandemic. The present article is based on a preliminary study that explored the symptoms of hikikomori syndrome in young adults in Lahore extracted from the preliminary phase of an ongoing research project and employed cross sectional research design. Sample was selected from Lahore from October 2022 to January 2023 and comprised of 206 young adults. The sample included both men and women with a mean age of 22 ( $SD= 6.65$ ) years. Data was collected through demographic form, hikikomori questionnaire and perceived social support scale. Hikikomori symptoms showed significant associations with many demographic variables like age, number of siblings, history of psychological illness. Gender, family system and social support revealed significant differences in hikikomori symptoms. Despite small sample size, present study revealed an interesting set of findings related to hikikomori phenomena.

**Keywords:** Hikikomori Syndrome, Social Problems, Social Support, Young Adults

Received: 17 November 2023; Revised  
Received: 05 February 2024; Accepted: 07  
February 2024

<sup>1\*</sup>Associate Professor, Department of Psychology, Forman Christian College (A Chartered University), Lahore, Pakistan.

**\*Corresponding Author Email:**

abianazim@fccollege.edu.pk

**Introduction**

Hikikomori syndrome is characterized by prolonged and severe social withdrawal, apathy and social isolation for extended periods of time with minimum of 6 months (Fong-Yong & Koneko, 2016; Kato et al., 2019) but can even last for many years. The condition is typically observed in adolescents and young adults and is reported to also have high comorbidity with psychosis, depression, anxiety and other psychological disorders (Teo & Gaw, 2010). Hikikomori syndrome has raised a considerable concern for being potentially associated with various health, economic, social and cultural problems and high risk of developing severe psychological

and physical disorders. Decline in performance efficiency, work force shortage, several social complications are few problems to name although the actual impact of the syndrome has yet to be examined (Kato et al., 2019; Wong et al., 2019).

This phenomena was first reported in Japan in 1990s as a significant health problem and had become important public health concern since then (Saito, 2010) with the reported prevalence rate of 1 % in Japan (Koyama et al., 2010). Over the years hikikomori syndrome reported to had spread alarmingly to other countries as well (Hayakawa et al., 2018; Kato et al., 2019).

Hikikomori syndrome was initially defined as a cultural phenomenon but later described as a mental health issue leading to serious social problems. The condition has recently been recognized as a growing mental health concern in many countries with rapidly increasing cases in Japan, China, South Korea, Spain, Italy, Canada, United Kingdom, United States, France, Australia, India and Oman (Kato et al., 2019; Ranieri & Luccherino, 2018). An alarming increase in

This article is distributed under the terms of the Creative Commons Attribution Non Commercial 4.0 International License (<https://www.creativecommons.org/licenses/by-nc/4.0/>) which permits non-Commercial use, reproduction and distribution of the work without further permission provided the original work is attributed as specified.

© Copyright: The Author (2024)

number of hikikomori syndrome cases has been observed after COVID-19 pandemic, attracting attention of mental health professionals.

Sometimes hikikomori is confused with various psychological disorders particularly anxiety, depression and related disorders. These disorders also have social isolation and social withdrawal as one of the symptoms. The literature (Wong et al., 2017), however, makes a clear distinction between the above mentioned psychological disorders and hikikomori. Social isolation and social withdrawal in anxiety and depressive disorders is one of the symptoms which may or may not be present and in most cases emerge later during the course of illness than the primary or core symptoms. Whereas, in hikikomori syndrome both social isolation and social withdrawal are core symptoms or features. Secondly, the duration of these symptoms is significantly prolonged and the intensity of these symptoms is significantly higher compared to when these symptoms are observed in anxiety or depression related conditions (Teo & Gaw, 2010).

The literature points to significant disparities when it comes to conceptualization of symptoms of Hikikomori syndrome. Despite the lack of consensus on defining features of hikikomori, it become a buzzword across the world (Castelpietra et al., 2021). Also, the epidemiological data on prevalence of hikikomori involving large samples is still scarce attributed mainly to lack of consensus on clear definition and diagnostic criteria of hikikomori (Stip et al., 2016). Another factor behind lack of valid epidemiological data is non-availability of standardized hikikomori assessment measures that can be used as contextually valid tools across different countries (Castelpietra et al., 2021) as most of the instruments are only available in Japanese language and are only relevant to Japanese cultural context. The most often used assessment measures for hikikomori

screening are Hikikomori Risk Scale, Adaptive Behaviors Scale for Hikikomori, Hikikomori Behavior Checklist and Hikikomori Questionnaire-25 (HQ-25) (Castelpietra et al., 2021). While Hikikomori Questionnaire-25 is one of the most recently developed measure developed to assess hikikomori symptoms across different cultures (Teo et al., 2018).

Hikikomori syndrome is attributed to a set of multifactorial and complex causes with literature pointing to various social, cultural and psychological influences as significant risk factors (Pozza et al., 2019). Societies that give importance to social conformity and high achievement are likely to indirectly encourage social withdrawal, particularly in those who do not fit into these preferred social norms (Kato et al., 2019). Similarly, individuals who suffer from social and familial rejection, social anxiety, abuse, family dysfunctions, distress and problems related to social cognition are also vulnerable towards hikikomori syndrome (Lee et al., 2013; Saito, 2019). Moreover, individuals who have a history of various psychological problems specifically depression, stress, trauma, low self esteem, anxiety and obsessive compulsive disorder are most vulnerable to develop hikikomori symptoms (Kato, 2019; Teo & Gaw, 2010).

Empirical research literature on hikikomori syndrome is relatively scarce and thorough review of literature failed to find any published research on hikikomori syndrome in Pakistan. However, the published research literature showed researches on hikikomori syndrome conducted in middle and south east Asian countries but doesn't provide any data related to Pakistan. In this context, the present study is likely to provide valuable input to provide baseline information about hikikomori syndrome in Pakistan. The present project is the pilot study of a multiphase project related to hikikomori syndrome. The current study was aimed to

explore hikikomori symptoms in Pakistan and to identify significant correlates of hikikomori symptoms in local population.

### **Method**

The present study followed cross sectional research design and comprised a sample of 206 university undergraduates attending different public and private sector universities of Lahore city selected through non probability convenience sampling technique. Participants included both men ( $n=111$ ) and women ( $n= 95$ ) with age between 18 and 25 years. The inclusion criteria for participants was age ranging from 18 to 25 years, ability to comprehend simple English language. Individuals with any history of psychotic symptoms, those abusing any substance or experiencing any psychological disorder since 4 weeks before data collection were not included in the sample.

### **Measures**

The data was collected through a detailed demographic form, Hikikomori questionnaire and multidimensional scale of perceived social support.

#### **Detailed Demographic Form**

The demographic form was specifically developed for this study to get information about age, gender, family income, relationship status, family setup, education etc. It also included the questions about past and current mental state, history of psychological problem and loss etc.

#### **Hikikomori Questionnaire**

Hikikomori questionnaire (HQ-25) developed by Teo et al., (2018) was used to assess the symptoms of hikikomori syndrome by recording both behavioral and emotional symptoms of the syndrome. It was a self-administered questionnaire of 25 statements recording three main domains of the syndrome namely lack of sociality, isolation and lack of emotional support on a scale ranging from strongly disagree (0) to strongly

agree (4). It was one of the most frequently used instruments to assess hikikomori symptoms. The measure reported to have excellent psychometric properties and high diagnostic accuracy to assess hikikomori symptoms Teo et al., (2018).

#### **Multidimensional Scale of Perceived Social Support (MSPSS)**

It was developed by Zimet et al. (1988) and consisted 12 items that recorded responses on a 7 point Likert scale. The measure assesses an individual's perception of social support available to them from friends, family and significant others. The measure reports to have good psychometric properties and is often used in researches to assess social support. The scale is used with both clinical and nonclinical samples and the reliability ranges from 0.92 to 0.94 for clinical group and from 0.81 to 0.98 for non-clinical group (Pedersen et al., 2009; Zimet et al., 1988).

#### **Procedure**

The project was duly approved by the related ethical and review authorities. Permissions related to using the HQ-25 and data collection from selected participants were sorted from all concerned. The participants were approached at their academic departments and were briefed about the purpose and aims of the research. The participation was voluntary and based on their free will. All participants received and filled the forms in the same sequence which was cover letter, consent form, demographic sheet and HQ-25 questionnaire. The instruments were self-report measures therefore, the participants filled themselves, and however, the researcher remained present and available in case participants required any assistance and explanation of one of the questions in demographic form or hikikomori questionnaire. The data was collected anonymously and all participants were thanked for their time and participation at the end. The collected data was analyzed through SPSS version 23.0. Other than

descriptive statistical analyses, point biserial correlation and independent sample t test were used to assess the association and differences between different study variables. The project was carried out following all the necessary ethical guidelines of APA regarding research.

### Results

The data was analyzed employing both descriptive and inferential statistics. A

number of demographic variables were recorded to assess their association with hikikomori syndrome, the variable included were gender, age, family system, number of siblings, family income, history of breakup, history of anxiety disorders or depression in last two years and history of losing a loved one

**Table 1**

*Demographic Characteristics of Participants (N= 206)*

Variables	Frequency	Percentage	Variables	Frequency	Percentage
Gender			Family system		
Men	111	54 %	Joint	119	58 %
Women	95	46 %	Nuclear	87	42 %
Institute			Residential Areas		
Private	130	63 %	Urban	163	79 %
Public	76	37 %	Rural	43	21 %

The study included 206 participants including representation of both men (54%) and women (46%). A large majority of the sample was living in urban residential settings (79%). Most of the participants (58%) were living in joint family system with

5 to 7 family members. The mean age of participants was 22±6.65 years. In total 73 percent participants scored above the established cut off score suggesting the presence of hikikomori syndrome.

**Table 2**

*Association of Hikikomori Syndrome Score with Study Variables (N=206)*

Variables	R	p
Age	0.42	0.001
Social support	- 0.30	0.017
Family system	- 0.30	0.021
History of psychological disorder	0.28	0.012
Losing a loved one in past 6 months	0.41	0.021
Breakup in past 6 months	0.35	0.021
Residential setting	0.25	0.021
No of siblings	-0.40	0.002

Age was observed to be the strongest correlate of hikikomori syndrome where increasing age showed strong association with hikikomori symptom score. Perceived social support and joint family system observed to be negatively associated with

hikikomori symptoms. Losing a loved one or having a breakup observed to be positively associated with hikikomori symptoms, however loss of a loved one showed stronger association. Living in urban residential settings and having fewer siblings were

associated positively with hikikomori symptom scores.

**Table 3**

*Hikikomori Syndrome Scores across Gender, Family System, Residential Area and Age (N=206)*

Variables	N	M	SD	t	p	Cohen's d
Gender						
Men	111	43.44	19.36	2.179	0.03	0.306
Women	95	48.90	16.08			
Residential setting						
Urban	163	57.32	33.30	3.563	0.0005	0.756
Rural	43	39.08	7.32			
Family system						
Joint	119	46.25	12.10	4.81	0.0001	0.713
Nuclear	87	61.30	27.25			
Age						
18-21	105	40.69	12.83	2.680	0.008	0.374
22-25	101	45.17	11.06			
Social Support						
Lack of Social Support	113	50.30	24.44	5.683	0.000	0.804
Satisfactory Social Support	93	33.08	17.86			

*df*= 204

When severity of hikikomori symptoms was assessed across two age groups, it showed significant differences. Increased age was observed to be associated with high scores of hikikomori syndrome particularly in female participants, in male participants however, age wise difference was found to be insignificant.

Significant gender differences were also seen in hikikomori symptoms. Females scored

higher on hikikomori symptoms compared to males.

Residential settings and family systems also showed significant differences in presentation of hikikomori symptoms. Those living in urban residential settings and nuclear family systems scored higher on hikikomori symptoms.

## Discussion

Hikikomori is a psychological problem which has gained immense attention in past few decades (Hu et al., 2022) and is becoming more pronounced after COVID-19 pandemic (Kubo et al., 2023) and made many researchers to explore the phenomena in their own cultural context. Current study was a similar effort to explore the hikikomori in Pakistani context and revealed some interesting findings particularly with reference to social demographic variables.

Sample comprised of young adults as the phenomenon is reported to be most prevalent in adolescents and young adults compared to any other age group (Imai et al., 2020; Komaya et al., 2010). This might be because young adulthood is the time of important transition from adolescence to adulthood and marked with many struggles that are likely to make individuals more vulnerable towards emotional problems.

One of the aims of the present study was to explore the presence of hikikomori

symptoms in Pakistani sample. A majority of young adults in the current sample indicated having experienced hikikomori symptoms which in turn support the findings of the previous studies depicting the same trend in other countries (Imai et al., 2020; Komaya et al., 2010). The possible reason might be that young adulthood is related with several challenges and many significant life decisions are made during the early years of young adulthood. Early years of young adulthood due to its sensitive nature are marked with pressures related to competitiveness and achievement which is also described as one of the possible reasons leading to symptoms of hikikomori syndrome. Pakistan is also facing serious economic crisis, political instability, high rates on unemployment and many other challenges which must have adversely affected the emotional wellbeing resulting in high scores on hikikomori questionnaire.

The second objective of the present study was to identify association of various demographic factors with hikikomori symptoms. For this purpose, the score on hikikomori questionnaire was correlated with age, residential setting, gender, family system, number of siblings, breakup, The expression of psychological problems differ significantly across gender (Matud et al., 2019) and age cohorts (De-Juanas et al., 2020). Present findings also supported the assumption of the literature that age and gender usually attribute to significant differences in hikikomori symptoms (Hu et al., 2022). Female participants scored significantly higher on hikikomori symptoms. Perhaps in local cultural context, social isolation and social withdrawal of females go unnoticed as a problem as females are encouraged to stay at home and be more involved in their families in many Asian countries.

In the light of previous studies, present study also explored the relationship of history of

psychiatric illness and hikikomori symptoms and found supportive findings. Participants of the present study only included those who have had experienced symptoms of any neurotic disorders in the pasts and the findings reported a significant positive association of these disorders with symptoms of hikikomori. This might be due to the fact that hikikomori include symptoms that are also experienced in anxiety and depressive disorders. These disorders also involve social withdrawal and isolation which might have contributed to higher scores on hikikomori. In Pakistan joint family system is still a preferred family system of majority (Nazim & Kahlid, 2018). This is also reflected in current study and joint family system was found to be associated to lower scores of hikikomori. The presence of more family members might have provided better social support and less chances for vulnerable family members to withdraw socially to dwell in isolation.

Social withdrawal is also seen after significant emotional loss. Losing someone significant and breakup in past 6 months was noted to be important factors associated with higher scores on hikikomori. This type of emotional loss usually leads to emotional reactions that comprise symptoms similar to hikikomori. The emotional loss can not only develop new symptoms but can also accelerate existing problems and consequently lead to psychological disturbance which in the present study was hikikomori symptoms.

The present study was one of the preliminary studies to explore hikikomori symptoms in Pakistan. The main limitations were small size, sample restricted to selected sites and only involves non clinical group. The project was a pilot study to collect baseline data for later studies so the sample size was restricted yet it helped providing with good insights. The present study didn't include clinical sample and the participants were only

selected from academic institutes from Lahore. Future studies should employ a larger sample set from diverse backgrounds to study the hikikomori phenomenon. It would be interesting if further researches are planned to study hikikomori in both clinical and non-clinical cohorts to make a comparison of presentation of hikikomori symptoms between these cohorts. Further researches can be planned to study the comorbidity of hikikomori with different psychopathologies and temperamental styles. Like many other psychological problems hikikomori is sensitive to cultural and contextual factors, reference to this, current findings identified gender and age contributing significantly to differences in hikikomori scores. Emotional loss in terms of losing someone significant for instance is associated with severity of hikikomori symptom scores.

#### Contribution of Author

Abia Nazim: Conceptualization, Investigation, Methodology, Data Curation, Formal Analysis, Writing – Original Draft, Writing - Reviewing & Editing

#### Conflict of Interest

There is no conflict of interest declared by the author.

#### Source of Funding

The author declared no source of funding.

#### Data Availability Statement

The datasets of the current study are not available publicly due to ethical reasons but are available from the corresponding author [A.N.] upon the reasonable request.

#### References

Castelpietra, G., Nicotra, A., & Leo, D.D. (2021). The hikikomori phenomenon: Could loneliness be a choice of self-restriction from society? *Journal of Psychiatry*, 11(1), 47-52.

De- Juanas, A., Romero, T.B., & Goig, R. (2020). The relationship between

psychological well-being and autonomy in young people according to age. *Frontiers in Psychology*, 11. <https://doi.org/10.3389/fpsyg.2020.559976>

- Fong-Yong, R.K., & Kaneko, Y. (2016). Hikikomori a phenomenon of social withdrawal and isolation in young adults marked by an anomic response to coping difficulties: A qualitative study exploring individual experiences from first and second person perspectives. *Journal of Preventive Medicine*, 6, 1-20.
- Hayakawa, K., Kato, T. A., Watabe, M., Teo, A. R., Horikawa, H., Kuwano, N., & Sagata, N. (2018). Blood biomarkers of Hikikomori, a severe social withdrawal syndrome. *Scientific Reports*, 8 (1), 2884. doi: 10.1038/s41598-018-21260-w
- Hu, X., Fan, D., & Shao, Y. (2022). Social Withdrawal (Hikikomori) Conditions in China: A Cross-Sectional Online Survey. *Frontiers in Psychology*, 13, 826945. <https://doi.org/10.3389/fpsyg.2022.826945>
- Imai, H., Takamatsu, T., Mitsuya, H., Yoshizawa, H., Mitsuya, H., & Furukawa, T. A. (2020). The Characteristics and Social Functioning of Pathological Social Withdrawal, "Hikikomori," in a Secondary Care Setting: a One-Year Cohort Study. *BMC Psychiatry*, 20(1), 352. <https://doi.org/10.1186/s12888-020-02660-7>
- Kato, T.A., Kanba, S., & Teo, A.R. (2019). Hikikomori: Multidimensional understanding, assessment and future: International perspectives. *Psychiatry and Clinical Neurosciences*, 73, 427-440.
- Koyama, A., Miyake, Y., Kawakami, N., Tsuchiya, M., Tachimori, H., &

- Takekuma, T. (2010). World mental health Japan survey group 2002-2006: Lifetime prevalence, psychiatric comorbidity and demographic correlates of “hikikomori” in a community population in Japan. *Psychiatry Research*, *176*, 69–74.
- Kubo, T., Masuyama, A., & Sugawara, D. (2023). Role of innate and acquired resilience in behavioral system, mental health, and internet addiction among Japanese adolescents in the COVID-19 pandemic. *PeerJ*, *11*, e14643. <https://doi.org/10.7717/peerj.14643>
- Lee, Y.S., Lee, J.Y., Choi, T.Y. (2013). Home visitation program for detecting, evaluating and treating socially withdrawn youth in Korea. *Psychiatry & Clinical Neurosciences*, *67*, 193–202.
- Matud, M. Pilar, Marisela López-Curbelo, & Demelza Fortes. (2019). Gender and Psychological Well-Being. *International Journal of Environmental Research and Public Health*, *16* (19), 3531. <https://doi.org/10.3390/ijerph16193531>
- Nazim, A., & Khalid, R. (2018). Assessment of adaptive functioning of children with typical development attending primary schools in Lahore. *International Journal of Social Sciences & Educational Studies*, *4* (4), 124-134.
- Pedersen, S., Spinder, H., Erdman, R., & Denollet, J. (2009). Poor perceived social support in implantable cardioverter defibrillator (ICD) patients and their partners: cross-validation of the multidimensional scale of perceived social support. *Psychosomatics*, *50*, 461–7.
- Pozza A, Coluccia A, Kato T, Gaetani, M., & Ferretti, F. (2019). The ‘Hikikomori’ syndrome: worldwide prevalence and co-occurring major psychiatric disorders: a systematic review and meta-analysis protocol. *BMJ Open*, *9*, e025213. doi: 10.1136/bmjopen-2018-025213
- Ranieri, F., & Luccherino, L. (2018). Hikikomori: Debating a XXI century phenomenon from a clinical point of view. *Scandinavian Journal of Child and Adolescent Psychiatry and Psychology*, *6*, 72-79.
- Saito, K. (2010) Hikikomori no hyouka: Shien ni kansuru gaidorain (Evaluation and Support Guideline for Hikikomori). Ministry of Health, Labour and Welfare, Tokyo.
- Stip, E., Thibault, A., Beauchamp-Chatel, A., & Kisely, S. (2016). Internet addiction, hikikomori syndrome and the prodromal phase of psychosis. *Frontiers in Psychiatry*, *7*. <https://doi.org/10.3389/fpsy.2016.00006>
- Teo, A.R., Chen, J.I., Kubo, H., Katsuki, R., Sato-Kasai, M., & Shimokawa, N. (2018). Development and validation of the 25-item Hikikomori questionnaire (HQ-25). *Psychiatry and Clinical Neurosciences*, *72*, 780-788.
- Teo, A.R., & Gaw, A.C. (2010). Hikikomori, a Japanese Culture-Bound Syndrome of Social Withdrawal? A Proposal for DSM-5. *Journal of Nervous and Mental Disease*, *198*, 444-449. <https://doi.org/10.1097/NMD.0b013e3181e086b1>
- Wong, J., Wan, M., Kroneman, L., Kato, T.A., Lo, T.W., & Wong, P.W. (2019). Hikikomori phenomenon in East Asia: regional perspectives, challenges, and opportunities for social health agencies. *Frontiers in*



- Psychiatry*, 10, 512.  
10.3389/fpsy.2019.00512
- Wong, P. W. C., Liu, L. L., Li, T. M. H., Kato, T. A., & Teo, A. R. (2017). Does hikikomori (severe social withdrawal) exist among young people in urban areas of China? *Asian Journal of Psychiatry*, 30, 175–176.
- <https://doi.org/10.1016/j.ajp.2017.10.026>
- Zimet, D.G., Dahlem, N.W., Zimet, S.G., & Farley, G. (1988). The Multidimensional scale of perceived social support. *Journal of Personality Assessment*, 52, 30-41.