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## COLOMBO JOURNAL OF PSYCHOLOGY & COUNSELLING

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**Featured Invited Article Contribution titled  
'Providing Psychological Support for the  
Defender of the Nation' by**

**Capt. Achira Telwatta**

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**Editor in Chief**

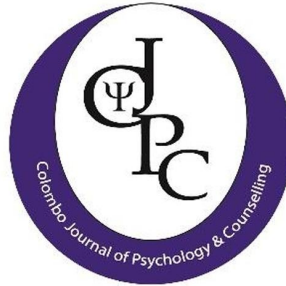
**Tina H. Solomons**

**Co-Editor**

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### **Acknowledgment of Peer Reviewers for Volume 3**

The Editors of Colombo Journal of Psychology gratefully acknowledge the valuable service of the following scholars who generously contributed their time and expertise as peer reviewers for this volume

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## **Message from the Editor in Chief**

It is with great pleasure that we present Volume 3 of the Colombo Journal of Psychology and Counselling. This volume marks another meaningful step in our commitment to advancing psychological research in Sri Lanka.

As the field of psychology continues to evolve, it is important that we cultivate a strong locally relevant body of research. Expanding publication opportunities in psychology and counselling not only strengthens academic discourse but also enhances the quality of care, training and also policy development within our communities.

We are especially pleased to present an invited article by Captain Achira Telwatta (serving Clinical Psychologist at Sri Lanka Army at Army Hospital, Colombo. Lecturer and Research supervisor for BSc in Psychology and MSc in Clinical and Health Psychology degrees of University of West London, Lecturer at University of Sri Jayawardhenapura for a Diploma in Counseling course.) titled “Providing Psychological Support for the Defender of the Nation”. This piece was commissioned by the editorial team to provide valuable expert perspective on being a clinical psychologist for the Sri Lanka Army.

I would like to extend my sincere thanks to the reviewers, the authors and the co-editor whose dedication has shaped this volume.

I also invite readers including students, practitioners and researchers alike to engage with the work presented here and to consider how their own scholarship might contribute to the ongoing development of psychological development in Sri Lanka.

Let this volume be both a reflection of our progress and a call to further inquiry.

Tina Solomons  
Editor in Chief  
*Colombo Journal of Psychology and Counselling*  
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Invited Article

**10.5281/zenodo.20743469**

Capt. Achira Telwatta is a distinguished Clinical Psychologist who's serving in the Sri Lankan Army at Army Hospital, Colombo, providing psychological support to service personnel and developing mental health intervention programs. Her expertise in trauma-informed care and psychological well-being has made her a respected voice in Sri Lanka's mental health landscape. She is also a Lecturer and Research Supervisor for the BSc in Psychology and MSc in Clinical and Health Psychology programmes at the University of West London, and a Lecturer for the Diploma in Counselling programme at the University of Sri Jayawardenepura. Capt. Telwatta brings a unique combination of clinical expertise in military mental health and academic experience, which makes her perspective especially valuable for this invited contribution. The editors invited her contribution to offer an expert perspective on *Providing Psychological Support for the Defender of the Nation*.

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## **Providing Psychological Support for the Defender of the Nation**

Achira Telwatta

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'Sri Lanka Army' (SLA) is also distinguished as the 'Defender of the Nation' and is known to serve as the nation's backbone whenever the country is faced with challenges (Sri Lanka Army, 2026). Over the past two decades, SLA functioned in multiple roles along with the Sri Lanka Navy and Sri Lanka Air Force in addition to performing the primary role in ensuring national safety and security (Balasuriya, 2025). SLA played a significantly active role in various national crisis situations (ex: Easter Sunday Attack in 2019, COVID 19 Pandemic spread in 2020, Dittwah cyclone in 2025) to offer humanitarian and civil administration support to the Sri Lanka government (Balasuriya, 2025).

SLA, originally named as 'Ceylon Army' was established in 1881, during an era when the country was ruled by the British (Sri Lanka Army, 2026). SLA has roughly 200, 000 personnel currently (Balasuriya, 2024). Army Hospitals (Colombo and Anuradhapura) and Army Base Hospitals (Panagoda, Diyathalawa, Kandy, Kilinochchi, Palali, Minneriya, Mullaitivu) are located around the island to care for the army personnel and their families (Sri Lanka Army, 2026). Currently serving and retired army personnel and their family members are medically supported at these hospitals that are managed by medical professionals employed at SLA.



In addition to typical medical and surgical support provided, a group of about 15 professionals in fields of Psychology and Psychiatry work in the Army Mental Health Unit at Army Hospital - Colombo. The Mental Health Unit (MHU) of SLA comprises Consultant Psychiatrists, Medical Officers, Clinical Psychologists, Psychologists, Counselors and Psychiatric Nurses. This team of individuals are motivated and dedicated to providing psychological, emotional and social support to army personnel identified with psychological, emotional and social issues as in-ward or out-patients.

#### **Experience as the Clinical Psychologist serving in the SLA**

Comparing the experience of working in the Army Hospital - Colombo to experience gathered at Government Teaching Hospitals, during the training period, prior to joining with the SLA, it's reasonable to say that the nature of issues handled at SLA are similar to issues that are handled at Government Teaching Hospitals. Disruptions in romantic relationships, friendships, family dynamics or workplace issues as well as a range of clinically diagnosed Psychiatric Disorders such as: Depression, Bipolar Affective Disorder, Schizophrenia, Delusional Disorder, Social Anxiety, Panic Attacks, Substance Misuse Disorders, Obsessive Compulsive Disorder, Post Traumatic Stress Disorder, Dissociative Disorders, Sexual Dysfunctions, Neuro Cognitive Disorders and Personality Disorders are managed at the MHU in Army.

Disruptions in social networks are commonly handled at Army MHU. These disruptions in social relationships with romantic partners, parents, children, friends and colleagues are largely observed due to obvious reasons such as

poor communication, misunderstandings, excessive commitment towards work, misuse of social media, working away from families for long periods and absence of leave on time. Underlying complex issues such as extra marital affairs, poor or heavy sex drive, substance misuse, delusional disorder (Morbid Jealousy), domestic violence and problematic personality traits (ex: Obsessive-Compulsive, Anti-social, Borderline Personality Disorder) also directly impact maintenance of healthy relationships in families and communities of army personnel.

Generational Trauma is direct or indirect transfer of trauma and various effects of trauma from survivors of trauma (ex: war, abuse, discrimination etc.) to subsequent generations (Gillespie & Graves, 2025). Individuals who have faced various adversities during childhood like parental separation, neglect, alcoholic fathers, low socio-economic state, abuse (physical, emotional or sexual) and exposure to domestic violence display similar abusive and maladaptive behavior as adults highlighting the effects of generational (Gillespie & Graves, 2025). Adverse effects of generational trauma are visible in some families of personnel serving in SLA. Additionally, these individuals show poor coping abilities, low tolerance for injustice, substance misuse habits, poor social skills, poor impulse control and verbal and physical aggression towards self as well as others.

A significant portion of clients treated at army hospital psychiatric clinics are war veterans who have been active in the battlefield during the 30-year civil war. These war heroes are primarily diagnosed with Post Traumatic Stress Disorder (PTSD), typically comorbid with depressive or anxiety features and substance misuse disorder. PTSD wasn't officially diagnosed as a mental illness among the medical community until publication of DSM III in 1980

(Brewin et al., 2025). However, a syndrome named 'Combat Stress Reaction' was included in previous DMS versions that described psychological and emotional distress experienced by war veterans (Brewin et al., 2025). Commonly observed symptoms in PTSD patients include: re-experiencing (ex: intrusive memories, flashbacks, nightmares), negative alterations in cognitions/ mood (ex: emotional numbness, avoidance) and changes in reactivity (ex: hypervigilance, hyperarousal) (Brewin et al., 2025).

Among the clients treated for PTSD at army hospital psychiatric clinic, there are war heroes who have sustained serious physical injuries during battle as well as some who have not sustained any physical injuries, but psychological trauma, associated with grief and guilt. Veterans who express grief and guilt about their experiences during battle recall their friends, officers who commanded and even opposition members that were killed by them. Brewin et al. (2025) reports that signs of PTSD do not occur immediately after one's exposure to a traumatic event, but it can occur later too. 'Delayed onset of PTSD' is also observed in Sri Lankan war veterans.

A minor portion of psychiatric clients in SLA experience PTSD symptoms following exposure to serious Road traffic accidents, physical and sexual abuse at households and even at camps. Some clients who were harassed at camps experience extreme anxiety symptoms and refuse to report back. Additionally, exposure to natural disasters like Tsunami and Ditwah has also impacted clients to experience PTSD symptoms, especially attached to grief and guilt of survival, while close ones suffered and died.

Hanwella et al. (2012) reports that 'possession' is a state of detachment from an individual's

environment and it is reported in all societies around the world. During the state of procession, one's personal identity is believed to be impacted by invisible external forces such as spirits or devils (Hanwella et al., 2012). During these dissociative episodes individuals typically display signs like screaming, memory impairments, disorientation and involuntary motor movements (Hanwella et al., 2012). Highlighting that SLA is a representation of the Sri Lankan community, a considerable portion of clients who obtain psychological support from the SLA psychiatric unit also express ideas about being possessed by spirits and being victims of traditional charms performed locally. Some of the clients displaying symptoms of dissociations express thoughts about being blessed with powers to cure illness and foresee the future (ex: *Paththini maniyo or Gambara deviyo*). Externalizing personal issues, a considerable number of clients express beliefs about one's misfortune as results of various charms done targeting them or effects of spirits that are cursed on their name.

Drug/s Addiction or Substance Misuse Disorder is a commonly treated condition at psychiatric clinic conducted at Army Hospital. A significant portion of soldiers as well as officers serving in SLA are regular users of alcohol and Nicotine (Cigarettes). Additionally, there are occasional reports of clients who are abusers of heroine, methamphetamine, cannabis and prescribed drugs. Typically, war veterans complain about abuse of alcohol to address sleep disturbances resultant of PTSD. Alcohol abuse habit in war veterans can be identified as a self-medication strategy. A trend observed in military psychiatric clinic these days is an increased number of reports of abusers of Methamphetamine. In rare cases, poly drug abusers are also reported to psychiatric clinic at Army Hospital and



depending on clients' motivation to quit drug misuse habit decisions are taken to discharge active army personnel from the service.

Disorders such as: Anxiety, Depression, Bipolar Affective Disorder and Schizophrenia are also treated at army hospital psychiatric clinic. Clients with a range of anxiety related disorders: social anxiety, panic attacks and illness anxiety are reported. Depressive features are commonly addressed in clients treated at army hospital psychiatric clinic and these symptoms are usually developed secondary to post-partum, family or workplace related issues. Suicidal attempts by overdosing, poisoning and hanging are the types of suicidal attempts are also reported at clinic. Individuals with Bipolar Affective Disorder and Schizophrenia are rarely seen at army hospital psychiatric clinic.

### **Treatment and Management Strategies used**

As mentioned earlier, the MHU at Sri Lanka Army comprised a multidisciplinary team of qualified and trained professionals. However, the unit lacks an adequate number of professionals to deliver the same quality service to all the clients seen at psychiatric clinic. Absence of adequate numbers of qualified and trained members in the psychiatric team sometimes results in team members feeling overworked and even failing to cater to the needs of the organization as expected.

Despite the challenge of handling a large number of clients at the psychiatric clinic, clients are offered a variety of treatments and services depending on the issue/s. Symptoms are typically managed pharmacologically while emotional and psychological support is offered with counseling and other talk therapies. Despite effectiveness, the benefits of advanced therapeutic techniques from Cognitive Behavior Therapy, the use of advanced techniques are

often challenging due to intellectual capacities of typical clients seen. MHU is also equipped to offer Electro Convulsive Therapy (ECT) and it's typically used with severe depression, severe PTSD and sever psychosis. Further, it's important to note that ECT is used as the last option when medication fail to improve symptoms in clients.

Relationship issues, marital issues and workplace issues are also managed through contacting necessary parties (ex: girlfriend, parents, spouse, in laws, Commanding Officers etc.). Additionally, local authorities such as: Probation services are also contacted and informed to offer support and supervision as required. Many clients in SLA fail to attend regular counseling sessions at Army hospital due to various practical issues such as: work commitments, location of camps, financial difficulties and family/ social commitments. Further, some clients report poor drugs compliance claiming inability to perform normal duties, especially night duties due to drowsiness from drugs. Failure to comply with recommended counseling/ therapy session and poor drug compliance stands in the way of obtaining expected improvements in clients' symptoms, relationships and overall wellbeing.

War heroes who have sustained serious physical injuries during battle, were prematurely discharged from the army considering the seriousness of the injury and limitations in offering a productive service to the organization. These war veterans are offered financial compensations or disability pension as a tribute to their sacrifice during the battle. Further to veterans who have sustained visible physical injuries, measures are taken to approve compensations and disability pension to those sustained significant psychological damage and functional impairment due to PTSD symptoms.

War veterans who have sustained serious physical injuries were treated, rehabilitated and cared at residential institutes built in Ragama, Anuradhapura, Kurunegala, Kamburupitiya and Attidiya areas namely Rana Wiru Swana, Abhimansal and Mihindu Seth Madura. In addition to veterans who sustained physical injuries, those affected psychologically as well as those without proper family support are also cared for at these institutes.

Many families seen at the army hospital psychiatric clinic are dysfunctional as depicted earlier, due to various reasons ranging from unhealthy habits to psychiatric illnesses or personality issues. Reuniting and harmonizing the broken family bonds to create a safe and warm environment for children has been a serious challenge. Sometimes the assistance of extended family is also obtained when both parents are under psychiatric care. In highly dysfunctional families, the dysfunctional parents are advised to live separately and perform responsibilities to support the children financially and materialistically as required.

### **Reflection on the Experiences and Challenges Faced**

Being a part of Sri Lanka Army's psychiatric unit is a highly rewarding experience that allows working with and working for a special community, whose service to the nation is unmatched. As noted earlier, the nature of issues seen and treated at the unit are similar to issues handled at general hospitals, but the management of issues is different at SLA. Sometimes, uncommon decisions are taken considering the effectiveness and productivity of clients towards the organization that leads in clients losing their employment.

The military is a highly structured organization, and it functions and relies heavily on ranks and

power. Practice of traditional client-centered approaches is neither practical nor effective in the military setting due to the power and respect clients hold towards the professionals and ranks within the organization. Further, the presence of ranks and hierarchy has facilitated clients' adherence with medical advice and drug compliance. Collaboration with respective camps is also beneficial in managing clients' symptoms and supervising productivity.

Managing issues in dysfunctional families/marriages is immensely challenging, especially when neither of the parties agrees to compromise. Further, clients who are unwilling to accept their difficult habits and personality traits as well as the impact on close ones make the time and effort go wasted. Even though morbid jealousy and heavy irritability is a primary cause of family disruptions, convincing clients on drug compliance is a nearly impossible task despite multiple sessions of psychoeducation.

Sri Lankan community places an importance on effects of spirits and demons on humans even today. Attempting to address underlying chronic stressors with proper psychoeducation and empowering clients with healthy coping mechanisms aren't effective with clients who hold strong beliefs about effects of traditional charms. Dissociations or dissociative episodes are successfully intervened when clients' beliefs are strategically challenged while introducing problem solving techniques.

A significant portion of clients treated for PTSD can recall harrowing memories at the battlefield. Some war heroes recall incidents vividly with specific dates, names of people and places where attacks happened. While some recall battle memories with grief and guilt, some recall their heroic acts with extreme pride and honor.



Importantly, some are proud to claim their participation and contribution in the battle. Deep discussions with clients who have been active widen the understanding of the brutality of battle.

Being a member of MHU at SLA is an unmatched and fulfilling experience that wouldn't be traded under any circumstance. Moreover, recognition within the team and visible improvements in clients serves as a motivation to provide a better quality service to the army personnel and their families.

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## Assessing The Relationship Between Socioeconomic Status And Psychological Well-Being Among University Students During An Economic Crisis In Sri Lanka

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### Abstract

*University students in Sri Lanka have been adversely affected by the country's economic crisis due to inadequate economic and student resources, contributing to poorer psychological well-being. This study sought to examine the relationship between socioeconomic status and psychological well-being among university students amid the economic crisis in Sri Lanka. The sample consisted of 97 university students who fulfilled the inclusion criteria and were obtained through convenience sampling. Data collection was conducted through a self-administered questionnaire conducted via Qualtrics. Psychological well-being (Depression, anxiety, and stress) was examined using the DASS-21, while socioeconomic status was determined using the Family Affluence Scale and a Likert-scale question measuring monthly household income. Further, Spearman's rank correlation coefficient was used to determine the direction and significance of the relationship between socioeconomic status and psychological well-being. The Kruskal-Wallis test was used to assess significant differences in the mean scores of depression, anxiety, and stress across classes of income. Findings revealed a non-significant negative correlation between socioeconomic status and psychological well-being, and university students belonging to the middle socioeconomic status had greater levels of depression, anxiety, and stress during the economic crisis. These findings contribute to a broader understanding of how the two variables' association is complex and multifactorial, providing an alternative perspective to previous findings. Recommendations for future research are provided.*

*Keywords; socioeconomic status, psychological well-being, university students, economic crisis*



## **Introduction**

The government of Sri Lanka declared the worst economic collapse the country has experienced in the last seventy-three years. The country was in a critical situation due to poor economic governance, a rise in foreign debt, a drop in international reserves and soaring inflation (Kumar et al., 2023; O' Neill, 2023). Additionally, the Easter Sunday bombings and the COVID-19 pandemic aggravated the crisis (Shoib et al., 2022). The heightened pressure of the crisis led to mass public protests, creating a weak political administration, which had a significant impact on the economic decline (Vivekanantharasa & Blanco, 2022).

The education system that operates as a major catalyst to Sri Lanka's economic growth failed to fulfil the needs of the student population (Raveenthiran, 2022). Nearly 4.3 million students were impacted due to the shortage of necessary resources (Raveenthiran, 2022). The fuel crisis and the significant surge in transportation expenses (Vivekanantharasa & Blanco, 2022) hindered students and educators' access to their educational institutions (Raveenthiran, 2022). As a result, all educational institutions were forced to suspend physical classes and shift to virtual learning. However, lower-middle-class families, notably those in remote areas, were adversely impacted, with over 70% of students facing difficulties due to inconsistent power supply and inadequate access to internet services and suitable electronic devices (Shoib et al., 2022; Vivekanantharasa & Blanco, 2022).

University students, particularly, are vulnerable to stress due to the transition into adulthood and the academically and psychologically demanding nature of university life (Kessler, 2023; Saleem et al., 2013). Besides, the economic crisis has contributed to the

deterioration of psychological well-being (PW) among university students. The Conservation of Resources Theory serves as a theoretical basis for examining the implications of economic crises on university students' PW. The theory suggests that psychological distress occurs when individuals experience reduced access to essential resources, including financial stability, social support, and psychological resilience (Farkash et al., 2022). Similarly, during an economic crisis, university students often face financial challenges through escalating living expenses and tuition fees (Vivekanantharasa & Blanco, 2022). Institutional cost-reduction strategies, including overcrowded class sizes, limited course options, and inadequate student assistance, could exacerbate student distress. In addition, reduced employment prospects along with a saturated labour market can increase concerns regarding long-term employability (Stein et al., 2013). Together, these challenges may weaken resilience and impair university students' PW.

## **Psychological Well-being among University Students**

PW is generally associated with positive emotional states such as subjective happiness and optimal functioning across different areas of life (Deci & Ryan, 2008). It is also characterized by the degree of perceived control individuals have over their life circumstances and interests (Udhayakumar & Illango, 2018). However, PW among university students has been worsening in recent years due to growing demands arising from the rising complexity of present-day life (Mahees, 2020), and a large body of research has emphasized the gravity of these challenges. For instance, research involving 1,850 university students found that approximately one-third had an identifiable psychological condition, while one-fourth of newly admitted students



experienced distress and sought professional support (Saleem et al., 2013). These findings indicate that the adaptation phase into university life represents a highly critical period during which students are more prone to experience psychological distress.

In this study, psychological well-being is conceptualised in terms of psychological distress, where symptoms of depression, anxiety, and stress are used as indicators, with higher levels reflecting poorer psychological well-being and lower levels indicating better psychological well-being among university students.

### ***Stress***

The World Health Organisation (2020) defines stress as a state that emerges when environmental demands surpass an individual's abilities or knowledge, thereby impairing their coping mechanisms. Stress is a widely experienced condition among university students, particularly in Sri Lanka (Madhusanka et al., 2021; Mahees, 2020). This is largely due to the intense competition for admission to government universities, which results from limited university placements and overcrowded conditions. Furthermore, students' stress levels may also be influenced by their socioeconomic status (SES) and their inability to pursue their preferred field of study because of parents' traditionally high expectations to enter prestigious professional careers such as medicine, engineering, or law, due to the associated social status and employment opportunities (Wanigasinghe & Rathnayaka, 2019). These factors significantly contribute to elevated stress levels among students, consequently increasing their vulnerability to mental health problems. In particular, chronic stress heightens the risk of anxiety and increases

the likelihood of anxiety developing into a disorder.

### ***Anxiety***

Anxiety is a common response that individuals project when they feel anxious and stressed about what to expect. It's a psychological state characterized by feelings of tension, worry, and apprehension about anticipated events or uncertain outcomes. It may manifest across cognitive, physical, and behavioural domains (American Psychological Association [APA], 2022).

Among university students, anxiety has been associated with multiple academic and psychosocial factors. A study reported that approximately 29% of the student population experienced symptoms of anxiety. The study highlighted that the academic year, financial difficulties, substance use, sleep quality, health and weight index, social engagement, uncertainty about the future, interpersonal conflicts with students and lecturers were identified to be the risk factors for anxiety among university students (Mohamad et al., 2021).

### ***Depression***

Depression is the most widespread disorder that affects 280 million people globally (Wickramasinghe et al., 2023). It is characterized by prolonged feelings of intense despair, which hinders an individual's capacity to function in their daily life. People suffering from depression may face challenges in concentration, experience reduced self-worth, or persistent guilt, as well as in some critical cases, recurring thoughts of self-harm or suicidal behavior (APA, 2022).



Evidence on the prevalence of depression, anxiety, and stress among university students shows considerable variation across contexts. Several studies report relatively high levels of psychological distress, with a meta-analytic evidence among Chinese university students with a prevalence rate of depression and anxiety at 24% and 22% respectively (Zhang et al., 2021). Similarly, studies among Pakistani (Asif et al., 2020) and Bangladeshi (Hossain et al., 2022) university students found notable levels of depression, anxiety and stress, with anxiety often emerging as the dominant condition. However, an Indian study highlighted that depression was the dominant disorder, with anxiety and stress also reported at notably high levels among university students (Raja et al., 2022).

In contrast, other studies report comparatively lower or moderate prevalence rates, such as findings from Spanish university students, where stress, depression and anxiety were moderately reported (Ramón-Arbués et al., 2020). Although the study used a reliable measure, the Depression Anxiety Stress Scale-21 (DASS-21), the findings may not be generalizable due to the sample being limited to a private college, where students may have had greater socioeconomic advantages and access to supportive academic environments that could reduce psychological distress. In addition, studies conducted among healthcare students in Sri Lanka (Gamage et al., 2021) and Jordan (Basheti et al., 2021) reported generally normal levels of psychological distress. The Sri Lankan study identified normal levels of depression, anxiety, and stress, whereas the Jordanian study reported normal levels of depression and anxiety only. These variations in anxiety, stress, and depression levels could be attributed to the application of vast knowledge

of physical health, mental health, and lifestyle that has contributed to better PW.

### **Socioeconomic Status**

Socioeconomic status (SES) is one of the essential components that has a major influence on youth PW (Lal et al., 2013). Typically, SES is an indicator of a person's or family's social standing based on their household income, educational background, and employment status (Saifi & Mehmood, 2011). These three factors are commonly identified as the key indicators of SES. However, income levels may have a more direct effect on the PW of university students, as they determine access to financial and psychological support services. For instance, one of the key challenges identified in a study exploring help-seeking behaviours among university students for mental health concerns was the "lack of money" (Chandrasekara, 2020), highlighting that financial stability may influence students' ability to seek therapy and support services. Additionally, previous Sri Lankan studies (Rathnayake & Weerahewa, 2005; Thoradeniya et al., 2006) have also used income levels alone to measure SES among participants. Therefore, although other SES indicators may influence PW, this study specifically focused solely on income levels as an indicator of SES.

### **Socioeconomic Status and Psychological Well-being**

Numerous studies have been conducted to explore the associations between SES and PW among university students. Studies by Mohammad et al. (2020), Saleem et al. (2013), and Wahed & Hassan (2017) reported a negative correlation between SES and PW. While the studies had a considerably large sample size, ensuring reliability, a drawback of the studies was their dependence on self-report measures,

which may have introduced response bias. Nevertheless, these studies validate the understanding that students from lower SES experience increased PW issues.

Although a substantial body of literature demonstrates that lower SES is linked with poorer PW, the findings remain inconsistent across several studies. Multiple studies report higher depressive symptoms among lower SES students, with results varying from slight increases above normal levels (Mohammad et al., 2020) to moderate levels of depression (Ibrahim et al., 2012; Chen et al., 2013). However, these findings should be considered carefully, as some studies present methodological limitations that may limit comparison across studies. For example, Ibrahim et al. (2012) study participants were based on a single university, raising concerns regarding generalizability, while Chen et al. (2013) included an uneven small sample of low SES participants, which could have shaped the results outcomes. Conversely, other studies did not show a consistent link between SES and PW issues. For instance, Shamsuddin et al. (2013) found no statistically significant relationship between family income and depression or anxiety, except for stress among lower SES groups. Similarly, mixed findings have been found in which psychological distress is higher among middle SES students (Agberotimi et al., 2020), while other evidence indicates increased depression and anxiety among higher SES groups (Salami & Walker, 2014). The above diverse studies suggest that the relationship between SES and PW is multifaceted and inconsistent across contexts, indicating that PW outcomes are likely influenced by a combination of contextual and psychosocial factors apart from SES alone

These studies provide a perspective into how PW varies across socioeconomic groups among university students. However, there has been limited research investigating the relationship between SES and PW among university students in Sri Lanka during an economic crisis, underscoring a gap in the literature. While multiple studies have investigated the psychological impacts of academic and developmental demands on university students, it is equally important to examine wider living circumstances that may contribute negatively to students' PW (Reiss et al., 2019).

One such wider living circumstance is the economic crisis currently experienced in Sri Lanka. Economic crises create multiple economic and social pressures that may place students at risk of developing psychological problems. This is particularly important in the university context, as the demand for higher education tends to remain high during periods of economic instability due to the perception that obtaining a degree may secure better living conditions (Varghese, 2001). Consequently, students may continue pursuing higher education despite experiencing significant financial and psychological pressures, potentially affecting their PW

Furthermore, although low- and middle-income countries are among the most disproportionately affected during economic crises, relatively insufficient research has been conducted within these contexts (Frasquilho et al., 2016). Sri Lanka, as a lower-middle-income country currently experiencing a severe economic crisis, therefore deserves particular consideration. The prevailing crisis is likely affecting individuals across different socioeconomic groups, which may subsequently impact the PW of university students. Therefore, this study attempted to investigate which socioeconomic category of



university students experienced higher psychological distress during the prevailing economic crisis in Sri Lanka.

### **The Current Study**

This study sought to contribute to the existing literature by examining the association between SES and PW among university students amid an economic crisis in Sri Lanka. The research hypothesised that;

(H<sub>1</sub>) There is a positive relationship between PW and SES, with higher SES associated with higher levels of PW.

(H<sub>2</sub>) Sri Lankan university students belonging to the low SES face greater psychological wellbeing issues during an economic crisis.

### **Methodology**

#### **Design**

The research utilised a quantitative cross-sectional correlational design to investigate if there was a significant connection between SES and PW. The research methodology facilitated establishing the direction and strength of the association between SES and PW as well as evaluating and confirming the hypotheses of the study. In addition, comparative analyses were conducted to examine differences in psychological well-being across socioeconomic groups. The independent variable was SES, operationalised using two indicators: the Family Affluence Scale (FAS) and a self-reported monthly household income scale categorising participants into lower-, middle-, and upper-income groups. The dependent variable was psychological well-being (PW), assessed through levels of psychological distress, including anxiety, depression, and stress. The study was conducted in the form of a self-report survey in Qualtrics,

lasting approximately 5-10 minutes. Surveys were chosen to gather data as they are quite efficient in reaching the target population faster than other approaches. Data was analysed using IBM SPSS Statistics (version 29.0.1.0) (IBM Corp, 2021). The protocol was approved by the Cardiff School of Sport and Health Sciences Ethics Committee (Reference No. UG-7494) in accordance with the Cardiff Metropolitan University Ethics Policy and the Declaration of Helsinki.

#### **Sample**

The study required a minimum sample size of 113 Sri Lankan university students as per the analyses of G power software for both linear bivariate regression (medium effect and power value 0.95) and Multivariate Analysis of Variance (medium effect size and power value 0.80) (Faul, et al., 2009). Convenience sampling was used to select participants based on availability, as it was a quick and efficient method of data collection. The study was advertised through a social media advert titled “Assessing the Relationship between Socioeconomic Status and Psychological Well-being among university students.” The eligibility criteria were that participants needed to be 18 years or older, be enrolled in a Sri Lankan university, and have the ability to comprehend the English language to participate in the study.

A total of 166 university students attempted the survey. But sixty-six incomplete and one incorrect response were eliminated to maintain data accuracy, avoiding imputation methods. Additionally, two responses were excluded for not meeting the requirements (participants under 18 years of age). Consequently, the study included 97 participant responses in the analysis, all of whom rigorously satisfied the established

criteria. Despite a slightly reduced sample size, this thorough data validation shows the dataset's quality, assuring substantial and meaningful insights.

### Procedure

The social media advert of the study consisted of the QR code as well as a link to access the survey. Additionally, the term “during an economic crisis,” from the title of the study was removed from the social media advert to avoid participant bias as the term itself can lead the participants to report lower levels of well-being. Upon accessing the survey through a link or the code, participants were provided with an information sheet and a consent form and were also given the option to download them. Informed Consent of the participants was obtained using a tick box question before commencing the study. Subsequently, participants completed the demographics questionnaire, DASS-21, and the SES measures which included the FAS scale, and a Likert scale question related to income levels. At the conclusion of the study, participants were thanked for their involvement.

### Materials

**DASS-21** : DASS-21 (a 21-item self-reporting questionnaire) was used to evaluate the symptom severity of the sub-scales of depression ( $\alpha = .83$ ), anxiety ( $\alpha = .79$ ), and stress ( $\alpha = .79$ ). The overall scale reliability was  $\alpha = .91$ . For each statement such as “I found it difficult to relax,” participants were instructed to evaluate their symptoms using a 0–3 scale, where 0 indicated that the item had not applied to them at all over the previous week and 3 indicated that it had applied very much or for most of that week. The scores filled under each subset were calculated and multiplied by two, as DASS-21 is a condensed version of DASS-42.

For depression, anxiety, and stress, the normal score varied from 0 to 9, 0 to 7, and 0 to 14, while the maximum score varied from 10 to 28, 8 to 20, and 15 to 34, respectively.

**SES Measures:** SES was operationalised using two indicators depending on the objective of the analysis. For correlational analyses (Hypothesis 1), SES was measured using the Family Affluence Scale (FAS), which provided a continuous indicator of socioeconomic status. For comparative group analyses (Hypothesis 2), participants were categorised into low-, middle-, and high-income groups based on self-reported household income obtained through a demographic questionnaire.

The FAS was employed to assess a family's socioeconomic status by measuring their wealth. The scale comprised of six items of the following; ownership of a family vehicle (No = 0; Yes, one = 1; Yes, two = 2), own bedroom (No = 0; Yes = 1), family computers (None = 0, One = 1; Two = 2; More than two = 3), bathrooms (None = 0; One = 1; Two = 2; More than two = 3), dishwasher (No = 0; Yes = 1) and Family holidays outside the country during the past 12 months (Never = 0; Once = 1; Twice = 2; More than twice = 3). The affluence level is calculated after each indicator is combined; higher scores represent greater material wealth and affluence, and lower scores represent decreased material wealth and affluence (Chzhen et al., 2016). The overall scale reliability was  $\alpha = .55$

Besides, the Likert scale question measured the monthly household income of the participants. The participants were requested to select a range from 5 options, such as ‘between Rs. 72,001 – Rs. 103,000’, that best represents their monthly household income. These options ranged from the upper class to the lower class. Each range represented an SES. For instance, less than Rs.

48,000 was classified as lower class, and between Rs. 48,001 to Rs. 72,000 was classified as upper lower class, and similar income range categorisations were applied to lower middle class, upper middle class, and upper class. The levels of income were evaluated based on the data provided by the Department of Census and Statistics (2019). The study applied the inflation-adjusted income equation to convert the income levels from 2019 to those of 2022 by incorporating the inflation rates. Ultimately, the amounts were rounded to the closest thousand.

### **Ethical Consideration**

Participants were provided with a consent form and an information sheet that outlined the study aims, inclusion criteria, right to withdraw, confidentiality, anonymity, risks, and the benefits of participating in the study. The information sheet also mentioned the right to withdraw at any given point during the study by exiting the browser, except after submitting the responses, as the extraction of that specific data would be impossible due to the anonymity of the data. Additionally, the confidentiality of the responses provided by the participants was assured and was stored in a password-protected OneDrive folder, which will be destroyed 10 years after project completion. Further participants in this study were provided with referral pathways to seek professional mental health support if the need emerged as a result of their participation. In addition, the email addresses of the study investigators were also presented if the participants required further assistance.

### **Analysis & Results**

Data was exported from Qualtrics after data collection and entered into SPSS software for analysis. Data was cleaned by removing redundant columns (start date, end date, IP

address, and so on), incomplete responses, incorrect responses (wherein a respondent replaced their name with an age), and those that did not meet the study criteria. Further, numerical values were already assigned for each scale point when exporting data to SPSS, and certain variables were renamed for clarity purposes.

### **Descriptive analysis**

Descriptive analysis was computed to present demographic characteristics. Participants ranged in age from 18 to 49 years, with a mean age of 24.56 years ( $SD = 5.84$ ). The distribution was positively skewed, with the majority of participants (58.8%) falling between 18 and 23 years of age, reflecting a predominantly young adult sample. In terms of gender, the sample was predominantly female, with 71 participants identifying as female (73.2%), 24 as male (24.7%), and 2 identifying as other (2.1%). With regard to educational qualification, the most common level of education was bachelor's degree ( $n = 44$ , 45.4%), followed by Diploma ( $n = 34$ , 35.1%), master's degree ( $n = 13$ , 13.4%), Certificate ( $n = 3$ , 3.1%), Postgraduate studies ( $n = 2$ , 2.1%), and PhD ( $n = 1$ , 1.0%).

Additionally, a reliability analysis was also conducted to check the reliability of the scales, with the DASS-21 demonstrating excellent internal consistency ( $\alpha = .910$ ) and the FAS yielding a comparatively lower reliability coefficient ( $\alpha = .548$ ).

### **Psychological well-being among university students**

The sub-scales of DASS-21 (depression, anxiety, and stress) were computed into three new variables, where the scores were summed up and multiplied by two and were categorised based on the severity level. The descriptive analysis of depression (Figure 1), anxiety (Figure 2), and

stress (Figure 3) scores was conducted to demonstrate the severity distribution of psychological well-being among university students.

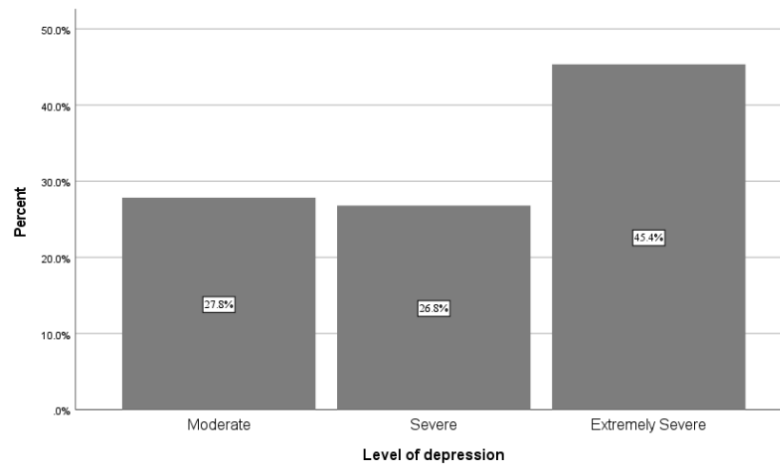


Figure 1: *Severity Distribution of Depression among University Students*

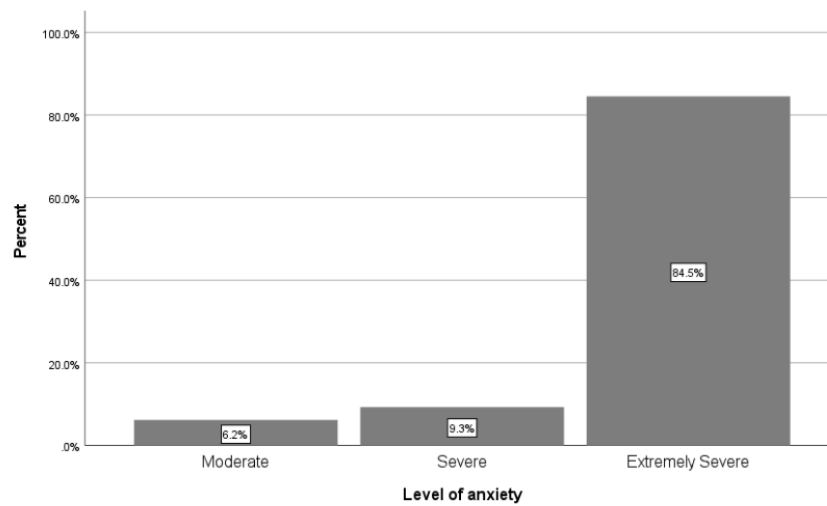


Figure 2: *Severity Distribution of Anxiety among University Students*

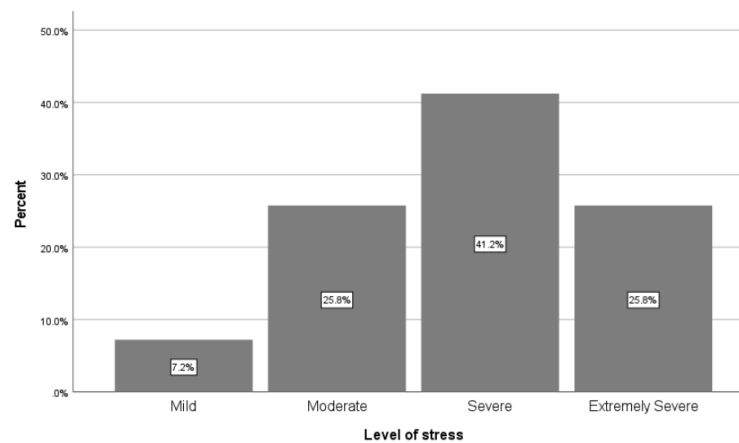


Figure 3: *Severity Distribution of Stress among University Students*

### **Socioeconomic classes of the university students**

To make subsequent analyses and referencing more convenient, the study recorded the initial five SES classes in the SES Likert scale on household income into two new variables. For instance, combining 'lower class' and 'upper lower class' as 'low SES' and combining the 'upper middle class' and 'upper classes as 'high SES.' The descriptive analysis demonstrated that the majority of the participants belonged to the lower-income class ( $n=37$ ), while an equal number of participants in the study belonged to the middle ( $n=30$ ) and high-income classes ( $n=30$ ).

### **Inferential analysis**

The mean scores for the FAS, DASS-21 scale, and the subsets depression, anxiety, and stress were calculated for subsequent analysis.

### **Relationship between psychological well-being and socioeconomic status**

To test  $H_1$  between psychological well-being (DASS-21) and socioeconomic status (FAS), a test of normality was conducted initially to check for skewness. Examination of the normality assumptions revealed that the distribution of both DASS-21 (significant positive Skewness = .632; Kurtosis = .117) and FAS scores (positive Skewness = .104; Kurtosis = .117) deviated significantly from a normal distribution. Additionally, the Shapiro-Wilk tests generated a statistically significant departure from normality for DASS-21 ( $p=0.010$ ); however, the FAS displayed a non-significant departure from normality ( $p=0.057$ ), denoting a reasonably normal distribution.



Initially, linear regression was planned to test the study hypotheses. Taking into account that one of the combined scales deviated from the normal distribution, violating the assumptions required for parametric testing. Consequently, non-parametric alternatives were employed. Taking this into account, Spearman's rank correlation coefficient was used to examine the nature and significance of the relationship between SES, measured by the FAS scale, and PW, measured by the DASS-21. The results indicated that there was a non-significant negative correlation between the two variables,  $r(95) = -.19, p = .067$

Table 1 : Pairwise Comparisons of Classes of Income

|            | Sample 1- Sample 2                     | Test Statistic | Sig.        | Adj. Sig. <sup>a</sup> |
|------------|----------------------------------------|----------------|-------------|------------------------|
| Depression | High Income Class-low Income Class Low | 9.697          | .159        | .478                   |
|            | High Income Class-Middle Income Class  | 20.967         | <b>.004</b> | .011                   |
|            | Low Income Class-Middle Income Class   | -11.270        | .102        | .305                   |
| Anxiety    | High Income Class-low Income Class     | 10.760         | .118        | .354                   |
|            | High Income Class-Middle Income Class  | 17.500         | .016        | .047                   |
|            | Low Income Class-Middle Income Class   | -6.740         | .328        | .983                   |
| Stress     | High Income Class-low Income Class Low | 10.076         | .144        | .431                   |
|            | High Income Class-Middle Income Class  | 22.817         | <b>.002</b> | .005                   |
|            | Low Income Class-Middle Income Class   | -12.741        | .064        | .193                   |

*Note: Each row tests the null hypothesis that the Sample 1 and Sample 2 distributions are the same. Asymptotic significance (2-sided tests) are displayed. The significance level is .050  
Significance values have been adjusted by the Bonferroni correction for multiple tests.*

### ***Effects of socioeconomic status on psychological well-being***

Initially, multivariate analysis of variance (MANOVA) was planned to test the study hypotheses. However, the DASS-21 scores deviated significantly from a normal distribution, violating the assumptions required for parametric testing. Consequently, a

non-parametric alternative was adopted. Since the outcome variable violated normality assumptions, the Kruskal-Wallis test was employed to examine differences in depression, anxiety, and stress scores across income categories. Kruskal-Wallis test yielded significant findings for depression ( $H = 8.407, df = 2, p = 0.015$ ) and stress ( $H = 9.986, df = 2, p = 0.007$ ) and demonstrated partial significance for

anxiety ( $H = 5.966$ ,  $df = 2$ ,  $p = 0.051$ ) across categories of classes of income.

Subsequently, Post hoc analyses using the Bonferroni correction were conducted to identify which specific SES groups showed significant differences in scores for depression, anxiety, and stress.

Additionally, descriptive analysis was carried out to ascertain which of the two categories (high-income classes or middle-income classes) had the greatest number of PW issues. The analysis's findings were shown graphically using a bar chart (see Figure 4), which showed that,

when compared to the low and high-income classes, the middle-income class showed higher levels of stress, anxiety, and depression. Therefore, the second hypothesis, that university students from lower socioeconomic classes face greater psychological impact was rejected.

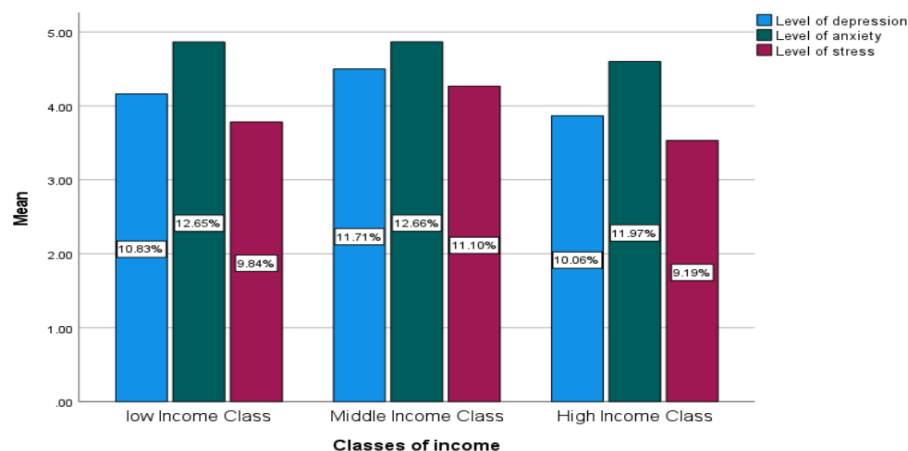


Figure 4 : *Distribution of Depression, Anxiety and Stress across Different Classes of Income*

## Discussion

The primary aim of this research was to examine the relationship between SES and PW among university students in Sri Lanka and to determine which SES group experienced greater psychological impact during an economic crisis. The results demonstrated that there was a non-significant negative correlation between SES and PW. In addition to those findings, the study also found that university students belonging to the middle SES had lower PW, reflected by higher levels of depression, anxiety, and stress during the economic crisis.

The study's results revealed a non-significant negative relationship between SES and PW among university students in Sri Lanka, leading to the rejection of the study's proposed hypothesis. This suggests that the relationship between the two variables may be more intricate than previously assumed, and that factors other than SES might have contributed to determining students' well-being. The economic crisis could have contributed to several factors that eventually influenced the PW of university students, such as increased class sizes implemented by universities to reduce costs,

fewer academic options, decreased student support services, and reduced part-time employment opportunities due to the competitive job market. These factors may have negatively affected students' prospects of finding full-time employment after graduation.

These economic challenges, along with common sources of stress such as academic stress, social relationships (including family expectations, romantic relationships, and peer relationships), involvement in student political activities and conflicts within the campus environment, and living conditions in university hostels, could have influenced one another intricately, resulting in harmful psychological consequences among Sri Lankan students (Mahees, 2020). Additionally, the FAS's reduced-scale reliability may have led to unexpected outcomes that did not support the study's first hypothesis. The reduced reliability could be explained through response bias related to social desirability associated with online surveys (Angel et al., 2019), where participants may not have responded honestly about their family's economic standing.

The present study's findings correspond with Cook (2014) study, which similarly reported a non-significant negative relationship between SES and PW among university students. Similar to the current study, Cook (2014) also employed the DASS-21 scale to measure PW and grouped participants into three SES (lower, middle, and upper), with a participant size of 95 participants. Cook (2014) justified that many students were reluctant to disclose their family's financial status and that the scale contained textual errors and language ambiguities, which may have contributed to the unexpected findings. Additionally, Cook's study also administered surveys for data gathering, which may have increased the possibility of social desirability

bias. These factors may have played a role in the surprising findings, underscoring the need for careful consideration of the methodological constraints when analysing the results.

Further, findings from Sakshi and Baloria (2023) and Wang and Geng (2019) also aligned with the current study; however, these studies were carried out among different groups, including university lecturers and respondents from the Chinese General Social Survey, respectively.

The second finding of the study indicated that Sri Lankan university students belonging to the middle SES experienced greater levels of depression, anxiety, and stress during the economic crisis, thereby rejecting the study's proposed second hypothesis. These unforeseen outcomes question the conventional framework of social selection theory. This theory argues that individuals vulnerable to mental disorders have a greater likelihood of falling into lower socioeconomic positions as a result of their condition (Jin et al., 2020), indicating that lower SES is linked to increased PW distress. However, the present study findings imply that this relationship may not apply universally and that the middle-class population, which is often regarded as socially and economically advantaged, may not be immune to mental health concerns, especially during a period of economic crisis.

Although the results differ from the proposed hypothesis, it can be reasonably assumed that the middle SES was the most impacted group during the economic downturn. This is because high SES individuals possess accumulated wealth and resources that function as a financial buffer, whilst low-income groups frequently receive government aid (Jayathilaka et al., 2022) and have prior experience dealing with financial challenges. However, the middle SES group



might not possess the financial capacity of the wealthy or receive the level of government assistance available to the low SES group, leaving them more vulnerable during economic crises.

Additionally, middle-SES individuals are primarily reliant on income through employment. During the economic crisis, these individuals may have experienced job loss and increased job instability, exposing them to a higher risk of unemployment and a reduction in income (Szymańska, 2019). Furthermore, the Sri Lankan government implemented a new income taxation policy that heavily impacted the middle SES due to reductions in income thresholds, making it significantly difficult for them to fulfil their financial obligations (Shanthaarchch, 2022), including their reduced ability to support their children's educational pursuits. As a result, middle-class students may have had to take up part-time employment and even consider borrowing loans to fund their studies (Shanthaarchch, 2022).

An alternate explanation for the present study to obtain these results is due to the greater importance placed on educational attainment by middle SES students. Azaria et al. (2019) noted that middle-SES students have a stronger inclination to pursue higher education, outperforming both their low-SES and high-SES counterparts. This is because students from low SES classes may face financial constraints that make it challenging for them to continue their education, potentially causing them to consider discontinuing from education or prioritising job search. Students from wealthier households, on the other hand, may be less driven to pursue advanced qualifications due to their existing high SES level (Azaria et al., 2019). Middle SES students attach greater importance to educational attainment, particularly during times of

economic distress, viewing education as a tool to improve living standards (Varghese, 2001). However, this commitment to completing their education amidst financial and economic stressors might have inadvertently resulted in lower PW in middle SES students, as demonstrated by the study findings.

The current study findings align with Agberotimi's (2020) study, which was conducted among healthcare personnel and the general public during COVID-19. The Nigerian study found no statistically significant results for stress or anxiety, but it did find that individuals in the standard (middle) income class had greater levels of depression. The results were ascribed to the fact that the middle SES, which in Nigeria makes up the majority of entrepreneurs and higher-income employees in the private and public sectors, represents the largest proportion of the population. Due to large scale layoffs, reduced pay, and reduction in income brought on by the COVID-19 crisis, the middle SES members were especially vulnerable to financial difficulties, which were further aggravated by the effects of lockdowns (Agberotimi et al., 2020). While the economic crisis and COVID-19 were distinct events, both situations had similar underlying effects, including economic instability and decline in income, which likely contributed to higher prevalence of depression reported among middle SES groups. Although the present study findings align with previous research among health workers, it is crucial to note that studies pertaining to middle SES are very limited in the existing literature on SES and PW among university students.

### **Limitations & Implications**

Every research study is restricted by certain limitations, and the current study is not an exception. Firstly, the study employed



self-report measures, which might have included unreliable responses, such as those caused by social desirability bias. Secondly, the study could not achieve the required statistical power value for the sample size, restricting generalisability of the findings to a larger population. Thirdly, low reliability scores of the FAS might have had an impact on the accuracy of the study findings. Fourthly, the limited availability of published non-significant findings on this topic presented challenges in interpreting results in relation to prior research. Finally, the absence of a validated Sri Lankan SES questionnaire, and the determination of participants' SES based only on their income levels, was seen as another limitation of the study.

Despite these limitations, the study provided meaningful insights into the complex relationship between SES and PW. While some studies have found a significant relationship between the two variables, the present study's findings challenge assumptions about the consistency and reliability of this relationship. In addition, it is important to note that many studies with non-significant results go unpublished due to selective publication bias, which may skew the research evidence on a subject and produce a fragmented understanding of the topic (Nair, 2019). These unpublished studies could provide insightful data even if their results are not statistically significant.

The current study serves as an illustration of this; even though it demonstrated a non-significant negative relationship between the two variables, it did reveal that middle-SES university students are psychologically impacted more than low and high-SES students. In light of the study, the significance of publishing non-significant results becomes evident. This not only contributes to a more holistic understanding of the topic, but it also prevents

repetition of research efforts and aids in refining hypotheses and guiding subsequent research investigations in an evidence-based direction (Nair, 2019). Thus, the study emphasises the need to encourage transparency in research by acknowledging and publishing non-significant findings to enhance academic literature.

Furthermore, previous studies report diverse findings pertaining to the relationship between SES and PW among university students; however, there is a considerable variation in the findings reported. For example, some studies propose that university students from lower SES have higher PW problems (Mohammad et al., 2020; Wahed & Hassan, 2017), whereas others argue that students from higher SES have greater PW-related difficulties (Ismail & Shujaat, 2018; Salami & Walker, 2014). The current study, which observed higher PW problems among middle SES, adds to the existing literature base by drawing attention to another aspect of the multifaceted SES-PW relationship, as research focusing on this target population is very limited. This variation underscores the importance of incorporating different SES groups when formulating interventions to address PW concerns among university students.

### **Future Research Recommendation**

The present study not only yields valuable insights but also provides a basis for subsequent research. A qualitative approach could be used to supplement this quantitative study in future research by exploring key stressors such as academic stress, financial strain, and job insecurity, that might influence the PW of university students from middle SES families during the crisis, providing comprehensive understanding of these issues. Additionally, increasing the sample size and enhancing scale's reliability would provide a more robust framework for future studies. Further, while

determining SES, additional factors such as education and occupation should be considered, as these variables might contribute to a more thorough SES assessment. Furthermore, a comparative analysis between middle SES students from public and private universities might help to better understand whether contextual factors have an influence on the decline of PW among university students. Finally, future research should highlight the importance of publishing non-significant findings, as this assists in gaining a comprehensive understanding of the topic and enhancing scholarly discourse.

### Conclusion

PW among university students is a widespread concern, and in the light of Sri Lanka's economic crisis, no student is entirely exempted from these challenges, regardless of which SES group they belong to. Therefore, the current study investigated the relationship between PW and SES among university students and examined which SES group experienced higher PW issues during the economic crisis in Sri Lanka. The study found a non-significant negative relationship between SES and PW but indicated that university students belonging to middle SES had higher PW problems. Although the study yielded a non-significant negative relationship between SES and PW, the findings do offer some insight into how the relationship between the two variables may be complex and multifaceted, which may reconsider previous assumptions. Additionally, the study provides meaningful insights into the challenges university students experience concerning PW during an economic crisis. Lastly, the research serves as an important reminder to educators and related organisations that students from all SES levels, not just those who are traditionally considered at risk, may experience PW issues.

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## Academic Trauma In Sri Lankan Patients Who Present For Psychotherapy

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### Introduction

#### Historical and Cultural Roots of Academic Achievement

The contemporary intensity surrounding academic performance in Asian contexts is rooted in a millennium-old tradition of meritocracy initiated by the Chinese *Kējǔ* (Imperial Examination) system. Established as early as the Sui Dynasty (581–618 CE), this was the world's first standardized, merit-based civil service exam, designed to replace hereditary power with intellectual competence (Hu, 1984; World History Encyclopedia, 2019). Under the profound influence of Confucianism, the "scholar-official" became the pinnacle of the social hierarchy, while the merchant class—despite their financial wealth—occupied the lowest rung, as money-making was often viewed as secondary to the moral and intellectual cultivation of the self (Lam, 2010). This historical framework fostered a deep-seated cultural belief that academic success is not merely a path to employment, but a fundamental marker of human value and social honor (Asia Exchange, 2017). Consequently, for many patients in psychotherapy, academic failure is not perceived as a financial setback but as a profound "ontological wound"—a total loss of identity and social standing that transcends monetary concerns.

In the Sri Lankan context, this historical reverence for the "scholar" has been further solidified by the post-independence democratization of education and the introduction of the "Free Education" policy. Within this framework, the competitive exam system—most notably the Grade 5 Scholarship, G.C.E. Ordinary Level, and the Advanced Level—is often perceived as the sole mechanism for socioeconomic survival and upward mobility (Little, 1999). This has created a "diploma disease" (Dore, 1976), where the pursuit of prestigious academic credentials, particularly in medicine or engineering, is viewed as a sacred duty to the family unit. Consequently, the Sri Lankan psychotherapist often encounters patients for whom academic failure is not merely a personal disappointment, but a source of profound "collective shame" and familial betrayal. In a society where professional titles are inextricably linked to social caste and marriageability, the trauma of failing to meet these benchmarks can lead to severe identity fragmentation and chronic anxiety that persists long into adulthood.

#### Academic trauma: A Review of the Literature The Conceptual Evolution of Academic Trauma

Recent systematic reviews have shifted the scholarly focus from generalized "academic

stress" to the specific prevalence of Post-Traumatic Stress Symptoms (PTSS) and Institutional Betrayal within educational frameworks. A comprehensive systematic review by Olf et al. (2025) indicates that chronic institutional pressures now constitute a significant source of Type II trauma, with students exhibiting symptom clusters—such as hyperarousal and cognitive avoidance—that mirror those of survivors of more traditional acute traumas. Meta-analytic findings from Carthy and Allen (2023) further emphasize that academic trauma is often mediated by a collapse in ontological security, where the erosion of a student's performance-based identity leads to long-term psychological vulnerability. Furthermore, recent global data confirms that the "competitive burden" in high-pressure educational systems is a primary predictor of suicidal ideation and persistent emotional dysregulation, particularly when the trauma is compounded by institutional failure to provide psychological safety (Kratovic et al., 2021; Bulathwatta & Lakshika, 2023). These findings collectively suggest that for many students, academic settings are no longer merely sites of learning but are high-risk environments for cumulative psychological injury that persists into professional adulthood (Guan et al., 2025; Adams-Clark et al., 2026).

In the Asian context, academic trauma is deeply embedded in a "high-stakes, high-competition" educational culture where scholastic success is often conflated with moral character and filial piety. This environment is characterized by the "Scholar over Merchant" hierarchy and the historical legacy of meritocratic examinations, which prioritize intellectual attainment as the primary vehicle for social honor (Park, 2023). Recent research within the region highlights that this cultural pressure frequently manifests as a "performance-based identity," leaving

individuals vulnerable to severe ontological insecurity when benchmarks are not met (Vandebroek, 2024). Specifically, in South Asia, the "diploma disease" and the rigid nature of competitive examination cycles have been linked to significant levels of hyperarousal and identity fragmentation, with students viewing academic setbacks as a source of collective family shame rather than individual failure (Bulathwatta & Lakshika, 2023). Furthermore, longitudinal studies from 2025 suggest that the institutional pressure inherent in many Asian educational systems acts as a chronic stressor that triggers neurobiological burnout, effectively transforming the pursuit of education into a site of cumulative Type II trauma (Guan et al., 2025; Olf et al., 2025).

In the Sri Lankan context, the reverence for academic scholarship has evolved into a high-stakes survival mechanism frequently described as "diploma disease," where educational attainment is the primary currency for socioeconomic mobility and familial honor (Dore, 1976; Bulathwatta & Lakshika, 2023). This environment is anchored by a competitive examination structure—most notably the G.C.E. Advanced Level—which serves as a rigid gatekeeper to state university entrance and professional legitimacy. Recent empirical research indicates that this system often triggers significant psychological distress; specifically, studies on Sri Lankan undergraduates have identified a direct correlation between academic-related pressure and hyperarousal, a core symptom of post-traumatic stress (Bulathwatta & Lakshika, 2023). Furthermore, the pressure to maintain a "scholar" identity in a society where professional titles are inextricably linked to marriageability and social caste can lead to chronic identity fragmentation and psychological burnout (Guan et al., 2025). Consequently, when these individuals present in



psychotherapy, their distress is often rooted in negative trauma appraisals, where academic setbacks are perceived not as temporary failures, but as an irreparable rupture in their ontological security and collective social standing (Ponnampereuma & Nicolson, 2015; Bulathwatta & Lakshika, 2023).

#### Methodology: Dual-Sector Clinical Inquiry and Phenomenological Review

The present study utilizes a practitioner inquiry framework, drawing upon systematic clinical observations gathered across both public and private mental health sectors in Sri Lanka. This dual-sector approach allowed for the observation of academic trauma across a diverse socioeconomic cross-section of the population. The primary data source consists of a longitudinal, phenomenological review of clinical case notes and intake assessments from a psychiatry department in the public sector and a private psychological service in Colombo.

The inquiry encompassed a broad developmental span, including children, adolescents, and working-age adults. A "phenomenological screening" was applied to identify recurring thematic clusters in patient narratives.

#### Thematic Analysis and Discussion

A thematic synthesis of clinical cases across both public and private sectors reveals that academic-related distress serves as a pervasive and primary stressor within the Sri Lankan clinical landscape. Notably, this distress was reported as a primary or significant secondary presenting complaint in nearly all clinical encounters involving children, adolescents, and working-age adults, whereas it remained notably absent in the geriatric population. This age-related distinction aligns with the concept that ontological security in modern meritocracies is most volatile during the "active" biographical stages of educational and professional

competition (Giddens, 2023; Vandebroec, 2024).

Significantly, the clinical presentation of academic trauma was observed to be transdiagnostic. It appeared as a core thematic driver across a wide spectrum of mental disorders, most prominently among patients diagnosed with Borderline Personality Disorder (BPD), Obsessive-Compulsive Disorder (OCD), Depressive and Anxiety Disorders, and Dissociative Disorders. In these cases, academic setbacks or institutional pressures acted as the primary catalyst for the erosion of the self-concept, triggering symptoms of hyperarousal and identity fragmentation typical of Type II trauma (Herman, 2023; Olff et al., 2025). The high prevalence in OCD and BPD populations suggests that academic trauma may exacerbate existing vulnerabilities related to perfectionism, fear of abandonment, and identity disturbance (Stutman et al., 2024).

Conversely, academic trauma was found to be notably less prevalent or secondary in patients presenting with Psychotic Disorders and Bipolar Disorders. This divergence suggests that while academic trauma thrives on—and exacerbates—disorders rooted in identity-based distress and emotional dysregulation, it may be less etiologically influential in clinical presentations with a more dominant neurobiological or psychotic driver (Guan et al., 2025).

Furthermore, this lower reported prevalence in psychotic cases may be attributed to a symptomatic lack of insight (*anosognosia*). In states of active psychosis, the patient's subjective reality is frequently dominated by primary psychotic phenomena, which can obscure or displace secondary existential stressors such as academic achievement or institutional entrapment. Consequently, the "academic wound" may remain unaddressed not

because it is absent, but because the patient's impaired capacity for self-reflection and reality testing prevents the integration of these complex, performance-based trauma appraisals into their narrative (David et al., 2024; Olff et al., 2025). These findings indicate that for the majority of the non-psychotic Sri Lankan clinical population, the "academic wound" remains a central component of psychological dysfunction.

In adults, the reactivation of academic trauma is frequently precipitated by contemporary failure-related stressors that mirror the high-stakes environments of their formative years. When faced with professional setbacks, workplace evaluations, or stalled career progression, these individuals often experience a "trauma re-enactment" where the current stressor is appraised not as a manageable hurdle, but as a definitive existential threat to their ontological security (Giddens, 2023; Vandebroek, 2024). This reactivation is driven by deeply embedded negative trauma appraisals, where adult failure is perceived through the lens of early academic "shame," triggering symptoms of hyperarousal and emotional dysregulation characteristic of Type II trauma (Herman, 2023; Ponnampereuma & Nicolson, 2015). Recent research suggests that for many South Asian adults, the "scholar identity" remains so central to their self-concept that any perceived professional decline acts as a primary catalyst for clinical presentations of anxiety, depression, and burnout, effectively "re-opening" the original academic wound (Bulathwatta & Lakshika, 2023; Guan et al., 2025).

Clinical narratives from both children and adults reveal that academic trauma is frequently rooted in a pervasive cultural assumption: that sub-optimal scholastic performance is exclusively a result of insufficient effort rather than a reflection of diverse cognitive profiles or

IQ variances (Bulathwatta & Lakshika, 2023). This "effort-ability fallacy" leads parents and educators to employ high-pressure tactics—such as constant comparison and punitive study regimens—which systematically erode a child's sense of ontological security (Vandebroek, 2024).

Crucially, in the counseling room, a recurring theme of "genetic denial" emerges; parents often exhibit a profound resistance to accepting that a child's intellectual and educational trajectory may mirror their own genetic or cognitive baseline. Instead, there is a pervasive expectation for children to surpass parental achievement levels, viewing any deviation as a moral failing rather than a biological reality (Guan et al., 2025; Park, 2023). This rejection of genetic similarity and the subsequent dismissal of a child's actual abilities function as a form of institutional and familial betrayal, where the child is "trapped" in an environment that demands the impossible. Consequently, these early experiences of being "misseen" by primary caregivers provide the blueprint for the complex trauma presentations seen in adulthood, where self-worth remains permanently and precariously tethered to unattainable performance benchmarks (Allen & Carthy, 2023; Herman, 2023).

### **Thematic Analysis: Conditional Acceptance and the Sanctification of Scholarship**

A striking thematic finding in the clinical interviews is that parental acceptance is frequently perceived by children and adults as conditional, tethered almost exclusively to academic performance rather than future wealth or material success. In the Sri Lankan context, parents rarely express a primary desire for their children to become "rich"; instead, they demand educational excellence as the only legitimate vehicle for social honor (Park, 2023). This sanctification of scholarship transforms the



student's academic record into an existential ledger. When a child fails to meet these educational expectations, they experience a rupture in the primary attachment bond, as parental validation is withdrawn (Herman, 2023; Vandebroeck, 2024).

This focus on education over financial gain suggests that in Sri Lanka, academic credentials function as a "moral currency." Consequently, the trauma is not merely about the fear of a poor career, but the fear of being fundamentally unworthy of parental love. This creates a fertile environment for Type II trauma, where the child, and later the adult, remains in a state of chronic hyperarousal, perpetually attempting to "earn" a sense of ontological security through certificates and degrees, even when these pursuits lead to psychological fragmentation (Bulathwatta & Lakshika, 2023; Guan et al., 2025).

A defining clinical characteristic of patients with academic trauma is a pervasive inability to internalize or celebrate personal achievements. Rather than experiencing a sense of mastery, these individuals frequently engage in a cognitive "downgrading" of their successes, dismissing significant milestones as inadequate because they do not meet an unattainable standard of perfection (Bulathwatta & Lakshika, 2023; Stutman et al., 2024). This phenomenon is closely linked to Type II trauma appraisals, where the individual has been conditioned to believe that only "perfect" performance ensures safety and acceptance within the family or institutional hierarchy. Consequently, achievements are viewed not as successes, but as "near-misses" with failure, triggering further hyperarousal instead of relief (Herman, 2023; Olff et al., 2025). This chronic inability to register accomplishment serves to maintain the erosion of ontological security, as the individual remains trapped in a cycle of "doing" to avoid

shame, rather than "being" with a sense of self-worth (Allen & Carthy, 2023; Vandebroeck, 2024).

In conclusion, academic trauma in the Sri Lankan context represents a pervasive, transdiagnostic phenomenon that fundamentally destabilizes an individual's ontological security. The clinical evidence gathered across public and private sectors underscores a critical "attachment breach," where parental and institutional acceptance is made conditional upon scholastic attainment, often in total disregard of innate cognitive diversity and the "effort-ability" fallacy. For the child, adolescent, and working adult, this results in a Type II trauma framework characterized by a permanent "inner critic" that discounts achievement and views success only through the lens of avoided failure (Bulathwatta & Lakshika, 2023; Herman, 2023). Moving forward, it is imperative that clinical interventions move beyond symptom management for anxiety or depression and instead address the underlying "academic wound." Only by decoupling human worth from academic output and promoting a cultural shift toward the acceptance of genetic and cognitive baselines can we hope to mitigate the cumulative psychological injury that currently defines the developmental trajectory of the Sri Lankan student (Allen & Carthy, 2023; Vandebroeck, 2024).

### **Clinical Implications and Therapeutic Interventions**

The transdiagnostic nature of academic trauma necessitates that clinicians working with Sri Lankan populations, regardless of the primary diagnosis, routinely screen for academic self-esteem and performance-related wounds. Within the framework of Cognitive Behavioral Therapy (CBT), adults often present with entrenched Negative Automatic Thoughts (NATs) and maladaptive schemas that are

explicitly tied to scholastic history (e.g., "If I am not the top performer, I am invisible" or "My value is my transcript"). These NATs are not merely cognitive distortions but are often accurate reflections of early environment-based "rules for living" that provided the only path to parental acceptance (Bulathwatta & Lakshika, 2023; Herman, 2023).

Furthermore, there is an urgent need for the development and implementation of specialized interventions focused on academic trauma processing. Such interventions should aim to decouple an individual's ontological security from their educational output, facilitating a transition toward a more resilient, self-derived identity. Increasing academic self-esteem should not involve simply encouraging higher performance, but rather fostering cognitive acceptance and self-compassion regarding one's actual abilities and IQ profile. By addressing these active failure-related stressors and processing the "academic wound" as a Type II trauma, clinicians can help patients break the cycle of perfectionism and internalize their genuine achievements (Allen & Carthy, 2023; Olf et al., 2025).

### Limitations

While the findings of this inquiry offer significant clinical depth, several limitations must be acknowledged. First, the data is based on the longitudinal observations of a single clinician within a specific practice context. Although these observations span both public and private sectors in Sri Lanka, the lack of multiple independent raters means the results may be influenced by idiosyncratic interpretive leanings. Consequently, more systematic, multi-center research, utilizing larger, randomized samples—is necessary to validate these thematic clusters across the broader population.

Furthermore, the study population consists entirely of individuals who have actively sought psychotherapy. This introduces a potential reporting bias, as help-seeking populations typically demonstrate a higher degree of psychological mindedness and self-awareness compared to the general public. Individuals who do not seek treatment may experience academic trauma differently or may lack the reflective capacity to identify and articulate the "academic wound" as a source of their distress. Therefore, the pervasive nature of academic trauma reported here might reflect a more vocal or self-aware subset of the Sri Lankan population, and the results should be generalized to the wider community with caution.

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## The Sri Lankan Adaptation of the Satisfaction with Life Scale (SWLS): Factorial Structure, Gender and Age Invariance in a Sample of Adults

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### Abstract

*This study adapted the Satisfaction with Life Scale into Sinhala for use in Sri Lanka (SWLS-SL) and evaluated its psychometric properties. A non-probability sample of 303 Sinhala-speaking adults aged 18–79 years ( $M_{age} = 40.19$ ,  $SD = 13.54$ ; 44.4% male, 54.7% female, 1.0% transgender) completed the scale. The hypothesised unidimensional structure was tested using confirmatory factor analysis (CFA), and measurement invariance across gender and age groups was examined using multi-group CFA.*

*The SWLS-SL demonstrated good reliability (Cronbach's  $\alpha = .90$ ) and strong temporal stability over a two-week interval ( $r = .83$ ,  $p < .001$ ). CFA supported the unidimensional model,  $\chi^2(3) = 5.68$ ,  $p = .128$ ,  $CFI = 1.00$ ,  $TLI = .99$ ,  $RMSEA = .05 [0.00, 0.12]$ , with correlated residuals between Items 1–2 and 3–4. The model showed strict invariance across gender and strong invariance across age groups. Convergent validity was supported by a positive correlation with the WHO-5 Well-Being Index ( $r = .36$ ,  $p < .001$ ), indicating a modest association.*

*These findings provide evidence that psychological instruments developed in Western cultural contexts can demonstrate sound psychometric properties in non-Western languages and settings. The psychometric properties of SWLS-SL enable it to be used in the Sinhala-speaking adult population in Sri Lanka to assess satisfaction with life across genders and ages, adding to the limited number of psychological instruments as a measure of an individual's positive orientation, which could have applications in both clinical and social settings.*

**Keywords:** Satisfaction with Life Scale, Sinhala, Sri Lanka, factor structure, measurement invariance, confirmatory factor analysis

## Introduction

Satisfaction with life is a central cognitive component of subjective well-being, with applications in distinguishing psychiatric from non-psychiatric populations, monitoring therapeutic change, assessing psychological well-being, and identifying risk for self-harm and psychopathology (Pavot & Diener, 2008). The Satisfaction With Life Scale (SWLS), a five-item measure rated on a seven-point Likert scale (Diener et al., 1985), is among the most widely used instruments of global life satisfaction (Guitard et al., 2022; Hultell & Gustavsson, 2008; Pavot & Diener, 2008), with translations into 39 languages (Arrindell et al., 2022).

Evidence generally supports the psychometric properties of the SWLS. Internal consistency ranges from  $\alpha = .60$  to  $.90$ , and temporal stability from  $r = .54$  to  $.83$  (Bacro et al., 2020; Jang et al., 2017; Pavot & Diener, 1993, 2008). Confirmatory factor analyses consistently support a unidimensional structure across diverse populations (e.g., Aishvarya et al., 2014; Bacro et al., 2020; Checa et al., 2019; Di Fabio & Gori, 2016; Erdem, 2022; Esnaola et al., 2017; Espejo et al., 2022; Jovanović et al., 2020; García-Castro, 2022; Sancho et al., 2014; Theodoropoulou, 2021; Vázquez et al., 2013).

However, item-level concerns persist. Items 4 and 5 have shown weaker correlations, potentially reducing reliability (Amtmann et al., 2019; Bai et al., 2011; Whisman & Judd, 2016), and tend to yield the lowest item-total correlations and factor loadings (Arrindell et al., 1991; Diener et al., 1985; Oishi, 2006; Pavot & Diener, 1993; Pons et al., 2000).

Most research findings have not supported strict invariance (Emerson et al., 2017), and invariance was more across gender than age

(Arrindell et al., 2022; Bacro et al., 2020; Jang et al., 2017; Joshanloo & Jovanovic', 2019; Jovanović et al., 2022; ), Non-invariance across age has been assigned to several reasons that include (a) differential interpretation of items (Emerson et al., 2017; Erdem, 2022), (b) the sensitivity of items two, four and five to age (Bai et al., 2011; Erdem, 2022; Jang et al., 2017; Hultell & Gustavsson, 2008; Pons et al., 2000), which have also been found to be non-invariant (Jang et al., 2017), (c) the strong wording effect of item four that taps into the past (Bai et al., 2011).

SWLS has shown convergent validity through positive correlations with subjective wellbeing related variables (Bendayan et al., 2013; García-Castro et al., 2022; Ngamaba et al., 2017; Pavot & Diener, 2008; Vázquez et al., 2013) and negative associations with adverse psychological and physical outcomes (e.g. Atienza et al., 2020; Bendayan et al., 2013; García-Castro et al., 2022; López-Ortega, 2016; Lorenzo-Seva et al., 2019; Pavot & Diener, 1993).

## The Rationale for the Present Study

In Sri Lanka, locally validated psychological instruments remain limited. Reviews report 55 validated scales by 2013 and 36 additional tools by 2020 (Suraweera et al., 2013; 2020), with only one (WHO-5; World Health Organization (WHO), 1998) assessing wellbeing. Therefore, evaluating the psychometric properties of a translated and adapted SWLS in a Sri Lankan sample is warranted.

## Aims of Study and Hypotheses

This study aimed to translate, adapt, and validate the SWLS in a Sri Lankan sample. In line with previous studies, we expected that the translated and adapted version of SWLS (SWLS-SL), would (a) have adequate internal consistency

and test-retest reliability at two weeks; (b) have a one-factor model, (c) show strong measurement invariance across gender but potentially not across age; (d) correlate well with the WHO-5 wellbeing index.

## Methods

### Participants

Participants were a non-probability sample of 303 persons ( $M_{age} = 40.19$  years,  $SD = 13.54$ , age range = 18 to 79 years; 44.4% male, 54.7 % female and 1.0% transgender) recruited online. More than half the participants had an education level of university degree or higher (55.9%).

Being a structural equation modelling (SEM) technique, CFA requires a large sample (Kline, 2016). The sample size affects parameter estimates, Chi-square tests, and goodness of fit indices (Kyriazos, 2018). However, there is no easy solution to the optimal sample size because it depends on many variables, including the size of the model, the number of parameters to be estimated, and the missing data level (Brown, 2015; Tanaka, 1987; Theodoropoulou, 2021). We used Jackson's (2003) recommended heuristic  $N:q$  rule of 20:1, where  $N$  is the sample size, and  $q$  is the number of parameters to be statistically estimated. Because SWLS has one factor and five indicators, there are 15 parameters, namely five each of factor loadings, intercepts, and error variance, to be statistically estimated. Therefore, a sample size of 300 was planned, which exceeds the minimum required size of 250 (Hu & Bentler, 1999).

### Design

The study hypotheses were tested by assessing the psychometric properties of SWLS-SL: the internal consistency, temporal stability, factor structure, measurement invariance across gender

and age groups, and the correlations with WHO-5 scores.

The reliability of the SWLS-SL was measured with Cronbach's  $\alpha$ , and test-retest reliability with Pearson's correlation coefficient ( $r$ ) between the item and scale scores measured two weeks apart.

Item properties were analyzed by estimating the total correlation coefficients without the respective item score. The satisfactory cutoff was 0.30 (De Vaus, 2002, cited in Garcia-Castro et al., 2022).

Factor structure was determined with CFA using IBM SPSS AMOS (Version 22). Model fit was evaluated using maximum likelihood estimation based on covariance matrices (Kline, 2016). This approach was selected because it is appropriate when (a) the data meet the assumption of multivariate normality (Beauducel & Herzberg, 2006), (b) skewness and kurtosis values fall between  $-1$  and  $+1$  (Muthén & Kaplan, 1985), and (c) variables have more than five response categories (Dolan, 1994).

Model fit was assessed using multiple indices, interpreted as guidelines rather than strict cutoffs, consistent with recommendations emphasizing close rather than exact fit (Browne & Cudeck, 1992), with RMSEA values of .06–.08 and CFI and TLI values of .90–.95 indicating close fit,  $RMSEA \leq .05$  and CFI and  $TLI \geq .95$  indicating excellent fit (Hu & Bentler, 1999), and an upper bound of the RMSEA 90% confidence interval below .08 (MacCallum et al., 1996, as cited in Brown, 2015).

Measurement invariance across gender and age groups was assessed using multiple-group confirmatory factor analysis (MG-CFA) (Milfont & Fischer, 2010), following the framework of Byrne (2008) and Brown (2015). First, a single-factor model with five items loading on

self-satisfaction was estimated separately for each group, followed by a combined **configural model** where factor structure was held constant, but factor loadings, intercepts, and residuals were freely estimated. Next, we tested sequentially for **metric invariance** by constraining loadings to be equal, **scalar invariance** by further constraining item intercepts, and **strict invariance** by imposing equality of error variance. At each stage of constraint, the more constrained model was considered tenable if (a) the change in chi-square ( $\Delta \chi^2$ ) was not significant, (b) the change in CFI ( $\Delta$  CFI) was less than .010, and (c) the change in RMSEA ( $\Delta$  RMSEA) was less than .015 (Cheung & Rensvold, 2002; Chen, 2007), supplemented with  $\Delta$  RMSEA less than .015 (Cheung & Rensvold & 2002). When full invariance was not supported, partial invariance was tested by iteratively removing or adding items until acceptable equivalence was achieved, allowing group comparisons based only on invariant items (Brown, 2015; Putnick & Bornstein, 2016).

The convergent validity was assessed with the Pearson correlation coefficient between SWLS-SL and WHO-5 scores. The strength of the correlation was determined as small, moderate, or strong based on the absolute value being around .10, .30, and .50, respectively (Cohen, 1988).

### Measures

Three instruments were used.

#### *Demographic Questionnaire*

The demographic questionnaire recorded the month and year of birth, sex, and education level.

WHO-5 Wellbeing Index Sinhala Language Version

The WHO-5 Wellbeing Index is a five-item unidimensional scale rated on a six-point scale with reference to the last 14 days (WHO, 1998). The sum of the item scores, converted to a percentage, indicates higher levels of mental wellbeing. The Sinhala language translation has shown good psychometric properties, including good correlation with the Patient Health Questionnaire score and Kessler Psychological Distress Scale (Perera et al., 2020). In the present study, Cronbach's  $\alpha$  for the WHO-5 was .93.

#### *SWLS-SL*

We followed the seven-step process proposed by Sousa and Rojjanasrirat (2011) to ensure conceptual, semantic, and cultural equivalence between source and target instruments (see also Beaton et al., 2000). In Step 1, two forward translations of the SWLS were produced by bilingual Sinhala-native professionals who were not informed about the back translation (Geisinger, 1994). In Step 2, one researcher compared both translations with the original and synthesized a preliminary Sinhala version. In Step 3, two independent translators back-translated the Sinhala version into English. The researcher reviewed discrepancies; some differences remained.

In Step 4, an expert panel ( $N = 9$ ) evaluated all versions for equivalence. As a result, "Ideal life" was replaced with "the best life as I think". Similar phrasing has been reported in prior studies (e.g., Bacro et al., 2020; Guhn et al., 2018). "Conditions of my life" was debated but retained. Items 4 and 5 were refined for clarity. The language was maintained at approximately the Grade 8 level, resulting in the pre-final SWLS-SL. In Step 5, 22 mainly monolingual participants reviewed the pre-final version and "if I could live my life over" was revised to a more commonly used expression.

In Step 6, preliminary psychometric properties were assessed in a bilingual sample ( $N = 25$ ), meeting minimum item-to-sample recommendations (Nunnally & Bernstein, 1994). Participants completed the SWLS-SL and the original English version (with item order randomized). Item-level comparisons showed strong correlations with paired-samples  $t$  tests ( $r = .55-.74$ ). Mean differences were minimal for Item 5;  $t$  tests were nonsignificant for Items 3 and 4, at  $p = .01$  for Item 2, and significant for Item 1, indicating partial equivalence. A full psychometric evaluation was conducted with a larger sample in Step 7 (see next section).

### Procedure

Online, each participant read the participant information sheet and consented to participate. They then completed the demographic questionnaire, SWLS-SL and WHO-5, presented in that order, read a debriefing and submitted the questionnaires. All questions were made mandatory following Nunnally and Bernstein's (1994) suggestion of enabling participants to answer all questions, thereby avoiding the need for excluding records with missing values (e.g. Bacro et al., 2020; Bai et al., 2011; Bendayan et al., 2013; Gadermann et al., 2010, cited in Bacro et al., 2020; Jovanovic et al., 2022; Vázquez et al., 2013). All participants who made their emails available received the SWLS-SL 13 days after they responded to the survey, requesting them to complete it again the following day.

Participants received no financial or other benefits and participated voluntarily. The study received ethical approval from the Ethics Committee at Arden University, and it conformed with the General Data Protection Regulation 2016 (GDPR) and the Data Protection Act 2018. The data collection took place in 2023 from February 28 to March 19.

## Results

### Preliminary Analysis

All preliminary analyses were carried out with SPSS (Version 27.0). SWLS-SL item and total scores were treated as continuous variables as the measurement scale was a Likert-type scale with more than five points (Jang et al., 2017). The Q-Q plots and Shapiro-Wilks test for item skewness ( $-1$  to  $+1$ ) and kurtosis ( $-3$  to  $+3$ ) provided evidence of normality. Although univariate normality was obtained, multivariate normality was examined because multivariate skewness impacts on tests of means and multivariate kurtosis could severely hamper tests of variances and covariances and distort parameter estimates (Curran et al., 1996). Multivariate kurtosis was 15.65, less than the critical ratio of 16.28. Therefore, data were examined for multivariate outliers using the Mahalanobis Distance test (Tabachnick & Fidel, 2013), which led to the identification and removal of eight multivariate outliers, resulting in an analyzed sample of 303.

For the whole group, the mean total score was relatively high ( $M = 25.39$ ,  $SD = 6.62$ ) out of a possible maximum of 35. The mean score was lowest in the lowest education category ( $M = 21.54$ ,  $SD = 6.49$ ), and highest in the oldest group, 54 to 79 years ( $M = 29.30$ ,  $SD = 4.29$ ). (See Table 1).



Table 1: *SWLS Scores Across Gender, Age, and Education*

| Category         | n   | Mean SWLS | Standard Deviation |
|------------------|-----|-----------|--------------------|
| Sex              |     |           |                    |
| Male             | 133 | 25.76     | 6.87               |
| Female           | 167 | 25.14     | 6.49               |
| Transgender      | 3   | 23.33     | 1.53               |
| Age group        |     |           |                    |
| 18-34            | 114 | 24.05     | 7.27               |
| 35-54            | 134 | 24.91     | 6.27               |
| 55-79            | 53  | 29.30     | 4.29               |
| Education        |     |           |                    |
| Below GCE O/L    | 28  | 21.54     | 6.49               |
| Up to GCE A/L    | 55  | 25.87     | 6.90               |
| Undergraduate    | 54  | 24.42     | 7.33               |
| Degree or higher | 174 | 26.19     | 6.11               |
| Total Sample     | 303 | 25.39     | 6.62               |

Note. <sup>a</sup> Age was unavailable for two participants.

### Reliability and Test-Retest Reliability of SWLS-SL

Cronbach's  $\alpha$  was .90, indicating good reliability. Overall, all items could be considered good indicators of satisfaction with life. As seen in Table 2, only item 5 caused a marginal increase (from  $\alpha = .90$  to  $\alpha = .91$ ) when it was deleted.

Table 2 : *Descriptive Statistics of SWLS -SL Item and Total Scores*

| Item      | Mean  | SD   | Skewness | Kurtosis | Corrected item correlation | $\alpha$ if the item is deleted |
|-----------|-------|------|----------|----------|----------------------------|---------------------------------|
| SWLS-SL1  | 5.12  | 1.54 | -.95     | .07      | .79                        | .87                             |
| SWLS-SL2  | 4.79  | 1.58 | -.73     | -.37     | .80                        | .87                             |
| SWLS-SL3  | 5.44  | 1.46 | -1.37    | .65      | .82                        | .87                             |
| SWLS-SL-4 | 5.31  | 1.40 | -.96     | .32      | .78                        | .88                             |
| SWLS-SL5  | 4.74  | 1.83 | -.95     | -.78     | .62                        | .91                             |
| Total     | 25.39 | 6.63 | -.72     | -.07     |                            |                                 |

Of the 195 participants invited to complete the re-test, 73 responded; 14 were excluded due to missing email identifiers, resulting in an analysed sample of  $N = 59$ . The retest sample was similar in sex composition but was slightly older (Male 45.8%, Female 55.2%;  $M_{age} = 48.31$ ,  $SD = 14.0$ ) compared to the original sample (Male 43.9%, Female 55.1%;  $M_{age} = 40.28$ ,  $SD = 13.6$ ). The two-week retest scores correlated strongly with original scores ( $r = .83$ ,  $p < .001$ ), indicating good temporal stability of SWLS-SL.

Table 3 shows that all inter-item correlations were substantial, with values exceeding .50. Most correlations were  $r \leq .70$ , with the exception of pairings between items 1 and 2 ( $r = .83$ ) and items 3 and 4 ( $r = .80$ ), suggesting potential item redundancy. Item 5 demonstrated the lowest item correlations, ranging from  $r = .54$  to  $r = .59$ . Overall, the items of SWLS-SL are strongly correlated.

Table 3: *Inter-Item Correlation Matrix of SWLS -SL*

| Item      | SWLS-SL 1 | SWLS-SL 2 | SWLS-SL 3 | SWLS-SL 4 | SWLS-SL 5 |
|-----------|-----------|-----------|-----------|-----------|-----------|
| SWLS-SL 1 | 1.00      |           |           |           |           |
| SWLS-SL 2 | .83       | 1.00      |           |           |           |
| SWLS -SL3 | .71       | .70       | 1.00      |           |           |
| SWLS-SL 4 | .65       | .69       | .80       | 1.00      |           |
| SWLS-SL 5 | .54       | .54       | .59       | .56       | 1.00      |

### Factorial Structure

The maximum likelihood estimation procedure indicated poor model fit,  $\chi^2(5) = 83.75$ ,  $p < .001$ , CFI = .93, TLI = .85, and RMSEA = .22, 95% CI [.19, .27]. Modification indices suggested correlating the error terms of items 1 and 2, and items 3 and 4, consistent with the high inter-item correlations observed in Table 3. Allowing these error covariances resulted in a substantial improvement, yielding an excellent fit:  $\chi^2(3) = 5.68$ ,  $p = .128$ , CFI = 1.00, TLI = .99, and RMSEA = .05, 95% CI [.00, .12].

All items loaded significantly on the latent factor ( $p < .001$ ), with standardized loadings ranging from .67 to .88, exceeding the recommended

minimum of .30 (De Vaus, 2002, as cited in Garcia-Castro et al., 2022). Table 4 reports the factor loadings and error variances, and Figure 1 presents the final model.

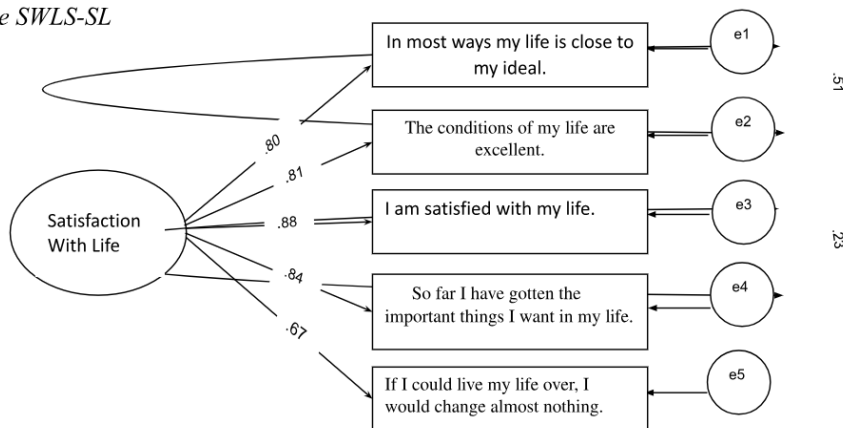
Table 4: *Factor Loadings and Related Measurement Errors of SWLS-SL Items*

| Item                                                            | Factor loading | Measurement error |
|-----------------------------------------------------------------|----------------|-------------------|
| 1. In most ways my life is close to my ideal.                   | .80            | .64               |
| 2. The conditions of my life are excellent.                     | .81            | .85               |
| 3. I am satisfied with my life.                                 | .88            | .77               |
| 4. So far I have gotten the important things I want in life.    | .84            | .70               |
| 5. If I could live my life over, I would change almost nothing. | .67            | .45               |

Note: The items are translated and adapted into the Sinhala language

**Figure 1**

*Schematic depiction of the hypothesized unidimensional factorial structure of the SWLS-SL*



Protection Regulation 2016 (GDPR) and the Data Protection Act 2018. The data collection took place in 2023 from February 28 to March 19.

## Invariance

Table 5 shows the model fit indices and their changes obtained in the sequential steps of

constraining the models. The tests for invariance supported strict invariance across gender with excellent indices. Across age groups, scalar invariance was supported by all indices except

for a nonsignificant chi-square. Partial strict invariance was not obtained when tested by relaxing the equality of variance constraint of items one by one.

Table 5: *Model Fit Indices and Measures of Invariance of SWLS-SL for Sequentially Constrained Models Across Gender and Age Groups*

| Model                            | $\chi^2$ | df | p   | CFI | TLI | $\Delta \chi^2$ | p-value of $\Delta \chi^2$ | $\Delta$ CFI | RMSEA         |
|----------------------------------|----------|----|-----|-----|-----|-----------------|----------------------------|--------------|---------------|
| <b>Gender-Related Invariance</b> |          |    |     |     |     |                 |                            |              |               |
| Configural                       | 14.99    | 6  | .02 | .99 | .97 |                 |                            |              | .07[.03, .12] |
| Metric                           | 15.90    | 10 | .10 | .99 | .99 | 0.92            | .92                        | .00          | .05[.00, .08] |
| Scalar                           | 18.15    | 14 | .20 | .99 | .99 | 2.24            | .68                        | .00          | .03[.00, .07] |
| Strict                           | 28.28    | 19 | .08 | .99 | .99 | 10.13           | .07                        | .01          | .04[.00, .07] |
| <b>Age-Related Invariance</b>    |          |    |     |     |     |                 |                            |              |               |
| Configural                       | 10.52    | 6  | .10 | .99 | .99 | -               | -                          | -            | .05[.00, .10] |
| Metric                           | 11.32    | 10 | .33 | .99 | .99 | 0.79            | .94                        | .00          | .02[.00, .07] |
| Scalar                           | 2.79     | 14 | .06 | .99 | .99 | 11.47           | .02                        | .01          | .05[.00, .08] |
| Strict                           | 50.27    | 19 | .00 | .97 | .97 | 7.49            | <.001                      | .02          | .07[.05, .10] |

Note.  $\chi^2$  = Chi-square, df = degrees of freedom, CFI = Comparative Fit Index, TLI = Tucker Lewis

Index,  $\Delta \chi^2$  = Change in Chi-square,  $\Delta$  df = Change in df between successive models,  $\Delta$  CFI = Change in CFI between successive models. RMSEA = Root mean square error of approximation with 90% confidence interval.

### Group Differences in Factor Means

With scalar-level invariance obtained for both groupings, group means were compared (Little, 1997). Independent sample t-tests showed a statistically significant difference between the 18-34 group ( $M = 24.05$ ) and the 35-79 group ( $M = 26.21$ ),  $t = 2.74$ ,  $df = 296$ ,  $p = .007$  and no significant difference between men ( $M = 25.76$ ) and women ( $M = 25.14$ ),  $t = 0.80$ ,  $df = 298$ ,  $p = .422$ .

### Convergent Validity

The total scores of SWLS-SL and WHO-5 indicated a statistically significant modest correlation in the expected direction ( $r = .36$ ,  $p < .001$ ). The item correlations varied from .16 to .36, reflecting weak interitem correlations, the

weakest being between item 5 of SWLS-SL and items of WHO-5.

### Discussion

The present study translated and adapted the Satisfaction With Life Scale into Sinhalese (SWLS-SL) and evaluated its psychometric properties in a sample of 303 adults recruited online. Our findings provide strong support for the psychometric adequacy of the SWLS-SL in this sample. In line with original validation studies and subsequent research, the scale shows high reliability and test-retest reliability and conforms to the well-established unidimensional factor structure (Álvarez et al., 2018; Amtmann et al., 2019; Bacro et al., 2020).

The present findings indicate strict measurement invariance of the SWLS-SL across gender, extending prior research that has generally supported invariance at or below the scalar level (e.g., Bai et al., 2011; Ghun et al., 2018; Moksnes et al., 2013). Although evidence for age invariance is comparatively limited (Emerson et al., 2017; Jovanović, 2019), the SWLS-SL demonstrate scalar invariance across age groups, consistent with previous findings (e.g., Bacro et al., 2020; Esnaola et al., 2017; Lorenzo-Seva et al., 2019). These results support the equivalence of the scale across gender and age.

Men and women show the same level of satisfaction with life, compared to mixed results in previous studies (Valenti & Faraci, 2024). The slight increase across age is parallel to the finding by Bai et al. (2011), but contrary to other studies (e.g. Jovanović, 2019). These findings imply that while life satisfaction may increase slightly with age, men and women understand and interpret the construct of life satisfaction similarly and have similar satisfaction levels.

The unexpected weak inter-item correlation ( $r = .36, p < .001$ ) between SWLS-SL and WHO-5 scores may be explained by the differences in the philosophical foundations of the two scales (Kusier & Folker, 2021). Four of the five items in WHO-5 refer to feelings or emotions in the past two weeks, stated as I have felt cheerful and in good spirits (Item 1), calm and relaxed (Item 2), active and vigorous (Item 3), fresh and rested (Item 4). In contrast, SWLS items measure cognitive evaluation of life overall, thus capturing different aspects of wellbeing leading to weak inter-item correlations.

### **Limitations, Strengths, and Future Directions**

A key limitation of this study is the lack of a representative Sri Lankan sample. The use of a

non-probability sample, coupled with relatively high educational attainment, limits ecological validity. Data collection was conducted online, restricting participation to individuals with basic digital literacy or access to assistance, which may have introduced sampling bias.

Despite these limitations, the study has notable strengths. It employed a rigorous translation and cultural adaptation process in line with recommended guidelines (Sousa & Rojjanasrirat, 2011), extending beyond basic translation and back-translation procedures, which may produce suboptimal target-language versions (Geisinger, 1994; International Test Commission, 2017). This rigour likely enhanced conceptual, semantic, and cultural equivalence between the original English SWLS and the Sinhala version, contributing to the observed strong psychometric properties. For example, in the present study, the relatively weaker performance of item 5 did not compromise overall scale invariance, unlike in previous studies (Arrindell et al., 2022; Bai et al., 2011; Hultell et al., 2008; Pons et al., 2000).

Future research could extend these findings using representative samples and include validation in the Tamil language to establish broader applicability in Sri Lanka. Further assessment of convergent validity with other measures of subjective well-being is warranted. In addition, differential item functioning—particularly for Items 4 and 5—could be examined to clarify and reduce potential bias associated with past-oriented and strongly worded items (Schutte et al., 2019).

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## From Stigma to Support: Intergenerational Changes in Attitudes toward Mental Health and Support Systems in Sri Lanka

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### Abstract

*This research explores the differences in mental health help-seeking attitudes and behaviors among three different generations in Sri Lanka, a context shaped by collectivist values and swiftly evolving access to information. Although existing studies highlight increasing awareness, there is lack of understanding of how generational attitudes changes with gender and contemporary support pathways with relation to socio-cultural context of Sri Lanka. Therefore, this study is aimed to explore how attitudes toward mental health related to stigma and support systems differ among Generation X, Generation Y and Generation Z in the Sri Lankan Context. The study employed a qualitative research design and the participants were recruited using purposive sampling by sharing a flyer in social media platforms asking for voluntary participants. Twelve participants were recruited taking four participants from each generation balanced by gender. Semi-structured interviews were conducted to gather data and later analyzed utilizing Braun and Clarke's six-step thematic analysis. Four overarching themes were identified and it showed the distinct mindsets of three generations. The first theme, "Silenced Struggles" reflects the stigma and avoidance behaviors of Generation X while the second theme, "Negotiating Change" indicates the partial acceptance alongside lingering worries about social judgement of Generation Y. The third theme, "Digital Openness" showcases proactive help-seeking via professional services and openly discuss about mental health concerns on digital platforms relevant to Generation Z. The fourth theme, "Barriers, Trust and System Navigation" captures cross generational challenges related to access, affordability and confidence in support systems. Gender norms seem to influence emotional expression and service use, particularly among older generations. Findings highlight the shift from stigma-based avoidance to varied openness to mental healthcare while implying the necessity for more culturally sensitive, generation-specific and gender responsive interventions to improve psychological help seeking in Sri Lanka.*

**Keywords:** Generational differences, Help-seeking, Mental Health, Stigma, Sri Lanka



## **Introduction**

Mental health is progressively acknowledged as an essential element of public health; nevertheless, stigma and socio-cultural beliefs still influence how people perceive distress and seek treatment. The literature consistently emphasize that culturally social stigma related to mental health is prevalent in Sri Lanka where negative attitudes lead to individuals to be marginalized in society (Deivanayagam et al., 2024). Individuals might encounter personal, social, relational or structural barriers to help seeking including stigma, lack of awareness, denial, fear of societal repercussions and financial constraints (Deivanayagam et al., 2024). A lack of investment in historical contexts has worsened these issues, with just 1.6% of overall health expenditures dedicated to mental health. It has remained stagnant like that since 2012 (Dimuthu, 2025).

In collectivist societies, where social harmony is valued, individuals tend to conceal personal issues and only turn to professional mental health services as a final option since seeking external support might be perceived as a failure in family (Karasz et al., 2019). These factors have led to hiding psychological issues and postponing help seeking. Research from Sri Lanka indicates that stigma is positively correlated explaining 23% of the variance in treatment delays (Fernando et al., 2016). In the recent years, significant changes influenced urbanization, education and digital connectivity may be transforming perspectives among generations. Urbanization has made individuals more prone to stress related and mood disorders while evolving lifestyles, shifting roles and decline of community support systems have heightened this susceptibility making mental health awareness and stigma reduction crucial (Kathriarachchi et al., 2019).

Generational cohorts commonly defined as Generation X (1965-1980), Generation Y/Millennials (1981-1996) and Generation Z (1997-2012) have encountered distinct socio-cultural surroundings. These differences can affect mental health literacy, perceived stigma and support preferences. Multiple studies indicate that younger generations possess greater mental health literacy which allows them to more effectively recognize signs and symptoms of mental disorders with the advancements of technology (Baral et al., 2022). In South Asian contexts, gender norms often mandate emotional restraint for men and relational obligations for women, potentially influencing disclosure and the use of services in different ways (Ullah, 2025). A study conducted on Sri Lankan university undergraduates revealed that males demonstrate a higher degree of mental health stigma compared to females along with additional obstacles such as hesitance to discuss issues, self-reliance and mistrust of counsellors (Chandrasekara, 2020). In collectivist South Asian cultures, a focus on family harmony and conventional gender roles may inhibit emotional expression in females and younger family members, resulting in unarticulated stress and an increased prevalence of somatization (Karasz et al., 2019).

The current literature highlights a rise in awareness and a decline in stigma among younger individuals, in addition to the expanding influence of online resources and tele-mental health. Statistics show that younger age groups like Generation Z (Gen Z) and Generation Y (Millennials) are significantly more inclined than other demographics to utilize telehealth for mental health sessions, indicating that technological proficiency provides a benefit in obtaining care (Jessel, 2024). Western research further indicates that younger



individuals are more inclined than older generations to pursue mental health resources via social media or online self-help applications (Beecroft, 2025). Nonetheless, there is scarce qualitative evidence from Sri Lanka investigating how generational changes interact with gender to influence specific help seeking pathways encompassing family, friends, religious figures, professional support and online platforms. In Sri Lanka's mental health framework, individuals have the freedom to seek help from any kind of healer, with many moving towards urban centers and private services while others turn to traditional or religious healers if initial treatments fall short of recovery (Mendis, 2004). Qualitative research conducted with community mental health workers in Sri Lanka has revealed a deep trust in traditional beliefs and healers as well as unfavorable views on mental illness and generally inadequate health seeking behaviours (Samarasekare et al., 2012).

Despite the increasing amount of evidence regarding mental health stigma and service use in Sri Lanka, considerable gaps still exist in the literature. Most existing research is quantitative and primarily concentrates on clinical groups, distinct diagnoses or certain demographic subgroups such as university students or perinatal women rather than examining stigma and help seeking across generations in Sri Lankan context. Although there is growing qualitative research on the gendered aspects of mental health in Sri Lanka, this work has primarily focused on specific groups such as survivors of violence, thereby neglecting the wider intersection of gender and help seeking unexplored (Palfreyman et al., 2024).

This study is further informed by Corrigan's Stigma Framework (Corrigan, 2004), which conceptualizes mental health stigma as a multidimensional process involving public

stigma, self-stigma, prejudice, discrimination, and their influence on help-seeking behaviours. The framework suggests that negative societal attitudes toward mental illness may become internalized by individuals, leading to concealment of psychological distress and avoidance of professional support. In the Sri Lankan context, where collectivist cultural values and concerns regarding social reputation remain influential, stigma may shape how different generations perceive mental health difficulties and engage with available support systems. The framework provides a useful lens for understanding how generational differences in stigma influence openness toward mental health discussions, willingness to seek support, and trust in formal and informal sources of care.

This study therefore addresses a significant empirical and methodological gap by utilizing a qualitative research design to explore how Generation X, Generation Y and Generation Z navigate perceived stigma, preferred sources of support and barriers and facilitators to care with relevance to gender in the Sri Lankan context.

## **Methodology**

### ***Research Design***

A qualitative exploratory approach was utilized to gather subtle meanings and lived experiences related to mental health and help seeking. Qualitative research is becoming acknowledged as an essential methodology strategy in mental health studies, especially since mental health experiences are intrinsically complex, fluid and influenced by culture involving profoundly subjective processes like identity formation, stigma navigation and relational turmoil that cannot easily be simplified into fixed variables or universal measures (Beg, 2025).

This method is particularly effective for exploring socially constructed phenomena and



practices specific to contexts, where the goal is to achieve depth of understanding rather than wide ranging measurement. A qualitative exploratory design is especially suitable when the aim is to comprehend participants' perceived experiences and subjective beliefs regarding phenomena as they navigate their lives (Ellis and Hart, 2023). Due to the scarce qualitative evidence on intergenerational and gendered help seeking and mental health related attitudes in Sri Lanka, an exploratory approach keeps the research relevant insights that may guide future interventions and policy formulation. In this framework, the interpretivist perspective views mental health as a dynamic, socially embedded phenomenon rather than a static diagnostic label (Beg, 2025).

### ***Participants and Sampling***

Twelve participants were recruited through purposive sampling, representing three generational cohorts (four from each group) with balanced gender representation (six males and six females). This expanded sample allowed for more detailed comparisons both within and between generational groups while maintaining the depth of qualitative investigation. Inclusion criteria included being a resident of Sri Lanka, participants' age being consistent with generational cohorts mentioned and their willingness to share their views on mental health and help seeking voluntarily. In addition to that, participants who were fluent in either Sinhala or English were recruited as an inclusion criteria. Participants who are currently experiencing severe distress due to any mental health conditions were excluded since sharing these experience as they go through it currently may cause them further distress.

### ***Data Collection***

Semi structured interviews were conducted in Sinhala or English depending on the fluency of each participant following an interview protocol that addressed comprehension of mental health, perceived stigma, any previous help seeking experiences, preferred sources of support and their perspectives on tele mental health or digital mental health. Interviews took 30 to 40 minutes and were recorded with the consent of participants. After that, the interviews were transcribed verbatim and Sinhala transcripts were translated into English while ensuring the meanings were maintained.

### ***Data Analysis***

Data were analyzed utilizing Braun and Clarke's (2006) six step thematic analysis: getting familiarized with data, creating initial codes, identifying themes, reviewing emergent themes, defining and labeling themes and generating the final report. The procedure started with multiple readings of transcripts to attain a thorough understanding of the data. Coding was inductive, enabling themes to arise naturally from participant narratives instead of being dictated by prior theoretical models. Codes were systematically grouped into potential themes, which were then progressively adjusted to guarantee internal consistency within themes and distinct differences among them. This flexible yet rigorous approach was ideally suited for examining the socially embedded and context-dependent aspects of mental health attitudes and help seeking behaviors across three different generations.



### ***Reflexivity***

The researcher acknowledges that personal experiences, academic training in psychology, and prior engagement with mental health advocacy may influence the interpretation of participants' narratives. Throughout the research process, reflexive journaling was used to document assumptions, emerging interpretations, and potential biases. Efforts were made to remain attentive to participants' perspectives and to ensure that themes emerged inductively from the data rather than being shaped by pre-existing expectations. Regular review of coding decisions was undertaken to enhance transparency and credibility.

### ***Ethical Considerations***

All participants provided informed consent and they were made well aware of the nature and the purpose of the study before data collection. Participants were further made aware that they could withdraw at any moment and can skip questions if they do not feel comfortable to continue. Delicate subjects were handled with caution and information on freely available

mental health support services was given along with the information sheet in case if they need any assistance. Pseudonyms were used to ensure anonymity and any identifying information was eliminated. The recordings were deleted from the device after transcribing them and data was transferred to a password protected file to maintain confidentiality.

### ***Results***

Four overarching themes were captured relevant to intergenerational and gendered patterns in attitudes toward mental health and support systems. The sample size of 12 enabled a more thorough investigation of generational variations and strengthened thematic consistency. Illustrative quotes are included under each theme with pseudonyms to preserve the voices of participants. Similar patterns were recognized in each generation implying how generational changes appear with relevance to mental health attitudes and support systems in Sri Lanka. Table 1 provides a summary of the themes and associated subthemes that emerged from the analysis.



Table 1: *Summary of the Themes and Associated Subthemes*

| Theme                                          | Subthemes                                                                                                |
|------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| Theme 1: Silenced Struggles                    | Mental health as a private matter; emotional suppression; reliance on religion; fear of social judgement |
| Theme 2: Negotiating Change                    | Growing awareness; selective disclosure; cautious acceptance; lingering stigma                           |
| Theme 3: Digital Openness                      | Peer discussions; online information seeking; acceptance of counselling; digital support platforms       |
| Theme 4: Barriers, Trust and System Navigation | Affordability concerns; confidentiality concerns; uncertainty about services; trust issues               |

### ***Theme 1: Silenced Struggles***

Among the four participants from Generation X, mental health was consistently viewed as a private matter that carries stigma. Participants expressed a significant cultural pressure to endure sufferings quietly, frequently associating emotional difficulties with weakness or failure. They seem to be hesitant to openly share their mental health struggles due to stigma around mental health compared to the other two generations' participants. The below given words from participants' narratives further provide evidence for this theme.

"In our time, talking about mental health was considered almost shameful. Usually it was difficult to openly share our struggles as society expected us to be strong no matter what." (P1, male, Gen X)

"If someone says they are mentally struggling, others immediately think that something is wrong with them." (P2, female, Gen X)

Male participants emphasized self-reliance and emotional suppression through their narratives

while females expressed their distress highlighting competing family responsibilities due to gender norms.

"Men should not normally show these things. So that we try to solve our problems quietly." (P3, male, Gen X)

"Even if I feel mentally tired, I cannot stop or take a rest. Family comes first." (P4, female, Gen X)

All the four accounts of Generation X's participants highlighted that they would normally seek help from religion first and only seek professional help in case of an extreme situation. Overall, this theme reflects how their deeply internalized stigma impacts delayed help seeking and their tendency to silently struggle instead of openly sharing their mental health concerns.

### ***Theme 2: Negotiating Change***

Generation Y individuals showed a transitional outlook indicating both increased awareness and persistent stigma. Participants recognized that mental health conversations are now more

transparent but social stigma continues to be problematic.

“Nowadays it’s more accepted than in the past, yet not entirely I guess. People are still careful about who they talk to.” (P5, female, Gen Y)

Female participants demonstrated higher levels of emotional openness while males still showed tendency towards selective disclosure.

“I feel comfortable talking about these issues with my close friends and they even suggest trying counselling if needed.” (P6, female, Gen Y)

“I don’t openly talk about my mental health struggles. Maybe only to one trusted person.” (P8, male, Gen Y)

Overall, this theme reflects how Generation Y is in a transitional standpoint where they shift toward acceptance while still being constrained by stigma.

### ***Theme 3: Digital Openness***

Generation Z (Gen Z) participants exhibited the most progressive attitudes toward mental health and support systems characterized by openness, normalization and various channels for help seeking. Mental health was frequently discussed with peers and they seem to consider it to be crucial component of overall well-being compared to the older generations. Below given quotes of their narratives aptly prove this. Participants further disclosed that they actively engage in digital platforms for support and digital platforms help to increase their awareness of mental health concerns.

“We normally share these things with our friends, especially when we go through a rough patch.” (P9, female, Gen Z)

“When I feel stressed, I usually search it online and read about it. It helps me to understand what I am feeling” (P10, male, Gen Z)

Gender differences were less pronounced among Generation Z participants and they appear to be positively viewing support systems as well.

“Even guys talk openly now. There are platforms where you can share your concerns anonymously as well. So even if you hesitate to share openly, now you can still converse about it and get help.” (P11, male, Gen Z)

“We have counselling services at university and students do reach them now. Even at some workplaces, they have these facilities nowadays.” (P12, female, Gen Z)

However, some of them expressed their concerns about reliability of online content as well since there are both correct and misleading information available on certain digital platforms.

“Not everything on the internet is accurate. It can be confusing sometimes because there is a lot of info.” (P11, male, Gen Z)

This theme showcases a significant difference between Generation Z and other two generations when it comes to their openness and less hesitant nature of reaching support systems.

### ***Theme 4: Barriers, Trust and System Navigation***

Across all generations, participants noted both structural and psychological barriers that affect the help seeking behaviours such as expenses, lack of awareness about available services and worries regarding confidentiality and effectiveness. They often voiced confusion regarding how to access appropriate services.

“Even if I feel like getting help, I don’t know which service is reliable.” (P8, male, Gen Y)

“How can we trust them with all our private details? Are they trust-worthy? I have that doubt always.” (P2, female, Gen X)

“Counselling is helpful but it’s not easy to afford private sessions regularly.” (P6, female, Gen Y)

This theme reflects how individuals still face several obstacles although they try to seek help for their mental health concerns and this can be seen across all the participants from the three generations considered for the study.

Overall, the findings indicate a distinct generational shift in attitudes on mental health transitioning from stigma and silence to increased openness and variety in help seeking behaviours. Simultaneously, overarching barriers concerning access, trust and system navigation persist in shaping help seeking behaviours across all demographics. Collectively, these themes emphasize the intricate interaction between cultural, generational and structural influences on mental health experiences in Sri Lanka.

## Discussion

The present study uncovered four interconnected themes demonstrating how generational differences, gender norms and systemic factors.

The theme, “Silenced Struggles” highlights the profound stigma within Generation X where psychological distress is often concealed and dealt in solitude. This correlates with studies suggesting that in collectivist South Asian cultures, a focus on family cohesion and conventional gender roles can inhibit emotional expression resulting in unvoiced stress (Karasz et al., 2019). Male participants displayed greater emotional suppression aligning with traditional

masculine norms that discourage openness compared to females.

“Negotiating Change” reflects that transitional status of Generation Y who display heightened awareness along with ongoing stigma. Studies indicate that enhancing mental health literacy might influence public perceptions regarding help seeking and support systems more significantly than the actual act of help seeking itself (Yang et al., 2024). This tension was visible among Millennial participants. Concerns regarding confidentiality and trust with possible sources of assistance continued to be significant obstacles as females exhibit higher readiness to share them than males do (Gulliver et al., 2010).

“Digital Openness” emphasizes an important transformation within Generation Z, marked by the normalization of conversations about mental health and interaction with digital support systems. Social media has contributed to greater transparency in conversations about mental health concerns among youth, likely diminishing stigma and promoting the pursuit of treatment (Crossier, 2024). Reduced gender differences in this generational cohort indicate a slow weakening of traditional emotional constraints.

The fourth theme, “Barriers, Trust and System Navigation” highlights common difficulties faced by all generations such as expenses, lack of awareness of available services and concerns regarding confidentiality and professional expertise. Stigma, confidentiality concerns and limited accessibility have consistently been identified as significant obstacles to seeking help among various age groups (Gulliver et al., 2010). The growing reliance on digital platforms also raise worries about false information and trustworthiness on online resources.



### Implications

The results emphasize the necessity for multi-level interventions tailored to each generational cohort. Awareness initiatives rooted in the community are crucial for Generation X while making services more accessible, affordable and confidential might effectively involve Generation Y. For Generation Z, combining evidence based digital resources with formal services seem to improve both outreach and trustworthiness. In all generational cohorts, it is essential to implement gender-sensitive strategies to tackle ongoing disparities in emotional expression and the willingness to seek help.

### Limitations and Recommendations for Future Studies

This study is constrained by its qualitative design and relatively small sample, restricting generalizability. Reliance on self-reported personal experiences could also create bias. Future studies ought to utilize larger, more varied samples along with mixed-methods approaches to investigate how attitudes convert into real help-seeking actions. Further exploration of digital mental health interventions within the Sri Lankan context is also warranted.

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## Effectiveness of Cognitive Behavioural Therapy in Treating Excoriation (Skin-Picking) Disorder in an Adolescent: A Case Study

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### Abstract

*This case study explores the application of Cognitive Behavioral Therapy (CBT) in treating Excoriation (Skin-Picking) Disorder in a 14-year-old adolescent female. She presented with repeated skin-picking behaviors affecting her face, arms, and hands, which caused visible lesions, scarring, and considerable emotional distress, including feelings of shame, guilt, anxiety, and social withdrawal. The behavior had persisted for several months, significantly impacting her daily functioning and self-esteem. Initial assessment using the Clinical Global Impression Scale (CGI) indicated a severe level of disorder. The intervention involved a structured CBT program, incorporating psycho-education, Habit Reversal Training (HRT), stimulus control techniques, and cognitive strategies designed to interrupt the cycle of urges, emotional triggers, and maladaptive behaviors. In addition, mindfulness exercises and emotional regulation strategies were employed to enhance her ability to tolerate urges and manage stress effectively. Family involvement was emphasized throughout the process, providing support, reinforcement of adaptive coping strategies, and encouragement of consistent practice outside therapy sessions. Over the course of 12 therapy sessions, the client demonstrated noticeable reductions in skin-picking behaviors and related emotional distress. Post-treatment evaluation revealed improvements in CGI scores, alongside visible healing of previously affected skin areas. This case illustrates how CBT, when combined with behavioral strategies, skills training, and family support, can effectively address excoriation behaviors. It also highlights the importance of individualized treatment planning, continuous monitoring of triggers, and relapse prevention strategies to maintain long-term recovery. These findings reinforce the efficacy of structured psychological interventions as first-line treatments for body-focused repetitive behaviors, including skin-picking disorder, and underscore the importance of patient engagement, a supportive therapeutic environment, and collaborative care in achieving sustained behavioral improvement.*

*Keywords: Excoriation Disorder, Skin-Picking, Cognitive Behavioral Therapy, Habit Reversal Training, Adolescent, Body-Focused Repetitive Behavior*



## Introduction

Excoriation (Skin-Picking) Disorder is classified under obsessive-compulsive and related disorders in the DSM-5-TR and is characterized by repetitive skin-picking resulting in tissue damage and clinically significant distress or impairment (American Psychiatric Association, 2022). Individuals with this condition often experience a cycle of tension or urge followed by skin-picking behavior, temporary relief, and subsequent feelings of guilt, shame, or frustration. During adolescence, emotional sensitivity, identity development, peer influence, and body image concerns make individuals particularly vulnerable to body-focused repetitive behaviors. Even minor skin imperfections may become sources of intense preoccupation, leading to repetitive picking behaviors. These behaviors can significantly affect self-esteem, social interaction, and emotional well-being (Grant et al., 2012).

Research suggests that Excoriation Disorder is maintained through both automatic and focused processes, where individuals may engage in skin-picking without awareness or in response to emotional distress. Over time, the behavior becomes reinforced through temporary emotional relief, making it increasingly difficult to control (Woods & Houghton, 2014). CBT has been identified as the most evidence-based psychological intervention for Excoriation Disorder. It focuses on the interaction between thoughts, emotions, and behaviors, and aims to modify maladaptive patterns through structured therapeutic strategies. Key components include Habit Reversal Training, cognitive restructuring, stimulus control, and emotional regulation techniques (Grant et al., 2016). Despite growing empirical support, there remains a need for detailed case-based evidence demonstrating CBT implementation in real clinical settings, particularly among adolescents in developing

contexts. This case study contributes to that gap.

## Literature Review

Excoriation Disorder is part of the broader category of body-focused repetitive behaviors (BFRBs), which also includes trichotillomania and nail-biting behaviors. These conditions share similar features, including repetitive behaviors, loss of control, and emotional regulation difficulties (Woods & Houghton, 2014). Biological models suggest that impairments in inhibitory control and habit formation pathways may contribute to repetitive skin-picking behaviors. Neurobiological studies have also suggested involvement of reward circuitry dysfunction, which may explain the reinforcing nature of the behavior (Grant et al., 2012). Psychologically, individuals with Excoriation Disorder often report elevated levels of anxiety, perfectionism, and emotional dysregulation. Skin-picking is frequently used as a coping mechanism to reduce internal tension or to correct perceived imperfections, even when these perceptions are exaggerated or distorted (Flessner et al., 2009).

Environmental and developmental factors also play a role. Adolescents are particularly susceptible due to increased self-awareness and sensitivity to peer evaluation. Academic pressure and interpersonal stressors may further exacerbate symptom severity (Hayes et al., 2009). CBT remains the first-line treatment for Excoriation Disorder. Habit Reversal Training (HRT), developed by Azrin and Nunn (1973), is one of the most empirically supported interventions and includes awareness training, competing response training, and social support components. Awareness training helps individuals identify triggers and early warning



signs, while competing responses introduce alternative behaviors incompatible with skin-picking.

Recent studies indicate that integrating cognitive restructuring, mindfulness, and emotional regulation strategies enhances treatment outcomes (Schuck et al., 2011). Family involvement is especially important in adolescent cases, as caregivers can reinforce behavioral strategies and provide emotional containment (Kazdin, 2017).

### **Case Presentation**

The client was a 14-year-old female adolescent referred for psychological intervention due to persistent skin-picking behavior involving her face, arms, and hands. The behavior had been present for several months and progressively worsened over time. She reported strong urges to pick her skin, particularly during periods of anxiety, boredom, and emotional distress. Episodes often occurred automatically while studying or engaging in sedentary activities. Although she attempted to resist, she experienced difficulty controlling the behavior. The client expressed significant emotional distress related to visible skin damage. She reported feelings of embarrassment, shame, and reduced self-confidence. Social avoidance behaviors were also observed, as she attempted to conceal affected areas from peers. No substance use, psychotic symptoms, or neurological conditions were reported. Based on DSM-5-TR criteria, the client met diagnostic requirements for Excoriation Disorder (American Psychiatric Association, 2022).

### **Ethical Considerations**

Ethical principles were carefully followed throughout the intervention and preparation of this case study. Informed consent for psychological treatment and the use of

anonymized clinical information for academic purposes was obtained from the client's parent/guardian, while assent was obtained from the adolescent client. All identifying information has been removed to ensure confidentiality and protect the client's privacy. The intervention was conducted in accordance with professional ethical guidelines for psychological practice, with particular attention to the welfare, dignity, and best interests of the adolescent. Participation in treatment was voluntary, and the client and family were informed of their right to withdraw from therapy at any stage without adverse consequences.

### **Assessment and Diagnosis**

Assessment was conducted through clinical interviews, behavioral observation, parental reports, and the Clinical Global Impression Scale (CGI) (Guy, 1976). A functional behavioral analysis identified anxiety, boredom, academic stress, and emotional discomfort as primary triggers. At baseline, the client was rated as severely ill (CGI-S = 6), indicating frequent skin picking episodes, significant distress, and visible skin damage. The behavior was both automatic and emotionally driven.

### **Intervention**

A structured Cognitive Behavioral Therapy (CBT) program consisting of 12 sessions was implemented over a defined treatment period. The intervention was individually tailored to the client's symptom presentation, developmental stage, and identified maintaining factors of the skin-picking behavior. The primary therapeutic goals were to reduce skin-picking frequency, increase awareness of triggers, improve emotional regulation, modify maladaptive cognitions, and strengthen adaptive coping strategies.



### **Psycho-education**

The initial phase of therapy focused on psycho-education for both the client and her parents. The aim was to develop a clear understanding of Excoriation Disorder as a body-focused repetitive behavior rather than a deliberate or controllable habit. The therapist explained the

cycle of urge, behaviour, relief, guilt, highlighting how temporary relief reinforces the behavior over time. Normalizing the condition helped reduce self-blame, shame, and emotional distress, which were prominent maintaining factors at baseline. Psycho-education also increased the client's motivation for treatment engagement and improved therapeutic alliance.

### **Habit Reversal Training (HRT)**

Habit Reversal Training formed the core behavioral component of the intervention. The client was guided to develop awareness of early warning signs preceding skin-picking episodes, including emotional states (anxiety, boredom), cognitive cues (self-critical thoughts), and situational triggers (studying alone, mirror checking). Awareness training was strengthened through self-monitoring and reflection exercises. Following awareness development, competing response training was introduced. The client practiced engaging in physically incompatible behaviors whenever urges arose, such as clenching fists, holding a stress ball, or engaging both hands in structured tasks. These alternative responses were rehearsed during sessions and gradually generalized into daily life. Over time, the client reported increased ability to "pause" before engaging in automatic skin picking behavior.

### **Stimulus Control Techniques**

Stimulus control strategies were introduced to modify environmental conditions that increased vulnerability to skin-picking. The client was supported in identifying high-risk situations and

making practical adjustments to reduce exposure to triggers. These included minimizing prolonged mirror exposure, keeping nails short to reduce skin damage, and maintaining hand engagement through fidget tools during passive activities such as studying or watching television. Visual cues and reminders were also used to interrupt automatic behavioral patterns. These modifications helped reduce opportunities for habitual or unconscious skin-picking.

### **Cognitive Restructuring**

Cognitive restructuring focused on identifying and challenging maladaptive thought patterns that contributed to emotional distress and behavioral urges. The client frequently experienced negative automatic thoughts related to appearance, perceived imperfections, and self-worth. Through guided cognitive work, she learned to recognize cognitive distortions such as catastrophizing, overgeneralization, and selective attention to perceived flaws.

The therapist supported the client in developing more balanced and realistic interpretations of her appearance and emotional experiences. Over time, this process reduced emotional intensity associated with urges and decreased the likelihood of engaging in skin-picking as a coping response.

### **Mindfulness and Emotional Regulation**

Mindfulness-based strategies were integrated to help the client develop non-judgmental awareness of urges without immediately acting on them. The client was taught to observe bodily sensations, thoughts, and emotional states as temporary experiences rather than signals requiring action. This increased her tolerance for discomfort associated with urges. Emotional regulation techniques, including diaphragmatic breathing, grounding exercises, and relaxation training, were introduced to support management of anxiety and stress. These



strategies were particularly helpful during high-risk emotional states when urges were strongest. The client gradually developed the ability to self-soothe rather than engage in maladaptive behavioral responses.

### Family Involvement

Family involvement was an essential component of the intervention, given the client's adolescent developmental stage. Parents were psychoeducated regarding the nature of Excoriation Disorder and the importance of supportive rather than punitive responses. They were guided to reinforce adaptive behaviors, provide encouragement during relapse prevention efforts, and reduce criticism related to skin appearance. The family was also encouraged to support environmental modifications at home and to create a calm, structured atmosphere that facilitated emotional regulation. This collaborative approach improved consistency of intervention strategies across clinical and home settings, contributing significantly to treatment adherence and progress.

### Results

Over the course of treatment, the client demonstrated gradual improvement in awareness and behavioral control. Skin-picking frequency and intensity reduced significantly. Emotional distress also decreased, and coping skills improved. Post-treatment evaluation indicated a shift from severe to mild symptom presentation (CGI-S = 6 to CGI-S = 3). The client also showed improved self-esteem, reduced shame, and increased social engagement. Visible healing of skin lesions was observed.

### Discussion

The findings support existing literature indicating that CBT is an effective intervention

for Excoriation Disorder (Grant et al., 2016). The combination of HRT, cognitive restructuring, stimulus control, and mindfulness contributed to meaningful behavioral change. Habit Reversal Training was particularly effective in increasing awareness of automatic behaviors and interrupting habitual cycles. Cognitive restructuring helped reduce maladaptive beliefs that contributed to emotional distress and compulsive behavior. Family involvement played a crucial role in sustaining treatment gains, consistent with prior research emphasizing caregiver support in adolescent interventions (Kazdin, 2017). Although positive outcomes were observed, this is a single-case study, limiting generalizability. Future research with larger samples and long-term follow-up is recommended.

### Conclusion

This case study demonstrates that Cognitive Behavioral Therapy is an effective intervention for adolescents with Excoriation Disorder. The structured treatment approach led to significant reductions in skin-picking behavior, emotional distress, and improved psychosocial functioning. The integration of behavioral, cognitive, mindfulness-based, and family-supported strategies contributed to positive clinical outcomes. Early identification and intervention are essential for preventing long-term psychological and dermatological consequences.

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## Spiritual Growth And Employee Work-Life Balance: A Quantitative Inquiry In Sri Lankan Organizations

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### Introduction

In today's demanding work environments, achieving a healthy balance between professional duties and personal life is a pressing concern for employees and organizations alike. Work-life balance (WLB) refers to an individual's ability to effectively manage work and personal responsibilities, minimizing conflict between these domains and maintaining well-being. Prior research links poor WLB to stress, burnout, and reduced job performance (Baber, 2024; Aarthy & Venkatesan, 2025). As organizations seek ways to improve employee well-being, attention has turned toward employees' spiritual growth and workplace spirituality, the presence of meaning, purpose, and connectedness at work, as a potential positive influence on WLB (Malik & Saxena, 2020). Spirituality in the workplace allows individuals to "bring their whole self" to work, aligning their values and purpose with their job roles, which may buffer stress and enrich their personal lives (Malik & Saxena, 2020). Recent studies suggest that when employees' spiritual needs are fulfilled, they experience greater harmony between work and family life (Rego & Pina e Cunha, 2008).

However, this topic remains under-researched in many cultural contexts. In Sri Lanka, a country with deep-rooted religious and spiritual traditions, the impact of employee spiritual growth on WLB is not yet well understood, representing a notable gap in the management literature. This study therefore proposes to examine the impact of employees' spiritual growth on their work-life balance through a quantitative investigation. By drawing on recent research and theories, we aim to refine the understanding of this relationship and address contextual gaps, providing insights relevant to Sri Lankan organizations and beyond.

### Literature Review and Research Gap

Defining Spiritual Growth and Work-Life Balance: Spiritual growth in the workplace context refers to an employee's development of their inner life, values, and sense of purpose or connectedness, often facilitated by a supportive organizational culture (Bandsuch & Cavanagh, 2005). It aligns closely with constructs like workplace spirituality, which involves finding meaningful work, feeling part of a community, and experiencing alignment between one's



values and the organization's values (Bandsuch & Cavanagh, 2005; Ashmos & Duchon, 2000). In contrast, work-life balance is commonly defined as an overall equilibrium and satisfaction with one's work and personal life roles, with minimal role conflict (Greenhaus & Allen, 2011). Employees with good WLB can meet work demands while also fulfilling personal and family needs, leading to outcomes like higher well-being and job satisfaction (Baber, 2024; Aarthy & Venkatesan, 2025). Maintaining WLB is challenging in high-pressure industries and roles; chronic imbalance can result in stress and psychosocial strain (Baber, 2024; Aarthy & Venkatesan, 2025). Researchers have long sought organizational and personal factors that promote better WLB, and spirituality has emerged as a promising avenue.

**Spirituality as a Positive Influence on WLB:** A growing body of literature indicates that an employee's spiritual growth or spirituality at work can positively affect their WLB. For instance, Jena and Pradhan (2014) conducted a survey of 206 managers in Indian manufacturing firms and found a moderately significant positive relationship between employees' spiritual competence (a proxy for spiritual growth) and their work-life balance. This suggests that individuals who perceive greater spiritual fulfillment in their work tend to report a better balance between work and personal life. Similar results were echoed by Malik and Saxena (2020), who reviewed literature and concluded that workplace spirituality is associated with improved work-life balance, helping employees better manage mental and physical demands at both work and home. They noted that a "significant relationship between spiritual competences and work life balance exists," underlining the

importance of integrating spiritual practices in workplace routines (Malik & Saxena, 2020). Rego and Pina e Cunha (2008) further observed that when individuals' spiritual needs are met alongside other basic needs, they derive greater work-life balance in their lives. In essence, spiritual growth, through meaning, purpose, and a sense of connectedness, may provide employees with inner resources that make balancing roles easier.

Recent empirical studies reinforce these insights. Aarthy and Venkatesan (2025) examined women professionals in India's high-demand IT sector and found that workplace spirituality (e.g. finding meaning in work and feeling a sense of community) had a significant positive correlation with work-life balance. Women who rated themselves higher on spirituality reported better integration of their work and personal roles (Aarthy & Venkatesan, 2025). Qualitative interviews from the same study highlighted that spirituality provided a coping mechanism for stress and helped create a supportive work culture, thereby enhancing WLB (Aarthy & Venkatesan, 2025). Similarly, Hunsaker and Jeong (2023) found that spiritual leadership in organizations, a leadership style that nurtures employees' sense of calling and membership, plays a positive role in helping employees achieve balance across work, family, and leisure domains. Employees who feel spiritually supported by leadership experience less stress and better integrate their personal and professional lives (Syahir et al., 2025). This stress reduction is crucial, as occupational stress is a known inhibitor of WLB (Baber, 2024). Indeed, a 2022 systematic review reported that spiritual leadership can lessen work-family conflicts and improve overall



well-being by fulfilling employees' intrinsic needs (Syahir et al., 2025).

Beyond direct relationships, scholars have begun to uncover how spiritual growth influences WLB. One explanation involves personal resources: Spiritual development may bolster an individual's resilience and self-efficacy, which in turn facilitate better role management. For example, Smothers, Engbers, and Clayton (2024) found that employees' spiritual well-being (a sense of peace and meaning in life) was positively related to satisfaction with work-family balance, and this link was fully mediated by self-efficacy, i.e., confidence in managing work-family demands. In other words, spirituality gave employees a resource (greater self-belief and calm) that enabled them to juggle roles more effectively. Likewise, Selvarajan et al. (2020) showed that personal spirituality can buffer the effects of work-family conflict on well-being: employees high in spirituality suffered less drop in well-being even when work-family conflict was high. These findings align with the conservation of resources theory, which posits that personal resources (like spiritual outlook or faith) help individuals cope with stress, and with work-family enrichment theory, which suggests positive experiences in one domain (e.g. a spiritually fulfilling work life) can spill over and enrich the other domain (home life).

### **Identified Gaps:**

While evidence is mounting that spiritual growth of employees can enhance work-life balance, several gaps remain. First, much of the existing research has been conducted in Western or other Asian contexts (e.g. the US, India, Malaysia), and studies explicitly

focusing on South Asian settings are scarce. Sri Lanka, with its unique cultural blend of Buddhism, Hinduism, Islam, and Christianity influencing workplace values, has seen very limited empirical research on workplace spirituality and WLB. One study by Fernando and Nilakant (2008) in Sri Lanka examined spirituality among business leaders and pointed to self-actualization and work-life balance as important considerations, but it was largely exploratory. No quantitative, large-sample studies to date have tested the impact of spirituality on WLB in Sri Lankan organizations, creating a contextual research gap. Secondly, prior studies often use varying definitions and measures of spirituality (e.g. some focus on religious attendance, others on meaning at work), making it hard to generalize findings. There is a need for a more unified framework, focusing specifically on spiritual growth of employees, and to examine its outcomes. Third, most research establishes correlation; fewer studies have explored underlying mechanisms or causality. This study will address these gaps by investigating the relationship in a Sri Lankan context using a robust quantitative approach, and by incorporating recent theoretical insights (e.g. the mediating role of self-efficacy) to deepen understanding. The findings will contribute to filling the literature gap and guide managers in culturally relevant ways to support employees' spiritual development and work-life harmony.

### **Research Questions and Objectives**

Based on the above review and gaps identified, the following key research questions (RQs) are formulated:

- RQ1: Does the spiritual growth of employees have a significant impact on their work-life balance?



- RQ2: How does spiritual growth influence work-life balance? does it enhance personal resources like self-efficacy that in turn improve work-life balance?
- RQ3: In the Sri Lankan organizational context, what is the nature of the relationship between employees' spiritual growth and work-life balance, and are there any unique cultural or demographic factors that moderate this relationship?

Corresponding to these questions, the study's objectives are:

- To examine the impact of employee spiritual growth on work-life balance in a quantitative manner. This involves measuring employees' spirituality (e.g. sense of meaning, purpose, and spiritual well-being) and their work-life balance, and testing the strength and significance of the relationship.
- To investigate the mechanisms linking spirituality to work-life balance. Specifically, the study will assess whether spiritual growth enhances employees' self-efficacy or resilience, which then mediates the effect on work-life balance (Smothers, Engbers & Clayton, 2024). By doing so, we aim to explain how spiritual growth translates into better balancing of work and family roles.
- To contextualize and validate the above relationships in Sri Lanka. This

includes analyzing whether factors such as gender, age, or cultural orientation influence the spirituality–WLB link among Sri Lankan employees. An objective is to identify any contextual nuances – for example, whether employees in Sri Lanka derive similar WLB benefits from spirituality as seen in other cultures, or if there are distinct patterns.

- To develop a conceptual framework and theoretical foundation for the role of spiritual growth in work-life balance, thereby filling the research gap and providing a basis for future empirical studies and managerial interventions in the South Asian context.

Through these objectives, the study will test the primary hypothesis that spiritual growth positively affects work-life balance, and also explore secondary questions of mediation and context. The ultimate goal is to produce a comprehensive understanding of the phenomenon that is both theoretically insightful and practically relevant.

### **Theoretical Foundation**

This research draws on two key theories to explain the proposed relationships: Work-Family Enrichment theory and Spiritual Leadership theory. Each offers a lens on how spiritual growth might influence work-life balance.

- Work-Family Enrichment Theory: Work-family enrichment (Greenhaus &

Powell, 2006) is a positive strand of work-family interface theory that contrasts with the traditional conflict perspective. It posits that experiences and resources gained in one role (work or family) can improve the quality of life in the other role. In other words, there can be a positive spillover between work and personal life. Applying this theory, an employee's spiritual growth at work can be viewed as a resource-generating experience that enriches their non-work life. For example, engaging in meaningful, values-driven work can increase an individual's sense of fulfillment, positive mood, or personal skills (such as empathy or patience), which then carry over to enhance family interactions and personal well-being. Empirical support for this idea comes from studies observing that spiritual well-being fosters positive attitudes and reduces stress, which can "spill over" to the home domain (Syahir, A. N. A., et al. 2025). An enriched personal life, in turn, can give feedback to improved focus and performance at work, creating a virtuous cycle. Thus, Work-Family Enrichment theory provides a rationale for expecting a direct positive effect of spiritual growth on work-life balance, as spiritual fulfillment at work produces benefits that generalize to life outside of work.

- Spiritual Leadership Theory: To further ground the concept of spiritual growth, we consider Spiritual Leadership theory (Fry, 2003) which, while a leadership theory, articulates the

process by which spirituality operates in organizational settings. Spiritual leadership involves creating a vision and culture based on altruistic love, meaning/calling, and membership (sense of community), thereby satisfying employees' higher-order needs (inner life needs). When employees feel their spiritual needs are met, experiencing meaning and purpose in their work and a sense of belonging, it leads to heightened spiritual well-being (often characterized by the feeling of "calling" in work and "membership" in the community) (Fry, 2003; Hunsaker & Jeong, 2023). This state of spiritual well-being has been linked to positive outcomes such as organizational commitment, productivity, and reduced burnout (Syahir, A. N. A., et al. 2025). In the context of work-life balance, Spiritual Leadership theory suggests that organizations which foster spiritual growth (through leadership and culture) enable employees to find inner fulfillment and support, which can reduce work stress and conflict. Employees who receive spiritual support at work "tend to experience less stress and enjoy better integration of their personal and professional lives" (Syahir, A. N. A., et al. 2025). In essence, the theory explains that meeting employees' spiritual needs provides them with greater inner resilience and alignment, which helps resolve tensions between work and family roles. This perspective complements the enrichment theory by highlighting the intrinsic motivational aspect: spiritual growth satisfies deep

personal needs, motivating employees to approach both work and home roles with more positivity, commitment, and harmony.

Additionally, underlying these theories is the general notion of Conservation of Resources (COR). Although not a formal part of our framework, COR theory (Hobfoll, 1989) aligns well: it would treat an employee's spiritual well-being or faith as a personal resource that can be drawn upon to cope with demands. Under stress, individuals with strong spiritual resources (e.g. a sense of peace, meaning, community) are less likely to feel depleted by work or family challenges, thereby maintaining balance. This has been observed in research where spirituality buffered the impact of work-family conflict on well-being (Selvarajan *et al.*, 2020).

In summary, Work-Family Enrichment theory provides the expectation of a beneficial cross-domain influence (from spiritual growth at work to better family/life outcomes), while Spiritual Leadership theory (and related spiritual well-being concepts) provides a mechanism for how spiritual needs fulfillment leads to reduced conflict and enhanced well-being, thereby improving balance. Together, these theories form a strong foundation for our conceptual model, informing the hypotheses and design of the study.

### Conceptual Framework Development

Drawing on the literature and theories above, a conceptual framework is developed to guide this study (Figure 1). The framework posits that employee spiritual growth is an important

antecedent of work-life balance. At its core, the model suggests a direct positive effect: as employees grow spiritually, for example, through finding meaning in their work, aligning with organizational values, and feeling a sense of inner growth, their ability to balance work and life improves. This is represented by the arrow from Spiritual Growth to Work-Life Balance in Figure 1. This primary relationship is what RQ1 and Objective 1 seek to test.

Additionally, informed by recent studies (e.g. Smothers *et al.*, 2024; Aarthi & Venkatesan, 2025), the framework incorporates a mediating variable to explain the process: self-efficacy in managing work-family roles. Spiritual growth is theorized to bolster employees' self-efficacy (confidence and belief in their ability to handle job and family responsibilities). In turn, higher self-efficacy is known to improve work-family outcomes by enabling proactive coping and effective role management. Thus, the model

proposes that spiritual growth enhances work-life balance partly through increasing self-efficacy. For instance, an employee who derives a sense of purpose and calm from workplace spirituality may feel more capable of handling overtime work or family duties without undue stress, leading to better balance. This mediating pathway will address RQ2, examining if the effect of spirituality on WLB is transmitted via self-efficacy (a hypothesis consistent with Smothers *et al.*'s (2024) finding that spiritual well-being's effect on WLB was fully mediated by self-efficacy).

Finally, the framework acknowledges potential boundary conditions and controls. Individual differences (such as gender or age) and organizational context might influence the

strength of the spirituality–WLB relationship. For example, cultural expectations (which in Sri Lanka often emphasize family commitments) might make spirituality even more salient for balancing roles, or conversely, certain organizational cultures might suppress the expression of spirituality. While these factors are not the focus, the study will control

for major demographics and consider their interaction effects in the analysis (illustrated in the figure 1).



**Figure 1: Proposed Conceptual Framework**

The model illustrates that employees’ spiritual growth is expected to positively impact their work-life balance. A potential mediating role of self-efficacy is included to explain how spiritual growth translates into better balance. Control variables (e.g., age, gender) are shown in dashed boxes to indicate their inclusion in analysis for validity. (Source: Developed by the author based on literature review)

In summary, the conceptual framework integrates prior empirical findings and theory into a testable model. It will be used to derive specific hypotheses (for quantitative testing) such as: “Employee spiritual growth has a positive effect on work-life balance” (H1) and “Employee self-efficacy mediates the relationship between spiritual growth and work-life balance” (H2).

This framework lays the groundwork for the research methodology and analysis plan.

### Ensuring Validity and Reliability

A critical aspect of this quantitative study is ensuring that the findings are valid and reliable. This section discusses the measures taken to uphold validity (the accuracy and truthfulness of the study’s results) and reliability (the consistency and stability of the measurements).

1. Construct Validity and Measurement: To ensure we are accurately measuring the key constructs (spiritual growth and work-life balance), the study will use established scales from prior research. Spiritual growth will be operationalized through a validated multi-item scale capturing dimensions of workplace spirituality (e.g. the Meaningful Work scale by Ashmos & Duchon (2000) and items on inner life and alignment with values). Work-life balance can be measured using a recognized



instrument such as the Work-Life Balance Scale (WLB) by Hayman (2005) or the work-family balance satisfaction scale used by Valcour (2007). By using instruments that have been published in Scopus/WoS-indexed journals and shown to have good psychometric properties, we establish content and construct validity. Each survey item will be carefully reviewed to ensure it is relevant to the Sri Lankan context (for example, wording might be slightly adjusted for local understanding without changing meaning). A panel of experts (e.g., management professors or HR managers) will examine the questionnaire to provide face and content validity, confirming that the items adequately cover the concept of spiritual growth as understood in our context and that WLB is appropriately captured.

To further strengthen construct validity, we will conduct a pilot test with a small sample of employees. Pilot data will be analyzed using exploratory factor analysis to check that items load on the expected factors (e.g., items intended to measure spirituality cluster together and separate from WLB items). Any problematic items (e.g., misinterpreted or cross-loading items) will be refined or removed before the main survey.

2. **Reliability of Instruments:** The study will ensure reliability primarily through internal consistency assessment. Using the pilot and main survey data, we will calculate Cronbach's alpha for each multi-item scale (spiritual growth, WLB, self-efficacy). A Cronbach's alpha value of 0.7 or above for each construct will indicate acceptable reliability. If any scale shows lower reliability, we may drop or revise items to improve it while maintaining content coverage. Additionally, the survey will be standardized in

administration (all participants receive the same instructions and item order) to avoid random errors. If feasible, a test-retest reliability check will be done: a subset of respondents may be asked to fill the spirituality and WLB scales again after a short interval to see if scores are stable over time (assuming no major life changes). High correlation between the two time points would indicate the measure is reliable.

3. **Validity of Data and Results:** In the data collection phase, we will aim for a sufficient and representative sample of Sri Lankan employees to support external validity (generalizability). The sampling strategy (discussed under Research Philosophy/Methodology) will use random or stratified random sampling across different industries to ensure diverse representation. By including participants from various sectors and backgrounds, the findings can be more confidently generalized to the broader working population in Sri Lanka. Moreover, the study will control for potential confounding variables (e.g., number of working hours, job level, family size) either by design or statistically. Including such controls in regression analyses helps isolate the effect of spiritual growth on WLB, bolstering internal validity (making sure the relationship observed is not spurious).

The analysis will also address common method biases, as the data for both independent (spiritual growth) and dependent (WLB) variables come from the same survey. We will use procedural remedies (assuring anonymity to reduce social desirability, separating sections of the questionnaire, using different scale formats for predictor vs. outcome where possible) and statistical tests (like Harman's single-factor test, and if needed, a marker

variable technique) to check that common method variance is not unduly influencing results. Ensuring minimal common method bias increases the validity of the conclusions.

Finally, the statistical techniques (e.g., regression or structural equation modeling) will be applied appropriately, meeting assumptions and using robust standard errors if necessary, so that results are trustworthy. We will report effect sizes and confidence intervals alongside p-values to give a full picture of the findings' significance and practical relevance. In summary, through careful measurement selection, pilot testing, reliability analysis, sampling design, and rigorous statistical controls, the study will uphold high standards of validity and reliability. This attention to methodological rigor will lend credibility to our findings on the impact of spiritual growth on work-life balance.

### **Research Philosophy and Design**

This research is grounded in a positivist paradigm, reflecting a quantitative, objective approach common in management science. Under positivism, it is assumed that social phenomena (like work-life balance and the impact of spirituality) can be observed, measured, and analyzed as objective facts, independent of the researcher's biases. The choice of positivism is appropriate here because our goal is to test hypotheses and examine relationships between defined variables using statistical methods. We seek to uncover generalizable laws or patterns, for example, "Does increased spiritual growth lead to improved WLB on average for employees?", which aligns with the positivist emphasis on law-like generalizations.

**Ontological Stance:** Positivism carries an objectivist ontology, meaning it assumes that reality exists external to social actors. In this study, we treat "spiritual growth" and "work-life balance" as real constructs that can be quantitatively measured through indicators (survey items) and that have an existence and influence regardless of individual perceptions. For instance, an employee's level of spiritual growth (such as their sense of meaning at work) is considered an objective attribute that can be quantified by their responses to a scale, and their work-life balance status can likewise be objectively scored. We acknowledge that these constructs are abstract, but by using validated instruments, we strive to capture them as real variables in analysis. This ontological view is justified because it allows aggregation and comparison across individuals, enabling us to identify consistent patterns (e.g., a trend that higher spirituality scores correlate with higher WLB scores).

**Epistemological Stance:** Epistemologically, positivism holds that knowledge is best gained through empirical observation and logical analysis. In our case, this means we trust the scientific method, gathering data via a structured survey, using statistical tests to examine our hypotheses, and drawing conclusions based on evidence. We assume a neutral, detached posture as researchers: the survey instrument will be standardized for all participants, and statistical techniques will impartially reveal relationships, reducing the influence of any subjective biases. The research design is deductive; we start with hypotheses derived from theory and prior research, then collect data to test those hypotheses. For example, based on theory we hypothesize a positive effect of spiritual growth on WLB; our survey and analysis will either

support or refute this in a logical manner. The justification for this stance lies in the success of quantitative approaches in producing reliable knowledge in similar studies (as reviewed in the literature section). Many prior works on workplace spirituality and outcomes employed surveys and statistical models (Aarthy, M.S., & Venkatesan, G. 2025; Jena, L. K., & Pradhan, R. K. 2014), which provided credible evidence for theory building. By aligning with that tradition, our study ensures compatibility and comparability with the existing body of knowledge.

**Methodological Approach:** Consistent with the positivist paradigm, the research will use a quantitative cross-sectional survey design. Data will be collected at one point in time from a sample of employees via a structured questionnaire (as discussed, containing measures of spiritual growth, WLB, etc.). The use of a relatively large sample (we aim for  $n \approx 300$  or more, covering multiple organizations in Sri Lanka) and statistical analysis (regression, SEM, mediation analysis) reflects a nomothetic approach, focusing on general patterns rather than in-depth idiographic insight into single cases. This approach is suitable for addressing our RQs which are about general relationships and not about specific individuals' narratives. The research philosophy also influences our stance on researcher independence: we remain external observers. We will not involve ourselves in participants' activities except to administer the survey; this minimizes researcher influence on the data, thereby upholding objectivity (a key positivist criterion).

We also considered alternative philosophical stances (such as interpretivism, which would favor qualitative exploration of personal

spiritual experiences). However, given that our aim is hypothesis-testing and breadth of coverage, interpretive or constructivist approaches were deemed less fitting. Those paradigms, while valuable for rich insights, would not easily allow us to measure "how much" spiritual growth impacts WLB or to generalize findings to a wider population. Moreover, the phenomena in question (spirituality and WLB) have been quantified in literature before, providing precedent that they can be measured objectively (Malik, N., & Saxena, A. K. 2020; Jena, L. K., & Pradhan, R. K. 2014). Therefore, a positivist, quantitative methodology is both justified and advantageous for this study's goals.

In conclusion, the research philosophy guides us to conduct the study in a systematic, objective manner. We will adhere to ethical research practices (informed consent, confidentiality) and maintain neutrality in analysis. The philosophical stance is summarized by the view that there are discoverable truths about how spiritual growth affects work-life balance, and by applying rigorous empirical methods, we can uncover evidence of those truths. This stance, coupled with our comprehensive literature foundation and careful methodology, will enable us to answer the research questions and contribute credible knowledge to the field of management.

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## **Ethical, Empathic, Psychological and Social Implications of Artificial Intelligence in Counselling Practice: A Theory-Informed Systematic Review and Critical Thematic Synthesis**

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### **Abstract**

*The rising integration of Artificial Intelligence (AI) in counselling and psychotherapy is outpacing the development of ethical, empathic and regulatory frameworks governing its use. Despite strong potential of AI-assisted tools in enhancing accessibility and efficiency, concerns involving safeguarding, accountability, psychological influence over vulnerable users' behavior and the erosion of empathic care repeatedly emerge. Such challenges are particularly salient within the Sri Lankan context, where mental health infrastructure, regulatory oversight and AI literacy remain constrained. This study examines qualitative literature addressing the ethical, social, empathic and psychological implications of AI implementation in counselling, with specific emphasis on ethical standardization requirements and the need for continued research. A qualitative systematic literature review was conducted using the READ method and reflexive thematic analysis informed by Naeem et al.'s (2023) framework, to identify recurring ethical risks, social tensions and practice-level implications. The analysis revealed 5 themes comprising (1) data privacy and psychological vulnerability; (2) professional competence, accountability and ethical responsibility; (3) integrity of empathy and the therapeutic alliance; (4) social inequality, access and marginalization; and (5) systemic gaps in ethical standardization and governance, alongside cross-cutting tensions comprising accessibility vs psychological safety, and efficiency vs empathic integrity. The interpretive findings indicate heightened risks in vulnerable populations such as minors, rural residents, sensory impaired users and individuals with limited digital literacy or complex mental health needs. They also highlight increased susceptibility to psychological and cognitive influence, cultural misalignment, limitations in crisis management, professional deskilling and over-reliance on AI-mediated guidance. They further suggest that while AI systems may simulate therapeutic interaction and improve accessibility and efficiency, limitations in contextual reasoning, empathic reciprocity, interpretative capacity of non- normative expression and emotionally nuanced communication, plus cognitive variation and mechanistic processes of AI may compromise therapeutic depth, relational authenticity and psychological safety. Additionally, they emphasize the need for improved quality and competence of AI-based software, and conceptualize AI as a conditional, ethically governed adjunct to traditional therapy as opposed to a therapeutic substitute. The study outlines implications for professional standards, governance frameworks, culturally sensitive implementation, human-in-the-loop safeguards and future directions for ongoing research in the field.*

*Keywords: artificial intelligence, counselling, ethics, empathy, sri lanka, human-in-the-loop*

## **Introduction**

Artificial Intelligence (AI) is growing increasingly prominent internationally, where according to The Artificial Intelligence Index Annual Report (2025), “It has crossed a critical threshold, moving from experimental pilot projects to essential, core infrastructure within professional sectors.”, and that “AI progresses towards transformation, reshaping workflows, skill demands and workforce design.”, noting how 78% of organizations worldwide reported using AI in 2024. AI is currently integrated in many professions including counselling, and the fields of AI and Psychology are known to be strongly interlinked, where AI developers constantly seek input from mental health professionals. Psychology has played a central role in AI development since AI’s origination (Frankish and Ramsey, 2014), and neuroscience has contributed to a significant share of prevailing AI research (Hassabis et al., 2017).

While AI has long been expected to play an influential role in the mental health care of the future (Illovsky, 1994; Luxton, 2016), only within the past decade have improvements in computer processing and natural language processing ability, along with innovations in artificial neural networks, brought about a new wave of AI capability (Hirschberg and Manning, 2015). As a vast, interdisciplinary field increasingly intersecting with counselling, its applications already assist mental health-care professionals in many components including clinical training, treatment, assessment and clinical decision-making (Hamet and Tremblay, 2017). AI is now employed in LLM-based conversational systems (Qiao et al., 2023) and AI-assisted decision support, involving diagnostic and predictive, treatment selection and self-help AI, produces high retention rates, with 86% of professionals reporting satisfaction

with digital support systems (Qassim et al., 2023).

Regardless of its widespread use, AI integration introduces several dilemmas. According to Anita et al. (2024), ethical concerns arise regarding data privacy, confidentiality and delegation of accountability in AI-mediated interactions, particularly where sensitive psychological disclosures are involved. AI-generated responses are not interpreted neutrally, and such interactions may influence cognitive and emotional processing, particularly among individuals in severe mental distress due to their psychological state (Riley et al., 2025). In addition, AI deployment in counselling may both alleviate and exacerbate existing inequalities, with disparities in access, digital literacy and persistent stigma shaping engagement with mental health services (Yesha et al., 2026). While these challenges are evident globally, their implications are prone to amplification in contexts with limited regulatory and infrastructural support.

## **Sri Lanka as a contextual amplifier**

Sri Lankan counselling remains a developing profession characterized by limited regulatory standardization, plus variability in training pathways, professional recognition and institutional oversight. According to the World Health Organization (WHO) World Mental Health Atlas (2022) the absence of a unified national licensing framework and clearly enforced ethical standards contributes to ambiguity surrounding professional identity and accountability. Public perception of counselling is similarly complex, where although awareness of mental health has increased in recent years, stigma, discrimination, cultural attitudes and limited mental health literacy continue to constrain help-seeking behavior (Fernando et al.,

2017). Samarasekara et al. (2012) shows how a discrepancy persists between the perceived value of counselling and its actual utilization, while funding for mental health also remains constrained, where a mere 1.6% of the total health spending in Sri Lanka goes towards mental illness, and the figure hasn't changed since 2012 (Dimuthu, 2025). This implies how structural and perceptual barriers continue to shape engagement with psychological services in Sri Lanka.

Sri Lanka is experiencing increasing digital adoption, accompanied by growing exposure to AI-driven tools across sectors, including health and education (International Telecommunication Union, 2022). However, access to and familiarity with such technologies remain unevenly distributed, particularly across urban-rural divides and socioeconomic groups (World Bank, 2021), where digital literacy of those residing in urban areas (52.1%) significantly outweighs that in rural (36.6%) and estate (18.6%) sectors (Department of Census and Statistics, 2025). In addition, rural areas have never been accessed with focused intervention (Rajasuriya, 2021), and counselling or meditation was found to be the stress coping mechanism of only 15.4% of rural adults, above hiding and concealment (Priyadarshani and Warnakulasuriya, 2023). Furthermore, while AI applications are becoming more visible, their integration into counselling remains limited and largely unregulated in Sri Lanka (WHO, 2021).

### Study Rationale

Vadiyam et al. (2019) illustrates how, despite the growing global body of literature examining AI integration in counselling and psychotherapy, research remains largely concentrated in technologically advanced and highly regulated settings. Within Sri Lanka, scholarly attention to

this intersection is notably limited, particularly in relation to intersecting ethical and psychosocial effects of AI-mediated counselling. Existing discussions are further constrained by a lack of context-specific analysis, minimal integration across these domains and an absence of systematic synthesis addressing underlying tensions and systemic implications. As a result, current understandings remain fragmented and insufficiently contextualized (WHO, 2021).

As AI becomes increasingly embedded, its interaction with the inherently relational nature of counselling raises complex and context-dependent challenges. In Sri Lanka, these challenges are further shaped by systemic vulnerabilities, and in the absence of unified and context-sensitive guidelines, a critical examination of these intersecting factors becomes necessary, raising the question “*What are the ethical, empathic, psychological and social implications of AI implementation in Sri Lankan counselling practice?*”.

### Methodology

This study employed a systematic literature review and thematic synthesis to examine ethical, empathic, psychological and social implications of AI in counselling, employing the READ method (Dalglish et al., 2020) to obtain qualitative research, involving reading materials, extracting relevant data, analyzing findings and distilling insights. Adopting an interpretive qualitative orientation, it aimed to identify underlying patterns and relationships within the literature.

A systematic search of relevant literature was conducted using databases including Google Scholar and PubMed, where the search strategy employed combinations of keywords grouped across three domains. AI-related terms included “AI”, “machine learning” and “chatbots”;

counselling-related terms included “counselling” and “psychotherapy”; and these were combined with terms reflecting the study’s focus, including “ethics”, “empathy”, “psychological influence” and “social impact”. Boolean operators (AND/OR) were used to combine search terms to ensure comprehensive coverage of relevant studies, and the search was limited to peer-reviewed articles published from 2020 onwards. This strategy was designed to balance breadth and relevance while ensuring transparency and reproducibility of the search process.

Clear inclusion and exclusion criteria were established to ensure relevance, quality and analytical depth, where studies were included if they examined AI application within counselling, psychotherapy or broader mental health contexts, with specific focus on one or more of the following: ethical, empathic, psychological and social implications. Only peer-reviewed academic publications written in English and published from 2020 onwards were considered, to reflect recent developments in AI capabilities and their evolving role in mental health practice. Studies were excluded if they focused solely on technical or computational

components of AI without engagement with mental health or counselling, and non-mental-health applications, opinion-based articles lacking analytical depth, non-English publications, studies published prior to 2020 and publications not meaningfully analyzing ethical, empathic, psychological or social dimensions were also omitted.

### Study Selection Process

Study selection was guided by PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines. The initial literature search revealed 63 studies, which was narrowed down to 28 after titles and abstracts were screened for relevance to the study’s focus on AI in counselling and its associated multidimensional implications. Full-text articles were then assessed for eligibility based on the established inclusion and exclusion criteria, resulting in a final pool of 11 qualitative studies for thematic synthesis.

The following table shows the 11 selected qualitative studies for the systematic literature review (SLR) and thematic synthesis:

| Author               | Title of Study                                                                                                                                   | Participants involved (if applicable)       | Methodology                         |
|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|-------------------------------------|
| Beg and Verma (2025) | Artificial Intelligence-based Psychotherapy: A Qualitative Exploration of Usability, Personalization, and the Perception of Therapeutic Progress | AI therapy app users (n=17)                 | Semi-structured interviews          |
| Dai et al. (2025)    | The paradox of agency in psychotherapy: How people with mental distress experience support from generative AI chatbots and human therapists      | Human and AI (ChatGPT) therapy users (n=16) | Semi-structured (online) interviews |

|                               |                                                                                                                                          |                                                                                                                                                                                                                                                                      |                                                                  |
|-------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|
| Zhang et al. (2023)           | The Adoption of AI in Mental Health Care–Perspectives From Mental Health Professionals: Qualitative Descriptive Study                    | Participants included practitioners, social workers and mental health nurses, educator scientists with dual roles as professors/lecturers and researchers, and practitioner scientists with dual roles as researchers and psychiatrists/mental health nurses (n=20). | Semi-structured interviews                                       |
| Hogg et al. (2025)            | Users’ Perceptions and Trust in AI in Direct-to-Consumer mHealth: Qualitative Interview Study                                            | Participants were self-reported users of mHealth apps (n=21)                                                                                                                                                                                                         | Semi-structured interviews via Zoom                              |
| Steenstra and Bickmore (2025) | A Risk Ontology for Evaluating AI-Powered Psychotherapy Virtual Agents                                                                   | N/A                                                                                                                                                                                                                                                                  | Built using qualitative interviews with clinical + legal experts |
| Kwesi et al. (2025)           | Exploring User Security and Privacy Attitudes and Concerns Toward the Use of General-Purpose LLM Chatbots for Mental Health              | n=21                                                                                                                                                                                                                                                                 | Semi-structured interviews                                       |
| AlMaskari et al. (2025)       | Students’ perceptions of AI mental health chatbots: an exploratory qualitative study at Sultan Qaboos University                         | University Students (n=60)                                                                                                                                                                                                                                           | Exploratory qualitative study involving group discussions        |
| Weir et al. (2025)            | Physician Perspectives on the Impact of Artificial Intelligence on the Therapeutic Relationship in Mental Health Care: Qualitative Study | Family medicine practitioners and psychiatrists (n=42)                                                                                                                                                                                                               | Case-based Qualitative Interviews                                |
| Song et al. (2024)            | The Typing Cure: Experiences with LLM Chatbots for Mental Health Support                                                                 | Participants from culturally and nationally diverse backgrounds (n=21)                                                                                                                                                                                               | Semi-Structured interviews and Thematic analysis                 |

|                    |                                                                                             |                                                                                                                                                                                                                                                                                  |                                                              |
|--------------------|---------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|
| Wang et al. (2025) | Evaluating an LLM-powered chatbot for cognitive restructuring                               | Participants interacted with the chatbot in real world scenarios (n=19), and Mental Health Practitioners (n=5) co-designed the chatbot (CRBot) and other Mental Health Practitioners (n=4) provided professional perspectives and identified potential risks in evaluation study | Qualitative analysis of chatbot interactions + expert review |
| Mead et al. (2025) | Exploring the Ethical Challenges of Conversational AI in Mental Health Care: Scoping Review | N/A                                                                                                                                                                                                                                                                              | Qualitative scoping review with thematic synthesis           |

Table 1.1: *Studies utilized for the SLR and thematic synthesis*

### Thematic Analysis

Thematic analysis following Naeem et al.'s (2023) framework was conducted to identify recurring patterns across studies, which were organized into 5 themes. Initial coding helped identify recurring ideas, concepts and issues across studies. Codes were then iteratively refined and grouped into broader conceptual categories, allowing for theme development.

Cross-cutting tensions were identified through comparative analysis of themes, focusing on areas where findings suggested competing priorities. This involved examining how different themes interacted across studies, through which 2 key tensions were identified.

### Theoretical Framework

Established ethical principles, including beneficence, nonmaleficence and respect for autonomy, alongside professional standards such as the American Counselling Association (ACA)

Code of Ethics, collectively informed evaluation of accountability, data protection, cultural sensitivity and responsible AI use. Theories of empathy and therapeutic alliance were employed to assess the extent to which AI-mediated interactions could approximate, disrupt or erode relational depth and affective attunement central to effective counselling.

Psychological concepts of vulnerability, cognitive processing and behavioural influence further underpinned analysis, enabling examination of how AI may shape user cognition, decision-making and emotional states, particularly among at-risk populations. Social justice and inequality perspectives provided a lens through which disparities in access, digital literacy and systemic marginalization were critically evaluated.

The study also incorporates secondary interpretive lenses operating across themes. These comprise (1) risk escalation logic,

examining how minor system limitations may compound into significant clinical or ethical harm; (2) vulnerability profiling, which identifies populations disproportionately susceptible to adverse outcomes; and (3) distinctions between human and AI cognition, informing critical comparisons regarding interpretive capacity, contextual understanding and empathic reasoning.

### Ethics

There were no ethical issues directly linked to any participants involved with the collection of data as the obtained research was of secondary nature and made publicly available. However, the ethical standards G.4.a and G.5.b of the ACA Code of Ethics (2014) were adhered to by

the accurate reporting of results and crediting of sources respectively.

### Results

The analysis identified 5 interrelated themes shaping the ethical landscape of AI-mediated counselling: data privacy and psychological vulnerability; professional competence, accountability and ethical responsibility; integrity of empathy and the therapeutic alliance; social inequality and marginalization; and systemic gaps in ethical standardization and governance. It also identified 2 cross-cutting tensions, namely, Accessibility vs Psychological Safety and Efficiency vs Empathic Integrity, as illustrated by Figure 1.1

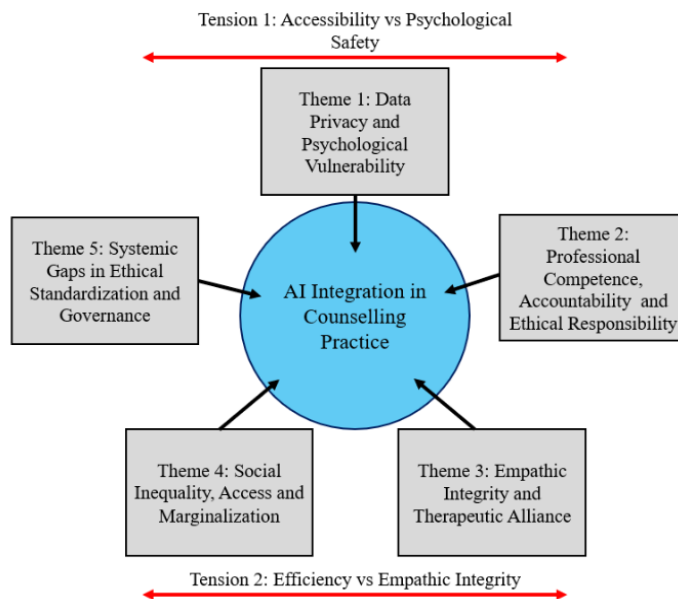


Figure 1.1: *Thematic Map of Findings*

**Themes:**

**Theme 1: Data Privacy and Psychological Vulnerability**

The findings indicate a shift beyond technical augmentation, where privacy and technological opacity increasingly intersect with psychological exposure and user vulnerability in AI-mediated counselling. A converging concern exists regarding how AI-mediated counselling environments intensify data-related and psychological vulnerabilities. AlMaskari et al. (2025) show that users are aware of data security risks and ethical uncertainties, particularly when disclosing sensitive mental health information, highlighting discomfort with how personal data may be stored or used. Complementing this, Steenstra and Bickmore (2025) identify risks comprising user harm, dependency and misdiagnosis.

**Theme 2: Professional Competence, Accountability and Ethical Responsibility**

The findings highlight significant ambiguity surrounding professional competence and accountability in AI-mediated counselling contexts. Zhang et al. (2023) demonstrates mental health professionals experience uncertainty regarding preparedness to integrate AI into practice, citing a lack of formal training, ethical guidelines and clarity around clinical responsibility. Complementing this, Kwesi et al. (2025) reveal that users often misperceive AI systems as being subject to professional regulation, overestimating their reliability and accountability.

**Theme 3: Integrity of Empathy and the Therapeutic Alliance**

Beg and Verma (2025) highlights significant limitations in the integrity of empathy and the therapeutic alliance within AI-mediated

counselling. Participants described AI responses as emotionally shallow and formulaic, often characterized by “scripted” or repetitive expressions of empathy failing to capture nuances of human emotional experience. While AI was perceived as responsive and accessible, this responsiveness did not translate into a meaningful relational connection. Users reported difficulty developing trust and emotional resonance, suggesting absence of genuine attunement undermines depth and authenticity required for strong therapeutic alliances.

**Theme 4: Social Inequality, Access and Marginalization**

AI in counselling both mitigates and reproduces social inequalities. AlMaskari et al. (2025) shows AI can reduce barriers including stigma and limited service availability, potentially widening access to support; however, participants highlighted cultural insensitivity and lack of contextual understanding, potentially marginalizing users from diverse sociocultural backgrounds. Similarly, Song et al. (2024) found that users often turn to AI to fill gaps in inaccessible or insufficient mental health care, particularly where traditional services are unavailable, yet cultural limitations and uneven relevance of support must be navigated too.

**Theme 5: Systemic Gaps in Ethical Standardization and Governance**

Findings from Meadi et al. (2025) and Kwesi et al. (2025) converge in highlighting significant systemic deficiencies in the ethical governance of AI in counselling contexts. Meadi et al. (2025) identify a lack of standardized regulatory frameworks, emphasizing inconsistencies in ethical guidelines, accountability structures and oversight mechanisms across jurisdictions. Complementing this, Kwesi et al. (2025) reveal that users often assume AI systems operate

under safeguards comparable to licensed professionals, exposing a critical mismatch between perceived and actual regulation. Together, these findings illustrate a fragmented governance landscape, where rising technological deployment outpaces development of coherent ethical standards, increasing risks related to user protection, accountability and informed engagement.

### **Cross-cutting Tensions:**

When considered collectively, these themes do not operate in isolation but interact to produce cross-cutting tensions reflecting deeper structural conflicts within AI-mediated counselling.

#### **Tension 1: Accessibility vs Psychological Safety**

Across Beg and Verma (2025), Steenstra and Bickmore (2025), Kwesi et al. (2025) and Song et al. (2024), a conflict emerges between expanded accessibility of AI-mediated counselling and risks posed to users' psychological safety. Participants valued AI for immediacy, anonymity and ability to bypass traditional barriers comprising cost, stigma and service availability. Song et al. (2024) highlights how users adopt AI as a readily available emotional support in contexts where human care is inaccessible, while Beg and Verma (2025) note its appeal for continuous, low-threshold engagement. However, this accessibility is accompanied by significant safety concerns. Steenstra and Bickmore (2025) identify risks including user over-reliance, misinterpretation of guidance and potential psychological harm in the absence of clinical oversight, while Kwesi et al. (2025) reveal that users overestimate regulatory status and reliability of AI, creating a false sense of security potentially heightening vulnerability. Collectively, these findings

suggest while AI enhances access to support, it simultaneously introduces conditions where vulnerable users may be exposed to unregulated, potentially harmful interactions without adequate safeguards.

#### **Tension 2: Efficiency vs Empathic Integrity**

A consistent tension emerges between efficiency of AI and preserving empathic integrity in counselling. AI was widely perceived as enabling rapid, scalable support, allowing engagement with mental health resources with immediacy and minimal barriers. However, this efficiency was repeatedly associated with diminished capacity for authentic empathic engagement. Beg and Verma (2025) and AlMaskari et al. (2025) highlight how users experienced AI responses as emotionally shallow, scripted and lacking cultural or contextual sensitivity. Similarly, Wang et al. (2025) demonstrates that although AI can replicate structured therapeutic techniques, it often fails to accurately interpret emotional nuance, resulting in seemingly misaligned or overly generic responses. Weir et al. (2025) emphasizes delegation of therapeutic functions to AI risks weakening relational depth and trust foundational to the therapeutic alliance. Collectively, these findings suggest while AI enhances efficiency and accessibility, it simultaneously compromises empathic authenticity essential for effective counselling, reinforcing a fundamental trade-off between speed and relational quality.

### **Discussion**

#### **Data Privacy and Psychological Vulnerability**

Lemmo et al. (2025) emphasizes how sensitive emotional disclosures are rendered traceable, persistent and subject to computational interpretation in AI-mediated counselling. This

introduces emotional traceability, where deeply personal experiences may be recorded, analyzed and potentially recontextualized outside the immediate therapeutic relationship.

These risks are intensified by AI-specific mechanisms, including data persistence, third-party processing and cross-border data flows, complicating traditional notions of confidentiality, as stated by Gupta and Braga Jr. (2025). While regulatory frameworks including the Sri Lankan Data Protection Act (2022) provide important legal foundations, their scope remains limited in addressing nuanced ethical challenges posed by AI-mediated interactions (Jinasoma et al., 2024), especially considering how awareness of data rights, enforcement consistency and stigma surrounding mental health may influence both disclosure patterns and risk perception (Harasgama et al., 2024).

The current trend of using AI platforms such as Claude AI, ChatGPT and Google Gemini as informal therapists is globally rising. However, such use comes with internationally documented risks, including cases linked to emotional harm and potential suicidal ideation, where chatbots struggle with crisis intervention, specifically by providing unhelpful responses, validating dangerous, self-destructive thoughts or delusions instead of challenging them, failing to detect crisis or immediate suicide risk, and in some cases, offering specific methods of self-harm (Head, 2025). Such failures may be linked to limitations in adaptability under uncertainty, as AI relies on probabilistic pattern recognition which may inadequately interpret ambiguous or high-risk emotional or psychological states. In addition, they tend to shift tone or disproportionately vary therapeutic-style responses based on prompt (linguistic) framing as opposed to intent (Bélisle-Pipon, 2026), memory persistence variations, plus AI-based

software or model type used. AI models also sometimes tend to “forget” crucial details such as contextual factors, and may be unable to grasp complex emotional or psychological states in clients or subtler contextual pragmatics, which is problematic in counselling as it tends to rely heavily on continuity, relational memory and nuance retention.

### **Professional Competence, Accountability and Ethical Responsibility**

AI destabilizes traditional models of responsibility, where professional competence must expand to include AI literacy, risk recognition and interpretive caution, as practitioners must actively evaluate how algorithmic outputs influence clinical reasoning and decision-making processes whilst assessing client progress in AI mediated therapy (Sheperis et al., 2025).

Responsibility is increasingly diffused across multiple actors, including developers, AI systems, practitioners and users, introducing delegated moral agency, where decision-making appears shared but accountability remains ambiguous (Bleher and Braun, 2022). This is compounded by underlying meta-patterns of AI-based reasoning, hence, determining responsibility for outcomes becomes more complex when guidance is both probabilistic and context-dependent. This emphasizes a broader tension between control and responsibility, where AI generates guidance without possessing internal moral agency, complicating attribution of accountability.

These dynamics raise concerns regarding automation bias, where practitioners may over-rely on AI-generated suggestions, exhibit premature trust or reduce critical evaluation of outputs. This may contribute to moral deskilling and professional atrophy, as ethical judgment



risks being partially outsourced to algorithmic systems (Zyl, 2025), particularly in settings where structured AI training, continuing professional development and institutional guidance on AI integration remain limited and unevenly distributed (Wijesinghe et al., 2025).

### **Integrity of Empathy and the Therapeutic Alliance**

Empathy is understood as attunement, responsiveness and co-regulation between client and practitioner, against solely linguistic or verbal communication. Empathy is dynamic, context-sensitive and grounded in practitioner capacity to interpret and respond to verbal and non-verbal cues (Rubin et al., 2024). 3 major components of counselling effectiveness are nonverbal abilities, nonverbal behaviors, and congruence between the two, the latter two of which AI is currently unable to primarily emulate (Steigerwald et al., 2026).

Rhodes (2025) describes how AI operates through emotional mirroring without lived experience and simulation without accountability, producing false relationality, where responses may appear empathic but lack embodied presence and ethical responsibility underpinning genuine therapeutic engagement. An example of this would be symbolic matching demonstrated by an LLM-type AI model learning to emulate specific clients' use of specific emojis, linguistic usage patterns and use of case-specific language via the client's prolonged interaction with the model. Many LLMs are known to perform affective mimicry, stylistic matching, tone mirroring and conversational alignment through statistical patterning rather than lived emotional comprehension. This could be problematic in counselling as it raises difficult ethical questions, such as whether users could over-attribute understanding to interpretatively

unstable pattern-matching systems, and what happens when mirroring creates perceived attunement without genuine comprehension. Amplifying this is the absence of non-verbal and embodied cues such as tone, synchrony, silence and capacity for rupture and repair, which are central to therapeutic alliance development and maintenance (Jackson et al., 2024). This highlights a distinction between simulation and experience, where AI generates linguistically coherent expressions of empathy, creating an illusion of empathy without embodied affective processes, limiting capacity for genuine empathic attunement and comprehension in AI-mediated counselling.

Factors such as creativity arising from tacit, intuitive knowing play a notable role in traditional counselling, helping counsellors understand client needs, build rapport and tailor interventions. Intuition is a therapist's gut feeling or instinctual sense of what is happening with a client in the moment, while creativity involves using imaginative approaches other than conventional talk therapy to enable deeper exploration and healing (Bohart, 1999). The compound effect of human intuition and creativity exceeds the scope of AI (Zhang and Wang, 2024), due to which AI-driven counselling may not be up to par with conventional counselling, highlighting a structural mismatch between computational reduction by AI and the relational complexity required for therapeutic engagement.

These limitations are especially pronounced from a Pluralistic Counselling perspective, which emphasizes co-construction of meaning, ongoing negotiation and value-sensitive responsiveness, rendering therapeutic engagement inherently dialogical rather than procedural (Cooper and Mcleod, 2012). AI tends toward context-compression, problem-solution

compression and conflation of probabilistic outputs without meaningful understanding (Saleem et al., 2020), hence, complex lived experiences are reduced to processable data units, potentially prematurely resolving ambiguity and truncating emotional processing, undermining depth and flexibility required for effective therapy. This highlights a deeper tension between optimization and meaning, where efficiency-driven response generation may compress complex emotional experiences into simplified, processable forms.

### **Social Inequality, Access and Marginalization**

Erdemir and Sumbas (2026) describe how AI-mediated counselling appears to redistribute access unevenly, structurally expanding reach for some groups while introducing new forms of exclusion for others. In Sri Lanka, rural communities face limited access to formal mental health services, digital access is often mobile-first, socioeconomic status (SES) and digital literacy tends to be lower than in urban areas, and linguistic diversity across Sinhala and Tamil exists alongside potentially lowered English proficiency (Dimuthu, 2025). This complicates equitable engagement with AI systems, as mobile-first access patterns are often constrained by data affordability, linguistic parities and device limitation due to SES disparities. Furthermore, many AI tools cannot undertake effective translation to non-dominant/non-Western languages such as Sinhala and Tamil, failing to capture cultural nuances, regional dialects or idiomatic expressions common to regional languages. This increases likelihood of disengagement and misinterpretation when linguistically disadvantaged clients are recommended AI-mediated therapy (Hayes, 2026).

AI raises concern regarding cultural and epistemic marginalization, where many tools implicitly encode Western psychological frameworks, prioritizing individualistic notions of distress and recovery. Such framing may conflict with collectivist social structures including family-based decision-making processes and spiritual or religious coping mechanisms (Lakshmi et al., 2025), all of which are highly prevalent in Sri Lanka and vary widely among individuals due to the nation's diverse cultural and religious landscape. Furthermore, Okeke (2022) emphasizes how traditional therapists address bias, discrimination and power dynamics through ongoing self-awareness, clinical training and active management of therapeutic relationships, besides utilizing supervision, cultural humility, and when necessary, direct confrontation of biases in the room. In contrast, AI-mediated therapy relies on algorithmic, data-driven approaches to mitigate bias, such as diversifying training data and regular audits, but struggles with detecting nuance, culturally situated meaning or complex power imbalances (Mergen et al., 2025). Moreover, it runs a high risk of flattening culturally or religiously coded experiences into stereotypes by prioritizing dominant cultural perspectives (Wang et al., 2025), and especially concerning is how empathy is deeply embedded in Sri Lankan collectivist values, relational identity and spiritual frameworks. Consequently, AI-mediated interactions risk cultural misalignment and therefore misinterpretation, impeded contextualization of client responses, discriminatory or unfair treatment based on demographic factors and disruption of relational expectations central to therapeutic trust due to algorithmic bias (Kordzadeh and Ghasemaghaei, 2022). These patterns show a tension between universality and pluralism, where AI may

inadequately capture culturally embedded meanings of distress and coping.

### **Governance Gaps and Ethical Standardization**

Maas (2021) emphasizes how, rather than operating within a coherent system of oversight, AI integration currently unfolds across uneven and underdeveloped layers of regulation. This is particularly exacerbated in Sri Lanka, where at the legal level, absence of AI-specific counselling legislation leaves existing frameworks such as the Sri Lankan Data Protection Act (2022) only partially equipped to address complexities of psychological data and AI-mediated interaction, while at the professional level, counselling bodies have not fully adapted ethical codes and practice guidelines accounting for AI use, leaving practitioners without clear standards for competence, responsibility and appropriate application (Wanarathna, 2024). Operationally, a lack of defined protocols exists regarding risk escalation thresholds, accountability structures and safeguarding mechanisms, which are especially crucial in high-risk or vulnerable cases, raising questions about when AI involvement should cease and human intervention must take precedence. Rathnayake et al. (2025) emphasizes that strong, comprehensive legal and regulatory frameworks are needed to manage risks to privacy and security.

These challenges are further intensified by a contextual mismatch, where AI systems are developed and deployed at a global scale, while ethical governance remains locally bounded. In Sri Lanka, where regulatory infrastructure remains emergent and institutional coordination across legal, clinical and technological domains is limited, these gaps become particularly

consequential (Bandaranayake and Dias, 2022), especially concerning how ethical codes followed locally are developed in Western contexts and may not effectively account for the widespread, multidimensional structural disparities across the nation. This indicates a broader global-local interaction, where globally developed AI systems intersect with locally specific structural vulnerabilities, unevenly amplifying ethical and practical risks.

### **Cross-Cutting Tensions**

AI offers immediate, low-cost and anonymous support, which is particularly significant in Sri Lanka, where mental health stigma and limited service alternatives may increase reliance on AI (Wanarathna, 2024) despite insufficient safeguards, particularly in rural areas. However, these benefits are accompanied by psychological risks, including misinterpretation of distress, absence of safeguarding mechanisms, reduced empathic attunement, data privacy concerns, emotional dependency and limited capacity for accurate risk detection.

Barrio (2023) stresses how AI optimizes for speed, scalability and continuous availability, enabling rapid response generation. However, as mentioned earlier, empathic integrity in counselling cannot be replicated through text-based or algorithmic interaction. This is exacerbated as traditional therapists are trained to identify, explore and contextually integrate attributes in therapies comprising higher interpretive and relational depth such as Person-centered and Psychodynamic models, potentially risking insufficient boundary management, misinterpretation, lack of contextualization and therefore reduced empathy when undertaken through AI-mediated therapy. This occurs due to the distinct mismatch between attributes of automation in AI and

extensive relational and interpretive authority, which is especially evident in the aforementioned therapeutic models (Grodiewicz and Hohol, 2023).

Collectively, these tensions may reflect deeper differences in how humans and AI process meaning, emotion and uncertainty, suggesting that observed ethical challenges are contextual and structurally embedded in underlying cognitive architectures.

### **Vulnerable Populations and Individual Variation**

Saidah (2025) emphasizes how limited digital literacy may constrain safe, effective use of AI-mediated counselling, particularly if users are reluctant to engage with AI-mediated therapy or struggle to effectively engage with and optimize AI-generated guidance for increased therapeutic benefit. In Sri Lanka, this intersects with cautious hesitation towards the rise in technological adoption stemming from high uncertainty avoidance, data privacy concerns and cultural preference for personal, human-driven interaction, particularly in rural areas and among older generations where digital literacy is significantly lower (Sewwandi, 2025), increasing likelihood of disengagement, ineffective or potentially harmful use.

Suriá-Martínez et al. (2025) suggests how variations in emotional intelligence (EI) may influence client interpretation and regulation of responses to AI-generated content, with higher EI levels increasing likelihood of contextualizing AI responses and recognizing limitations, lowering risk of emotional dependency. Meanwhile, lower EI levels may raise susceptibility of emotional dysregulation, misreading tone and over-attributing empathy. Additionally, the predominantly English-based linguistic structure of AI systems may privilege

users with stronger verbal skills in English or abstract reasoning, increasing access and usability, while disadvantaging those with lower linguistic or cognitive flexibility (Soldatic et al., 2025).

Emotional and psychological risks of AI-mediated therapy are intensified among minors navigating psychosocial (Vygotsky, 1978) and cognitive (Piaget, 1964) developmental asymmetries and clients with complex mental health needs as they may lack cognitive aptitude, knowledge of AI's limitations or metacognitive capacity to critically evaluate AI-generated responses. Alfano et al. (2024) highlights how minors navigating power asymmetries may incorrectly attribute a sense of "authority" to AI since it may be viewed as "knowledgeable", similar to how this is done to a traditional therapist, potentially unequivocally following AI's "advice" without questioning how far this is applicable.

Neurodivergent and sensory-disabled (deaf/blind) children, plus those with severe cognitive/emotional impairment, can face compounded risks due to additional stigma and social isolation faced, increasing over-reliance, dependency and potential for emotional/psychological harm on AI as an alternative for reduced social and emotional support in some cases (Babushkina and de Boer, 2024). AI displayed ableist biases and emotionally insensitive responses in cases of differently abled clients using AI-mediated therapy (Glazko et al., 2025). Neurodivergent individuals whose communication styles may diverge from normative patterns (Frizell, 2025) may phrase prompts ambiguously, show semantic or emotional incoherence in prompts or misinterpret AI's responses. As discussed earlier, AI's linguistic framing sensitivity and contextual

interpretive instability may taint responses in such cases, highlighting need for tailored assessment to determine suitability for AI-mediated therapy for clients.

AI-mediated therapy may hold particular relevance for users who rely on augmentative and alternative communication (AAC), as automated transcription, speech generation and adaptive conversational systems can increase communicative accessibility (Light and McNaughton, 2014). However, this introduces complex ethical tensions involving dependency mediation, communicative substitution and relational displacement. When AI systems begin functioning as primary communicative intermediaries, users may become increasingly reliant on algorithmically mediated interaction for emotional expression, interpretation and social connection. For individuals already experiencing social marginalization and isolation, in addition to potentially being reliant on administration of various developmental therapies and technological mediation for navigating daily functioning, this dependency might alter attachment processes, reshape interpersonal dynamics within therapy itself and may influence social, emotional and cognitive development in adverse ways. Simultaneously, inaccuracies in transcription, contextual interpretation or emotional recognition may disproportionately affect AAC-dependent users, (Dietz et al., 2020) as such individuals usually face cognitive, social and/or emotional developmental asymmetries which tend to be inadequately represented or accounted for via AI-mediated therapy (Martelli et al., 2026), thereby hindering effective use of AI-mediated therapy as such individuals may not be cognitively and/or psychologically equipped to accurately and appropriately utilize AI-mediated therapy or interpret or contextualize responses or

specific malfunctions which might arise in AI-mediated therapy, compromising autonomy and nonmaleficence.

AI-mediated counselling may improve accessibility for blind or visually impaired users through voice-based interaction, increasing independence and broader access to remote psychological support. Audio interfaces and speech-based systems may help address longstanding inequities in mental health access (Choi et al., 2024). However, psychological and communicative risks arise when speech recognition or transcription systems demonstrate variable accuracy under certain conditions. Documented limitations involving accent recognition, background noise or non-standard communication plus AI's inadequacy in interpreting non-dominant/regional language patterns such as those in Sinhalese or Tamil may increase likelihood of distorted interpretation or emotionally misaligned responses (Blodgett et al., 2020). For blind users who rely primarily on audio-mediated interaction, such inaccuracies may disproportionately affect psychological safety.

AI-mediated counselling could benefit deaf or hard-of-hearing individuals through real-time transcription, captioning and text-supported therapeutic communication. This may reduce communication barriers and expand access to psychological support, as sign-language-informed or disability-sensitive mental health services remain currently limited (Shubbar et al., 2024). However, counselling relies heavily on emotional nuance, contextual interpretation and accurate communication of affect, all of which may be compromised by transcription inaccuracies in capturing emotional tone, pauses or non-standard phrasing, potentially distorting disclosures or weakening empathic attunement within therapy. This

intersects with AI's currently significant limitations in accurately interpreting sign language, which comprise complex 3D language relying on spatial grammar, body posture, context, nuance and facial expressions (Papastratis et al., 2021). This may disproportionately affect deaf or hard-of-hearing users who may rely primarily on visually-mediated interaction.

Particularly concerning are cases of asynchronous development, where children might possess relatively high digital/AI fluency but still be emotionally or behaviorally normative as per their chronological age, increasing likelihood of overreliance or emotional dependency in AI-mediated counselling, highlighting necessity for therapy tailored to individual cognitive-behavioral profiles as opposed to a one-size-fits-all approach to prevent psychological and emotional harm (Kurian, 2025).

Structurally, this mismatch becomes particularly consequential across diverse user profiles, where computational reduction interacts unevenly with variations in cognitive, linguistic and emotional processing, by compressing heterogeneous experiences into standardized representations, hence causing uneven distribution of harm across different client profiles due to distorted interpretation, responses and treatment of varying client presentations via AI-mediated counselling.

### **Differential Amplification Across User Profiles**

A broader structural pattern emerges where AI does not exert uniform effects across users, but appears to amplify pre-existing differences in cognitive, emotional, linguistic and digital capacities in counselling. Individuals with higher levels of EI, metacognitive awareness,

linguistic proficiency and digital literacy, plus normative sensory abilities appear better equipped to contextualize, critically evaluate and effectively utilize AI-generated responses, increasing likelihood of optimizing therapeutic benefit and even professional application. In contrast, those with lower capacities in these domains may be more susceptible to misinterpretation, over-reliance, emotional dysregulation, psychological influence or inappropriate application of guidance. Hence, AI-mediated counselling introduces a differential amplification effect, reinforcing existing advantages while simultaneously amplifying vulnerabilities, producing uneven distribution of both benefit and risk across user populations. This suggests AI may function as a stratifying mechanism within counselling, potentially shaping outcomes to mirror and intensify underlying individual and structural inequalities in both clients and potentially practitioners (Yesha et al., 2026).

### **Reframing Knowledge, Practice and Responsibility in AI-Mediated Counselling**

A consistent pattern emerges where intersecting ethical and psychosocial challenges appear to arise from underlying differences in cognitive architecture. Concepts such as emotional traceability, delegated moral agency, simulated relationality and differential amplification suggest AI alters how cognition, meaning and responsibility are structured in therapy.

AI influences practitioner case conceptualization, interpretation of client narratives and clinical decision making, where automation bias, framing sensitivity and salience amplification indicate AI actively structures reasoning (Zyl, 2025). This suggests AI may be an active epistemic agent shaping how knowledge is generated, interpreted and applied

within counselling, thereby echoing a deeper tension between epistemic authority attributed to AI outputs and preservation of independent human clinical judgment. This highlights importance of metacognition and reflective practice as safeguards, as clinicians must remain aware of how algorithmic outputs shape their own thinking when using AI, develop professional competence for delivering AI-mediated therapy and decide when and to what extent AI should be employed for specific cases.

The evidence supports a conditional, role-specific approach. AI can sometimes infer subtler patterns and meta-patterns in client behavior, emotions etc., particularly over longitudinal time durations, however, interpretation of these inferences should solely lie with practitioners to accurately determine progress, escalation, reduction or prognosis (Gutierrez et al., 2024). AI may therefore be more compatible assisting with structured, skills-based models such as cognitive behavioral approaches, or delivering objective assessment comprising psychometric testing, plus assisting psychoeducation, self-monitoring or between-session tasks.

### **Practical Application**

Practitioners should restrict AI use to clearly bounded tasks with low relational or psychosocial complexity and avoid integration when confronted with cases such as suicide, crisis assessment, trauma processing or complex mental health needs, aligning with a risk-stratified model of deployment (Tavory, 2024). Secondly, AI assistance may be more defensible with tasks aligning with biopsychosocial components and administrative levels. Where implemented, outputs should be treated as provisional inputs requiring active

clinical verification rather than direct application. Practitioners could incorporate brief metacognitive checks during decision-making, evaluating whether agreement with AI outputs reflects independent clinical judgment or response coherence.

Training programs may need to incorporate applied AI literacy focused on risk recognition, output variability and limits of probabilistic reasoning, alongside simulation-based comparisons of AI-generated responses with human clinical judgment. This enables trainees to identify inconsistencies and ethical concerns besides distinguishing automation bias, framing sensitivity and probabilistic outputs (Gonzalez and McCalla, 2025). This would be especially effective in Sri Lanka, where formal AI training pathways remain limited (Wanarathna, 2024). Given AI's limitations in relational attunement, AI integration into therapy should emphasize preserving core relational competencies, and should remain contingent upon demonstrated competency within clearly defined ethical boundaries.

AI-specific ethical frameworks should define scope of use, accountability structures, risk-classification frameworks and escalation thresholds for determining case-specific suitability for the extent of integrating AI-mediated therapy, plus in what circumstances AI-mediated therapy should be halted and potentially substituted with traditional therapeutic intervention and/or increased conventional safeguarding. This could be supported by documentation and audit mechanisms to ensure transparency and compliance (Lei, 2025), potentially aligning with the Sri Lankan Data Protection Act (2022). Higher standards in design and development of AI-based technical counselling tools and software are required, including improved



contextual sensitivity, built-in safeguards for risk detection and more robust user guidance (Rehman and Sajjad, 2025).

Adams et al. (2023) highlights how AI-mediated counselling may require enhanced informed consent procedures clearly communicating role, limitations and risks of AI involvement, potentially supported by basic client-facing AI literacy to improve critical engagement with generated responses. Language accessibility should be prioritized through linguistic adaptation in multilingual regions such as incorporating Sinhala and Tamil AI modifications in Sri Lanka, alongside consideration of culturally relevant expressions of distress. Use with minors, cognitively vulnerable individuals and socially isolated users should be strictly limited, with increased human oversight and monitoring for emotional dependency or over-reliance (DeBruine et al., 2025).

Future research could examine AI-mediated responses to linguistic framing variability, particularly where minor phrasing variations produce inconsistent outputs in counselling scenarios. Longitudinal studies could explore dependency and attachment patterns arising from sustained AI interaction, while research in Global South settings could investigate cultural alignment within multilingual and culturally embedded distress expressions in AI-mediated counselling. Additional research is required to establish evidence-based escalation thresholds for safe transition from AI-assisted to human-led care.

## **Conclusion**

AI operates as a structural force actively shaping conditions of counselling, influencing access pathways, framing distress interpretations and subtly reconfiguring help-seeking behaviors,

particularly when reliance on technologically mediated support increases. Beyond immediate ethical risks, this introduces a deeper layer of epistemic influence, whereby AI participates in shaping what is recognized as “normal,” what is interpreted as “distress,” and what is considered appropriate “help.” As such, the implications of AI extend beyond matters of safety or efficiency toward a more fundamental transformation in how psychological experiences are constructed, understood and responded to in counselling.

Consequently, a hybrid model-where AI operates within clearly defined, role-bounded parameters under sustained human oversight-emerges as a more viable and ethically grounded future direction. This could alleviate exacerbation of existing disparities in intersecting socio-structural and individual vulnerability factors among clients via the multidimensional implications of AI integration, while reaping the benefits of AI implementation in counselling. Furthermore, an urgent need for AI software and technical tools of higher quality becomes evident, for improving accessibility and engagement among both privileged and vulnerable groups while potentially minimizing the numerous negative implications discussed earlier.

AI may also be understood as not merely a technological aid, but introducing a new epistemic actor within counselling, subtly reshaping perceptions of authority, expertise and trust, potentially by gradually influencing public understanding of what constitutes legitimate knowledge and who is positioned as a credible source of psychological insight. Ethical AI integration is therefore not solely a question of technological capability, but of preserving the relational, interpretive and ethical foundations of counselling within increasingly complex sociotechnical environments.

### Limitations

The rapidly evolving nature of AI technologies means some included studies may not fully reflect the most recent developments in AI-mediated counselling. As capabilities, deployment contexts and regulatory responses continue to shift, the relevance of current findings may change over time.

The study is constrained by its search and selection criteria, as it included a relatively small number of qualitative studies ( $n = 11$ ), limited to peer-reviewed publications in English from 2020 onwards. While this ensured contemporary relevance and analytical depth, it excluded relevant research published in other languages, earlier foundational work or emerging evidence not yet captured within academic databases.

Although this study incorporates contextual considerations relevant to Sri Lanka and broader Global South settings, the findings are not universally generalizable. Variations in cultural norms, technological infrastructure, regulatory environment and mental health systems may influence how AI-mediated counselling is experienced and implemented across different contexts. The Sri Lankan framing is intended to provide situated insight rather than a comprehensive account of all low- and middle-income settings.

The study is limited by exclusive reliance on secondary qualitative data and does not include primary empirical investigation. Therefore, its findings cannot capture real-time practitioner or client perspectives or dynamic interactional processes inherent in AI-mediated counselling environments.

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