Studies in Social Wellbeing

An Open Access Journal

Volume 4 Issue 1, 2025
ISSN: 3007-4479

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L-Università ta' Malta
Faculty for Social Wellbeing

This is an international journal published by the Faculty for Social Wellbeing, University of Malta.

https://www.um.edu.mt/ssw

Studies in Social Wellbeing -

ISSN: 3007-4479

About the Journal

Studies in Social Wellbeing (SSW) is an online, peer-reviewed, open access journal with an international focus on topics related to wellbeing from a social perspective. We look for contributions that engage with research that promotes wellbeing, inclusion, equity and equality. Contributions are welcome from scholars carrying out research in a broad range of areas related to wellbeing, including but not limited to counselling, criminology, disability studies, family studies, gender studies, gerontology, psychology, sociology, public health, social policy and social work, and youth and community studies. Our journal aims to promote original research which crosses disciplinary boundaries in an effort to stimulate knowledge-sharing in areas related to social wellbeing. The journal aims to have a broad scope, covering research from a wide range of academic disciplines, whilst also encouraging research papers with a niche focus on wellbeing. We encourage contributions from practitioners presenting their research or reflecting on their practice, as well as from post-graduate students. Co-authored interdisciplinary research articles are particularly welcome. The journal does not adhere to any single type of methodology; inviting qualitative and quantitative research studies that draw on various psycho-social approaches and philosophical orientations. The journal is owned and managed by the Faculty for Social Wellbeing, University of Malta. It only publishes manuscripts in English.

Peer Review Process

Manuscripts submitted to Studies in Social Wellbeing are subject to a rigorous process of peer review by at least two reviewers with a relevant academic background and expertise.

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This is an international journal published by the Faculty for Social Wellbeing, University of Malta.

Studies in Social Wellbeing, Volume 4: Issue 1: 5-7

ISSN 3007-4479 / https://www.um.edu.mt/ssw

Editorial

Claudia Psaila and Andreana Dibben

Outgoing and incoming Editor-in-Chief

The pursuit of social wellbeing in our contemporary world is a continued negotiation between personal resilience and the socio-political and ecological forces that shape, and often strain, our lives. Increasingly, wellbeing is defined by our capacity to engage with complexity, adapt meaningfully, and find possibility in the face of disruption. This volume of Studies in Social Wellbeing gathers contributions that address such experience of adaptation and resilience with nuance, sensitivity, and intellectual rigour. Each article invites us to dwell within the uncomfortable spaces of disruption and to attend to the ways individuals and communities strive for coherence, connection, and justice.

This issue is also marked by a shift in the journal's editorial leadership. Dr Claudia Psaila concludes her time as editor-in-chief, having led the journal with care and commitment during a time of transition. Dr Andreana Dibben now takes up the role, with a continued commitment to interdisciplinary, critical, and socially engaged scholarship. We write this editorial together, in a spirit of continuity, mutual respect, and a shared belief in the power of research to intervene in the conditions that structure lives.

The opening article by Laurenti and Darmanin Kissaun explores the deeply personal experiences of non-offending caregivers following the disclosure of child sexual abuse (pp. 8 - 40). Using a phenomenological lens, the authors trace the trauma, guilt, and grief endured by caregivers navigating the shock of disclosure, giving attention to the cultural and familial layers that shape

responses to abuse in Malta. They argue for trauma-informed, psycho-educational interventions, particularly in contexts where silence and stigma still dominate narratives of abuse. This work foregrounds the relational nature of recovery and challenges us to centre caregivers' wellbeing as essential to children's healing.

In their study of Filipino migrant workers in Hungary, Balangue and Bene (pp. 41 - 72) examine the intersections of labour migration, healthcare access, and psychosocial wellbeing. Against the backdrop of shifting migration policies and economic precarity, their mixed-method analysis reveals the uneven geographies of care that migrant workers must navigate. What emerges is a complex interplay between resilience and marginalisation. The study offers concrete policy recommendations, underlining that migrant wellbeing cannot be meaningfully addressed without structural commitments to equity, access, and inclusion.

Bonello and Lauri bring ecological precarity into focus with their study on eco-anxiety among participants in the small island state of Malta (pp. 73 - 117). Through the application of the Hogg Eco-Anxiety Scale, the authors bring to light a pervasive sense of existential threat, especially among younger participants. Their findings remind us that the ecological crisis is not an abstract future event but a lived present reality that unsettles the very foundations of wellbeing. By connecting subjective experiences to broader environmental uncertainties, this paper serves as a timely reminder that environmental concern is also a site of psychological distress, and that our understanding of wellbeing must extend to the ecological domain.

In a psychologically rich and evocative contribution, Borg examines panic attacks as moments of existential collapse—"attacks of emotional blindness" (pp. 118 - 147). Her conceptual reframing invites us to move beyond the biomedical model and toward a phenomenological understanding of panic as a disruption in narrative and emotional coherence. This perspective challenges clinicians to reimagine how they engage with clients and encourages a reconceptualisation of panic through the lens of narrative and personal agency, enriching psychotherapeutic practice.

The final article by Vassallo, Pace, and Vella (pp. 148 - 195) investigates the subjective wellbeing of middle and secondary school students in Malta, using a national sample. Their analysis offers critical insight into how school satisfaction, peer relationships, and a sense of purpose contribute to young people's wellbeing. Notably, the authors emphasise the need to recognise children as active agents in their own lives, challenging adult-centric approaches that treat them solely as future citizens rather than as present subjects of rights and care.

Each article in this issue offers insight into how people navigate moments of rupture, and what social systems can do to support and not merely survive them. What connects these diverse contributions is an ethical commitment to situated knowledge, a sensitivity to relational dynamics, and an insistence on attending to the lived realities that shape wellbeing. Whether through the aftermath of trauma, the complexities of migration, ecological uncertainty, or adolescent development, the authors in this issue offer contextually grounded analyses that expand our understanding of what it means to live —and to live well —in conditions of uncertainty.

We extend our heartfelt thanks to the contributors whose work lies at the heart of this issue and to the generous reviewers whose thoughtful engagement helped shape it. Dr. Claudia Psaila concludes her time as editor-in-chief with gratitude for the opportunity to have contributed to the journal’s development, as she continues to serve as a member of the editorial board. Meanwhile, Dr. Andreana Dibben steps into the role with enthusiasm for its future directions. We are especially grateful to Ms Maria Giulia Borg for her committed and discerning service as outgoing Assistant Editor, and warmly welcome Mr Michael Debattista, whose insight and care we are confident will enrich the journal's next chapter. We also welcome Dr. Katya Degiovanni, a new member of the Editorial Board.

May this issue not only inform but also provoke, unsettle, and inspire. May it remind us that social wellbeing is not a fixed state, but an ongoing and collective project of care, resistance, and imagination.

Studies in Social Wellbeing, Volume 4: Issue 1: 8-40

ISSN 3007-4479 / https://www.um.edu.mt/ssw

The Caregiver's Experience of Child Sexual Abuse Discovery

Michela Laurenti[1] and Dr Greta Darmanin Kissaun[1]

[1]Department of Psychology, Faculty for Social Wellbeing, University of Malta

Author Note

Michela Laurenti ORCID ID: 0009-0000-8840-500X-8848.

Greta Darmanin Kissaun ORCID ID: 0009-0003-1318-5040

ORCID ID: 0000-0001-5219-8010.

Correspondence concerning this article should be addressed to Michela Laurenti.

Email: michela.laurenti.15@um.edu.mt.

Abstract

The aim of this study is to understand the experience of non-offending caregivers (NOCs) finding out that their child has experienced sexual abuse (CSA). It will primarily focus on understanding how NOCs describe their experience of finding out, and how NOCs make sense of their reactions to their child's disclosure. There is a lacuna of research focusing on the NOCs' experience of finding out, and this research endeavours to address this paucity of information. This study adopted a qualitative approach, and semi-structured face-to-face interviews were conducted with two mothers who both experienced their child's disclosure of sexual abuse. Interpretative Phenomenological Analysis (IPA) was utilised to analyse these case studies in-depth. The following superordinate themes emerged from the analysis, (a) The Moment, (b) Finding out as a Process, and (c) The Occurrence of Trauma. While various details of the sexual abuse and disclosure differed, participants appeared to have experienced similar feelings resulting from their child's disclosure. This study highlights the NOCs' reactions to finding out about their child's experience of sexual abuse, some of which include shock, compassion, empathy, fear, guilt, self-blame, anger, disappointment, grief, loss, acceptance and symptoms of trauma. Key findings indicate the similarity between the NOC's experience of finding out, and the experience of loss that provides scope for future research in the area. They also evidence participants' avoidant coping strategies, thus informing the practice of psychotherapy with NOCs.

Keywords: non-offending caregiver, child sexual abuse, disclosure, interpretative phenomenological analysis

The Caregiver's Experience of Child Sexual Abuse Discovery

Child Sexual Abuse (CSA) is a global problem (Gewirtz-Meydan & Finkelhor, 2020) that generally leaves negative consequences in its aftermath (Stoltenborgh et al., 2011). These may be experienced by the survivor and their family (Hernandez et al., 2009; van Toledo & Seymour, 2013). The survivor's family may also experience a sense of shame after the CSA disclosure (Reitsema & Grietens, 2015).

For the purpose of this study, Modelli et al.'s (2012, p.2) definition of CSA was adhered to, namely a non-consensual sexual act, perpetuated against someone under 16 years. There must be a difference between the ages and maturational levels of perpetrators and targets (Manion et al., 1998). The CSA may or may not be incestual (Finkelhor, 2009; Kendall-Tackett, 2001), and may be penetrative or non-penetrative, and does not necessarily include physical contact (Finkelhor, 2009; Murray et al., 2014). The perpetrator, the individual who commits the sexual abuse, may not be known to the target, and may or may not be an adult (Finkelhor, 2009). The non-offending caregiver (NOC) refers to the caregiver of the survivor, who is also the recipient of disclosure, and was not involved in the act of CSA. Disclosure refers to the process of the survivor sharing their CSA experience with their NOC. The term survivor refers to the minors who experienced sexual abuse. The term 'survivor' has connotations of being free from defenselessness and powerlessness, and thus, was chosen over the term "victim" (Dahl, 2009).

Child Sexual Abuse Disclosure

CSA disclosure can be crucial to stopping the sexual abuse (Serin, 2018; Tang et al., 2008). Survivors of CSA tend to disclose their experience to someone who is close to them (Münzer et al., 2016), supportive (Anderson, 2016), and who they believe is able to end the abuse (Reitsema & Grietens, 2015). Consequently, numerous survivors who disclose their CSA experience, disclose to their mother (Malloy & Lyon, 2006). Disclosure of CSA is an interpersonal

process (Alaggia et al., 2019), and is equally dependent on the survivor's communication as it is on the recipient's response (Reitsema & Grietens, 2015).

The child's expectation of social support from the recipient of disclosure seems to be pivotal in their decision to disclose (Tang et al., 2008), with their anticipated reaction of the recipient also influencing the contents of disclosure (Jensen et al., 2005). NOCs seem to exhibit less support when the CSA is incestual (Wallis & Woodworth, 2021), and survivors are less likely to disclose when the perpetrator has a close relationship to them (Malloy & Lyon, 2006).

Reactions to Child Sexual Abuse Disclosure

Whilst most non-offending mothers are supportive following their CSA disclosure, this support may occasionally be ambivalent and inconsistent (Yancey & Hansen, 2010). NOCs' ambivalent reactions to CSA disclosure have been identified in different studies (Reitsema & Grietens, 2015), and may be cognitive and/or affective, potentially resulting in unstable behaviour of the NOC (Bolen & Lamb, 2004). Ambivalent responses are typical when the NOC has a close relationship with the target of CSA as well as the perpetrator, and has to choose between the two (Bolen, 2002; Bolen & Lamb, 2004). This response may also occur when choosing a side can result in significant consequences (Bolen, 2002), such as when the perpetrator is intra-familial, a parent, and/or is the breadwinner (Yancey & Hansen, 2010). CSA disclosure is usually unexpected and complicated for the recipient (Elliott & Carnes, 2001; Hébert et al., 2007), thus reactions are often not straightforward positive or negative reactions (Reitsema & Grietens, 2015). Moreover, NOCs' reactions to CSA disclosure are typically swayed by contextual (Knott & Fabre, 2014) and cultural aspects (McElvaney & Nixon, 2020).

Impact of CSA Disclosure on Non-offending Caregivers

The potential effect that CSA disclosure has on NOCs, and the crucial role of NOCs in the survivor's post-disclosure recovery, highlights the importance of understanding NOCs' needs when supporting the CSA survivor (van Toledo & Seymour, 2013). Many challenges are faced by

mothers following their children's CSA disclosure (Cyr et al., 2016), and this is supported by the extant literature (Fong et al., 2017). Post-Traumatic Stress Disorder (PTSD) has been found to be more present in mothers who also have a history of CSA themselves (Timmons-Mitchell et al., 1996). Mothers experience higher levels of distress when the sexual abuse is intra-familial (Hébert et al., 2007) with feelings of guilt and self-blame being more prevalent in cases where the perpetrator was also the father of the survivor (Plummer & Eastin, 2007).

Cyr et al. (2013) considered (a) psychosocial services, (b) coping strategies, and (c) external support among the various elements that influence the manner in which NOCs handle their child's CSA disclosure. This is supported by Kilroy et al. (2014) who found that receiving support from family, friends and professional services such as the police and social workers, impacted the effect CSA discovery had on NOCs. Cyr et al. (2013) grouped non-offending mothers into four categories as a result of their quantitative study, (a) resilient mothers, (b) avoidant coping, (c) traumatised mothers, and (d) anger-oriented reactions. Increased symptoms of distress were found in mothers who deployed avoidant strategies, had reduced problem solving, and who were less likely to seek support (Daignault et al., 2018). PTSD symptoms and avoidant symptoms were also reported in mothers using avoidant coping (Cyr et al., 2013).

Grief and Loss

Learning and accepting that one's child has experienced sexual abuse may lead to feelings of deep emotional loss (Hébert et al., 2007). This notion is reinforced by the findings of McCourt et al. (1998) and Pretorius et al. (2011) who identified themes associated with grief and loss in their qualitative studies. These themes include anger, self-blame, guilt, disbelief and sadness (McCourt et al., 1998; Pretorius et al., 2011) and are in coherence with the five stages of grief and loss purported by Kübler-Ross and Kessler (2005) and delineated by these authors as denial, anger, bargaining, depression and acceptance, that may occur in any order, may be

repeated, and may be skipped all together. According to these authors denial is characterised by a state of shock and the world appears meaningless; anger provides structure to the emptiness of loss and may be directed at someone who is present or otherwise; bargaining is accompanied by feelings of guilt and questions of "What if?", whereas depression involves feelings of sadness accompanied by the belief that the feeling will last forever; lastly, acceptance is understanding and accepting that this reality is permanent (Kübler-Ross & Kessler, 2009).

NOC Intervention Following CSA Disclosure

The literature, albeit limited, supports the necessity for intervention with NOCs following CSA disclosure (Alaggia et al., 2019). Focal areas of intervention include (a) providing information and support – psycho-education may serve as a tool for empowerment and decrease self-blaming tendencies (McElvaney & Nixon, 2020) – (b) addressing the NOC's reaction to the CSA disclosure, and (c) aiding the NOC in caring and supporting their child (Alaggia et al., 2019; Malloy & Lyon, 2006; van Toledo & Seymour, 2013; Yancey & Hansen, 2010). The psychological health and functioning of the NOC is pivotal to the survivor's post sexual abuse recovery (Daignault et al., 2018), therefore, it is crucial that interventions for survivors of CSA and their family are accessible (Tavkar & Hansen, 2011). The mental health of a NOC affects the capacity to be sensitive and responsive to the needs of a child, potentially influencing recovery following CSA as a result of this (Lewin & Bergin, 2001). NOC distress may therefore inhibit their capability of effectively caring for their child (Hébert et al., 2007).

CSA in Malta

The prevalence rate of reported CSA in Malta appears to have more than doubled from 2019 to 2020, and has increased by 75% from 2020 to 2021 (Marchand-Agius, 2024). In 2020, 100 cases of CSA were reported, more than double the amount when compared to 2019 where 45 cases were reported (Marchand-Agius, 2024). Additionally, 175 cases were reported in 2021, 157 in 2022 and 158 in 2023 (Marchand-Agius, 2024).

Reporting of CSA in Malta may be especially problematic where residents are subject to an increased level of social visibility (Clark, 2012). Malta forms part of the European Union (EU) and is the most densely populated country (Agius et al., 2016; Clark, 2012). Culture could potentially influence; (a) whether a child discloses and/or whether the CSA is discovered (Alaggia, 2005; Fontes & Plummer, 2010; Reitsema & Grietens, 2015; Tener & Murphy, 2015), (b) a mother's CSA disclosure response (Knott & Fabre, 2014), and (c) the decision to report the CSA (Fontes & Plummer, 2010). Thus, Malta's small size may deter survivors and their families from reporting the CSA.

Rationale for the Study

While there is an abundance of research focusing on CSA (Yancey & Hansen, 2010), research focusing on the lived experience of NOCs is limited (McElvaney & Nixon, 2020). This research therefore aims at understanding the NOCs' experience of finding out, and how they make sense of their reactions to their child's disclosure of sexual abuse.

Method

The participants in this study were two non-offending mothers who experienced CSA disclosure from their child. The consideration of two case studies facilitated the idiographic focus on the in-depth analysis of the participants' subjective experiences, where Interpretative Phenomenological Analysis (IPA) was deployed. This is in line with Smith et al.'s (2009) recommendation that Masters students should use small samples and their 2022 suggestion that IPA should make use of "small, purposively-selected and carefully-situated samples, and may often make very effective use of single cases analyses" (p.24).

Interpretative Phenomenological Analysis (IPA)

IPA was considered appropriate to address the aims of this study due to its exploratory nature (Larkin & Thompson, 2012) and interpretative underpinnings (Smith et al., 2009). Its idiographic and experiential focus (Eatough & Smith, 2006, Shinebourne, 2011; Smith et al.,

2009;) and phenomenological underpinnings (Giorgi et al., 2017) render it especially suitable when investigating relatively under-researched areas (Smith & Osborn, 2003). It enables researchers to carry out descriptive research and is considered to be the most participant-centred qualitative approach by several researchers (Alase, 2017).

IPA is rooted in phenomenology (Heidegger, 1962), hermeneutics (Ricoeur, 1975) and idiography (Harre, 1979). Its main aim is to capture the lived experience of the individual, and is thus focused on quality over quantity (Smith et al., 2009). Researchers who opt to use IPA lean towards gathering in-depth data as opposed to adopting a wider lens to understand a particular phenomenon in great detail (Pietkiewicz & Smith, 2014).

Data Collection

This study is an outgrowth of a Master's dissertation submitted to the Department of Psychology at the University of Malta by Laurenti (2022) in partial fulfillment of the Master of Science in Psychological Studies. Ethical clearance was granted by the Malta University Research Ethics Committee (ID number 6377), and all subsequent procedures for recruitment and data collection were in line with the committee's recommendations. Purposive sampling was used as a recruitment method, in line with Smith and Shinebourne (2012), and Smith et al.'s (2022, p. 43) recommendations for studies using IPA with small, homogenous samples. The inclusion criteria were as follows:

1. The participant's child had experienced sexual abuse and disclosed of this experience to them.

2. The survivor of abuse was over 18 years of age.

3. At least three years have passed since the time of disclosure.

The participants were recruited from a Facebook group termed *Women for Women*, and were invited to contact the researcher voluntarily. Both participants were given the information

sheet and consent forms - one for the participant and one for the CSA survivor - ahead of time. Informed consent was obtained and each participant was given the opportunity to ask questions. Participants were debriefed following the interview and were handed a list of mental health professionals who they were free to consult if necessary. Face-to-face semi-structured interviews were conducted by the first author with the two female participants, mothers of children who had experienced sexual abuse and subsequently disclosed this to them. The interviews, which lasted approximately 1 hour and consisted of 14 open-ended questions, were audio recorded and transcribed verbatim. Participants were given the freedom to express themselves in Maltese or English. Pertinent quotes in Maltese were translated into English.

Data Analysis

The steps outlined by Smith et al. (2009) were used as a guide for the data analysis. The researchers are aware of the updated guide "Interpretative Phenomenological Analysis; Theory, Method and Research" (2022, pp. 75-108). However, the analysis was well underway when this was published, therefore, the original method of data analysis as stipulated by Smith et al. (2009) was adhered to. An iterative and cyclical mode of interpretation, according to Heidegger's (1962) notion of the hermeneutic circle, was deployed. The process was underpinned by researcher reflexivity (Etherington, 2004). The impact of the researcher's standpoints and biases on the process of data collection and interpretation was thus acknowledged. The researchers' understanding of different phenomena were challenged by means of a process termed bridling by Dahlberg (2006). Participants' anonymity was preserved by assigning pseudonyms to both, and all information that could potentially render participants identifiable was omitted from the paper.

Findings and Discussion

Jane's Story

The perpetrator of CSA was Jane's husband and the survivor's biological father, thus the CSA was intra-familial. The CSA went on for approximately 3 years, until it was disclosed. The CSA disclosure was unprompted and led to Jane's separation from the perpetrator. Jane is 55-64 years old[1], she is the primary caregiver of the survivor, and is also a survivor of CSA herself, however, she was not believed by her own NOCs. A duration of 25 years passed between the time of disclosure from her child and the interview for this study.

Samantha's Story

Samantha is aged between 45-54 years old and is the biological mother and primary caregiver of her son. Her son experienced extra-familial CSA perpetrated by an older student at school. Two other students – uninvolved in the CSA – warned Samantha about something happening at school, which resulted in her prompting the CSA disclosure. The disclosure took place 15 years before the interview for this study, and t he CSA duration was approximately 1.5-2 weeks.

Superordinate and Subordinate Themes

The following table presents superordinate themes and subordinate themes that emerged from the analysis of the transcribed interviews. Excerpts of the participants' narratives, in the form of direct quotes elicited from the interviews, are presented throughout the following section.

Table 1

Superordinate and subordinate themes

[1] Exact age was omitted from the study to preserve participants' anonymity

Superordinate Themes	Subordinate Themes
The Moment (Initial Reactions)	1. It was a shock 2. Belief and Support: A Knee-jerk Reaction 3. Compassion and Empathy
Finding out as a Process	1. The Many Aspects of Fear 2. Guilt and Self-blame 3. The Presence of Anger 4. Feelings of Disappointment (Resource Constraints) 5. Experiencing Grief and Loss 6. Frustration and Acceptance
The Occurrence of Trauma	1. Revisiting the Past 2. Re-Opening Psychological Wounds 3. Remembering vs Forgetting

The Moment (Initial Reactions)

"Il-mument", was used by Jane to refer to the moment when her daughter disclosed her experience of sexual abuse to her. This superordinate theme thus refers to the moment when participants found out.

It was a shock

Shock is expressed by both participants, and is coherent with the findings of Kilroy et al. (2014), Pretorius et al. (2011) and Thompson (2017). Jane experienced shock due to the perpetrator being her husband and the father of the survivor; "shocked, speechless…". Samantha's shock stemmed from a place of not knowing much about Male CSA and from the concern about possible physical repercussions of the CSA on the son; "on a boy you don't hear a lot about them".

Belief and support: A knee-jerk reaction

This sub-theme encompasses the NOCs' immediate belief and support following the CSA disclosure, as though it was a reflex, like a "knee-jerk reaction". Reitsema and Grietens' (2015) review is coherent with these findings. The study by Kilroy et al. (2014) yielded mixed findings, where some participants believed the disclosures, while others did not. Belief and support change over time (Alaggia, 2002; Elliott & Carnes, 2001), however, this was not the case for Jane and Samantha. It was found that belief (Elliott & Carnes, 2001) and support (Malloy & Lyon, 2006; Wallis & Woodworth, 2021) were less likely to be present in cases of incestual abuse, which was not the case in this study. Participants reported that they instantly believed their child's disclosure, and demonstrated effective support, through empathic responses and the seeking out of professional help; "as soon as I got to know, I phoned the paediatrician" (Samantha). Behavioural support was also exhibited in their efforts to limit contact between the survivor and perpetrator. This is in line with the three different dimensions of support identified by Alaggia (2002).

Compassion and empathy

Compassion and empathy refer to the participants' feelings towards the survivor, as well as towards the perpetrators and their families. Jane became visibly upset when recounting her daughter's experience, with her eyes tearing up and her voice becoming low. Jane's own history of CSA may have led to her empathising more deeply with her daughter.

Kilroy et al. (2014) found that NOC's experience of sympathy towards perpetrators were especially present in situations when perpetrators were minors, which was also the case for Samantha. Samantha explained that she felt sorry for the mother of the perpetrator "bdejt nitħassar lilha" ("I began to feel sorry for her") and mentioned how she empathised with her "I was putting myself in her shoes". While Samantha's feelings of sympathy towards the perpetrator and their family may be sincere, this may also be construed as a reaction-formation

- a term coined by Freud (1894) - whereby Samantha may have repressed any aggressive feelings towards the perpetrator and transformed them into more acceptable emotions such as compassion. By sympathising particularly with the perpetrator's mother, Samantha may have displaced her own intense emotions and thus, avoided experiencing them. This defensive strategy - referred to as "displacement" by Freud (1894) - is coherent with the avoidant coping strategies identified in Cyr et al.'s (2013) quantitative study. Additionally, throughout the interview Samantha appeared to be constantly resorting to rationalisation - a term deployed by Freud (1984) to refer to another defence mechanism of the ego - by explaining that the CSA and overall situation could have been a lot worse. This could possibly be construed as another avoidant strategy, aimed at warding off unbearable thoughts and emotions evoked as a result of the CSA. Cyr et al. (2013) found that symptoms of PTSD were exhibited in mothers who made use of avoidant coping mechanisms.

Finding out as a Process

This superordinate theme refers to the process of finding out, and the stages which became apparent through the interviews and analysis. Some of the prevalent emotions experienced by NOCs are fear, guilt, self-blame, anger, aloneness and isolation.

The many aspects of fear

This refers to the presence of fear in NOCs. Fear emerged very differently in the studies of McCourt et al. (1998), Pretorius et al. (2011), and Thompson (2017), when compared to this study. Jane feared that the perpetrator would cause harm to her children following his emancipation from prison and explains how she "was afraid he was going to do something to them". This is coherent with the findings of Pretorius et al. (2011). On the other hand, Samantha appeared to fear her husband's reactions towards the perpetrator following his discovery of CSA; "I was trying to keep the situation calm so that I don't see him…go for them and kill them". This was in line with Fong et al.'s (2017) findings, who also identified participants' distress in

relation to fear that a family member would confront the perpetrator. This may once again suggest Samantha's displaced emotions. It may be easier to fear her husband, who may be viewed as less of a threat in comparison to the perpetrator. Similarly, Samantha may feel guilty for having strong negative emotions towards a minor.

Jane explained that, "from my mum's side I had some judgments" in reference to her sharing her experience of her daughter's disclosure. This may have potentially triggered past memories of her own CSA disclosure. Fear of judgement was also exhibited in her relief to her friend's reaction when explaining her daughter's disclosure: "she believed me… a great relief". Samantha did not share the news with anyone due to the fear of judgement. She explained that her mother would "…probably blame me".

A participant in Pretorius et al.'s (2011) study felt embarrassment when faced with the possibility of others discovering the CSA. While embarrassment is essentially different from fear of judgement and blame, it is important to note that the Maltese cultural context is particularly prone to fostering shame (Darmanin-Kissaun & Clark, 2022). Perhaps participants' fear of judgement was augmented by Malta's strong sense of "moral community", and the community members' propensity to gossip (Clark, 2012). Therefore, it seems rational to hypothesise that the entire family may be impacted by the awareness that others are observing and judging (Fontes & Plummer, 2010). This is in line with Knott and Fabre's (2014) and McElvaney and Nixon's (2020) research that found that NOCs' reactions to CSA disclosure are typically swayed by contextual and cultural aspects.

Guilt and self-blame

Feelings of guilt and self-blame have been identified in a number of other studies (Fong et al., 2017; McCourt et al., 1998; Pretorius et al., 2011; Thompson, 2017). Similarly, Jane blamed herself for her daughter's experience of CSA – "I blame myself for it all". Her self-blame was possibly augmented by her other daughter who blamed Jane for the incarceration of the

perpetrator, her father; “She was always blaming me for not having her dad”. Similarly, Fong et al. (2017) found that participants felt guilty for not preventing the abuse or discovering it earlier. Jane’s guilt is further emphasised in her efforts to convince herself that the abuse was not her fault; “I know I’m not guilty, I know I did everything, I know”.

Samantha’s guilt is exhibited through the imagined dialogue with her mother; “She’d tell me that I did something wrong….". Samantha explained the ways in which she did not react to the abuse, rather than the way she did; “for sure I didn’t judge him”. This could indicate she may be experiencing guilt resulting from her reaction to the CSA disclosure. This notion is reinforced by her desire to seek reassurance from a psychologist that she handled the situation well. Her attempts to reassure and thus console herself by rationalising that the CSA and her reaction to disclosure could have been a lot worse further supports this finding; “I could have done worse”. Samantha’s insecurity regarding her worth as a mother following CSA emerged as a result of the feelings of guilt and self-blame. This insecurity was exhibited in her efforts to explain her parenting strategies related to life-events which were separate from the CSA. This is coherent in the findings of Fong et al. (2017), Kilroy et al. (2014) and Plummer and Eastin (2007).

The presence of anger

Anger is prevalent among non-offending mothers whose children have been sexually abused (Thompson, 2017). McCourt et al. (1998) identified anger as being subsumed beneath the theme of bereavement. This is coherent with the findings of Kilroy et al. (2014) who state that anger can be directed at the self. Anger was exhibited by both participants through their self-blaming behaviours and guilt – “the anger was all against me” (Jane). In Jane’s case, and in line with McCourt et al.’s study (1998), she also directed her anger towards the perpetrator, the Judicial system, and the police who allowed the perpetrator to have continued access to the children, despite his actions; “that really bothered me, the whole system” and “once he was out of jail, he still had access visits”.

Samantha expressed her anger towards the bystanders who did not stop the abuse which possibly served as a safe outlet of anger which, if expressed, she feared might anger her husband. She also appeared to be consumed by a general form of anger that targeted the situation as a whole; “sort of angry… why should something like that happen?”, which is suggestive of contained anger.

Feelings of disappointment (resource constraints)

This sub-theme focuses on participants’ experiences with the external support systems which they accessed, including mental health and medical professionals, the police, and social workers. The negative perception of police involvement is emphasised in Jane’s description of her husband’s incarceration and in Samantha’s reluctance to report her son’s CSA. Both participants had an initial meeting with Aġenzija Appoġġ, [2]however, eventually sought help from psychologists working privately due to long waiting lists. Jane expressed her disappointment when saying “that really bothered me, the whole system”. Similar findings emerged in Kilroy et al. 's (2014) study, where participants had negative perceptions of the support systems available and found them to be lacking resources.

Experiencing grief and loss

This sub-theme emerged from the analysis in both participants for significantly different reasons. Jane experienced the loss of her husband, the perpetrator, who was incarcerated for his actions. Samantha experienced loss in relation to her son, the loss of the “perfect child” as a consequence of the CSA; describing it as, “It was like he had a future, and now he doesn’t”. While participants may not have experienced all stages of grief as identified by Kübler-Ross and Kessler (2005), some similarities were noted. Denial may have emerged through feelings of shock and avoidant coping. Anger was explicitly mentioned as forming part of the NOCs’

[2] This is an agency based in Malta which safeguards families and individuals through psycho-social services https://www.um.edu.mt/ssw

experience. Compassion and empathy emerged as significant emotional reactions. Lastly, acceptance was experienced by NOCs and is discussed in the following section. This highlights the similarity in experiences between someone who is grieving and the participants' experience of finding out. Kilroy et al. (2014), McCourt et al. (1998), Pretorius et al. (2011), and Thompson (2017), also identified similar themes in their studies.

Frustration and acceptance

Acceptance is usually construed as an important stage that marks the end phase of mourning, allowing individuals to resume their lives. Jane explains that while the pain of her experience is not as intense anymore, she still experiences episodes of sadness, and believes that one can never fully move on from this type of event; "you never really get over it". Samantha, on the other hand, recounts her experience with pride and a sense of accomplishment for having overcome this adverse event; "deep down I know, I dealt with it in the right way I think, because I feel good". Acceptance also surfaced in Thompson's (2017) qualitative study.

The Occurrence of Trauma

Trauma can be described as an event which is physically, cognitively and emotionally overwhelming for an individual, and overpowers their ability to cope with the situation (Giller, 1999). While Samantha insisted that she did not believe the CSA disclosure was a traumatic experience, as revealed by her statement - "personally I don't feel it was very traumatic"- the findings suggest otherwise.

Revisiting the past

Given that this was a retrospective study, the interviews necessitated participants to revisit the past and recount their experience. Participants' discomfort was evident in their non-verbal communication, and their struggle to "stay with" and to remain present in the moment

when asked particular questions during the interview. Jane would often shift her attention to the days that followed the disclosure. She constantly repeated that the experience was “too much”, highlighting the intense emotions roused by memories of the event. When asked to recall particularly difficult moments both participants attempted to change the subject onto something they perceived to be more neutral and therefore less upsetting. For example, Jane would begin explaining how she “just kept going” because she had “no choice” and then would immediately begin speaking about her children following the moment of the CSA disclosure, “they all had psychological problems”. Additionally, when Samantha was explaining that the two young students (bystanders) were reluctant to divulge exactly what happened to her son, she quickly digressed and began to recount an unrelated conversation between her husband and a neighbour, “my husband told her (the neighbour) ”don’t worry about the house, we were going to get someone to fix it””. This may be another instance of deploying avoidant coping, which may be related to PTSD symptoms and dissociation (Daignault et al., 2018). Indeed, avoidance of stimuli related to the trauma is a symptom of PTSD (Oltmanns & Emergy, 2011).

Neuropsychological research e.g., by van der Kolk (2014) among others, has demonstrated that the activation of a traumatic memory significantly impacts the functioning of the speech and language centres of the brain.

Re-opening psychological wounds

Timmons-Mitchell et al. (1996) found that following the discovery of one’s child’s sexual abuse experience, higher levels of post-traumatic stress symptoms were present in mothers with a history of CSA, when compared with mothers with no such history. Jane was the only participant who had a history of CSA and appeared to still hold a substantial amount of guilt from this experience at the time of her daughter’s disclosure; “I still carried so much guilt from my own abuse”. Jane explained how she had engaged in self-blaming behaviour and experienced anger towards herself. She became fidgety when recalling her own CSA experience

and disclosure. Feelings of guilt, self-blame and anger appeared to resurface following Jane's daughter's disclosure. Fong et al. (2017) also found that following a child's CSA disclosure, participants with a past experience of maltreatment – not necessarily CSA – re-experienced negative memories. More specifically, a participant in Fong et al.'s (2017) study experienced the same feelings they had felt following their CSA, similar to Jane. Thompson (2017) observed that following the discovery of their child's CSA, numerous participants who are survivors of CSA, experienced re-traumatisation, intrusive memories and difficulties coping. Similarly, Jane explained how "it triggered (her) as a child, that they (her parents) didn't believe and how they treated (her) with guilt".

Remembering vs forgetting

The last sub-theme refers to the memories available to participants during the interview. There is a contrast between Jane, whose memory was vivid, and Samantha, who had trouble recalling particular details. When Jane described her daughter's face during her doctor's examination there was a sudden change in her prosody evidencing the intensity of the memory; "I can still see her face, her terrified eyes looking at me". In contrast, Samantha could not remember the names of the boys who encouraged her to prompt the disclosure, as she "…erased them from…memory". In some instances, Samantha struggled to articulate her experience, which resulted in her describing her physical sensations rather than her mental events. She stated "I got cold" and "it's as though someone is hitting you here [pointing to her stomach]", at the moment of discovery . It is possible that to some extent, Samantha could still experience those feelings on an unconscious level. Therefore, while she struggled to remember certain memories and details, her body seemed to remember the experience of finding out. This often occurs when individuals have experienced a traumatic event (van der Kolk, 2014) and is reminiscent of dissociative amnesia, defined by Mangiulli et al. (2021) as the inability to remember important autobiographical experiences, usually of a stressful nature.

Samantha described having “a gut feeling that something bad is going to happen. You’re going to go through a traumatic phase”.

Limitations

Despite the rich and complex data generated by an in-depth focus on two participants, different themes may have emerged from the analysis had more participants been recruited, thus, impacting the findings. Additionally, the severity of CSA and types of disclosure varied, therefore, the transferability of the experience may be limited. Demographic details of the NOCs, which could possibly shed further light on their experience, were not recorded at the time of data collection, such as their socio-economic status (SES), level of education, and age. This was done in an effort to safeguard participants’ identity due to Malta being a small close-knit community. Thus, only the age group of participants was collected. Furthermore, the underrepresentation of non-offending fathers renders the findings non-transferable to that demographic. This is a consequence of the recruitment method used, since only women are in the Facebook group *Women for Women*. Other methods of recruitment were utilised, however this was the only successful method through which individuals reached out and showed an interest in participating.

The constraint of having to wear a face-mask during interviews (due to COVID-19 restrictions) may have posed an additional barrier between interviewer and interviewee, due to the inaccessibility of the interviewer’s facial reactions. In addition, there was no control for any potential mental health consequences which may have been a direct result of COVID-19.

Given that this was a retrospective study, there may be limitations related to the reliability of the participants’ memories. Participants’ discomfort and difficulty in recounting past experiences was evident in their non-verbal communication, and their struggle to “stay with” and remain present in the moment during the interview. Traumatic reactions could have set in motion avoidant or dissociative coping strategies that may have augmented participants’

difficulty in conveying complex inner states through language. Additionally, the semi-structured interview, although a useful research tool, does not bypass unconscious aspects of the experience. The sole reliance on self-reporting of participants, limited the understanding to explicit experiences and beliefs, leading researchers to interpret implicit content by resorting to inference.

Conclusion and Recommendations

This study has identified a number of new findings providing in-depth insight into the lived experience of NOCs finding out that their child has experienced CSA. Findings indicate that this process may result in diverse negative effects and emotions. This study also sheds light on the various severities of CSA, and the types of disclosure – prompted and unprompted. A sense of loss of self-worth as parent detected in participants' accounts has implications for psycho-education that may be doubly beneficial; (a) it may provide NOCs with the necessary skills and support required to help their offspring, and (b) it may indirectly address the sense of inadequacy related to their parenting skills. NOCs may also benefit from guidance on how to approach family members following CSA disclosure, particularly in cases of intra-familial CSA.

This study highlights the possible occurrence of trauma symptoms, which may be helpful to consider when contemplating potential therapeutic techniques and approaches which can be utilised when working with NOCs. Clinical interviews that aim to detect the unconscious avoidant processes mentioned in this study may be beneficial when designing a treatment that would permit NOCs to process the various emotions experienced following CSA discovery. A trauma-informed psychotherapeutic approach may be particularly relevant to target elements of dissociation, amnesia and avoidant strategies identified and mentioned in the findings and which pose challenges to traditional talking therapy. Indeed, neuroscience findings suggest that experiential therapy (e.g., psychodrama) is the treatment of choice when working with

symptoms of trauma (Giacomucci, 2021). Family therapy may also be an effective route, considering the disruption to the family system resulting from CSA.

The study has also raised significant questions that can only be addressed in the following avenues in future studies. The duration between the lived experience and the interview should be kept to a minimum in order to reduce the risk of distorted memories and other biases. The large underrepresentation of male NOCs in CSA research warrants the need for future studies to focus entirely on male NOCs. A comparative study between the experience of grief and the experience of finding out may also be useful due to the prominent findings which emerged in this study and those of other researchers. Lastly, as a direct result of the findings, it may be interesting to study the experience of NOCs of minors who have perpetrated CSA.

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Authors' bios

Michela Laurenti holds a Bachelor's degree in Psychology and a Master of Science in Psychological Studies from the University of Malta. As part of the Erasmus+ programme, she enriched her academic journey with a semester at the University of Padova in Italy, gaining valuable international experience. Her research is driven by a deep commitment to exploring the nuanced and often under-represented lived experiences of individuals. Michela adopts a qualitative and theoretically informed approach to investigate the complex realities surrounding child sexual abuse (CSA). Her work addresses critical issues such as disclosure processes and the broader impact of CSA on family members, and she is committed to obtaining a more in-depth and comprehensive understanding of the under-researched aspects of this topic.

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Dr Greta Darmanin Kissaun, PhD, is a resident senior lecturer and former Head of Department of Psychology at the University of Malta. She trained in Clinical Psychology at the University of Padua, Italy and earned her PhD from Regent's University, London. She is also a clinical psychologist and psychotherapist in private practice and has worked extensively with severe mental health difficulties. In her role of co-ordinator of the professional Masters programme, she has been supervising trainee clinical psychologists since 2005. Her research interests include psychopathology, psychotherapy and clinical supervision and some of her research addressing these areas has been published in local and international peer reviewed journals and edited books.

Studies in Social Wellbeing, Volume 4: Issue 1: 41-72

ISSN 3007-4479 / https://www.um.edu.mt/ssw

Exploring the Quality of Life of Filipino Migrant Workers in Hungary:

Barriers to Healthcare Access and Impacts of Migration on Well-being

Climson Balangue and Dr Ágnes Bene

Author Note

Climson Balangue ORCID ID: 0009-0005-1309-8283-1900

Ágnes Bene ORCID ID: 0000-0003-2275-7090

Abstract

The exponential growth of Filipino migrant workers or overseas Filipino Workers (OFWs) in Hungary (2,971% increase, 2018-2022) seeking financial stability, necessitates a comprehensive study on the quality of life (QOL), access to healthcare, and the impacts of migration on this expanding population. This surge marks a significant departure from Hungary's historically restrictive immigration policies, as the nation welcomes foreign workers at an unprecedented scale due to shortage in skilled workers. This study targeted OFWs in rural Szabolcs-Szatmár-Bereg County using a mixed-methods approach. Quantitative data was gathered through the World Health Organization Quality of Life – Brief Version (WHOQOL-BREF) questionnaire and was computed and analysed as prescribed in the World Health Organisation (WHO) manual, while the qualitative data explored healthcare barriers and migration impacts and was scrutinised using thematic analysis. Results showed that the overall perceived QOL score (74.01 ± 20.59) and health status (67.11 ± 20.90) were at a good level, with positive scores across all domains (social, environment, psychological, and physical). Moreover, correlation tests indicate that all domains have a positive relationship with each other, signifying the need for a holistic approach in improving QOL, as the gain in one is a gain in others. In addition, differences in various demographic and socioeconomic factors such as age, education, income, job category and duration, and illness were found to be statistically significant when associated with QOL domains. Moreover, OFWs face healthcare access challenges due to communication, work, finances, psychology, and transportation. Migration impacts economics, social/cultural aspects, health, personal development, and overall life conditions. Recommendations are provided to improve well-being and successful integration.

Keywords: well-being, overseas Filipino workers, migration, health, Hungary

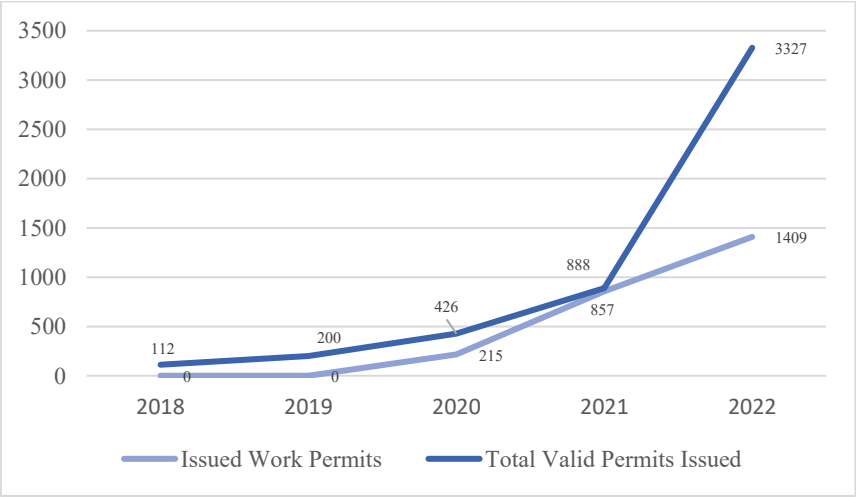
Exploring the Quality of Life of Filipino Migrant Workers in Hungary: Barriers to Healthcare Access and Impacts of Migration on Well-being

Overseas Filipino Workers (OFWs) are key players in the Filipino economy through their money transfers, which account for over 8.9% of the nation's gross domestic product (GDP), reaching 32.5 billion USD in 2022, according to the Philippine Central Bank (BSP, 2023). The motivation for many OFWs to seek employment abroad is driven by poverty and lack of job opportunities in the Philippines (Hall et al., 2019).

Over the five years between 2018 and 2022, Hungary's labour landscape has seen a remarkable transformation, with a substantial increase in Filipino workers. Based on Hungary's Ministry of Economic Development 2022 annual report (Gazdaságfejlesztési Minisztérium, 2022), the number of Filipino workers with valid work permits in Hungary has increased significantly. In 2018, there were only 112 Filipino workers with valid permits, but by the end of 2022, this number surged to 3,327, representing a staggering increase of 2,971% in just four years, as shown in Figure 1.

Figure 1:

Number of work permits issued to Filipino nationals in Hungary from 2018-2022 by the Ministry of Economic Development



The Philippine-Hungary Relations

In 2023, Philippine-Hungary relations marked its 50-year-old diplomatic cooperation since its establishment in 1973 with the signing of the Philippine Treaty Series No. 618, (1973), which was followed by numerous treaties and agreements to enhance geopolitical, economic, cultural, and historical cooperation.

Economic factors have played a role in shaping Philippine-Hungary relations. Hungary has been actively pursuing foreign direct investment (FDI) from China and other countries (Völgyi & Lukács, 2021), including the Philippines. The increase in FDIs in Hungary created more business opportunities, which subsequently created labour gaps in the market, which the Philippines tried to fill by sending skilled workers in different industries such as manufacturing, electronics, hospitality, industrial works, transportation and food production.

Understanding Hungary's migration landscape and its impacts on well-being and access to social services such as healthcare

It is noteworthy that Hungary, historically known for its closed stance towards immigration (Popescu & Libal, 2018), has now opened its doors to this influx of foreign labour, departing from its historical norm of restrictive immigration policies. This policy change has long-term implications for both Hungary's economy, which benefits from the additional workforce, and Filipino workers, who seek economic opportunities and a new life in Hungary.

Grochtdreis et al., (2021) conducted a study in Germany wherein they found that individuals with a migration background had lower Health related Quality of Life (HrQOL) compared to those without a migration experience. This suggests that migration can have a negative impact on the quality of life of migrants, potentially due to challenges in accessing healthcare services.

These significant shifts in migration patterns in Hungary suggest the need for careful attention to migrants' quality of life, healthcare access, and the impacts of working abroad on

their well-being, emphasising the importance of proactive and corrective measures to ensure the successful integration and well-being of these newcomers in the Hungarian labour market and society.

Research *Objectives*

This study aimed to explore the perceived quality of life (QOL), barriers to healthcare access, and the impacts of migration on the well-being of Filipino migrant workers in Hungary. Specifically, it intended to:

1. Identify the demographic and socioeconomic profiles of migrant workers
2. Determine the perceptions of migrant workers regarding their quality of life and health status
3. Assess the perceived quality of life of migrant workers across four domains: physical, psychological, social, and environmental well-being
4. Examine the association between the demographic and socioeconomic profiles of migrant workers and their quality of life in the four domains
5. Identify barriers to accessing healthcare services
6. Explore the impacts of migration on migrant workers
7. Provide recommendations to ensure the successful integration and well-being of migrant workers

Significance of the Study

The significance of this study lies in its potential to inform policies and initiatives that can improve the lives of these workers. Understanding their quality of life is crucial, as it directly affects their well-being and satisfaction in Hungary. Additionally, studying the barriers to healthcare access among Filipino workers is fundamental in ensuring their overall well-being, which in turn contributes to a more productive and healthier workforce. The demographic and socioeconomic profiles of these workers are also essential for establishing baseline data and

creating tailored support programs and integration strategies. Moreover, exploring the impacts of migration on their well-being is valuable for enhancing their integration and ensuring their successful and fulfilling lives in their new settlement.

This study's recommendations are expected to serve as a practical guide for policymakers, not only in Hungary and the Philippines but also potentially in other countries, to create a welcoming environment for migrant workers and address the unique issues they face. In essence, this research not only contributes to understanding the well-being and healthcare access of Filipino migrant workers in Hungary, but also has broader implications for immigration policy changes and the socio-economic dynamics that accompany such changes. Its findings and recommendations have the potential to improve the lives of migrant workers and contribute to a more inclusive Hungarian society.

Methodology

Target Group, Timeline, and Location

The study focused on the demographic group of Filipino migrant workers, popularly known as OFWs, residing in Szabolcs-Szatmár-Bereg County, Hungary. Between June 1 and July 22, 2023, a total of 76 respondents actively participated in the study, this is equivalent to 48% of the reported total number (159) of OFWs issued with valid work permits in Szabolcs-Szatmár-Bereg county in 2022.

The respondents were located specifically within the distant towns of Nyíregyháza, Nyírkarász, and Szabolcsbáka. It is posited that the conditions in these remote areas are likely to be less favourable than those of migrant workers situated in highly urbanised cities, hence, they can most effectively serve as a representative of the quality of life and healthcare access experienced by migrant workers in rural areas.

The migration of Hungarian workers from rural areas can result in population redistribution and further underdevelopment of already disadvantaged rural sectors (Brown et

al., 2005). This movement may lead to a drain of skilled workers from rural areas, potentially creating a labour gap that foreign workers can help fill. Furthermore, an increasing number of international companies are establishing their businesses in Hungary, including in rural areas, due to the availability of cheap labour and a favourable environment (Iwasaki et al., 2012).

Instrument

This study employed a mixed-methods approach, integrating both qualitative and quantitative methodologies. To collect quantitative data on the quality of life among Filipino migrant workers in Hungary, the validated World Health Organization Quality of Life – Brief Version (WHOQOL-BREF) questionnaire was administered. This widely acceptable questionnaire comprise 2 items designed to evaluate overall quality of life and health and 24 facets to evaluate four distinct domains: physical health, psychological well-being, social relationships, and environmental factors. To ensure full understanding of the questions by the respondents, the Filipino version of the WHOQOL-BREF was used.

In addition to the standard questionnaire items, supplementary questions were added to capture qualitative data, specifically aimed at documenting the barriers encountered by Filipino migrant workers when accessing healthcare services, as well as assessing the impact and challenges of migration. The questions were also carefully designed to obtain insights and unique experiences that may further explain the current wellbeing of the OFWs in Hungary. Added questions are as follow:

1. What do you believe are the things that hinder or act as obstacles for you to access healthcare services in Hungary?
2. What do you believe are the impacts of migration to your health and quality of life as migrant workers in Hungary?

Procedures

Initial coordination was made through the Bayanihan Association, a registered non-profit OFW organisation in Hungary and is recognised by the Philippine embassy, which gave initial information on the names of the OFWs we can contact in the area. A consent was obtained by the association from the OFWs before providing their information to the researchers. Further consent through phone calls and messaging app by the researcher was obtained prior to the visit. Those participants who were available and willing during the visits were provided with the option to either access and complete the questionnaire online provided link or opt for the printed version to be filled out using pen and paper. Prior to the administration of the questionnaire, a comprehensive explanation of the study's purpose was given, and consent was duly obtained.

Statistical Analysis

IBM SPSS version 29 (IBM Corp., 2023) was used to explore the quantitative data, particularly in analysing descriptive statistics, correlating, and associating the data sets . Using the same software, the reliability of the WHOQOL-BREF, particularly the four domains, was tested using Cronbach's alpha coefficient with an overall value of .815 (higher than 0.70), which indicates a satisfactory or acceptable result. Also, to correlate the four domains, Pearson values were determined, and the general linear model was used to calculate the association between the demographic data and the physical, psychological, social, and environmental domains.

On the other hand, the qualitative data was examined through narrative and thematic analysis to determine the frequency of responses, recurring themes, unique and common occurrences, and other stories within the data and information provided. Upon completing the transcription and data analysis, the researcher used tables and codes to categorize ideas into groups based on their similarities and differences. To address the research questions on the

barriers to healthcare access and the impacts of migration on well-being, a comprehensive thematic analysis was conducted.

Inclusion and Exclusion Criteria

The survey was open to all Filipino migrant workers residing in the Szabolcs-Szatmár-Bereg county of Hungary. However, individuals who had recently arrived in Hungary and had been in the country for less than two weeks, as well as those who were unavailable or unwilling to participate, were excluded from the survey.

Sampling Technique

The researcher adopted the convenience sampling technique, wherein the sample population was determined by the willingness and availability of individuals during the data collection events.

Ethical Considerations

Prior to the distribution or sending of the online link of the questionnaire, a comprehensive explanation of the study's purpose was provided, and the informed consent of participants was diligently obtained. The utmost commitment to integrity and ethical conduct was upheld throughout the research process, ensuring that any potential biases were rigorously avoided. Only the responses from individuals who willingly and knowingly participated in the study were utilised.

In the unlikely event that any participants' rights are inadvertently infringed upon during the study, the researcher accepts full responsibility for any such actions and is committed to addressing and rectifying any issues promptly and ethically. The welfare and ethical treatment of participants remain paramount throughout the research endeavour.

Scope and Limitations

This research was conducted within the geographical confines of Szabolcs-Szatmár-Bereg County, located in the rural north-eastern region of Hungary. While this area provides valuable insights into the QOL and experiences of migrant workers, it is essential to recognise that these conditions and experiences may not generally represent migrant workers across the nation.

Moreover, the use of convenience sampling relies on the availability and willingness of workers during scheduled interview sessions. Consequently, this approach may introduce a degree of selection bias, as the characteristics and experiences of the participants may not entirely align with the broader population of Filipino migrant workers in Hungary.

Additionally, cultural and linguistic differences, the possibility of temporal shifts in experiences, sample size constraints, and reliance on self-reported data all contributed to the study's limitations. These aspects should be considered when interpreting the findings and there is the need for future research to expand on this foundation to gain a more holistic understanding of the lives and experiences of Filipino migrant workers in Hungary.

Results, Analysis and Discussion

Demographic and Socioeconomic Characteristics

Notable findings included a substantial sex disparity, male (84%) and female (16%) workers. Most of the respondents declared that they have a partner (55%). These characteristics reflect a demand for labour in specific industries that aligned with traditional gender roles as well as the influence of Filipino patriarchal family structures (Garcia & De Guzman, 2017).

The age range of the respondents was from 23 to 45 years old, which demonstrated a significant concentration of people in the prime working age group, which plays a pivotal role in driving economic activities (OECD, 2023). The respondents were highly educated, with the majority (53%) having finished tertiary level education, and are presumed to be knowledgeable

of the basic English language, since the medium of instruction in all public and private educational institutions in the Philippines is English.

Income disparities within the group were evident, with a substantial majority earning close to or below the Hungarian national minimum wage (approx. 638 USD/month). Nonetheless, this highlights the economic motivation for migration, as the new minimum wage in Hungary was almost three times the minimum wage (approx. 237 USD/month) in the Philippines.

All respondents had valid working visas. Contract durations were relatively short, at least one year, possibly offering flexibility for both employers and employees (Mooi-Reci & Dekker, 2015). However, research indicates that individuals in precarious employment situations, such as those with short-term contracts, are at a higher risk for developing depressive symptoms and engaging in harmful behaviours, such as alcohol abuse (Legleye et al., 2011). Most respondents were employed in industrial and manufacturing sectors (Category 7 Industry and Construction Industry Occupations), aligning with the demand for such workers in Hungary (KSH, 2011).

Overall Perception of Quality of Life and Health Status

The WHOQOL-BREF contains two separate questions. One that inquires about the individual's perception of QOL and a second question asking about the individual's health perception. Scores were scaled in a positive direction, which means that the higher the score, the better the quality of life. To easily interpret the mean transformed scores, the results were interpreted following the interpretation in Table 1.

Table 1:

Transformed scores

Range	Equivalent
0-20	Very poor
21-40	Poor
41-60	Neither poor nor good
61-80	Good
81-100	Very good

In the survey, there were 76 (N=76) Filipino migrant workers who responded with converted mean scores on a 0-100 scale as shown in Table 2. The mean score of the overall perception of the respondents of their QOL was 74.01±20.59 and their health status was 67.11±20.90, indicating good status. Skew/SE computations show normal distributions with values less than 1.96.

Table 2:

Overall perception of QOL and Health Status

Variable	Mean	Skew/SE
QOL	74.01±20.59	1.33
Health	67.11±20.90	.86

The high level of satisfaction observed among Filipino workers in Hungary, both in terms of their overall quality of life and their health, stem from their ability to fulfil their primary motivation for seeking employment abroad, which is to access higher income potential and financial stability to support their families back home (Yu et al., 2019). While the mean health status score for Filipino migrant workers in Hungary is slightly lower, it signifies an overall positive health status among this demographic. This can be attributed to the relatively optimal health conditions of these workers, with only 4% of respondents reporting suffering from an illness.

Quality of Life in Four Domains

Among the OFWs, the mean scores on all domains were at good level with social relationship (74.67±15.18) being observed to be the highest, followed by environment (74.51±14.92), psychological health (74.45±12.37), and physical domain (73.68±11.96) as shown in Table 3. The skewness/SE values for all four domains were <1.96, hence the distributions were normal.

Table 3:

QOL Scores in Four Domains

Variable	Mean	Skew/SE
Social	74.67±15.18	0.08
Environment	74.51±14.92	.37
Psychological	74.45±12.37	1.61
Physical	73.68±11.96	.39

Moreover, to test the correlation between the four domains, Pearson correlation coefficient was computed with a significant value of <.001 (2-tailed) as shown in Table 4, which indicates a significant or positive relationship between the variables. This means that in evaluating quality of life, it is important to consider all variables, not just one domain, as one may affect others. In the case of OFWs in Hungary, the strongest relationship is observed between their psychological and environmental well-being, which may have been impacted by their physical distance from their family and friends, who serve as their primary psychological support.

Table 4:

Correlation of Four Domains

Domain		Phy	Psy	Soc	Env
Phy	Pearson	1			
	Sig. (2-tailed)				
Psy	Pearson	.538*	1		
	Sig. (2-tailed)	<.001			
Soc	Pearson	.555*	.495*	1	
	Sig. (2-tailed)	<.001	<.001		
Env	Pearson	.594*	.646*	.401*	1
	Sig. (2-tailed)	<.001	<.001	<.001	

*Correlation is significant at the 0.01 level (2-tailed).
Abbreviation - Phy (Physical), Psy (Psychological), Soc (Social), Env (Environment)

Social Domain

In the analysis of the social domain, respondents consistently received good scores (74.67±15.18) in these facets. This suggests that the individuals generally reported positive and fulfilling personal relationships with family, friends and significant others, signifying a strong sense of belonging and emotional support. This is also consistent with the results of the study on the resilience of migrant domestic workers from the Philippines in China, conducted by Van Der Ham et al. (2014), where they found that participants perceived their well-being abroad as relatively good due to the presence of strong social support, despite experiencing high levels of stress.

Environment Domain

The good overall mean (74.51±14.92) score suggests a generally positive perception of quality of life among the respondents in terms of facets under the environmental domain, which include financial stability, a sense of freedom and security, access to healthcare and social services, a comfortable living environment, opportunities for personal growth, leisure activities,

a favourable physical environment and reliable transportation options. However, this result should be consistently monitored as adverse living and working conditions, including exploitation and abuse, lack of privacy, and unhealthy lifestyles, have also been found to contribute to poor mental and physical health among migrant workers (Devkota et al., 2021).

Psychological Domain

Within the psychological domain, the respondents scored good (74.45±12.37) on all six facets that were measured, including self-image and appearance, emotions, self-esteem, spirituality and other mental abilities such as thinking, learning, memory and concentration. The good result could be a result of effective coping mechanisms employed by the workers, such as going to church, travelling, engaging in sports, physical exercise, constant communication with family and occasional gatherings. However, stressors experienced within the host country, such as work-related challenges and difficulties in interpersonal relationships (Hall et al., 2019), must also be given attention.

Physical Domain

The good scores (73.68±11.96) in this domain reflected decent physical health and well-being among the respondents. However, although the physical domain appeared to be the lowest, it is believed that this is usually associated with physically intensive jobs they perform daily at the work setting. A systematic review by Bize et al. (2007), uncovered an affirmative relationship between physical activity status and health-related QOL in the general adult population, but overdoing physical activities may result to negative health outcomes as well.

Association of Demographic Data and Quality of Life in Four Domains

With all the demographic and socio-economic data, only the following were found to be statistically significant and/or were associated with the four domains of QOL, as shown in Table 5. To analyse the significance of demographic factors in the four domains of QOL, the T-test and one-way ANOVA (Analysis of variance) were used. A Post hoc test using Tukey's HSD (Honestly

Significant Difference) method was also used to determine which specific group means differ significantly from each other.

Table 5:

Demographic and socio-economic variables that are significantly associated with the four domains of QOL

Demographic Profile		Physical	Psychological	Social	Environment
Age range in years	≤24	67.86±18.90	**59.72±8.67** [a]	72.22±4.81	64.58±12.63
	≥25	73.92±11.74	**75.06±12.16** [a]	74.77±15.46	74.91±14.94
	p-value	.393	**.034***	.778	.242
Education	Secondary	76.19±11.52	77.89±10.99 [a]	**78.94±13.44**[a]	77.00±14.87
	Tertiary	71.43±12.05	71.35±12.84 [a]	**70.83±15.79**[a]	72.27±14.80
	p-value	*.083*	*.020**	***.019****	*.169*
Income Range (HUF)	Low	73.25±1.62	73.79±1.66	75.00±2.03	**71.19±1.90** [a b]
	Middle	72.96±3.21	73.21±3.28	69.64±4.02	**82.37±3.76** [a]
	High	78.57±4.54	82.14±4.64	82.14±5.69	**84.82±5.32** [b]
	p-value	*.530*	*.225*	*.198*	***.006****
Job category (HCSO-08)	Category 7	73.83±12.50	74.25±12.74	74.14±15.79	**76.28±14.12** [a]
	Category 8	73.10±9.82	75.28±11.08	76.67±12.68	**67.29±16.40** [a]
	p-value	*.833*	*.775*	*.573*	***.036****
Years of work contract	Up to 1 year	74.32±11.97	73.71±12.80	75.99±14.63	**77.98±13.82** [a]
	> 1 year	72.90±12.09	75.37±11.94	73.04±15.90	**70.22±15.31** [a]
	p-value	*.610*	*.565*	*.403*	***.023****
With present illness	Yes	65.48±6.89	68.06±7.15	72.22±8.82	**50.00±8.17** [a]
	No	74.02±1.40	74.71±1.45	74.77±1.79	**75.51±1.66** [a]
	p-value	*.228*	*.364*	*.778*	***.003****

**p < 0.05 is considered as statistically significant* [a] *pairwise difference*

Age

In terms of age group, workers aged 24 years and below were found to have significantly lower scores (p-value of .034) than those aged 25 years and above in the psychological domain. This suggests that younger migrants may be at higher risk for poor mental health, while older age and increased use of social support were related with lower risk to psychological problems (Li et al., 2014).

Education

Regarding educational attainment, migrant workers who completed tertiary education exhibited significantly lower psychological health (p-value of .020) and a significantly lower score in the social domain (p-value of .019) compared to those who finished secondary education. The result contradicts most of the studies which suggests that higher education is generally associated with a higher QOL (Ryff, 2014) and lower levels of stress and better mental health outcomes (Cramm & Nieboer, 2011). However, the discontent among highly educated migrant workers may be associated with job mismatches. When individuals are in jobs that do not align with their education, it can lead to a decreases in mental health returns on tertiary education (Bracke et al., 2014). Job mismatch, particularly as a result of overeducation, has been found to negatively affect labour market outcomes such as low wages and low job satisfaction (Kim & Choi, 2018).

Income

Regarding income, a significant difference (p-value of .006) was observed between low- and middle-income earners and between low-and high-income groups in the environmental domain, with the low-income group scoring the lowest. This suggests that income plays a crucial role in the QOL of Filipino migrant workers, as it affects their ability to meet their financial needs and achieve their migration goals. Furthermore, a study by Semyonov & Gorodzeisky (2005) that compares the economic behaviour and household income of OFWs, indicating that labour migration has a significant impact on the economic well-being of households in the Philippines.

Job Category

The data revealed that workers under job classification Category 8 (Machine Operators, Assembly Workers, Drivers of Vehicles) had significantly lower scores (p-value of .036) compared to employees under Category 7 (Industry and Construction Industry Occupations) in the environment domain. An interlink is also observed between job categories and income level,

wherein higher job categories, like category 1, which includes managers, receive higher income compared to those in job category 9, which comprises elementary occupations. The wage disparity between these job categories may contribute to the significantly lower scores observed among workers in the environmental domain (Parreñas et al., 2019). Furthermore, the nature of their workplace, tasks, and job location may also have a negative impact on their job satisfaction.

Years of contract

The data revealed a significant difference (p-value of .023) in the environment domain of workers with 1-year contracts having higher scores compared to those with 2-year or more contracts. This may be associated with the notion that short-term workers, who usually adopt a positive outlook and try to see the positive side of things, are more likely to be satisfied with their jobs several months after starting (Kim et al., 2005). This suggests they may be more motivated to adapt to their new work environment and establish a positive fit within the organization in the hope for their contract to be renewed, extended, or promoted.

Present illness

Workers with a current illness significantly scored lower in the environment domain with a p-value of 0.003. The respondents identified body pain and elevated blood pressure as manageable conditions. Aktas et al., (2022), discussed the high risks of workplace injury, occupational disease, work-related disease and ill health among migrant workers in different countries, which highlights the need for improved occupational safety measures to mitigate the impact of illness in the work setting for migrant workers.

Barriers to Healthcare Access

The responses were consolidated and categorized into thematic areas, including no barriers, communication, work dynamics, financial constraints, psychological, and transportation.

No recognised barriers

While a significant portion of the survey respondents reported no barriers to healthcare access, this positive trend must be interpreted within the context of the ever-evolving healthcare landscape. What may appear as an absence of barriers today can swiftly change due to shifting demographic, economic or policy factors. Moreover, migrant workers often underreport or fail to disclose problems they encounter for fear of negative consequences. These negative reports could lead to difficulties for their companies or workplaces, which in turn could have adverse effects on the workers themselves.

Communication barriers

The most identified barrier revolved around communication, similar to the previous finding of a European wide study (Priebe et al., 2011) primarily stemming from language gaps. Despite the ability of all the workers to use English, some healthcare providers in Hungary do not share the same language proficiency. Additionally, the limited knowledge of OFWs of the Hungarian language was a significant contributing factor to this communication challenge. Migrant workers may struggle to communicate their health concerns effectively due to language differences, which can hinder their access to appropriate healthcare services (Lee et al., 2014). Additionally, cultural, and linguistic differences may affect the quality of care received by migrant workers, potentially leading to medical errors and difficulties in obtaining informed consent (Loganathan et al., 2019).

Unfavourable work dynamics

Workers reported that their work schedules often do not permit them to visit doctors during the standard appointment times, particularly if they are on the night shift. The inflexibility of doctors' hours restricts their access to healthcare, as they are required to work for most of the available appointment slots. Additionally, some expressed that health appointments were being managed by the hiring agency, which could pose a significant delay in cases of health

emergencies. This reliance on external entities for healthcare management could hinder timely intervention and negatively impact the overall health and well-being of OFWs.Extended work schedules can be a significant barrier to healthcare access, as individuals may struggle to find time to seek medical care due to conflicting work hours (Chiu et al., 2017). This is particularly true for individuals with limited healthcare access, financial barriers, and difficulty getting timely appointments with doctors (Bhandari et al., 2014).

Psychological

Certain barriers were rooted in the personal perspectives of the workers. For instance, a fear of learning about the doctor's findings could deter them from seeking healthcare. In depth inquiry revealed that this distress was often related to concerns that a poor health assessment might result in them being sent home and instructed to cease working, which could adversely impact their employment status and their ability to support their families at home.

Limited transportation

The limited availability of public transportation in these regions, coupled with the absence of readily available vehicles at their residences for emergency situations, created significant obstacles to their ability to access timely and reliable healthcare services. Moreover, the proximity of healthcare facilities to the workplace influences patterns of healthcare utilization (Huntley et al., 2014).

Impacts of Migration

The responses were grouped into two main categories, positive and negative responses. Out of the 76 respondents, 74% (n=56) provided only positive responses regarding the effects of migration. Additionally, 12% (n=9) identified only negative effects, while 11% (n=8) provided responses encompassing both positive and negative aspects. It was also accounted that 4% (n=3) did not provide any response.

Overall, 64 positive responses and 17 negative responses were collected. These responses were subsequently consolidated and categorised into thematic areas, including economic effects, social and cultural integration, psychological and physical health, personal development, and overall life condition.

Economic

Many respondents emphasised that migration had enabled them to secure employment opportunities, earn capital to start a business, or access higher-paying jobs, thereby substantially improving their financial situations. They regarded this newfound income as a crucial factor contributing to their overall well-being.

On the other hand, there was a respondent who stated his negative concern regarding the high costs of medications in Hungary and the necessity to repay debts accrued during the application process for their application abroad.

Social and cultural impacts

The respondents emphasised that the experience of adjusting to a new cultural milieu and working alongside people of various races had not only improved their social skills but also presented them with the opportunity to immerse themselves in different cultures. Conversely, some respondents reported a notable yearning for Filipino cuisine, indicating a distinct sense of homesickness. Additionally, the acquisition of a new language presented a notable challenge. Communication barriers remain as a challenge, which limits social interaction and cultural exchange between the residents of the host country and the migrants (Marques et al., 2020).

Health impacts

Many of the respondents articulated emotions characterised by worries, sadness, homesickness and stress. These sentiments were often linked to their physical separation from their families and the monotonous nature of their daily routines. Moreover, respondents reported experiencing physical fatigue due to the demands of their work, however, they need to

persevere, driven by their commitment to supporting their families. On the other hand, some respondents highlighted the positive emotional aspects of migration, including feelings of joy and a renewed sense of purpose to pursue greater aspirations in life. For some individuals who had prior experience living abroad, their familiarity facilitated a smoother adjustment to the new living conditions.

Personal development

Remarkably, the OFWs exhibited a positive outlook concerning skill enhancement and the realisation of personal and family's aspirations. They articulated that their time spent in Hungary had the potential to open doors to further opportunities in the future. In this study, it was also found out that 75% of the respondents plan to extend or seek new opportunities in Hungary or in other countries using their newly acquired skills and experience.

Furthermore, several of them shared that they were gradually making strides towards achieving new milestones in their personal life goals, such as the opportunity to visit a new country, financial stability, skill development, and gaining capital and network. This optimistic perspective underscores the transformative potential of their migration experience in facilitating personal growth and the pursuit of their dreams.

Improved overall life condition

The respondents conveyed a general sentiment of experiencing an improved quality of life in Hungary, primarily driven by having a source of income for their families left at home.

Recommendations

Based on the findings of this study, the following are recommended by the researcher.

Gender-Balanced Recruitment Policies: To address the notable gender disparity among Filipino migrant workers, it is recommended that recruitment agencies and employers implement gender-balanced recruitment policies. These policies can help ensure equal employment opportunities for both men and women, reducing gender-related disparities.

Support for Younger Workers: The study revealed that younger workers may be at a higher risk for poor mental health. As such, targeted support programs, including mental health initiatives and stress management, should be designed to specifically cater to the needs of this demographic.

Addressing Educational Mismatches: The unexpected findings regarding education and its impact on quality of life highlight the importance of addressing education-to-job mismatches. Employment opportunities that better align with workers' educational levels should be explored to enhance their well-being.

Financial Literacy and Tax Support: Given the challenges related to taxation and financial matters, providing Filipino migrant workers with financial literacy programs and clear information about tax regulations can help alleviate these concerns. Additionally, tax incentives or deductions specific to their circumstances should be considered.

Workplace Conditions and Safety: It is crucial for both employers and host countries to address workplace conditions and safety concerns, including sick leave policies and discrimination. Ensuring a safe and fair working environment is essential for the overall well-being of migrant workers.

Multilingual and Cultural Support: To reduce communication barriers and enhance access to healthcare and other services, providing multilingual support and cultural sensitivity training to both health care providers and migrant workers can be beneficial.

Technology Access: Improved access to technology and communication services, including reliable internet access, can help migrant workers stay connected with their families and access essential services, promoting their overall well-being.

Transparent Administrative Processes: Administrative challenges, such as placement fees and tax refunds, should be addressed through more transparent and supportive processes. Simplifying administrative procedures can reduce stress and financial concerns.

Community Integration Programs: Enhancing community integration programs, such as facilitating involvement in host country policies and community events, can foster a sense of belonging and well-being among migrant workers.

Family Support: Given the importance of family unity, facilitating family visits through improved travel and repatriation options or accompaniment of the worker's dependents is recommended. This can help maintain strong family connections, positively impacting overall well-being.

Tailored Healthcare Services: Healthcare services should be tailored to meet the specific needs of migrant workers, considering their work schedules and potential language barriers. This can improve healthcare access and overall well-being.

Continuous Monitoring: Lastly, a system for continuous monitoring of the well-being and challenges faced by migrant workers should be established. Regular assessments can help identify emerging issues and adapt policies and support mechanisms accordingly.

Conclusion

This comprehensive study provided valuable insights into the lives of Filipino migrant workers in Hungary. Their demographic and socioeconomic profiles reflected a complex interplay of factors, including labour demand, education and economic motivations. Despite facing challenges related to taxation and workplace conditions, these workers exhibited high levels of satisfaction, primarily attributed to improved financial stability and income. Their quality of life across four domains was notably positive, with social relationships and psychological well-being standing out. Various demographic factors, including age, education, income, job category, years of contract and present illness, played intricate roles in shaping their

quality of life. The study also shed light on significant barriers to healthcare access, such as communication challenges, work dynamics, financial constraints, psychological deterrents and limited transportation, which were recommended to be addressed through a holistic and tailored approach. Moreover, the impacts of migration also included themes on economic effects, social and cultural aspects, health impacts, personal development, and overall life conditions.

Lastly, the research recommended diverse means to enhance well-being, emphasising the importance of financial well-being, economic independence, social and personal fulfilment, and various other factors. Addressing these multifaceted needs was deemed essential for ensuring the well-being and successful integration of migrant workers in the host country.

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Authors' bios

Climson Lamyong Balangue is a doctoral student at the University of Debrecen, Hungary, pursuing a PhD in Preventive Medicine and Public Health at the Doctoral School of Health Sciences. He holds a Bachelor of Science in Nursing and a Master of Science in Social Work in Health Care. His research interests focus on health and social wellbeing for vulnerable populations, particularly in the contexts of migration, ageing, and poverty.

Dr. Ágnes Bene holds a Ph.D in Social Sciences. She is an Associate Professor, Deputy Head of Department (Department of Gerontology), member of Institute of Social Sciences (Faculty of Health Sciences) at the University of Debrecen. Dr Bene is the Secretary of Gerontology Days yearly International Scientific Conference in Hungary, and deputy editor-in-chief at Hungarian Gerontology scientific journal. She represents Hungary in the AGE Platform Europe, and she is a visiting Lecturer at the Department of Gerontology and Dementia Sciences, Faculty for Social Wellbeing, University of Malta. Her Research areas are gerontology, positive ageing, Education for the elderly, the importance of peer support in later life, persuasion awareness, activity in old age(sport, dance), cultural differences, consumer protection, and corporate Social Responsibility.

Studies in Social Wellbeing, Volume 4: Issue 1: 73-117

ISSN 3007-4479 / https://www.um.edu.mt/ssw

Eco-Anxiety

A Preliminary Study using the Hogg Eco-Anxiety Scale with Participants in a Small Island State

Claire Bonello and Professor Mary Anne Lauri
Department of Psychology, Faculty for Social Wellbeing, University of Malta

Author Note

Claire Bonello is a Master of Science in Psychological Studies, University of Malta, graduate.

ORCID ID: 0000-0002-2682-8848.

Mary Anne Lauri is a Professor at the Department of Psychology,

Faculty for Social Wellbeing, University of Malta.

ORCID ID: 0000-0001-5219-8010.

Correspondence concerning this article should be addressed to Claire Bonello.

Email: claire.bonello@um.edu.mt.

Abstract

The ecological crisis is having profound impacts on mental health and psychological well-being. One such psychological experience is eco-anxiety, which is characterised by anxiety regarding environmental degradation and its implications on all aspects of life. Despite growing trends in research on eco-anxiety, studies that investigate this phenomenon in the small island state of Malta are lacking. This paper presents a preliminary study within a small island state context that collected quantitative data on eco-anxiety and its four dimensions: (1) rumination, (2) affective symptoms, (3) behavioural symptoms and (4) anxiety about personal impacts, measured using the Hogg Eco-Anxiety Scale (HEAS). Self-perceived eco-anxiety, demographic variables, and levels of anxiety about environmental events and personal impacts, alongside their relationship to eco-anxiety, were also investigated. Data was collected from 243 Maltese adults using an online survey. Following data analysis, eco-anxiety levels were found to be relatively low, while self-perceived eco-anxiety was generally scored higher. Eco-anxiety was significantly higher in individuals working in a climate or environment-related field. More so, anxiety about climate change and one's carbon footprint accounted for the greatest proportion of variance in eco-anxiety scores. Despite limitations in generalisability and contextualisation of the scale, this paper supports eco-anxiety as a relevant psychological concept within the local research agenda, highlighting the importance of such conversations in stimulating environmental engagement and facilitating hope in the face of environmental issues within a small island state.

Keywords: eco-anxiety, environmental events, personal impacts, ecological crisis, climate change, small island state

Eco-Anxiety: A Preliminary Study using the Hogg Eco-Anxiety Scale with Participants in a Small Island State

The present ecological crisis is composed of interconnected environmental issues, including climate change, the loss of nature and biodiversity, and issues of pollution and waste. The United Nations (2021) aptly labels such predicaments as the "triple planetary crisis". The effects of the ecological crisis on human health, particularly mental health, have relatively recently begun to surface in scholarly literature and everyday conversations, signalling a growing recognition of and the need for research on the mental health effects of environmental threats. This study, conducted in a small island state context, focuses on eco-anxiety as an emotional reaction to the ecological crisis, which manifests as anxiety stemming from the declining environmental condition of the planet (Albrecht, 2011).

Eco-Anxiety: What is it?

Passmore et al. (2022) provide a comprehensive definition for eco-anxiety, being the "persistent feelings of worry, anxiety, dread, or doom regarding environmental degradation and the impacts and implications of climate change on our planet as a whole" (p. 3). The prevailing consensus among scholars is that eco-anxiety represents a non-pathological reaction to environmental deterioration and its consequences rather than a mental health disorder necessitating treatment (Sackett, 2019). Nonetheless, eco-anxiety may present itself on a continuum with varying types and degrees of emotional, cognitive, social and functional implications that can be both adaptive and maladaptive in nature (Lutz et al., 2023; Verplanken & Roy, 2013). Eco-anxiety can escalate to a state of significant distress and be deemed "potentially disabling" (Albrecht, 2019; Doherty & Clayton, 2011). As an example, Hickman et al.'s (2021) research, conducted among youth from 10 different countries, reveals that almost half of participants believed their feelings about environmental issues were affecting their ability to function. This implies the perceived potential 'paralysing' effects of feeling eco-anxious, and demonstrates how perceptions towards emotions about the ecological crisis influence actions

taken in response to them (Miceli & Castelfranchi, 2019). This highlights the need to measure individuals' self-perceived eco-anxiety.

Eco-anxiety, with its multidimensional and continuum nature, has also been found to impact environment-related behaviour (Pavani et al., 2023; Hogg et al., 2024), with this relationship being affected by other mediating and moderating variables, such as self-efficacy (Innocenti et al., 2023). Kurth and Pihkala (2022) distinguish between practical and debilitating eco-anxiety that either promote or hinder pro-environmental behaviours (Andrews & Hoggett, 2019).

There is ongoing debate among researchers and mental health professionals regarding what constitutes *eco-anxiety*, which, unlike climate anxiety, encompasses a broader range of concerns about the ecological crisis and related environmental events (Clayton, 2020; Kurth & Pihkala, 2020; Pihkala, 2020). Studies that have operationalised climate and eco-anxiety levels using standardised scales have found overall low levels of eco-anxiety (Clayton & Karazsia, 2020; Hogg et al., 2021; Whitmarsh et al., 2022; Wullenkord et al., 2021). This has prompted debate on whether the concept 'eco-anxiety' is to encapsulate both milder forms of fear/ worry and stronger anxiety symptoms, or be reserved solely for the latter with other concepts, such as 'eco-worry', used to describe milder affective responses to the ecological crisis (Pihkala, 2020; Lutz et al., 2023). In this study, we adopt Pihkala's (2022) definition of eco-anxiety, viewing it from a non-pathological perspective. This includes their conceptualisation of "practical eco-anxiety, the potential of paralyzing eco-anxiety, and eco-anxiety as a moral emotion" (Pihkala, 2022, p. 3).

Possible Sources of Eco-Anxiety

Eco-anxiety arises from multiple aspects of the ecological crisis, including its uncertain, unpredictable, uncontrollable, overwhelming and future-oriented nature (Pihkala, 2020). Pihkala (2020) refers to these features as the "classic ingredients in anxiety" (p. 2). Eco-anxiety also

stems from personal experience and awareness of the crisis's profound impacts, including environmental, emotional, physical, social, and political pressures, alongside the recognition of one's role in exacerbating environmental issues (Albrecht, 2011; Norgaard, 2011). Eco-anxiety may also stem from existential awareness of and concern for environmental events occurring outside one's geographical zone with the media offering information on the latest events on the ecological crisis alongside their implications in this globalised world (Pihkala, 2020; Passmore et al., 2023).

The Special Eurobarometer 538 survey highlights climate change as being the most pressing concern for Maltese participants (European Commission, 2023). However, a MaltaToday study (Debono, 2024) found that only 2.2% of Maltese voters identified climate change as the EU's biggest issue while global conflicts rank the highest, most likely due to media focus on current wars. These findings emphasise the need for more studies on eco-anxiety and the media's potential influence.

Another contributing factor to eco-anxiety is risk perception. Evidence suggests that this varies according to sociodemographic factors (van der Linden, 2015). According to the Climate Change Risk Perception Model (van der Linden, 2015), factors such as being younger, female, and possessing a higher level of education are associated with a heightened perception of climate change risks. Various studies have found that women were significantly more likely to report feeling eco-anxious and eco-worried (Boluda-Verdu et al., 2022; Clayton et al., 2023; Closson et al., 2022; Heeran et al., 2022; Niedzwiedz & Katikireddi, 2023; Poortinga et al., 2019; Wullenkord et al., 2021). In addition, Niedzwiedz & Katikireddi (2023) assert that eco-anxiety is higher in individuals who have a high level of education, which is attributed to increased climate change awareness and risk perception (Arya & Kumar, 2023).

Conclusions regarding the association between eco-anxiety and age are mixed. While some studies found higher eco-anxiety in older participants (Clayton et al., 2023; Niedzwiedz

and Katikireddi, 2023), others showed the contrary (Boluda-Verdu et al., 2022; Clayton & Karazsia, 2020; Heeran et al., 2022; Whitmarsh et al., 2022). Researchers attribute this to mixed media messages (Fernando, 2023), young individuals' perceptions of inadequate governmental responses (Hickman et al., 2021), and socially organised climate change denial that contributes to a sense of apathy and diminished agency (Ojala, 2012; Norgaard, 2006).

Working in the environment field implies heightened awareness of the ecological crisis and direct exposure to environmental degradation, (Head, 2016). Such individuals, including climate first responders and environmental professionals, tend to perceive climate change as more serious and display elevated levels of eco-anxiety (Clayton et al., 2017; Cunsolo et al., 2020; Hoggett & Randall, 2018; Pollack, 2020).

This study examines the level of eco-anxiety among a sample of Maltese adults in response to various environmental issues, building on previous studies investigating Maltese people's concern about certain environmental events which contribute to the ecological crisis. The Environment and Resources Authority (2020) reported that 61% of Maltese respondents were highly concerned about water pollution, likely influencing eco-anxiety due to its prominence in Malta's coastal areas. Similarly, Mifsud (2010) found that waste management was a key concern among Maltese youth. The Environmental Attitudes Survey (Environment and Resources Authority, 2020) recently identified air pollution, loss of natural habitats, and waste management as the key environmental concerns for adults in Malta. Similar findings emerged from Briguglio's (2015) social media question analysis whereby pollution in the form of litter, noise and traffic were mentioned as factors that suppressed Maltese respondents' wellbeing. Meanwhile, one fifth of respondents mentioned the beauty of the island's environment, the sea and sunshine as factors positively contributing to their wellbeing. Refalo and Conrad (2009) note a discrepancy between concern and actual personal behaviour in favour of the environment. On the other hand, Gozitan farmers who believed that climate change is occurring were more concerned about climate change risks, such as reduced crop production due to perceived change

in seasonal duration, and more supportive of farm-related adaptation efforts (Galdies & Galdies, 2016). More so, the perception of climate change as a public health threat may be the strongest driver behind mitigation policy support and willingness to act (DeBono et al., 2012). These studies suggest that eco-anxiety and concern for the environment as experienced by Maltese individuals is shaped by multiple environmental stressors, may particularly involve heightened concern for pollution and waste issues, and may or may not transpire into resulting pro-environmental behaviours.

Malta's Environmental and Sociodemographic Context

Malta is a small island state in the middle of the Mediterranean Sea with a population of 563,443 (National Statistics Office, 2024). The climate in Malta is characteristically Mediterranean, featuring mild, wet winters and hot, dry summers (Malta Resources Authority, 2024). The annual mean, maximum and minimum air temperatures have increased since 1952, while the rainfall rate has decreased with noticeable extended periods of drought, especially since 2000 (Galdies, 2022). Maltese waters have also experienced a marine heatwave in the summer of 2024 (TVM News, 2024).

Malta ranks among the most densely populated nations within the European Union (Eurostat, 2023). With limited space and competing pressures for development, this small island state has the highest proportion of land covered by artificial surfaces in the European Union; almost a quarter (23.7%) of its land consists of artificial surfaces (Eurostat, 2018).

Air pollution is considered one of Malta's greatest environmental challenges, alongside biodiversity protection, such as illegal trapping and hunting of protected bird species, waste management and water conservation (Environment and Resources Authority, 2020; European Commission, 2022). Malta's waste generation per capita output stood at 6,847 kilograms in 2020, notably higher than the EU average of 4,815 kilograms (Eurostat, 2024). Inadequate waste management also impacts water resources, placing significant pressure on both water sources

and their quality (Environment and Resources Authority, 2020). Malta experienced the highest increase in greenhouse gas emissions within the EU in early 2024, showing an 8.8% growth compared to the same period the previous year (Eurostat, 2024). Household electricity consumption in Malta also surged by 63.9% between 2012 and 2022, far outpacing the EU average (Eurostat, 2024).

Malta's unique socio-demographic factors, including its colonial history, Roman Catholic traditions, and small geographic size, significantly shape the population's environmental attitudes and behaviours (Mifsud, 2012). These cultural influences contribute to the complex dynamics of eco-anxiety in the island state. In the Maltese context, eco-anxiety is being tackled through non-governmental organisations (NGOs) initiatives like BirdLife Malta's *Blooming Minds*, which promotes ecotherapy for mental health, and Friends of the Earth Malta's *CALM-EY* (Coping with Anxiety and Lowering Mental Health Effects in Youth) project, focused on reducing climate-related anxiety in youth. Eco-anxiety was also mentioned in APS Bank's Malta Sustainability Forum in 2021 and featured in an article in THINK Magazine (Camilleri, 2022). These initiatives show that most of the efforts to tackle eco-anxiety in Malta do not come from academia, but rather NGOs, fora and the media. Current local scientific research on the psychological realms of the ecological crisis tends to investigate cognitive and behavioural factors, such as attitudes towards, concerns about, satisfaction with and knowledge of the environment, alongside perceptions towards solutions to environmental challenges and environment-related behaviour (Refalo & Conrad, 2009; DeBono et al., 2010; Galdies & Galdies, 2016; Agius, 2019; Environment and Resources Authority, 2020; European Commission, 2023). The emotional component, including eco-anxiety, remains scarce in local research.

The Current Study

This paper aims to investigate eco-anxiety in Malta, a small island state, using the Hogg Eco-Anxiety Scale (Hogg et al., 2021) that assesses four dimensions of eco-anxiety: (i)

rumination, (ii) affective symptoms, (iii) behavioural symptoms and (iv) anxiety about one's personal impacts. This study aims to measure participants' self-perceived eco-anxiety, their frequency of anxiety regarding seven global environmental events and six personal behaviours affecting the environment, demographic differences in eco-anxiety levels, and to identify relationships of these variables with eco-anxiety.

The overall scope of the study is to offer preliminary findings on the emotions that individuals from the small island state of Malta feel in response to the overall ecological crisis. It contributes to further local research, possibly using other tools to be able to triangulate findings. Understanding the emotional responses of Maltese people towards global and local environmental issues can enhance knowledge of the connections between environment-related emotions, cognitions and behaviours, having broad implications on sustainability, well-being, interpersonal relationships, community engagement, education, healthcare, therapy, and policy development.

Methodology

This study and its findings form part of a larger research project that employed an explanatory sequential mixed methods research design. The present article reports on the quantitative findings obtained through a self-administered online survey. Participants had the choice of answering in either English or Maltese. The questionnaire took approximately six minutes to complete, and data was collected between November 2022 and March 2023.

Sample

A total of 243 participants, who were Maltese, and aged between 18 and 70 years, completed the questionnaire. Recruitment was done through non-probability volunteer sampling through social media, word-of-mouth and the University of Malta's Registrar. This sampling method using a voluntary sample of participants allowed efficient data collection (Farrokhi & Mahmoudi, 2012). While limited in representativeness, this pragmatic approach

provided valuable preliminary insights into eco-anxiety. The study serves as a foundation for future research with more representative sampling methods.

The Research Instrument

The research instrument, distributed through SurveyMonkey, used the 13-item Hogg Eco-Anxiety Scale (HEAS) (2021) to measure eco-anxiety. The HEAS was chosen given that it evaluates eco-anxiety's cognitive, behavioural, and emotional dimensions, alongside personal accountability for the ecological crisis (Hogg et al., 2021). It is a short, straightforward tool that is easy to administer and has been validated across multiple populations, including Turkey (Uzun et al., 2022), France (Mathe et al., 2023), Australia and New Zealand (Hogg et al., 2021), Spain and Argentina (Rodríguez Quiroga et al., 2024), Italy (Innocenti et al., 2021; Innocenti et al., 2023; Rocchi et al., 2023) and Germany (Heinzel et al., 2023). The scale's successful use in Italy, which shares cultural and climatic similarities with Malta (Fischer, 2014; WorldData, 2022), supports its applicability in this study (Innocenti et al., 2023). Nonetheless, Malta, as a small island state, presents unique characteristics that warrant dedicated investigations into eco-anxiety, including the current study.

Permission to use and translate the test in Maltese was granted by the primary author of the HEAS via email correspondence. Both English and Maltese versions were put online.

The HEAS asked participants how often they had been bothered by symptoms when thinking about climate change and other global environmental conditions (e.g., global warming, ecological degradation, resource depletion) within the past 2 weeks. This was measured on a 4-point scale (0 = "rarely/ not at all", 1 = "several of the days", 2 = "over half of the days", 3 = "nearly everyday"). Symptoms included affective symptoms (4 items), rumination (3 items), behavioural symptoms (3 items) and anxiety about one's personal impact (3 items) on the planet (Hogg et al., 2021). The items, their sequence, and the response options were maintained as in the original HEAS (2021) with the exception of the first response option, which was modified

from “Rarely” to “Rarely/Not at all.” The addition of “Not at all” was made for respondents who had not experienced the specific symptom, and as suggested after the piloting of the questionnaire.

The research instrument included demographic items of gender, age, education level, and whether participants worked in climate or environment-related fields, with examples like environmental science, environmental law, environmental engineering, conservation and sustainability being given (Peach, 2021).

Self-perceived eco-anxiety was measured by asking participants to self-report the extent to which they experienced eco-anxiety (0 = “Rarely/ not at all”, 1 = “Sometimes”, 2 = “Often”, 3 = “Almost always”).

Hogg et al. (2021) assessed participants’ anxiety about seven environmental issues and six personal behavioural impacts related to the environment using items adapted from Homburg et al. (2007) and Helm et al., (2018). These scales were incorporated into this study’s questionnaire. Local environmental events were later examined qualitatively through focus groups, though this aspect is beyond the scope of this article.

The seven environmental issues included climate change, species extinction, ecological degradation, resource depletion, ocean pollution, deforestation and the ozone hole. These environmental issues were directly adopted from Hogg et al.'s (2021) questionnaire. As a result, these issues were not modified to reflect the geographical context of Malta. For example, "ocean pollution" was not changed to "sea pollution". Malta's unique social, cultural, geographical, political, and educational context—as a small island state—underscores the importance of tailoring the concept of eco-anxiety to its specific circumstances. This contextualisation is crucial for effectively defining and studying eco-anxiety, opening new opportunities for further research. Moreover, the use of the term "ozone hole”, with "ozone depletion" provided as its definition, may introduce some scientific imprecision and

oversimplification, given that the former specifically refers to the thinning of the ozone layer over Antarctica (NASA Ozone Watch, 2024). Another issue in terminology may arise from the inclusion of "ecological degradation" as a separate environmental phenomenon. While "ecological degradation" is generally considered an umbrella term for resource depletion, species extinction, and deforestation in the United Nations' 2030 Agenda for Sustainable Development (2015), Hogg et al. (2021) may have chosen to differentiate these issues to better capture participants' perceptions of each specific threat. People's emotional responses and conceptualisations of these issues can be nuanced, influenced by their individual risk perceptions, knowledge, and the prominence of certain terms in media and public discourse. However, using "ecological degradation" alongside other specific environmental threats may impact the discriminant validity of the items, as participants may interpret these terms differently.

The six personal behavioural impacts which contribute to these environmental threats were included, rated using a 4-point scale (0 = "Never/ rarely", 1 = "Sometimes", 2 = "Often", 3 = "Almost always"). These were one's carbon footprint, waste production, energy consumption, water consumption, meat eating and air travel. There is some overlap in these personal impacts, such as the involvement of water, waste and energy consumption in meat consumption and air travel (González et al., 2020; UK Civil Aviation Authority, 2024), and the intrinsic inclusion of these personal impacts to one's carbon footprint. Nonetheless, anxiety about the six personal impacts was measured separately to gain a more nuanced understanding of how individuals perceive and respond to both broad and granular dimensions of eco-anxiety. On the other hand, the use of broad impacts and their constituent specific behaviours influences the interpretation of the results, and may introduce item redundancy, as their interrelatedness may have led to conflating anxiety about specific behaviours with broader anxiety about their overall carbon footprint. This issue could be resolved through the revision of the terms used to refer to anxiety about specific personal impacts in subsequent uses of this questionnaire.

Alongside limitations in terminology use and implications, the HEAS may lead to the *floor effect*, attributed to its focus on more maladaptive aspects of eco-anxiety (Hogg et al., 2024). Ágoston et al. (2022) released the Eco-Anxiety Questionnaire, capturing both adaptive and maladaptive aspects. This scale was released after decisions regarding which scale to use for this study had been made.

Items in Hogg et al.'s (2021) questionnaire provided definitions of some terms in order to increase validity and reliability. The definitions of the respective environmental events and personal impacts were given as follows:

- Species extinction (the extinction of entire animal populations)
- Ecological degradation (the destruction of ecosystems such as the Great Barrier Reef)
- Resource depletion (the reduction of the world's natural resources such as water and food)
- Ozone hole (the depletion of the ozone layer)
- Carbon footprint (the amount of greenhouse gases you emit)
- Air travel (taking long-haul flights that emit high levels of carbon dioxide)

Data Analysis

The data was cleaned on Microsoft Excel and analysed using the Statistical Package for Social Sciences (SPSS) using descriptive and inferential statistics to reach the study's aims outlined above. To measure differences between groups, Kruskal Wallis *H* tests and Mann-Whitney *U* tests were conducted given that data was collected from a volunteer sample and did not satisfy parametric assumptions. Additionally, Spearman's rank correlation coefficient was utilised to examine the presence and strength of correlations between variables and factors, as the data did not follow a normal distribution.

Reliability and Validity

To ensure the validity of the results, a pilot test was conducted with nine participants. Two of the pilot study participants were proficient in Maltese orthography, grammar and syntax. The pilot study was performed to identify and rectify any issues in the items, data collection procedures, conceptual understanding and English-to-Maltese translations (Flick, 2018). The research objectives outlined above guided the construction of some additional questions, ensuring content validity (Lynn, 1986; Rattray & Jones, 2007), and the gathered data was accurately analysed using appropriate tests. Lastly, the construct validity of the HEAS was accepted given the confirmatory factor analysis undergone in Hogg et al.'s (2021) research study, that differentiated items measuring eco-anxiety from those measuring Generalised Anxiety Disorder (Spitzer et al., 2006).

Utilising the HEAS also contributed to the reliability of the findings, as it has been validated across diverse populations, including Mediterranean countries. Internal consistency was evaluated using Cronbach's alpha, a commonly used statistic for assessing the interrelatedness of test items (Tavakol & Dennick, 2011).

Ethical Considerations

Ethical considerations were a top priority during this study, following recognised guidelines and principles. The research proposal obtained ethical clearance from the Faculty Research Ethics Committee.

Informed consent was sought from all participants. A combined information letter and consent form was presented at the beginning of the questionnaire. This included information on participants' rights, such as the right to withdraw (Pope & Mays, 1995), the purpose of the study, what participation entails, the benefits and risks of participating, and measures undertaken to ensure confidentiality. For example, the survey data gathered via SurveyMonkey

guaranteed that participants' IP addresses were not accessible to the administrator. In the data analysis phase, measures were taken to minimise confirmation bias. The analysis was directed by the research objectives, ensuring that both significant and non-significant results were reported to help reduce publication bias.

Limitations

This study is to be viewed in light of its limitations and preliminary nature. Non-probability sampling techniques were employed, resulting in selection bias that diminished the sampling validity and generalisability of the results, besides hindering the application of parametric tests (Trochim & Donnelly, 2008). The demographic items also lacked options for “Post-Secondary Education” and “Do not work”, leading participants to classify themselves as “Tertiary Education” and “No” for environmental employment, potentially causing inaccuracies in response.

The sample was unbalanced, predominantly comprising females, the tertiary-educated, 18- to 30-year old’s and individuals who do not work in an environment-related field, which limits the generalisability of the findings to the Maltese population (Cook & Campbell, 1979; Jager et al., 2017). The self-reported data collected could introduce response bias due to misunderstandings or social desirability (Rosenman et al., 2011).

Some participants had missing data: those with over 20% missing responses being excluded from the analysis, which limited the statistical power of the study (Siegel & Castellan, 1988). Furthermore, the study could not establish causality or changes over time. The application of the Hogg Eco-Anxiety Scale (2021) in a small island context may not fully capture local socio-economic and demographic characteristics, impacting generalisability and necessitating further contextualisation. Some terminology used in Hogg et al.’s (2021) study and replicated in this study may have posed scientific imprecision and validity issues, as mentioned in the description of the research instrument. Recent ecological events may have also affected

participants' eco-anxiety scores. Lastly, input from an environmental expert could have enhanced the pilot study.

Results

The Hogg Eco-Anxiety Scale shows a high internal consistency when applied to a Maltese context with Cronbach's alpha being at .916.

Eco-Anxiety and Demographics

Table 1 presents sample demographics, statistics from the HEAS, and results from the Kruskal-Wallis H and Mann-Whitney U tests conducted to identify differences in eco-anxiety scores across age, gender, education, and environment-related occupation.

Table 1

Demographic information of sample participants and tests for differences in demographics for eco-anxiety

Demographics			Eco-Anxiety Score			
	N	*%*	*M*	*SD*	*H*	*U*
Gender						4378.50
Female	185	76.1	1.56	0.50		
Male	54	22.2	1.52	0.59		
Other †	3	1.23	2	.27		
Prefer not to say †	1	0.41	1.69	NA		
Age					0.96	
18-30 years	123	50.6	1.55	0.52		
31-45 years	52	21.4	1.54	0.54		
46-60 years	54	22.2	1.59	0.50		
61+ years	14	5.8	1.62	0.61		
Highest educational level						3223.50
Secondary education	34	14	1.53	0.56		
Tertiary education	209	86	1.57	0.52		
Work in Environment Field						3214.50*
Yes	44	18.1	1.76	0.69		
No	184	75.7	1.51	0.47		
Unsure †	15	6.2	1.54	0.38		
Total	243		1.56	0.52		

* $p < .05$

All† These demographic groups were excluded from their respective Mann-Whitney *U* tests.

The differences in eco-anxiety scores for the age, gender and highest education level groups were not statistically significant. However, the differences between those who work (*Mdn* = 1.65) and do not work (*Mdn* = 1.38) in an environment-related field were statistically significant, *U* = 3214.500, *z* = -1.988, *p* = .047. Therefore, significantly higher eco-anxiety scores were present in participants working in an environment-related field compared to those who did not. The effect size "*r*" of 0.13 and Cohen's *d* '0.48 indicate a small but statistically significant difference in eco-anxiety scores between participants who work and those who do not work in an environment-related field.

With regards to the four dimensions of eco-anxiety, as proposed by Hogg et al. (2021), participants scored highest on the dimension measuring their anxiety about personal impacts, followed by rumination, affective symptoms and behavioural symptoms respectively, as can be seen in Table 2.

Table 2

Sample participants' scores on eco-anxiety dimensions

	Score	
	M	*SD*
Eco-Anxiety Dimensions		
Affective symptoms	1.54	0.65
Rumination	1.66	0.69
Behavioural symptoms	1.22	0.45
Anxiety about personal impacts	1.83	0.75

Eco-Anxiety and Self-Perceived Eco-Anxiety

Approximately half of participants (51.4%) reported that they sometimes experience anxiety related to climate change and environmental problems, 12.8% rarely or never

experience eco-anxiety, 29.2% often experience eco-anxiety and 6.6% almost always do. The mean self-perceived eco-anxiety score was 2.30 (*SD* = .77)

A Spearman rho correlation test showed a positive and moderate-to-strong two-tailed correlation between eco-anxiety scores and self-perceived eco-anxiety, *rs*(238) = .626, *p* < .001. A Kruskal-Wallis *H* comparing HEAS scores across self-reported eco-anxiety levels showed statistically significant results (see Table 3), with a large effect size (*η2* = .38) indicating that self-perceived eco-anxiety accounts for substantial variance in HEAS scores, supporting the scale's concurrent validity.

Table 3

Kruskal Wallis H Test statistics and effect sizes for eco-anxiety and self-perceived eco-anxiety

Eco-Anxiety and Self-Perceived Eco-Anxiety	*N*	Mean Ranks	*Mdn*	*H*	*η2*
Self-Perceived Eco-Anxiety					
Rarely/not at all	30	61.40	1.08		
Sometimes	124	96.48	1.31	95.493*	.38
Often	70	168.70	1.77		
Almost always	16	206.56	2.35		

*$p < .001$

Eco-Anxiety and Anxiety about Seven Environmental Events

In descending order, the environmental event that participants were most anxious or distressed about was deforestation (*M* = 2.76), followed by ocean pollution (*M* = 2.71), resource depletion (*M* = 2.64), ecological degradation (*M* = 2.47), species extinction (*M* = 2.45), climate change (*M* = 2.31) and the ozone hole (*M* = 2.14).

A Spearman rho correlation test showed a positive and moderate-to-strong two-tailed correlation between anxiety about environmental events and eco-anxiety scores, *rs*(213) = .656, *p* < .001.

Kruskal-Wallis *H* tests comparing eco-anxiety scores of participants with varying frequency of anxiety felt about each environmental event produced statistically significant results (see Table 4). The effect sizes on eco-anxiety scores were large for all seven environmental events, except for the moderate effect size of anxiety about the ozone hole ($\eta 2$ = .12). It could be assumed that anxiety about climate change accounted for the greatest variance in eco-anxiety scores, being 34%, while anxiety about the ozone hole accounted for 12%, being the least variance in eco-anxiety scores.

Table 4

Kruskal Wallis H Test statistics and effect sizes for eco-anxiety and anxiety seven environment e*vents*

Eco-Anxiety and Environmental Event	*n*	Mean Ranks	*Mdn*	*H*	*η2*
Climate Change				77.94*	.34
Never/rarely	27	40.26	1.00		
Sometimes	117	99.49	1.46		
Often	54	136.06	1.77		
Almost always	20	189.80	2.24		
Species Extinction				50.40*	.19
Never/rarely	32	79.72	1.20		
Sometimes	99	100.08	1.38		
Often	78	136.88	1.62		
Almost always	30	184.80	2.08		
Ecological Degradation				57.78*	.22
Never/rarely	36	64.93	1.15		
Sometimes	94	105.47	1.38		
Often	73	138.23	1.70		
Almost always	37	177.78	1.92		
Resource Depletion				41.19*	.15
Never/rarely	13	73.19	1.24		
Sometimes	98	98.22	1.38		
Often	90	127.13	1.54		
Almost always	38	175.29	2.20		
Ozone Hole					.12

Never/rarely	60	89.96	1.24	32.52*	
Sometimes	102	116.39	1.46		
Often	63	139.33	1.62		
Almost always	15	191.57	2.00		
Ocean Pollution				48.19*	.18
Never/rarely	18	62.17	1.15		
Sometimes	81	96.87	1.38		
Often	92	125.29	1.54		
Almost always	48	170.58	1.89		
Deforestation				50.90*	.20
Never/rarely	14	64.79	1.15		
Sometimes	85	93.40	1.38		
Often	84	122.07	1.54		
Almost always	55	169.85	1.85		

*$p < .001$
Note. *df* =

Eco-Anxiety and Anxiety about Personal Impacts

Maltese participants were most anxious about their personal waste production (M = 2.51, SD = 0.87), followed by their carbon footprint (M = 2.41, SD = 0.89), their energy consumption (M = 2.33, SD = 0.86), water consumption (M = 2.15, SD = 0.90), meat consumption (M = 1.78, SD = 0.88) and air travel (M = 1.75, SD = 0.82). A Spearman rho correlation test showed a positive and moderate correlation between anxiety about the six personal impacts and eco-anxiety, $rs(240) = .491$, $p < .001$.

Kruskal Wallis H tests, done to compare eco-anxiety scores of participants who "rarely/not at all", "sometimes", "often" or "almost always" felt anxious about the six personal impacts with HEAS eco-anxiety produced statistically significant results (see Table 5). The effect

sizes on eco-anxiety scores for anxiety about one's carbon footprint and waste production were large, while those for anxiety about one's air travel, meat consumption, water consumption and energy consumption were moderate. This means that anxiety about one's carbon footprint (19%) and one's waste production (16%) accounted for the largest variance in eco-anxiety scores, while anxiety about one's water consumption accounted for the least variance (6%).

Table 5

Kruskal Wallis H test statistics and effect sizes for eco-anxiety and anxiety six personal impacts

Eco-Anxiety and Environmental Event	*n*	Mean Ranks	*Mdn*	*H*	*η2*
Carbon Footprint				48.86*	.19
Never/rarely	38	57.59	1.00		
Sometimes	94	117.78	1.46		
Often	81	137.53	1.62		
Almost always	27	167.43	1.85		
Waste Production				41.83*	.16
Never/rarely	33	57.77	1.00		
Sometimes	81	116.07	1.46		
Often	98	132.70	1.54		
Almost always	28	164.55	1.77		
Air Travel				33.81*	.12
Never/rarely	109	95.60	1.38		
Sometimes	92	131.59	1.54		
Often	30	155.38	1.77		
Almost always	9	192.44	2.00		
Meat Consumption				24.75*	.08
Never/rarely	114	99.85	1.38		
Sometimes	77	127.92	1.54		
Often	36	148.11	1.73		
Almost always	12	176.29	2.08		
Water Consumption				18.27*	.06
Never/rarely	63	88.81	1.24		
Sometimes	96	127.72	1.54		
Often	62	133.35	1.62		
Almost always	18	141.97	1.65		
Energy Consumption				20.77*	.07
Never/rarely	40	83.51	1.15		
Sometimes	104	115.66	1.46		
Often	74	139.10	1.69		
Almost always	22	148.07	1.65		

*$p < .001$

Note. $df = 3$

Discussion

This study shows relatively low levels of eco-anxiety within the Maltese adult sample, in line with findings reported in Hogg et al. (2024), Clayton and Karazsia (2020), Whitmarsh et al. (2022) and Wullenkord et al. (2021). Self-perceived eco-anxiety levels were higher than the eco-anxiety score measured using the HEAS. Significant differences are observed in HEAS eco-anxiety scores across varying levels of self-reported eco-anxiety, demonstrating an increase in both measures. As Hogg et al. (2021) posit, "this suggests that people relate with the term and many feel they have experienced eco-anxiety" (p. 3), thus further highlighting the need to study eco-anxiety in different contexts. Hickman et al.'s (2021) study shows that more than 45% of youth participants stated that environment-related emotions affect their daily life and functioning. Future research could explore Maltese beliefs about eco-emotions, including perceptions of their nature and controllability, which may influence emotional regulation (Ford & Gross, 2018).

The study's quantitative findings indicate a small but statistically significant difference in eco-anxiety scores between those who work and do not work in an environment-related field. Notably, those engaged in environment-related work exhibited higher eco-anxiety scores, aligning with previous research highlighting eco-anxiety as common among climate scientists and environmental workers (Clayton et al., 2017; Cunsolo et al., 2020; Hoggett & Randall, 2018). This tendency is attributed to their heightened awareness of the ecological crisis and direct exposure to environmental degradation (Head, 2016). These findings prompt further exploration into the influence of occupation on eco-anxiety levels, and whether heightened eco-anxiety motivates individuals to pursue environmentally adaptive employment, or conversely, that is, whether working in such employment makes persons more aware of environmental degradation and sustainability issues.

In contrast to earlier research, this study found no significant differences in eco-anxiety scores between males and females, nor between individuals with secondary and tertiary

education. Previous studies indicate that females typically exhibited a greater risk perception related to climate change (Wullenkord & Reese, 2021) and higher levels of eco-anxiety compared to males (Boluda-Verdu et al., 2022; Clayton et al., 2023; Closson et al., 2022; Heeran et al., 2022; Niedzwiedz & Katikireddi, 2023; Poortinga et al., 2019; Wullenkord et al., 2021). Niedzwiedz & Katikireddi (2023) also found that individuals with higher education levels exhibited higher eco-anxiety levels. Innocenti et al.'s (2023) study that measured Italian participants' eco-anxiety using the HEAS found that a higher education reduced the risk of eco-paralysis when one is affected by eco-anxiety. Given that Italy is geographically and socio-culturally close to Malta, these findings offer a basis for comparison. However, our current study did not find any correlation between eco-anxiety and education, pointing towards potential cultural and contextual differences in the effect of education level on eco-anxiety. Further investigation in this area is needed to understand these differences.

Similar to Clayton et al. (2023) and Niedzwiedz and Katikireddi (2023), age differences in eco-anxiety scores were not statistically significant. On the other hand, these findings contrasted to those of Boluda-Verdu et al. (2022), Clayton & Karazsia (2020), Heeran et al. (2022) and Whitmarsh et al. (2022), who found that younger participants reported significantly higher climate and eco-anxiety. Additionally, a study conducted by MISCO, and published on LovinMalta (MISCO, 2022) and The Malta Business Weekly (Camilleri, 2022), found that 16- to 34-year old's descriptively displayed higher concern for the environment compared to their older counterparts. The lack of significant associations of age, gender and education with eco-anxiety could be explored further through the investigation of potential moderating factors, such as self- and collective efficacy. These may influence the relationships' strength and direction, thus providing a more comprehensive overview of the diverse eco-anxiety experiences across different demographic groups (Homburg and Stolberg, 2006; Mead et al., 2012). There is a significantly moderate positive correlation between anxiety about the environmental impact of personal behaviours and eco-anxiety. The HEAS dimension 'anxiety about personal impacts'

had the highest mean score from the four dimensions, indicating that anxiety about one's impact on the ecological crisis and responsibility for addressing environmental issues is a big component of Maltese participants' eco-anxiety. Hogg et al.'s (2024) research found a positive association between the eco-anxiety dimension of "anxiety about personal impacts" and pro-environmental behaviour, indicating a potential effect of participants' relatively high anxiety about personal impacts on pro-environmental engagement.

There are also statistically significant differences in eco-anxiety scores among participants with varying levels of concern regarding personal impacts with anxiety related to one's carbon footprint and waste production showing the most substantial effects on eco-anxiety scores. Participants in this study expressed the highest levels of anxiety regarding their waste production. Maltese youths in Mifsud's (2010) study showed particular concern for waste management, while concern about waste management was scored high in the study conducted by the Environment and Resources Authority (2020). This may indicate that Maltese people are anxious about the general waste management of the country and their contribution to it. The Eurobarometer 538 survey shows that a significant majority of Maltese participants (91%) were involved in waste reduction and recycling efforts (European Commission, 2023). While this study did not examine the relationship between eco-anxiety regarding waste production and behaviours related to waste reduction and recycling, it is reasonable to speculate that concerns about waste generation could lead to practical eco-anxiety, which may encourage individuals to engage in waste reduction and sorting practices. This potential connection suggests that eco-anxiety might serve as a motivating factor.

Meanwhile, participants expressed the least anxiety about their air travel. The Eurobarometer 538 survey also shows that considering the carbon footprint of transportation when planning vacations was the action performed by Maltese participants (European Commission, 2023). Similar to the above assumption, this may suggest a potential link between low eco-anxiety concerning specific environmental impacts and the absence of pro-

environmental behaviour to mitigate such impacts. The high anxiety regarding deforestation observed in this study aligns with the elevated concerns about the country's natural environment, and the loss of nature, species, habitats, and trees reported by Maltese participants in the Environmental Attitudes Survey (Environment and Resource Authority, 2020). Ocean pollution also emerged as a prevalent concern among participants in the Environment and Resource Authority survey, ranking as the second most significant environmental issue that caused anxiety in this study. The findings from this governmental authority can be corroborated by MaltaToday's (2020) survey in which 76.3% of respondents showed high concern for marine pollution. It can therefore be concluded that deforestation, species extinction and ocean pollution have a large effect on eco-anxiety scores, as experienced by Maltese individuals.

The Eurobarometer 538 found that climate change was the most pressing issue for the Maltese (European Commission, 2023). Anxiety about climate change accounts for 34% of variance in eco-anxiety scores in this study, which may point to the strong impact of climate change concern on eco-anxiety levels in Maltese people. Nonetheless, only 2.2% of respondents to MaltaToday's 2024 survey mentioned climate change as the most pressing issue for the EU, trumped by concern about wars (Debono, 2024). MaltaToday attributed this to heightened media information on current wars occurring that led to a lower level of concern for climate change. Research points to the effect of salient issues in the media on what people think about and prioritise (McCombs, 2014). In line with this, climate change news could decrease in times of war in several countries (Shao & Yu, 2023). Nonetheless, Djerf-Pierre et al. (2024) found that climate change beliefs were not affected by shifts in climate change media attention in Sweden. The above has implications for media outlets and consumers, and calls for analyses on the quantity and quality of environment-related information, environmental issue salience, and their effects on concern about the ecological crisis, levels of eco-anxiety and pro-environmental engagement.

Conclusion and Recommendations

The findings of the current study contribute to the expanding body of knowledge concerning eco-anxiety, and represent preliminary data on eco-anxiety in the small island state of Malta. This study uncovers the heightened eco-anxiety in individuals working in a climate or environmental-related job, prompting further investigation into this relationship, while acknowledging the significance of investigating eco-anxiety's relationship with other socio-demographic factors. Given the "floor effect" observed in this study's results, future research could recruit individuals with high eco-anxiety levels to investigate eco-anxiety's relationship with other variables said to be correlated, such as demographics, efficacy beliefs and pro-environmental behaviour. The low eco-anxiety levels observed also contribute to ongoing debates about its conceptualisation among scholars, specifically about whether the term should apply only to severe anxiety symptoms or also include milder forms is questioned (Pihkala, 2020; Lutz et al., 2023). Nonetheless, eco-anxiety includes "practical eco-anxiety", "paralysing eco-anxiety" and "moral emotion" (Pihkala, 2022, p. 3), that paves the path for local studies on the relationships of eco-anxiety with pro-environmental engagement and values to capture eco-anxiety's continuum. Other local research avenues include the standardised contextualisation of the HEAS with alterations in certain terminology used to address limitations in scientific accuracy.

Additionally, eco-anxiety emerges as a multifaceted emotional response resulting from both direct and indirect experiences with environmental issues, and considerations of one's individual contribution to these challenges. This is reflected in the positive and significant correlations found between eco-anxiety and concerns regarding environmental events and personal impacts. Alongside the multifaceted nature of eco-anxiety are the intricacies of cognitively, emotionally, and behaviourally navigating the ecological crisis, which influence and are influenced by other factors not investigated in this study, including feelings of individual and collective efficacy, environmental self-identity, pro-environmental values, and ecological

citizenship (Bourban, 2023; Huang, 2016; Pickering & Dale, 2023) Verplanken et al., 2020). Future research may explore these concepts within the Maltese population, together with a more in depth investigation of the dimensions encompassing eco-anxiety, including rumination, affective symptoms, behavioural symptoms and anxiety about one's personal impact. Such data would provide contextual insights into Maltese individuals' current experiences of the ecological crisis and identify strategies to promote hope and meaning-focused coping strategies, ultimately fostering meaningful and effective environmental engagement.

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Authors' bios

Claire Bonello is a First Stage Researcher, who holds a Master of Science in Psychological Studies from the University of Malta, she has specialised in environment, ecological and social psychology. Her research interests include attitudes towards the ecological crisis, environmental efficacy, biospheric values, eco-emotions, pro environmental behaviours and climate change in the media.

Professor Mary Anne Lauri studied Psychology at the University of Malta and at the London School of Economics. Joined the University of Malta in 1992 as a member of the Department of Psychology. Between 2006 and 2016, was appointed Pro-Rector in charge of Students and Staff Affairs. Authored several works published in both Maltese and international journals. Researcher and member of EUKids Online network. Won a National Book Prize awarded by the National Book Council (Malta) for the book Exploring the Maltese Media Landscape co-authored with J. Borg. In addition to her academic career, Professor Mary Anne Lauri has served on boards within the education and social welfare sectors. She is active in political organizations and NGOs.

Studies in Social Wellbeing, Volume 4: Issue 1: 118-147

ISSN 3007-4479 / https://www.um.edu.mt/ssw

Panic Attacks: Attacks of emotional blindness

Dr Elena Borg

Author Note

ID: Elena Borg ORCID 0000-0001-6213-5144-1900

Abstract

Panic attacks are complex and overwhelming experiences characterised by intense fear, a profound sense of solitude, and difficulties in recognising and expressing emotions—a phenomenon, denoted by the concept of "emotional blindness". This emotional aspect is particularly pronounced in individuals with alexithymia- the difficulty in describing and expressing emotions, plays a significant role in the overall development of panic attacks. Addressing alexithymia emerges as a crucial element in treatment strategies, aiming to enhance emotional awareness and regulation for those navigating panic attacks. This paper delves into qualitative research conducted as part of a doctoral study, utilising Interpretative Phenomenological Analysis (IPA) through eight retrospective interviews. The study offers valuable insights into the nuanced experiences contributing to the complexity of panic attacks, emphasising the importance of Gestalt psychotherapy in their treatment.

Moreover, this study underscores the necessity for a holistic understanding of human experience, emphasising the integration of body, mind, and soul. Together with clinical reflections, it acknowledges acceptance of the authentic self; promoting present-moment awareness. This aligns with the need for a humane approach to panic attacks in a world that might often shift away from human values.

Keywords: panic attacks; emotional blindness; alexithymia; Gestalt psychotherapy; humanistic

Panic Attacks: Attacks of emotional blindness

As a Gestalt psychotherapist and supervisor, this paper integrates findings from my doctoral research and clinical practice reflections focusing on the aetiology of panic attacks from a Gestalt phenomenological perspective. Worldwide, mental health afflictions, including panic attacks, continue to rise (De Jonge et al., 2016; World Health Organisation [WHO], 2022, 2022a, 2023). Although specific population-based studies on mental health conditions in Malta are lacking (Grech, 2016), the global increase in mental health challenges is impacting the region. According to the "Mental Health Strategy for Malta 2020-2030," mental illness is identified as one of the most significant public health challenges of the 21st century.

In my professional experience, I have observed a rising incidence of clients seeking therapeutic support for mental health conditions, particularly an increase in panic attacks. This observation has prompted a curiosity to explore the possible factors contributing to this distress. Francesetti (2007, p.80) explains that “panic can be expected, feared, remembered, re-elaborated, and overcome in a number of different ways and even during the attacks themselves panic can manifest itself in various forms”. Recognising the intricate nature of panic attacks, influenced by a convergence of biological and social factors (American Psychiatric Association [APA], 2013; Francesetti et al., 2020), the precise aetiology of this condition remains elusive (De Jonge, 2016).

Positioning of the Paper

While the precise aetiology of panic attacks remains unknown, alexithymia characterised by difficulties in identifying and expressing emotions—is increasingly recognised as a significant factor in both the onset and persistence of panic attacks (Borg, 2023; Cucchi et al., 2012; Francesetti et al., 2020; Izci et al., 2014);

This paper explores the emotional dimensions of panic attacks, with a particular focus on alexithymia. Using qualitative methods, the study addresses a notable gap in Maltese

literature and advocates for integrating Gestalt psychotherapy, known for its emphasis on emotional awareness, sensory reconnection, present-moment engagement, humanistic values and authenticity, alongside World Health Organisation recognised therapies.

Clinical reflections from my practice are incorporated to offer a reflexive perspective, highlighting the prevalence of panic attacks, their impact on clients, and the therapeutic challenges they present. By merging research findings with practical insights, this paper aims to validate the importance of tailoring therapeutic approaches to the emotional complexities of individuals with panic attacks, ultimately contributing to more effective treatment strategies.

Setting the scene

Before discussing the research framework, this paper explores panic attacks, emotions, and Gestalt psychotherapy principles to support the reader's comprehension.

Unveiling the Complexity of Panic Attacks

According to the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), panic attacks are brief episodes marked by heightened anxiety, resulting in severe somatic sensations and intense fear. Symptoms include an accelerated heartbeat, palpitations, respiratory distress, choking sensations, dizziness, and tremors. Psychic manifestations may also occur, such as depersonalisation (disconnection from oneself) and derealisation (perception of unreality). Panic attacks often involve a pervasive sense of impending doom, accompanied by a profound fear of death or losing control (APA, 2013; Francesetti et al., 2020).

Current treatment of Panic Attacks

Research indicates that panic attacks can be managed through pharmacological, psychotherapeutic, or combined approaches, such as antidepressants and Cognitive Behavioural Therapy (CBT) (APA, 2013). However, up to one-third of clients may continue to experience symptoms post-treatment, underscoring the complexity of managing these attacks (Francesetti et al., 2020; Herrera et al., 2018).

To address the multifaceted dimensions of healing, comprehensive strategies are essential (Francesetti, 2007; Francesetti et al., 2020; Masdrakis & Baldwin, 2021). Among these is the concept of aesthetic healing in Gestalt psychotherapy, which emphasises the integration of sensory experiences and holistic awareness into therapeutic practice (Barber, 2006; Roubal et al., 2017; Spagnuolo Lobb, 2013).

Is there a Relationship Between Emotions and Panic Attacks?

The increasing complexity and prevalence of panic attacks warrant a closer examination of their origins (De Jonge, 2016; Francesetti et al., 2020). Traditionally perceived as an exaggerated fear response tied to heightened amygdala activity—an almond-shaped structure in our brain orchestrating fear-related responses—within the Fear Brain Network, recent research aligns with Jaak Panksepp's (1998) Affective Neuroscience, exploring connections between emotional processing and panic attacks. Francesetti et al. (2020) suggest these episodes may stem from separation from emotional support and environmental overexposure, conceptualising them as "attacks of solitude" associated with the panic-separation system.

Exploring panic attacks as either fear-based or stemming from solitude can deepen therapeutic understanding, paving the way for a more nuanced and personalised approach to improved psychotherapy efficacy (Francesetti et al., 2020).

Author's reflective pause

In clinical practice, I often wonder whether panic attacks stem from the Fear Brain Network or the Panic-Separation System. Having once suffered from panic attacks and now working as a therapist, I have personally witnessed the intense fear, breathlessness, and immobilisation they cause. Through various narratives encountered in my clinical work, I have explored themes of separation anxiety and overwhelming exposure. While the term "panic attack" may seem straightforward, as I conduct more research and delve into clinical experiences, I realise more its complexity. The terror and sense of overwhelm people experience challenge the simplicity that might be associated with the term "panic attack."

Emotions

Panksepp (2005) argues that emotions are central to all mental processes, influencing mental well-being and physical health. Research indicates that individuals experiencing panic attacks may struggle with emotional abilities, potentially linked to alexithymia—a construct noted earlier regarding difficulties in identifying and expressing emotions (Francesetti et al., 2020).

The origin of alexithymia may be primary, resulting from developmental, genetic, or familial factors, or secondary, arising from psychological stress, trauma, or sociocultural factors (Lesser, 1981; Taylor, Bagby & Parker, 1997). Literature underscores that alexithymia increases the risk of both somatic and mental health issues by impairing emotion processing and regulation, contributing to various medical and psychiatric disorders (Cerutti et al., 2020; Lumley, 2007)

Author's reflective pause

This awareness encourages a reflective pause, highlighting the critical role of emotions and environmental factors that can hinder healthy functioning, potentially leading to panic attacks. In this paper, I propose that panic attacks can be viewed as an attack of emotional

blindness, where an individual's ability to perceive and express emotions is obscured. While we all experience a wide range of emotions—from frustration over a poor internet connection to excitement about a new episode of a favourite series—many people struggle to articulate their feelings, especially in therapy sessions, often resorting to limited terms like "sad" or "happy." Being in touch with one's emotions does not always equate to the ability to express them in words.

As I consider the implications of alexithymia on the individual and its effects on various aspects of the self, I reflect on my own traumas and cultural context. This introspection brings me to acknowledge the emergence of secondary alexithymia. By linking these personal reflections with clinical insights, a clear connection emerges between alexithymia and disruptions in early emotional development. This underscores how early childhood trauma may contribute to emotional disowning and avoidance, potentially leading to alexithymia and, ultimately, panic attacks (Borg, 2023; Francesetti, 2020; Zou, 2016).

What is Gestalt Psychotherapy?

Gestalt psychotherapy emphasises holistic self-awareness and present-moment experience, viewing individuals as integrated wholes. It explores the interplay between thoughts, feelings, and behaviours within their environment, prioritising subjective emotional experiences over cognitive and behavioural approaches.

Rooted in field theory, which draws from physics and Kurt Lewin's work (1951), Gestalt psychotherapy views the environment, social context, and culture as influential factors, perceiving the self as an emerging expression within this interactive world (Francesetti & Roubal, 2020). It understands mental health issues, including panic attacks, as phenomena arising from this field rather than isolated problems. Adopting a humanistic perspective, it regards panic as a creative response to specific situations shaped by contextual backgrounds. I perceive a dynamic

interaction between the individual's background environment and the foreground manifestation of panic attacks, akin to understanding a fish in its environmental context.

Author's reflective pause

As I seek to convey the depth of Gestalt psychotherapy, I find myself reflecting on its complexity. My journey with Gestalt therapy has reconnected me with my body, emotions, and self, healing a deep rupture within me. This transformative process is echoed by participants in my research, providing insight into how they alleviated their terror. As Mike, one of the participants, shared, "Gestalt brought me back to myself; to my body; to my emotions."

I also contemplate the aspects of our culture that in my perception seem entrenched in fear. Through my personal psychotherapy, I recognised that my panic attacks were linked to my cultural upbringing and a lack of emotional expression and awareness. This introspection raises important questions: Are we, as Maltese individuals, characterised by alexithymia? Do we actively encourage our children to articulate and express their emotions, or do we suppress our feelings, relying on somatic experiences to cope?

As I contemplate the field approach, I consider the diverse experiences across cultures, particularly the unique traits of the Maltese population. This recognition reveals how societal factors—such as heritage, Catholicism, Maltese politics, and personality traits—impact the perception and expression of emotions. These cultural elements significantly contribute to the potential development of panic attacks within the Maltese community (Borg, 2023).

From a Gestalt perspective that embraces field theory, we can view alexithymia as a creative adjustment for individuals seeking to protect themselves from the interferences of various factors included unprocessed trauma (Francesetti et al., 2020). Panic attacks may be seen as silent cries of the soul, manifesting in the body without words. This understanding underscores the importance of researching the role and perception of emotions in individuals experiencing panic attacks.

Uncovering emotional dimensions

Building on these reflections, I present an overview of the qualitative phase of the research (Borg, 2023), focusing on unravelling the emotional dynamics of panic attacks. Grounded in Malta's cultural context, the study examines panic attacks holistically, acknowledging the interplay of various dimensions in shaping individuals' experiences. As Barber (2006) states, "A person is a whole and is a body, emotions, thoughts, sensations and perceptions—all of which function together and in relationship with the other" (p. 48). This holistic perspective is essential for a comprehensive understanding and effective treatment of panic attacks.

Aims and objectives

The main question this research tried to address was: *What is the role of perception and expression of emotions in the development of panic attacks?*

The primary aim of this research that was carried out in Malta was to explore the typology of individuals experiencing panic attacks and to deepen understanding of the emotional components underlying these attacks, aiming to enhance the efficacy of psychotherapeutic interventions for this population.

Various objectives accompanied the research question through the research. However, for the purpose of this paper, I shall focus on the below objectives:

- To outline the different expressions and perceptions of emotions available to the client throughout their development
- To provide useful reflections on how the field condition can contribute to the development of alexithymia and panic attacks
- To explore if Gestalt psychotherapy was fruitful in treatment

Research Design and Methodology

The conceptual framework of this research draws from Gestalt Psychotherapy, Psychopathology, and Affective Neuroscience. The study employed a sequential mixed-method design, combining qualitative and quantitative approaches. Qualitatively, eight retrospective interviews were conducted using Interpretative Phenomenological Analysis (IPA). The quantitative phase involved administering a questionnaire based on themes from the qualitative findings, along with the 20-item Toronto Alexithymia Scale (TAS-20), which measures difficulties in identifying and describing emotions. A total of 117 participants were recruited through snowball sampling.

Qualitative Phase

This paper focuses exclusively on the qualitative phase, examining the integration of Gestalt therapy with qualitative research methods[3]. The Gestalt therapeutic process inherently aligns with qualitative research principles, as Barber (2006) noted.

Grounded in Gestalt principles, this study utilised Interpretative Phenomenological Analysis (IPA), which centres on individuals' lived experiences and is based on phenomenology, hermeneutics, and ideography (Pringle et al., 2011). IPA organises findings into superordinate and subordinate themes (see Table 1). To ensure credibility and validity, Prof. Paul Barber conducted a peer review of participant narratives. I also engaged in continuous supervision and academic reviews to maintain awareness of potential biases, ensuring the integrity of the research.

Using IPA allows for an in-depth understanding of panic attack typology through open dialogue and the emergence of multiple perspectives (Smith et al., 2010). Although IPA supports

[3] In light of the recent publication of the second edition of Interpretative Phenomenological Analysis (IPA), which introduces updated terminology (Smith et al, 2022), it is important to clarify the version of IPA utilised in this study. This study adopted the version of Smith et al. (2010).

various data collection methods, semi-structured interviews were chosen to promote dynamic exchanges and humane interactions. Each participant was interviewed three times, with shared processes and findings to ensure transparency and minimise bias. This collaborative approach enriched the understanding of participants' narratives and the emotional dimensions of panic attacks.

Participants

In-depth interviews were conducted with eight Maltese participants who experienced lifelong panic attacks and underwent Gestalt psychotherapy as part of their treatment. I sought participants willing to share their perceptions of emotional perception and expression in the development of panic attacks. An open invitation was sent through the Malta Association of Psychotherapy, and participants quickly responded through the invitation and referrals from colleagues. The target of eight participants was reached immediately, so no further recruitment was needed.

All participants were professionals in various helping roles. Pseudonyms were used to ensure anonymity, and ages were presented in ranges. Demographic details, including the age at the onset of the first panic attack and the duration of suffering, are outlined in Table 2. Participants are listed chronologically based on interview timing, with a total of three interviews per participant conducted over eight months in 2021. Due to the COVID-19 pandemic, interviews were conducted online via Zoom. Five participants identified as female, two as male, and one as non-binary. All participants were white Caucasian and came from stable socio-economic backgrounds.

Author's reflection

I reflected that helping professionals familiar with Gestalt psychotherapy would likely articulate their experiences with panic attacks more effectively and assess the therapy's benefits. Acknowledging this bias, I ensured all selected professionals had training in multiple

modalities, believing their diverse expertise would help them describe which aspects of their treatment were helpful. I expected they would be less likely to deflect or withdraw if interviews triggered unconscious material, which was essential for gathering rich qualitative data. Guided by retrospective studies, as suggested by Francesetti et al. (2020), I aimed to foster meaningful discussions that aligned with Gestalt principles.

Recruiting in Malta posed challenges due to its small size and interconnected professional community. To ensure impartiality, I intentionally avoided selecting colleagues, supervisees, or friends, which was crucial for maintaining unbiased participant selection and preserving the research's integrity.

Ethical Approval

The research obtained approval from the Research Ethics Committee of European Accredited Psychotherapy Training Institute- Gestalt Psychotherapy Training Institute Malta (EAPTI-GPTIM). Participants were thoroughly briefed on the study, and explicit consent was obtained for their participation, recording, and publication of gathered data. Participants were assured of their right to withdraw at any stage. Anonymisation measures were implemented to safeguard participant identities. While Malta lacks a standardised code for psychotherapy research, adherence to the American Psychological Association ethics code (2017) was chosen for its adaptability from psychological to therapeutic professions.

Table 1

Super-Ordinate Themes

First Super-Ordinate Theme	Panic Attacks: Illness or creativity?
Sub-Ordinate Themes	Awareness of Panic Attacks Self vs Others: Embracing Polarities to the Core Boundaries: Understanding who I am Resorting to Panic Attacks
Second Super-Ordinate Theme	Critical Moments
Sub-Ordinate Themes	Family Field Trauma The Torment of Separation Before the Panic Attacks Started
Third Super-Ordinate Theme	A Roller Coaster of Emotional Turbulence
Sub-Ordinate Themes	My Perception of Emotions My Expression of Emotions Somatic Symptoms: A Possible Emotional Language The Difference in Emotions, Body & Cognition
Fourth Super-Ordinate Theme	Understanding the Healing Process
Sub-Ordinate Themes	Restoring Back the Emotions Gestalt Psychotherapy in Healing Panic Attacks Healing as a Holistic Approach Gestalt Psychotherapy: The Glue for Emotional Healing

Table 2

Participants' Demographic Details

Pseudonym Name	Gender	Age Range (years)	Age of first Panic Attack (years)	Range of Years Suffering from Panic Attacks	Therapeutic Treatment Received for panic attacks	Other Forms of Treatment Received for panic attacks
Cristina	Female	40-50	8 years old	15-20	Gestalt psychotherapy	
Mike	Non-binary	30-40	17 years old	10-15	Gestalt Psychotherapy	
Lidia	Female	40-50	24 years old	10-15	Gestalt Psychotherapy/	Selective serotonin reuptake inhibitors (SSRIs)
Frank	Male	30-40	15 years old	10-15	Gestalt Psychotherapy	
John	Male	40-50	43years old	5-10	Gestalt Psychotherapy/	Selective serotonin reuptake inhibitors (SSRIs)
Stella	Female	30-40	22 years old	5-10	Gestalt Psychotherapy/ Cognitive Behavioural Therapy (CBT)	
Jessica	Female	30-40	17 years old	10-15	Gestalt Psychotherapy/ Eye Movement Desensitization and Reprocessing (EMDR) /	Homeopathy
Giulia	Female	30-40	4 years old	15-20	Gestalt Psychotherapy/ Systemic Psychotherapy	

Findings

The introduction of the research findings analyses participant experiences, supported by quotes and raw data to establish an empirical foundation. It begins with the superordinate theme "Panic Attacks: Illness or Creativity," followed by "Critical Moments." The discussion then centres on the third and fourth superordinate themes: "A Roller Coaster of Emotional Turbulence", focusing on emotional perceptions and expressions, and "Understanding the Healing Process." This structured approach aims to convey the core objectives of the article while maintaining academic rigour.

Panic Attacks: Illness or Creativity?

The journey began with participants collectively recounting their experiences with panic attacks, focusing on their initial lack of awareness and the shock of their first attack. The narratives capture the participants' reflections on the traumatising experience of not understanding what was happening to them, accompanied by vivid recollections of the bodily torture endured during the attacks. For instance, Lidia explained that “You have no idea what hit you” [lanqas taf xi jkun laqtek], while Cristina echoed the shock of the first panic attack for all participants, stating:

> my panic attacks started from a young age 8-9 ... but I wasn’t aware that they were panic attacks. I didn’t know what was happening ... I was not aware that they were panic attacks ... Huge loss of control ... huge pressure that I felt on my heart ... It’s like ... it’s like ... and somebody’s ripping my heart out ... I used to feel my, my head being squeezed. And my stomach used to come up almost to my throat, and the huge, huge pressure and pain in my chest, and the breathlessness that I couldn’t breathe.

Critical Moments

Transitioning from the shock and terror, participants' narratives unveil how their family dynamics, characterised by either abuse, perfectionism, and high expectations, could have triggered their panic attacks. As they share childhood, cultural, and familial experiences, we gain insight into the emotional components underlying panic attacks.

Whether it was Jessica, Giulia, and Mike grappling with instability and tension or Stella and Cristina feeling the pressure to achieve perfection, each story underscores a lack of emotional connection in their upbringing. John's imitation of his father may have led to a disconnect from his authentic self, while Lidia's loss of her father shattered her stability. Transitioning from their nuclear families to the outside world marked pivotal moments for all participants. More often than not, all participants reported feeling unseen and weighed down

by expectations. Reflecting on these dynamics, participants revealed a lack of emotional understanding within their family units, which in turn made it challenging for them to establish boundaries together with the suppression they endured from either religion; culture and politics, to name a few. Cristina recalls, “we were obsessed by politics, I was born into politics which hindered my true expression since a child”. John further elaborates “we are a very religious family, we were brought up that way, very rigid”. Throughout their journey, participants reported lacking awareness of their emotions, opening the door to a deeper exploration of their emotional depth. The question remains: Did they have the language to express their emotions before panic attacks? And now, as they heal, do they still struggle to articulate the profound emotional turmoil they endured?

A Roller Coaster of Emotional Turbulence

> Before the age of 20, I had no feelings; I could not see anyone’s feelings
>
> ...and one day it happened…. intense fear…palpitations…sweating… I could not breathe. I had no clue what I was feeling or experiencing. I felt I was going to die
>
> …express…..x’express! (Mike)

Perception of Emotions: Mike’s sentiments resonate with the other participants, highlighting their limited emotional awareness prior to experiencing panic attacks. As we delved into their emotional experiences, it became evident that participants had little understanding of their emotional capacity, experiencing a eureka effect during the interviews as they recognised their emotional blind spots. Throughout the interviews, participants realised how, most often in their past, they struggled to describe their emotions, with somatic symptoms often serving as the only indication of their internal turmoil. However, during panic attacks, some experienced a slight improvement in emotional perception, though often accompanied by overwhelming feelings of shame or terror. Participants noted the significant role of Gestalt psychotherapy in deciphering emotions and establishing boundaries during panic attacks, marking a transformative stage in their emotional journey. Emotions began to be introduced and

perceived during these intense experiences. As Stella noted *"*Gestalt supported me in starting to understand emotions, to describe them, sounds simple but for me it was foreign".

Expression of emotions: The collective experience of grappling with emotional expression before panic attacks was described by participants as agonising and elusive. During these episodes, there was indeed a turning point for some participants—a shift in emotional expression. While some were able to identify and express emotions like terror or anger, they mostly kept them to themselves. This highlights the complexity of emotional processing during panic attacks, where the underlying struggle to vocalise and process emotions persisted. Giulia takes us to the pain that emotional expression can have if not held back within a contained environment. She explained that, as she grew older, she was able to express her "vulnerability" and "defeat" during her panic attacks. But this behaviour only served to make her feel worse since "the pain is so huge [tant huwa kbir l-uġiegħ] that no one can hold it for me". Lidia brings this journey to an elegant disclosure summarising somewhat all the other participants' experience. She spoke about how her panic attacks led her to her limitations of her unexpressed emotions,

> During ... like when I started to deal with these unexpressed emotions and started the journey to get in touch with them, maybe I have dealt in within my limitations with was maybe, what was not... what was, was unexpressed before.

Her journey mirrors that of the other participants, each navigating the complexities of emotional expression and healing in their own way.

Panic Attacks: A somatic language? The roller coaster of emotional turbulence manifested further for participants in their bodily experience. It is interesting to note that participants reported experiencing various somatic symptoms before and during their panic attacks or were completely desensitised from their bodies. They reflected on the possibility that

these somatic symptoms were their unspoken words, unfelt emotions, and unrecognisable experiences of their feelings.

Before experiencing panic attacks, participants reported various somatic symptoms. Cristina, Frank, and Giulia recounted suffering from constant nausea, while Mike reported severe migraines. Conversely, John, Stella, and Jessica did not recall having any somatic symptoms before their panic attacks; however, they described a feeling of detachment from their bodies, as if their bodies did not exist. Participants reflected on how these symptoms could have been a reflection of their unexpressed emotions and unrecognised feelings, and as Cristina names it her “locked world of emotions”.

During panic attacks, all participants reported intense torture from somatic symptoms. Jessica and Giulia referred to the symptoms of their panic attacks as traumatic. John emphasised the roller coaster of somatic symptoms he experienced, describing it as "hot flushes etc.". Mike and Stella explained an increase in somatic symptoms, yet they could not establish a connection with their emotions at the time. Lidia beautifully summarised this period for all participants by suggesting that panic attacks could be seen as a creative adjustment, with the body finding its own creative means and ways to cope. She stated:

> During... the somatic symptoms were high ... all that ... you feel are going to throw up [li ħa tirremetti] ... choking ... in a way panic attacks could be seen as a creative adjustment, maybe not the desired adjustment but creative in its awareness or not ... the body finding its own creative means and ways, not the body the organism.

*The difference between emotions, body and cognition***.** Another facet that emerged and which was common to all participants in this study was their difficulty in distinguishing between their emotions, their body and cognition, both prior and during their panic attacks. It is as though participants had a ball of fire inside them and all these three features were embedded all

together with nothing to distinguish them from each other. The participants reported that not only were they unaware of the differentiation between these three facets but, even more striking, that they were completely unaware that these three facets existed within them.

Cristina continued to put emphasis on the body while she was experiencing her panic attacks. She could see that, paradoxically, while her cognition and emotions were still "at war", it was her body which was the facet which was suffering the most. She claimed:

> There was always a war ... my body, I think, suffered the most. Because I think I was ripping my ... my body apart because my body couldn't be loyal. It had to be loyal to both, to my emotions and to my cognitions ... they were competing all the time.

On the other hand Lidia expressed this as a sense of "fragmentation". In the end, each participant had come to realise that their emotions, body and cognition needed to work together and not against one another. It is interesting to note that panic attacks faded for each participant as their emotional component started to become restored. This restoration took place as reported by participants mostly in Gestalt psychotherapy. However, each participant found their own way of support in this phase that complemented their Gestalt experience. This process will be explained in more depth in the next section.

The Healing Journey: Restoring Back Emotions While Embracing a Gestalt Way of Life

In this research, the emotional component, especially alexithymia, is identified as a potential risk factor for panic attacks. Participants' struggles in perceiving and expressing emotions are viewed as contributing to the development of panic attacks. However, contrary to seeing emotions solely as triggers, the data suggests that emotions play a crucial role in the healing process. Participants, during their recovery, transition from perceiving emotions as foreign to actively incorporating them into their lives, contributing to the restoration of various elements within their personal field.

The participants' emotional growth is intricately linked to heightened awareness, which participants reported as crucial in their healing from panic attacks. Reflecting on Kepner's (2003) perspective of healing as growth, the process is considered dynamic and non-linear, allowing individuals to confront previously intolerable aspects of themselves at new levels. The growth journey is depicted as a spiral process, with participants revisiting complex issues at different times, steadily increasing their emotional perception and expression. This iterative process, marked by heightened awareness, enables participants to bring their field into balance. Themes like belonging, solitude, boundaries, and separation anxiety find resolution as participants gain a deeper understanding of their emotions. Giulia encapsulates this transformative process by expressing her newfound ability to "accept what is" as an integral part of her emotional journey.

All participants expressed profound gratitude for the transformative role Gestalt psychotherapy played in their healing journey from panic attacks. Rooted in the German word meaning "pattern" or "constellation," Gestalt offers a phenomenological and field-oriented approach, focusing on direct perception of sensations, feelings, and projections in the therapeutic space (Barber, 2006). The emphasis on sensing, feeling, and projecting within Gestalt psychotherapy proved crucial for participants, providing a foundation to understand and meet themselves in the present moment. Aligned with Kepner's (2003) view of healing as growth, Gestalt created a space for participants to safely hold and accept the fragments of their organism. Through meaningful contact with another human being within the Gestalt framework, participants experienced a profound sense of connection and support. This connection facilitated the healing process, enabling them to reconcile and mend the fragmented parts of their organism, thereby fostering personal growth and wholeness.

Through a humanistic approach, complexities were revisited from different perspectives throughout the healing process, allowing fragments to become integrated into a new emerging self. Mike encapsulates this transformative process, stating, "Gestalt helped me to bring back to myself my body and emotion ... it made me whole." Participants highlighted key Gestalt

principles essential to their healing, including "accepting what is," "living in the here-and-now," and "taking responsibility." The therapeutic relationship in Gestalt, characterised by a unique focus on each individual's needs, provided a space where participants felt seen, heard, and validated in their authentic form. From addressing inner child healing to exploring masculine personality functions, Gestalt psychotherapy tailored its approach to each participant, fostering a sense of validation.

Gestalt psychotherapy focused on the individuality of each participant, uncovering the underlying causes of their panic attacks within the safety of the therapeutic relationship. This process involved addressing fragmented aspects of their childhood, societal influences, feelings of division, and experiences of lack of safety amongst others.

Rooted in Buber's (1958) I-Thou relationship, participants experienced mutuality, directness, presence, and intensity. The therapeutic relationship, characterised by moment-to-moment Zen-like awareness in the here-and-now, played a central role in the healing process, as described by Barber (2006). Participants found healing through embracing uncertainty and guided exploration within the therapeutic space characterised by the unknown. Grounding in the present moment, taking responsibility, and addressing unmet needs became essential components of the healing process. Gestalt psychotherapy, with its focus on the I-Thou relationship, body and emotional work, empowered participants to embrace the present moment and initiate a natural drive towards health. Through completing contact cycles, identifying unmet needs, and healing from deep wounds, participants liberated themselves from past chains and potential future anxieties.

The narratives of the participants reflect the world we inhabit—an environment often consumed by our thoughts, overrun by our egos, and preoccupied with past experiences and future fears. Ego in this paper is understood as the image we try to project in society.

The participants' journey with Gestalt psychotherapy serves as a testament to the power of grounding oneself in the present moment. As Jessica eloquently expressed, Gestalt psychotherapy "enabled the possibility for the process to take place." Of course, it is worth noting the unique nature of panic attacks and the receptive approach of Gestalt psychotherapy. Although Gestalt psychotherapy significantly contributed to addressing panic attacks, the data emphasised the need for a comprehensive approach that considers biological, cognitive, and social factors. Participants explored various treatments, ranging from medication to further therapeutic techniques highlighting the intricate nature of managing panic attacks (Caldirola & Perna, 2019; Francesetti et al., 2020).

Reflecting on these findings, it becomes evident that Gestalt acted as the glue for emotional healing among participants. Despite the intense pain experienced, Gestalt emerged as a solid ground, fostering wholeness throughout their healing journey. Participants' narratives reveal that while they required a holistic approach, Gestalt served as a “vehicle” to navigate their past and present selves, facilitating the emergence of a new identity. Lidia's statement encapsulates this experience, "I needed a solid ground to rest upon, and Gestalt offered me that ground for this process to happen".

The narratives also highlight the cultural context participants were raised in, where emotions were often suppressed or overlooked. This cultural void hindered their emotional integration, forming a fragmented basis for identity formation. However, integrating emotions proved crucial for healing from panic attacks, which were viewed as opportunities for self-transformation. Despite the challenges, participants experienced profound healing, as seen in examples like John's “unlocking the fullness of life” and Mike's shift from” anger to passion”. Regardless of their unique journeys, participants emphasised the importance of understanding and expressing emotions fully, underlining the need to reconnect with their bodies.

Cristina succinctly captures the essence of what Gestalt provided for all participants by highlighting how "Gestalt mostly helped in using the body and senses... working directly on the sensation phase." By focusing on the sensation phase—working on the body and emotions—Gestalt supported participants in re-establishing the connection with themselves. As the connection between emotions and the body was restored, and emotions were held, panic attacks subsided. Gestalt psychotherapy became the ground for working on sensory feedback, providing words and symbols to articulate the experiences. By restoring the sensation phase, Gestalt acted as the glue that bound the fragments together, facilitating emotional healing.

Conclusion

While I acknowledge that this paper, its accompanying discussion, and reflections from a segment of the doctoral research are not exhaustive, they aim to provoke a new perspective. Cristina's narrative exemplifies this, as she portrays panic attacks as a gift that gave her a language for unspoken trauma. She describes them as the "wordlessness of trauma," symbolising the lost words she could not articulate. For her, panic attacks act as a thermometer, revealing hidden feelings and unmet needs of her inner child, serving as a call to address her inner child's pain and express her suppressed emotional narrative.

Throughout this paper, we have seen how participants struggled at different life stages due to their inability to perceive and express emotions. This struggle hindered their understanding of belonging, acceptance of change, and ability to set boundaries. Earlier, I presented classical and contemporary literature on the aetiology of panic attacks. Whether viewed as attacks of fear or solitude, both perspectives emphasise the un-mentalized emotional experiences of those suffering from panic attacks, which remain symbolically unrepresented.

Reflecting on the research process (Borg, 2023), which involved triangulating qualitative and quantitative data along with my position as a reflective practitioner, I recognise the study's limitations, particularly the small quantitative sample size that restricts generalisability.

Nonetheless, the results highlight the significance of this triangulation approach in emphasising the emotional component of panic attacks.

This research supports previous findings (Francesetti et al., 2020; López-Muñoz & Francisco Pérez-Fernández, 2020; Šago et al., 2020) that identify alexithymia as a risk factor for mental disorders, including panic attacks. By integrating qualitative narratives and quantitative analysis, the study confirms that the emotional component is central to the development of panic attacks.

Thus, considering this emotional aspect as pivotal opens the door to a holistic approach that utilises diverse methods to address the complexities of panic attacks. Ultimately, this research suggests that panic attacks can be conceptualised as "attacks of emotional blindness."

Author's Reflective Conclusion

As I reflect on the participant and on my own healing journey of panic attacks, I realise the need for a holistic approach in the treatment of panic attacks. Perhaps it is time to bring an end to the conflict between territories and professional modalities, recognising that the fragments of panic attacks mirror the fractures within our society. In conclusion, the message conveyed by this research is an invitation as John stated to "come to our senses," urging a reconnection with our bodies and a deeper understanding of our emotions. Contemplating panic attacks as an 'attack of emotional blindness' could potentially serve as a catalyst to bring us back to our senses and emotions. This perspective encourages placing the ego in the background, accepting the present moment, and living in the here-and-now. It also emphasises the core of Gestalt psychotherapy, a therapeutic approach that challenges the modern way of life as it stands in contrast to it.

In conclusion, I invite readers to "come to their senses," take a moment to breathe, and reflect on how we navigate our lives. I encourage exploring our core selves and paying attention to our bodily signals. While these signals might not always indicate panic attacks, other

symptoms could arise, reflecting various factors influencing our well-being. The essential question to consider is: Are we attuned to these signals and what they might be communicating? Are we living in harmony with our tr selves and our surroundings? If we find alignment, our bodies are likely at peace; if not, we can start exploring if our somatic experiences and other influencing factors may require attention. Let us listen to our bodies and undertake an introspective journey to enhance self-awareness and strive for greater harmony.

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Author bio

Dr Elena Borg began her career as a social worker, drawn to supporting society's most vulnerable. This commitment led her to train as a Gestalt psychotherapist and clinical supervisor, later specialising in work with children and young people. Dr Borg further trained in Psychometrics, EMDR, and EFT. Deeply engaged in the profession, she served six years on Malta's first Psychotherapy Profession Board and am now an honorary member of the Malta Association of Psychotherapy. Her five years at the University of Malta included work with Appreciative Inquiry, which sparked her move into business consultation. My doctorate focused on panic attacks and alexithymia—now central themes in her clinical practice. Dr Borg published articles on trauma and emotional processing, and currently she is co-authoring a book with her mentor Prof Paul Barber. With the support of many, she recently opened her own clinic and transitioned fully into private practice, working with children, adolescents, adults, and couples internationally.

Studies in Social Wellbeing, Volume 4: Issue 1: 148-195

ISSN 3007-4479 / https://www.um.edu.mt/ssw

The Subjective Wellbeing of Middle and Secondary Schoolchildren in Malta

Jeannine Vassallo, Dr Maria Pace and Timothy Vella

Author Note

Jeannine Vassallo ORCID ID: 0009-0000-0003-4217-1900

Maria Pace ORCID ID: 0009-0007-4827-3293

Timothy Vella ORCID ID: 0009-0003-3630-9616

ORCID ID: 0000-0001-5219-8010.

Correspondence concerning this article should be addressed to Jeannine Vassallo.

Email: jeannine.vassallo@gov.mt

Abstract

Adolescence[4] is characterised by rapid development (see Löfstedt et al., 2020). The experiences, competences and beliefs formed during adolescence impact people's adolescence, their adulthood, and the next generations (Patton et al., 2016). Subjective wellbeing is necessary for adolescents' positive development, health, goal achievement and improved prospects (Patton et al., 2016; Tikkanen, 2016). Differences in adolescent wellbeing persist both between and within countries (Cavallo et al., 2015; Patton et al., 2016). Understanding Malta's situation is important to be able to better support and enhance services for adolescents. This paper presents 3456 Year 7, Year 9, and Year 11 students' beliefs about their own life satisfaction, self-esteem, resilience and hope and worry for the future. The research explores the correlations among these variables and draws comparisons between genders and school years. Regression models were developed to facilitate interpretation of the results. Findings show that Maltese adolescents generally have positive scores for life satisfaction, resilience and hope but show signs of some challenges with self-esteem and particularly with concerns for the future. When analysing the data, notable differences in subjective well-being between different age groups and genders were also observed.

Keywords: adolescents, life satisfaction, self-esteem, resilience, future, Malta

[4] Adolescence covers the period of between the ages of 10 and 19 years (WHO, n.d.).

The Subjective Wellbeing of Middle and Secondary Schoolchildren in Malta

Adolescence is a critical juncture in people's lives, during which rapid development takes place (Patton et al., 2016; Klinger DA et al., 2015, as cited in Löfstedt et al., 2020). Experiences, competences and beliefs constructed during adolescence impact adolescents' present (adolescence), their future (adulthood) and their future descendants (Patton et al., 2016). Adolescent subjective wellbeing incorporates psychological wellbeing, such as life satisfaction (LS), self-esteem (SE), agency and hope for the future (García et al., 2019; Cefai et al., 2021; Cefai et al., 2024). It forms a key component of health (WHO, 1946). Understanding these components is essential, as they collectively influence adolescents' mental health outcomes and their ability to cope with present and future challenges.

Adolescence is often considered the healthiest period, and this may have led to adolescent health being underserved by policy and services (Patton et al., 2016). Yet worldwide estimates are that 10-20% of adolescents experience mental health issues, often remaining undiagnosed and undertreated (Kessler et al., 2007, as cited in Bersia et al., 2022). While most adult mental health (MH) problems begin in adolescence, not all adolescent MH problems continue into adulthood (Copeland et al., 2011, Patton et al., 2014, as cited in Patton et al., 2016). Therefore, adolescence provides a window of opportunity to address any issues affecting wellbeing with the right support (Luna-Alfaro, 2015, as cited in Palenzuela-Luis et al., 2022).

Differences in adolescent health between countries has been reported, making data generalisability difficult (Arnett, 2018, as cited in Lopez-Zafra et al., 2019). Furthermore, health inequalities (including related to MH and wellbeing) persist within countries (Patton et al., 2016; Scerri et al., 2023). Therefore, the focus of this study on adolescents in Malta is essential to foster an understanding of the wellbeing of adolescents growing up in Malta, including specific

cohorts. Consequently, this understanding can inform the development of interventions and policies aiming to support and promote wellbeing among young people in Malta.

Furthermore, this paper presents a snapshot of adolescent subjective wellbeing in school year 2021/22: the first school year where no school closures due to COVID-19 took place. Between March 2020 and September 2021, social distancing efforts, aimed at limiting the spread of the pandemic, resulted in closures to schools and to extra-curricular and social spaces frequented by young adolescents, reducing young people's opportunities for in-person socialisation. This isolation had a negative impact on adolescents' social wellbeing (Furlong et al., 2024). During school year 2021/22, students were exposed to increased social interactions when compared to the two previous school years (Henseke et al., 2022). This post-COVID period provided an opportunity for recovery of social wellbeing in adolescents (Furlong et al., 2024). Data from the latter part of the 2021/22 school year enables a better understanding of any lasting effects that social distancing may have had on social wellbeing,

The present study investigates the key indicators of subjective wellbeing, specifically life satisfaction, self-esteem, resilience, hope and worry about the future among adolescents in Malta, analysing the interplay between these indicators and any differences between students attending different school years (Years 7, 9 and 11) and adolescent Males and females. This analysis provides a deeper understanding of adolescent subjective wellbeing in Malta in a post-Covid-19 scenario, informing targeted interventions that support adolescents' self-perceptions and agency, contributing to their overall mental health and future aspirations.

Life Satisfaction

Life satisfaction is an individual's appraisal of their quality of life (see Crede et al., 2015; Cavallo et al., 2015). It can either be measured globally or in relation to life domains (Suldo & Huebner., 2006, in Crede et al., 2015). Life satisfaction is the most stable and pivotal indicator of subjective wellbeing (Veehoven, 1988, Suldo & Huebner, 2006, as cited in Crede et al., 2015;

Pavot & Diener, 1993, as cited in Cavallo et al., 2015). High life satisfaction is strongly correlated with high satisfaction with friends, school, living environment, socio-economic situation, and self (Seligson et al., 2003 as cited in Crede et al., 2015; Schneider, 2000, as cited in Cavallo et al., 2015; Lawler et al., 2017, as cited in Flores-Jara et al., 2021). High life satisfaction in adolescence has been associated with prosocial behaviour, enhanced coping, positive sense of self and good health, better psychological wellbeing, and ability to cope with stress (Huebner et al., 2004, as cited in Cavallo et al., 2015; Garrido-Muñoz, 2010, as cited in Palenzuela-Luis et al., 2022; Suldo & Huebner, 2004, as cited in Murphy et al., 2019). Low life satisfaction has been associated with relationship difficulties, poor school engagement, higher risk behaviour, lower confidence, mental health issues, and suicide (Moksnes et al., 2016; Lippman et al., 2014, Huebner, 2004, as cited in Inchley et al., 2020).

In Malta, 8-, 12- and 15-year-old children have been reportedly satisfied with their overall life and various aspects of their life and their future (Cefai & Galea, 2016; OECD, 2023). Nevertheless, international comparison revealed that life satisfaction of adolescents in Malta is among the lowest[5] (OECD, 2023; Cosma et al., 2023; Inchley et al., 2023). Furthermore, students' overall life satisfaction has declined in many countries and economies in recent years, including in Malta (OECD, 2023). Studies have noted Malta as having more equitable distribution of wellbeing across different socioeconomic groups compared to other European countries (Zaborskis et al., 2019).

Most studies reported adolescent life satisfaction decreases with age (Cavallo et al., 2015; Cosma et al., 2023). Cavallo et al., (2015) reported significant differences in life satisfaction scores of 11- and 13-year-olds in 24 out of 30 countries[6] and between 13- and 15-year-olds in 28

[5] In the PISA 2022, 24% of 15-year-old students in Malta rated their life satisfaction 0-4 on a 0-10 scale, increasing by 4% from 2018. This was above the OECD average (16% in 2018 and 18% in 2022) (OECD, 2023).
In 2022, Malta's life satisfaction mean score was below that of the HBSC average (Cosma et al., 2023; HBSC, 2023):
Females: Malta - 11: 7.6, 13: 6.4, 15: 6.1; HBSC - 11: 7.9, 13: 7.1, 15: 6.8
Males: Malta - 11: 8.0, 13: 7.6, 15: 7.0; HBSC - 11: 8.1, 13: 7.8, 15: 7.5

[6] No significant age differences were reported in Canada, Czechia, Hungary, Italy, Latvia and Ukraine

out of 30 countries[7] (Cavallo et al., 2015). No significant age differences were also reported in Hungary (Lábiscsák-Erdélyi et al., 2022). life satisfaction decline with age has also been observed in Malta (Cefai & Galea, 2016; Cefai et al., 2024).

Most studies[8] report adolescent life satisfaction to be greater in males than females (Hodačová et al., 2017; Fernandez-Pinto et al., 2019, Kaye-Tzadok et al., 2017, Soares et al., 2019, Campbell Ret al., 2020, as cited in Flores-Jara et al., 2021; Cosma et al., 2023). This has also been reported in Malta (Cefai & Galea, 2016; Inchley et al., , 2023). One possible reason for this is that internalising behaviour, which is more prevalent among young females, has a more significant effect on life satisfaction than externalising behaviours, which are more prevalent among adolescent males (Flores-Jara et al., 2021; Cefai et al., 2024).

Self-Esteem

Self-esteem is the evaluation of one's value as positive or negative (Rosenberg, 1965, as cited in Tomas et al, 2015; Rosenberg, 1965, as cited in García et al., 2019). People tend to have positive (or high) self-esteem, across cultures (Schmitt and Allik, 2005, as cited in in García et al., 2019). Positive self-esteem is associated with positive outcomes (Baumeister et al., 2003, as cited in Nemček et al., 2017). It is an important factor of MH (Jambor & Elliott, 2005, Goulimaris et al., 2014, as cited in Nemček et al., 2017), healthy lifestyle (Broďáni et al., 2015, Bendíková, 2016, Smoleňáková & Bendíková, 2017, as cited in Nemček et al., 2017), and wellbeing (Nemček, 2016, Kvintová & Sigmund, 2016). Self-esteem has also been found to be positively associated with life satisfaction with some studies additionally reporting no interaction effect of age or gender on the relationship between self-esteem and life satisfaction (Moksnes & Espnes, 2013; Moksnes et al., 2016; Flores-Jara et al., 2021). Positive self-esteem has been found to predict increased happiness, motivation, personal empowerment, social relationships, life satisfaction

[7] No significant age differences were reported in Canada and Czechia
[8] Conversely, Lábiscsák-Erdélyi et al. (2022) found no gender differences in the life satisfaction of students in Hungary.

and quality of life[9] (Baumeister, Campbell, Krueger, & Vohs, 2003, in Isomaa et al., 2013; Moksnes & Espnes, 2013; Sutton et al., 2019, as cited in Wood et al., 2021)

Negative self-esteem includes being a sense of dissatisfaction and rejecting oneself (Isomaa et al., 2013). It is generally underpinned by "traumatic experiences, psychological and behavioral problems" (Cantón and Justicia, 2008, as cited in García et al., 2019). It is a risk factor for MH problems (Pullman & Allik, 2000, Rosenberg, 1989, Schmitt & Allik, 2005, as cited in Isomaa et al., 2013; Boden et al., 2008, Orth et al., 2009, Griffiths et al., 2010, Ferro & Boyle, 2015, as cited in Wood et al., 2021). Negative self-esteem in childhood has been associated with mood disorders; dissatisfaction with relationships and employment; and low physical health in adulthood, while negative self-esteem in adolescence has been associated with worse economic prospects and criminal behaviour in adulthood (Orth et al., 2012, Sowislo & Orth, 2013, Trzesniewski et al, 2006, as cited in Wood et al., 2021). This suggests that self-esteem might underpin life outcomes (Wood et al, 2021).

Twenge and Campbell (2001) found a that adolescent self-esteem increased with age, particularly in the transition between the high school and college years. Contrastingly, Bhave et al. (2024) found that self-esteem is highest in early adolescence and drops significantly in middle and late adolescence only to rise again in young adulthood. Many conclude that self-esteem tends to be stable over time but is responsive to life contexts and experiences (Mann et al., 2004, as cited in García et al., 2019; Robins, 2005, as cited in Bhave et al., 2024).

The impact of gender on self-esteem is nuanced. Some literature found no differences (Maccoby & Jacklin, 1974, Wylie, 1979, as cited in Tomas et al, 2015; García et al., 2019), while others did find differences (Gentile et al., 2009, Kling, Hyede, Showers, & Buswell, 1999, as cited in Tomas et al, 2015). Men had higher self-esteem when it came to aspects of physical appearance, athletic, personal and self-satisfaction, while women scored higher in self-esteem

[9] This may be a byproduct of the increased motivation and self-efficacy (Isomaa et al., 2013).

related to behaviour and moral ethics (Gentile et al., 2009, as cited in Tomas et al, 2015). No statistically significant gender differences were found for academic, social, familiar, and affective SEs (Gentile et al., 2009, as cited in Tomas et al, 2015).

Resilience

Resilience is the ability to cope with or bounce back from daily challenges and stressors (Avdagic et al, 2020; Yoon et al., 2020; Mattelin et al., 2024). It helps adolescents process and overcome the challenges experienced during childhood and builds the pediment for skills and habits with life-lasting benefits (Avdagic et al, 2020). Resilience protects against adolescent MH problems (Cefai et al. et al., 2021). A study by Grazzani et al. (2022), on adolescents' resilience during the COVID-19 pandemic, noted that social and emotional learning (SEL) skills, resilience, age, and gender significantly contributed to MH differences.Positive thinking, positive self-concept and self-regulation are strongly correlated with resilience (Cefai et al., 2021). Nearly half the participants (47%) in a Malta study on resilience during the COVID-19 pandemic registered resilience often or nearly all the time, but 12% recorded poor resilience (Cefai et al., 2021).

Hope and Worry about the future

Hope is a motivational construct and a psychological strength, particularly for disadvantaged adolescents (Savahl, 2020) and has been described as the optimism that the future brings good things (Snyder, 2002). In adolescents, hope motivates positive behaviour and engagement in self-development or societal issues (Zimmer-Gembeck et al., 2023).

Conversely, worry is a negative feeling, underpinned by fear or perceived likelihood of pessimistic outcomes (Borkovec, 1994, as cited in Owczarek et al., 2020). Worry is common among adolescents, and tends to increase throughout adolescence due to development in cognition and personal and social difficulties experienced during this period (Tikkanen, 2016). Worry is more prevalent among older adolescents and girls (Brown et al., 2006, Grist & Field,

2012, as cited in Tikkanen, 2016). Some adolescents experience excessive and persistent worries, which can become distressing (Songcoet al., 2020).

Research amongst Swedish children during the COVID-19 pandemic found that worry was common with 77% of the study participants experiencing worry with 3 emerging themes: worry about disease or death; existential worries (worries about the future and worries about the impact of the long-term impact on day-to-day life during COVID-19); and worries about society (Marchi et al., 2021). In Malta, 57.8% of 8-15-year-olds reported being very satisfied with their prospects (Cefai et al., 2024).

This literature review has highlighted the importance of subjective wellbeing, and its various components, on adolescents, in the present and the future, and the implications that it has on society. Research indicates that higher levels of life satisfaction and self-esteem are associated with increased resilience, enabling adolescents to navigate difficulties more effectively (García et al., 2019; Cefai et al., 2021). Additionally, hope for the future serves as a motivational force that can mitigate feelings of anxiety and worry, contributing to a more positive outlook on life (Savahl, 2020; Snyder, 2002). This interconnectedness suggests that fostering these psychological attributes can lead to improved mental health and wellbeing among adolescents. Given the need for contextualised data on adolescents in Malta for planning policy and interventions, this paper seeks to investigate the life satisfaction, self-esteem, resilience, and hope and worry for the future of adolescents in Malta. By focusing on subjective wellbeing, interventions can be tailored to enhance these psychological dimensions, ultimately promoting healthier developmental trajectories for adolescents. This approach not only aligns with global health objectives but also emphasises the need for targeted support systems that nurture these essential components of wellbeing.

Methodology

This study, which delves into adolescent subjective well-being, presents some of the data collected as part of the 2021/2022 iteration of the cross-national Health Behaviour in School-aged Children study (HBSC). HBSC looks at the health behaviours, of 11-, 13- and 15-year-olds, in social contexts. Using a self-report survey conducted in schools, data was collected from students in Years 7, 9 and 11[10]. The survey incorporated standardised questions from the HBSC initiative and supplementary questions selected by the Malta research team from the question banks available as optional HBSC questions and The Children's Society Good Childhood Report (GCR). The variables that have been taken into consideration in this article are outlined below:

[10] Y7 is the first year of Middle School, while Years 9 and 11 are respectively the first and last years of Secondary School

Table 1:

Variables taken into account by this study

HBSC variables	**MT variables**
Age	School year
Biological sex	
Family structure	**GCR variables**
Family support	Life Satisfaction
Family activities	Resilience
Quality of family communication	Self-esteem
	Future
	Hope

In accordance with the protocols established by the HBSC, the data collection for the 2021/2022 survey utilised a stratified cluster sampling approach, targeting students in school years 7, 9, and 11. Based on a desired 95% confidence level with a margin of error of ±3%, considering a population proportion of 50% and applying a design effect factor of 1.2, as derived from prior data analyses, the targeted sample was 1500 participants per school year.

The study explores the following research questions:

How do young adolescents perceive their life satisfaction, self-esteem, resilience, hope, and FW?

How are the aforementioned variables impacted by school year and sex?

How are the aforementioned variables interrelated?

The study adhered to ethical principles as outlined by Diener and Crandall (1978), addressing harm, consent, privacy, and deception. The research team, consisting of vetted public servants (in relation to the Protection of Minors Act (Chapter 518 of the Laws of Malta), conducted data collection in classrooms with teachers present. Students completed a questionnaire on paper or tablets and could skip sensitive questions. They were informed they could discuss any concerns with school staff.

There was no deception in the research process. Schools, parents, and participants were fully informed in writing and could discuss the study further if desired. All communications were available in Maltese and English. Participation was voluntary; schools and parents could opt out, and students could choose not to participate or skip questions on the day of data collection. Once submitted, questionnaires could not be withdrawn as they were anonymous with no personal identifiers included.

Each child completed their questionnaire privately and was advised to keep their answers confidential. When requested, support for reading and marking was provided without noting any personal information. Educators or researchers who assisted were asked to keep responses confidential. Data was reported only in aggregate form.

Limitations

The results of this study should be viewed with the research limitations in mind. First, social desirability and recall biases may be present since the questionnaire relied on self-reporting. Translation biases may have influenced participant responses. Participants may have become bored or tired of the lengthy questionnaire. The cross-sectional design, particularly with the inclusion of certain optional questions for the first time, does not allow for analysing trends. Additionally, while the quantitative design can identify observed associations, it does not enable inferring causation.

Analytic Variables

The variables used in this paper were sex and school year and the dependent variables described in Table 2 (below).

Table 2

Variables and items used in this study

Analytic variable	Survey item(s)	Response options	Analytic variable levels	Validity and reliability
Life Satisfaction	My life is going well My life is just right I wish I had a different kind of life* I have a good life I have what I want in life	Strongly Agree (4), Agree, Neither agree nor disagree, Disagree, Strongly disagree (0)	1. Items were analysed in their raw form. 2. Total satisfaction score, on a scale from 0 to 20, with a higher score indicating higher levels of global life satisfaction.	This variable is a version of Huebner's (1991) Students life satisfaction Scale (SLSS). The original 7-items scale registered a strong internal consistency (α = 0.82), had a moderate test-retest reliability (0.74) over a 1-2 week interval, and correlated with several other wellbeing measures (Huebner, 1991). Evidence supports its criterion, convergent and discriminant validity (Gilligan and Huebner, 2007). The SLSS has been used in various countries11 with similar reliability and validity reported. This version differs from the original SLSS in two ways: (1) The SLSS was reduced from 7 to 5 items[12]; (2) Response options in this study reduced Huebner's (1991) six answer options to five, replacing the "slightly agree" and "slightly disagree" with a neutral response option. The version used in this study also registered a strong internal consistency (α = 0.86). Upon conducting factor analysis it was noted that there is indeed an underlying factor reflecting the observed variables, making it viable to sum up response to create the total life satisfaction score. Scores were not computed for those participants who did not respond to at least one life satisfaction item.

[11] Including the United States, United Kingdom, Spain, Portugal, and Germany.

[12] Two items, 'I would like to change many things in my life' and 'My life is better than most kids', were removed because it was found that, for England, the original one-factor model did not fit the data well, suggesting a need for refinement due to a significant residual covariance between the two items (Jiang et al., 2016, in Jiang & Huebner, 2017). This reduction did not cause substantial loss of reliability (The Children's Society, 2020).

Self-Esteem	I feel I have several good qualities I certainly feel useless at times* I am a likeable person At times I feel no good at all* I don't have much to be proud of* I am as able as most other people	Strongly Agree (5), Agree, Neither agree nor disagree, Disagree, Strongly disagree (1)	1. Items were analysed in their raw form. 2. Total self-esteem score, on a scale from 6 to 30, with a higher score indicating higher levels of global self-esteem.	This six-item self-esteem scale is a version of Rosenberg's self-esteem Scale (RSES). RSES is the most widely utilised self-report measure of self-esteem, suitable for research and clinical purposes, and widely considered valid, and reliable, including for use with adolescents (Bagley and Mallick, 2001, Robins et al, 2021, Sharrat et al., 2014, Sinclair et al., 2010, as cited in Wood et al., 2021; Dhingra, 2013; García et al., 2019). The RSES version used in this paper was amended: (1) The original 10-item scale was reduced to six-items by The Children's Society; (2) The wording of the items was simplified by The Children's Society since the RSES wording was deemed too complex, although the concepts were deemed appropriate for children (also see Wood et al., 2021); (3) The original RSES is rated on 4-point Guttman scale, and is commonly scored as a 4-item Likert scale (Strongly Disagree to Strongly Agree). However, versions with 5- and 7-point scales also exist (CUNY, n.d.). This paper adopts a 5-pointed response scale, introducing a neutral option; (4) The original 10-item 4-point response scale is computed into a total score ranging from 0 to 30, with higher scores representing higher self-esteem. It can also be categorised into a trichotomous ordinal variable: low (0-14), normal (15-25) and high (26-30). In our version, the range is 6-30. The version used in this study also registered a strong internal consistency ($\alpha = 0.779$). As a result, responses were summed up to create the total self-esteem score. Scores were not computed for those participants who did not respond to at least one self-esteem item.

Resilience	I can usually think of lots of ways to solve a problem I try to stay positive I am a very determined person I really believe in myself I am good at solving problems in my life	Strongly Agree (5), Agree, Neither agree nor disagree, Disagree, Strongly disagree (1)	1. Items were analysed in their raw form. 2. Total resilience score, on a scale from 5 to 25, with a higher score indicating higher levels of global resilience.	This scale was developed by The Children's Society (The Children's Society, 2020). Factor analysis confirms one factor and high alpha (0.852) suggests strong reliability. Thus, a total resilience score was created by summing items. Scores were not computed for those participants who did not respond to at least one resilience item.
Hope	I think I am doing pretty well I am doing just as well as other young people my age I think the things I have done in the past will help me in the future	Strongly Agree, Agree, Neither agree nor disagree, Disagree, Strongly disagree	1. Items were analysed in their raw form. 2. Total hope score, on a scale from 4 to 20, with a higher score indicating higher levels of global hope.	Hope in children and adolescents (ages 8 – 16) was measured through the three items that measure agency in Snyder's Children's Hope Scale (CHS), and one item, from the Children's World, inserted by The Children's Society (Snyder, 2002; Cefai & Galea, 2016). Factor analysis identified a single underlying factor. High Cronbach's alpha (0.872) indicates strong internal consistency. Thus, items were summed to create a total hope score. Scores were not computed for those participants who did not respond to at least one hope item.

	I feel positive about my future			
Worry about Future	Getting good grades at school	Very worried, quite worried, not very worried, not worried at all, don't know	1. Items were analysed in their raw form. 2. Total worry about the future score, on a scale from 8 to 32, with a higher score indicating higher levels of global concern about the future.	This scale was developed by The Children's Society (The Children's Society, 2020) and used as part of the data collection for the Good Childhood Report in the UK (The Children's Society, 2023). Factor analysis revealed an underlying factor explaining the observed variables. Additionally, Cronbach's alpha of .910 indicated strong internal consistency. Scores were not computed for those participants who did not respond to at least one worry about future item.
	Being able to go on to further education/university after finishing school			
	Being able to find a job			
	Being able to move out of your parents' home			
	Having enough money			
	Being able to buy a house			
	My mental health			
	My physical health			

Results

The sample analysed comprises 3456 adolescents aged 11 to 16 years. The sample was evenly distributed between males and females (49.7% and 50.3% respectively, n=3416). Students in Y11 comprised a quarter of the study sample, (26.1%), while the remainder was split almost evenly among students in Years 7 or 9 (38% and 35.9% of participants respectively). The lower representation of Y11 students is attributed to attrition commonly observed in the second term of Y11. Results were not weighted.

Descriptive statistics are presented to offer a basic understanding into the distribution and central tendencies of our variables. Next, a comparative analysis between genders and school years is performed to identify any significant differences between groups. Correlations are then explored to examine the relationships between key variables, offering an indication of potential predictors. Finally, regression analyses are conducted to determines the most significant predictors of self-esteem, hope, resilience, and life satisfaction, thereby offering a basis for practical applications and policy development.

Life Satisfaction

Each of the five items on the life satisfaction scale (scored from 0 to 4) garnered around one quarter of respondents who felt neutral towards the statements posed (see Table 3). The majority of respondents agreed with the four positively-worded statements, seemingly expressing a general contentment with their lives. Additionally, just under half the respondents (49%) held a dissenting view towards the reverse-scored statement ("I wish I had a different kind of life"), further affirming this overarching satisfaction with life. Nevertheless, it is still crucial to acknowledge that over a quarter of adolescents (28.4%) do express some desire for a different life, a statistic that holds some sociological significance and warrants attention. Participants (n=3271) obtained a mean life satisfaction score of 13.55[13] (lower quartile: 11, upper quartile:

[13] Range: 0-20

17), a median of 14, and a mode of 13, reflecting a consistent trend towards satisfaction with life.

Self-Esteem

Two thirds of respondents agreed that they are likeable and equally able as others, while almost three quarters agreed that they have several good qualities, indicating a prevalent sense of self-assurance and self-worth among the surveyed population. However, over one third of adolescents expressed agreement with feeling ”no good” and ”useless” at times, suggesting that despite the seemingly more positive self-perception, a substantial portion of adolescents still experience moments of self-criticism and judgement. Furthermore, 28.2% agreed with the statement “I don’t have much to be proud of”. These responses indicate that around a quarter of adolescents experience persistent feelings of lack of self-accomplishment, while a larger portion experience such feelings momentarily.

SE Score was measured on a scale from 6 to 30. A large proportion of participants scored over the midpoint (that is, 18 or higher), with the majority registering moderately-high self-esteem (mean=20.62, mode=18, median=20, upper quartile=24). Notably, even individuals with lower self-esteem scores hovered close to the mid-point, as reflected by the lower quartile score of 18.

Resilience

Each of the items on the Resilience Scale received agreement from over half the respondents (see Figure 4 below). Positivity emerges as a prevailing theme with 75% of respondents agreeing with maintaining a positive outlook. Additionally, 66.1% of respondents demonstrate a sense of determination and 57.2% express faith and belief in themselves. Nonetheless, a discernible segment leans towards neutrality for all questions. Lastly, two statements received disagreement from over 10% of participants, the items associated with the

questions “I am good at solving problems in my life” (11.8%) and “I really believe in myself” (16.6%).

The resilience score was scaled from 5 to 25. Although scores (n=3253) were observed across the entire scale, few scored below the midpoint (15), while the measures of central tendency were all well above the midpoint[14]. Such a finding underlines the robustness of adolescent resilience within the studied population.

Hope

Each hope item garnered agreement from over two thirds of respondents. Notably, 80.6% of respondents affirm a belief in their current success and 76% of participants perceive their own personal achievements as on par with their peers. Furthermore, 77.5% of adolescents expressed confidence in the utility of their past experiences in facilitating prospects. Lastly, 76% do indeed feel positive about their futures. Notwithstanding, it may be important to note that one in five respondents lacked positive feelings about their future (18%) or felt they compared negatively with others their age (19.1%).

The hope score was measured on a scale from 4 to 20 (n=3226). The median and mode for this score are both 16, and the mean and upper quartile are 15.34 and 18 respectively, while the lower quartile lies just below the midpoint value at 14.

[14] Mean: 18.84, median: 19, mode: 20, lower and upper quartile: 16 and 21 respectively

Table 3

Descriptive statistics of subjective wellbeing items

		Strongly Disagree	**Disagree**	**Neither Agree nor Disagree**	**Agree**	**Strongly Agree**	**Mean**	**Standard Deviation**
Life Satisfaction	I have what I want in life	4.2	8	27.7	33.5	26.7	2.71	1.074
	I have a good life	2.5	4.3	18.9	41.9	32.3	2.97	0.956
	I wish I had a different kind of life	24.3	23.7	23.6	19	9.4	2.35	1.288
	My life is just right	3.6	8.8	26.1	37.1	24.4	2.7	1.044
	My life is going well	3..1	5.7	22.9	40.9	27.4	2.84	0.992
	Total Life satisfaction Score	-	-	-	-	-	13.56	4.316
Self-Esteem	I am as able as most other people	3.2	6.1	22.4	38.7	29.6	3.85	1.031

	I don't have much to be proud of	18.2	29.4	25.2	18.3	8.9	3.30	1.214
	At times I feel no good at all	11.6	19.2	25.9	30.7	12.6	2.87	1.449
	I am a likeable person	3	5.5	27.1	44.7	19.6	3.72	0.940
	I certainly feel useless at times	12.2	21.2	27.9	27.5	11.2	2.96	1.422
	I feel I have a number of good qualities	3.1	4.2	17.7	47.1	27.9	3.92	0.948
	Total Self-Esteem Score	-	-	-	-	-	20.62	4.520
Resilience	I am good at solving problems in my life	3.7	8.1	30.5	36.6	21.1	3.63	1.019
	I really believe in myself	5.1	11.5	26.1	33.3	23.9	3.59	1.122
	I am a very determined person	2	5.8	26.2	39.4	26.7	3.83	0.954
	I try to stay positive	2.2	4.6	18.2	48.6	26.4	3.92	0.908
	I can usually think of lots of ways to solve a problem	1.6	4.3	23.3	47.1	23.6	3.86	0.88
	Total Resilience Score	-	-	-	-	-	18.84	3.884
Hope	I feel positive about my future	3.3	14.7	6	48.1	27.9	3.83	1.094
	I think the things I have done in the past will help me in my future	3.6	13.5	5.4	50.4	27.1	3.84	1.079

	I am doing just as well as other young people my age	3.4	15.7	4.9	51	25	3.79	1.089
	I think I am doing pretty well	2.7	11.8	4.9	54.4	26.2	3.90	1.008
	Total Hope Score	-	-	-	-	-	15.344	3.637

Worry for the Future

The responses in this category stand out due to the overall negative tendencies. Over half the respondents expressed worry in 5 of the items. Around 60% of participants indicated that they are worried about education-related prospects, like school grades and furthering education. Aconsiderable number of participants expressed concern for their future economic stability, specifically their ability to secure employment (55.4%), financial stability (56.8%), and housing affordability (57%). Another point of concern is that 39% and 46.7% of respondents express apprehension about potential issues regarding their future physical health and mental health respectively. Correspondingly, the Future Worry scale, which ranges from 8 to 32, registered measures of central tendency below the midpoint (20)[15].

[15] Mean: 20.69, median: 21, mode: 16, lower quartile: 16. The upper quartile, on the other hand, is 25.

Table 4

Descriptive statistics of worry for the future items

Worry for the Future Items	**Not worried at all (%)**	**Not very worried (%)**	**Quite worried (%)**	**Very worried (%)**	**Mean**	**Standard Deviation**
My physical health	26.6	34.4	23	16	2.28	1.027
My mental health	23.5	29.8	24	22.7	2.46	1.083
Being able to buy a house	16.2	26.7	30.6	26.4	2.67	1.036
Having enough money	16	27.2	30.2	26.6	2.67	1.035
Being able to move out of your parents' home	19.7	32.3	27.8	20.2	2.48	1.024
Being able to find a job	15.6	29	31.8	23.6	2.63	1.008
Being able to go on to further education/university after finishing school	13.3	26.6	33.2	26.8	2.73	0.999
Getting good grades at school	13.2	25.9	35.1	25.7	2.73	0.987
Total Worry for the Future Score	-	-	-	-	20.69	6.377

Differences Between Groups – Sex and School Year

Data for Life Satisfaction score, Self-Esteem score, Resilience score, Future score, Hope score is not normally distributed for young males or females and across all three school years (see Table 5 below). Consequently, nonparametric tests were used when comparing means between groups.

Significant differences between genders were registered (see Table 5 below): Males have higher means than females on the self-esteem, resilience, life satisfaction and hope scales, and on every individual item on these scales. Correspondingly, young females scored higher means for each individual item on the future questions, indicating that they are more worried about the future than their male peers. The data suggests a gender disparity in perceptions of future concerns, hopefulness, resilience, life satisfaction and self-esteem.

Significant differences were also observed between the three school years under study (Year 7, Year 9 and Year 11). Life satisfaction, self-esteem and resilience decrease as children progress through the education system, while future concerns increase. This gradual trend which appears to be present may potentially reflect evolving difficulties that older students may encounter or perhaps, their heightened awareness of such difficulties. The increased academic demands, social dynamics, decisions regarding studies and employment following post-compulsory education, and day-to-day experiences could possibly be having an overall impact on adolescents' subjective wellbeing.

Table 5

Normality testing across scales

		df	Kolmogorov-Smirnov D	p-value	Shapiro-Wilk W	p-value
Life satisfaction	Males	1587	0.094	<.001	0.949	<.001
	Females	1651	0.075	<.001	0.975	<.001
	Year 7	1247	0.106	<.001	0.930	<.001
	Year 9	1171	0.093	<.001	0.969	<.001
	Year 11	850	0.081	<.001	0.980	<.001
Self-esteem	Males	1555	0.089	<.001	0.978	<.001
	Females	1599	0.072	<.001	0.986	<.001
	Year 7	1213	0.083	<.001	0.977	<.001
	Year 9	1147	0.086	<.001	0.984	<.001
	Year 11	826	0.076	<.001	0.989	<.001
Resilience	Males	1583	0.088	<.001	0.947	<.001
	Females	1636	0.080	<.001	0.977	<.001
	Year 7	1233	0.080	<.001	0.957	<.001
	Year 9	1174	0.092	<.001	0.964	<.001
	Year 11	843	0.082	<.001	0.975	<.001
Future	Males	1099	0.054	<.001	0.975	<.001
	Females	1136	0.072	<.001	0.972	<.001
	Year 7	782	0.075	<.001	0.969	<.001
	Year 9	774	0.058	<.001	0.978	<.001
	Year 11	703	0.054	<.001	0.974	<.001
Hope	Males	1564	0.214	<.001	0.880	<.001
	Females	1627	0.192	<.001	0.933	<.001
	Year 7	1230	0.206	<.001	0.882	<.001
	Year 9	1156	0.206	<.001	0.916	<.001
	Year 11	837	0.182	<.001	0.936	<.001

Table 6

Gender differences across scales

	U	Z	p-value	Mean		N		
				Male	Female	Male	Female	Total
LS	996,779	-11.817	<.001	14.50	12.74	1587	1651	3238
SE	974,314	-10.551	<.001	21.529	19.838	1555	1599	3154
Resilience	952,687	-13.035	<.001	19.763	18.009	1583	1636	3219
Future	799,613	11.515	<.001	19.091	22.217	1099	1136	2235
Hope	1016664	-9.997	<.001	15.971	14.833	1564	1627	3191

Table 7

Differences between school year, across scales

	Kruskal-Wallis	**p-value**	**Median**			**N**			
			Year 7	**Year 9**	**Year 11**	**Year 7**	**Year 9**	**Year 11**	**Total**
LS	252.364	<.001	15	13	12	1247	1171	850	3268
SE	87.861	<.001	21	20	20	1213	1147	826	3186
Resilience	65.584	<.001	20	19	18	1233	1174	843	3250
Future	84.377	<.001	19	21	22	782	774	703	2259
Hope	159.547	<.001	16	16	16	1230	1156	837	3223

Interrelatedness among variables

Relationships were observed between the five dependent variables in this study ($p<0.001$) (see Table 8). Specifically, life satisfaction is positively correlated with self-esteem ($r = .622$), resilience ($r = .604$) and hope ($r = .654$). This suggests that adolescents who report higher levels in life satisfaction also tend to have higher self-esteem, resilience and hope scores. Similarly, self-esteem is positively correlated with resilience ($r = .591$) and hope ($r = .647$), indicating that adolescents with higher self-esteem are more likely to have higher resilience and hope scores. Resilience also shows a positive correlation with hope ($r = .634$).

Conversely, life satisfaction, self-esteem, resilience and hope are negatively correlated with worry about the future. Indeed, the negative correlation coefficients are as follows: life satisfaction and future worry ($r = -.465$), self-esteem and future worry ($r = -.456$), resilience and future worry ($r = -.426$) and hope and future worry ($r = -.519$). This indicates that adolescents with higher life satisfaction, self-esteem, resilience and hope scores seemingly worry less about their future. This introduces a temporal aspect to the study which will be addressed further when conducting linear regression models.

Table 8

Correlations observed between total scores

	LS	**SE**	**Resilience**	**Hope**	**Future Worry**
Life satisfaction	-	.622	.604	.654	-.465
Self-esteem	-	-	.591	.647	-.456
Resilience	-	-	-	.634	-.426
Hope	-	-	-	-	-.519
Future Worry	-	-	-	-	-

Predictors of each of the total scores were further analysed using multiple linear regression models, with the aim of capturing how various aspects of adolescents' subjective wellbeing influence the dependent variable. This paper presents the most representative models (R^2>0.4), that are not strongly impacted by multicollinearity[16]. Some statements (see Table 2 above) were reverse coded to facilitate interpretation.

[16] All condition indices were below 30. For self-esteem, life satisfaction and hope scores, tolerances were in the range 0.5-0.9, and variance inflation factors were in the range 1-2. For resilience, tolerances ranged between 0.4 and 0.8, and variance inflation factors ranged 1.2-2.1.

Table 8 *Regression models having R^2 >.4 and are not strongly impacted by multicollinearity*

Table 9:

Regression models having R^2 >.4 and are not strongly impacted by multicollinearity

Model Name	**Dependent variable**	**Independent variables/ Constants**	**B**	**t**	**p-value**	**R^2**
1	Total Self-esteem	My life is going well	1.305	16.265	<.001	.488
		I try to stay positive	.423	5.093	<.001	
		I feel positive about my future	1.114	15.596	<.001	
		Worry about my mental health	-.660	-10.362	<.001	
		I am a very determined person	.695	8.993	<.001	
		Constant	10.001	23.317	<.001	
2	Total Self-esteem	I have a good life	.756	9.478	<.001	.541
		I wish I had a different kind of life	.734	14.253	<.001	
		I really believe in myself	1.283	20.107	<.001	
		I am doing just as well as other young people my age	1.048	15.828	<.001	
		Worry about getting good grades at school	-.216	-3.431	<.001	
		Constant	8.715	24.259	<.001	
3	Total Self-Esteem	Worry about having enough money	-.267	-4.319	<.001	.508
		I think I am doing pretty well	1.528	20.101	<.001	
		I can usually think of lots of ways to solve a problem	.406	5.333	<.001	

		I really believe in myself	1.220	16.665	<.001	
		I have what I want in life	.519	7.935	<.001	
		Constant	8.167	21.326	<.001	
4	Total Life Satisfaction	I feel I have a number of good qualities	8.44	10.491	<.001	.512
		I try to stay positive	.791	10.278	<.001	
		I feel positive about my future	.986	14.767	<.001	
		Worry about my mental health	-.704	-12.185	<.001	
		I really believe in myself	.711	10.491	<.001	
		Constant	2.518	6.200	<.001	
5	Total Life Satisfaction	Worry about getting good grades at school	-.224	-2.229	.085	.467
		Worry about being able to go on to further education/university after finishing school	-.365	-2.229	<.001	
		I am doing just as well as other young people my age	1.464	21.335	<.001	
		I am a very determined person	.711	9.581	<.001	
		I certainly feel useless at times	.596	8.729	<.001	
		I don’t have much to be proud of	.494	7.226	<.001	
		Constant	3.436	7.822	<.001	
6	Total Life Satisfaction	Worry about having enough money	-.204	-4.704	<.001	.725
		I think I am doing pretty well	1.082	20.250	<.001	
		I can usually think of lots of ways to solve a problem	.249	4.675	<.001	
		I really believe in myself	.605	11.795	<.001	
		I have what I want in life	2.267	49.391	<.001	

		Constant	.658	2.461	<.001	
7	Total Resilience	My life is going well	.893	29.450	<.001	.490
		I am doing just as well as other young people my age	.583	9.862	<.001	
		I have what I want in life	.399	6.861	<.001	
		At times I feel no good at all	.209	4.554	<.001	
		I feel I have a number of good qualities	1.407	21.333	<.001	
		Constant	6.875	29.450	<.001	
8	Total Resilience	Worry about my mental health	-.243	-4.394	<.001	.461
		I don’t have much to be proud of	.190	3.807	<.001	
		I wish I had a different kind of life	.134	3.364	.005	
		I think I am doing pretty well	.845	11.374	<.001	
		I am as able as most other people	.946	14.765	<.001	
		I feel positive about my future	.877	12.797	<.001	
		Constant	8.184	22.492	<.001	
9	Total Hope	Worry about getting good grades at school	-.548	-11.344	<.001	.540
		I feel I have a number of good qualities	1.076	16.111	<.001	
		I have what I want in life	.719	15.153	<.001	
		I really believe in myself	.778	15.013	<.001	
		I am a likeable person	.465	7.791	<.001	
		Constant	6.153	20.266	<.001	
10	Total Hope	My life is going well	1.162	20.311	<.001	.570
		I don’t have much to be proud of	.426	10.668	<.001	

		I am as able as most other people	.839	16.124	<.001	
		Worry about my mental health	-.484	-10.627	<.001	
		I am a very determined person	.483	8.697	<.001	
		I try to stay positive	.442	7.352	<.001	
		Constant	5.052	15.762	<.001	

Three models are presented for self-esteem, with Model 2 exhibiting the highest predictive value. Hope emerged as a key predictor of self-esteem (SE) across all three models. Items from the hope scale, particularly "I think I am doing well," exhibited the strongest positive associations with self-esteem compared to other predictors. Similarly, self-belief ("I really believe in myself") from the resilience scale and "My life is going well" from the life satisfaction scale had strong positive associations with self-esteem.

Life satisfaction analysis yielded three models, with Model 6 exhibiting the highest R^2 value (indicating moderate predictive power). Across the three models, coefficients relating to adolescents' self-perceptions ("I feel I have a number of good qualities", "I certainly feel useless at times", "I don't have much to be proud of") and positive agency ("I have what I want in life", "I am doing just as well as other young people my age", "I think I am doing pretty well") significantly influence life satisfaction. The two items from the resilience scale that registered high association with life satisfaction also fall within the categories of self-perception ("I really believe in myself") and positive agency ("I try to stay positive"), indicating that self-esteem and hope may be better predictors of life satisfaction than resilience.

Two models are presented for the resilience score with model 7 having the highest predictive ability, moderately strong. Across the two models, the strongest associations are between resilience and having a positive self-perception, both in the present ("My life is going well", "I think I am doing pretty well", "I am as able as most other people") and the future ("I feel positive about my future").

Both models for the hope score presented a rather high predictive ability. The coefficients with the highest predictive ability across both models underpin strong positive self-belief ("I feel I have a number of good qualities", "I really believe in myself") and fulfilment ("I have what I want in life", "My life is going well", "I am as able as most other people"). These may

imply that those who are confident in their present selves and achievements may be more likely to have a more optimistic outlook for the future. Regression models attempting to identify predictors relating to future worry only provided low predictive ability (<0.3).

Conclusion and Recommendations

This research sheds light on the subjective wellbeing of young adolescents in Malta. Findings indicate that while most adolescents expressed positive subjective wellbeing (measured through life satisfaction, self-esteem, resilience, hope and worry about the future), some challenges prevail. Over one quarter of respondents expressed desire for a different kind of life, while a larger proportion of students expressed a lacking sense of accomplishment. This is reflected in the responses to the resilience scale, where over 16% expressed lack of belief in themselves and their ability to solve problems. While most participants were hopeful for their future, just under one in five respondents lacked positive feelings about their future or felt they compared negatively with others their age. Moreover, almost half of the participants expressed concern about their mental health, and more than half are worried about their education and employment prospects and economic stability. Thus, while scores in life satisfaction, resilience and hope were generally positive or very positive, the study shows signs of concern that should not be underestimated.

The analysis revealed gender and age differences in subjective well-being. Adolescent males registered more positive scores across all five scales compared to their female peers, and younger students reported more positive scores than older students. While these findings warrant further investigation, they also highlight the potential need for targeted interventions to address subjective well-being among different student subgroups. Future research should explore the reasons underpinning these disparities and examine the influence of demographic factors not explored in this paper.

The five subjective wellbeing variables under study are all correlated. Regression analysis indicated that hope is a key predictor of self-esteem, that life satisfaction is associated with a positive self-perception and agency, that a positive self-perception is a core factor of resilience, and that hope is underpinned by self-belief and fulfilment. These results highlight the pivotal nature of self-esteem in various aspects of subjective wellbeing, underscoring the importance of ensuring that adolescents are surrounded by systems that nurture positive self-esteem and that detect and specifically support young people with negative self-esteem. Further research is necessary to assess the efficacy and feasibility of introducing such systems, be they universal or targeted.

The results from the regression models offer insightful information for practical applications and policy development in Malta. The identification of hope items as key predictors of self-esteem across the models suggests that fostering hope among adolescents could significantly enhance their self-esteem. Educational and community programs should incorporate strategies that build a positive outlook on the future, such as workshops on goal setting, positive thinking, and resilience training. The findings also indicate that self-belief items and life satisfaction items are strongly associated with self-esteem. Schools and community organisations could develop programs that promote self-belief through activities that highlight personal strengths and achievements. For instance, mentorship programs and success story sharing can inspire confidence in young individuals.

Furthermore, the analysis shows that life satisfaction is influenced by adolescents' self-perceptions and their sense of positive agency. Policies should support initiatives that boost self-worth and agency, such as peer support groups and extracurricular activities that provide opportunities for personal growth and accomplishment.

In terms of resilience, the models reveal that positive self-perception and optimism (especially regarding the future) are crucial. On the other hand, the regression models for hope

indicated that strong self-belief and fulfilment items have strong predictive power on the total hope score. This highlights the importance of creating environments that support the fulfilment of adolescents' needs and aspirations.

Longitudinal research could be employed to comprehensively understand the subjective wellbeing of adolescents across pivotal stages of their lives, providing insights into long-term development trajectories and informing potential interventions. Such research would allow for the study of changes and continuities in mental health and wellbeing over time, shedding light on the enduring effects of familial, social, and environmental factors. In addition to longitudinal studies, future research should explore the role of digital technology and social media on adolescent mental health, given their increasing prevalence in youths' lives. Moreover, investigating the impacts of different parenting styles and family structures on adolescent wellbeing can provide a more nuanced understanding of family dynamics.

Lastly, incorporating diverse demographic and cultural contexts into future research would improve the generalisability of findings and potentially reveal unique influences on adolescent development. This broader scope of research could lead to more tailored and effective policies and programs that address the specific needs of different adolescent populations. Therefore, continued and expanded research efforts are essential to deepen our understanding of adolescent wellbeing and to develop evidence-based strategies for promoting wellbeing in this critical developmental period.

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Declaration:

No potential conflict of interest or financial gain was report by the authors of this paper.

Authors' bios

Jeannine Vassallo holds a B.A. (Hons) in Anthropology (Melit.), an M.Sc. in Social Research (Edin.), an M.Sc. in Integrative Health and Social Care (Derby), and a CMI Level 7 Extended Diploma in Strategic Management and Leadership. Her professional experience has focused on the delivery, regulation, research, and policymaking of welfare and education services. Ms Vassallo's research interests centre on social justice, wellbeing, and person-centred and evidence-based service delivery. Her work reflects a commitment to advancing inclusive, equitable, and holistic approaches to services aimed at improving people's lives.

Dr Maria Pace is an Education Officer in Wellbeing, working within the People Management of Malta's Ministry for Education, Sports, Youth, Research, and Innovation. She holds a Bachelor of Education in Primary Education, two Master's degrees, one in Social, Emotional, and Behavioural Difficulties (SEBD) and another in Education Leadership – and a Doctorate in Education (Ed.D) focused on Children, Schools and Families. Dr Pace stated her career in teaching as a primary school teacher and then moved to working in a nurture group within two primary schools. After

her tenure as a teacher, she became an Education Officer first in Inclusive Education and recently in Wellbeing. Dr Pace is also a lecturer and coordinator of the Master of Education in Mental Health Literacy programme within CC Education Academy. Her research interests are student voice, educator wellbeing, mental health literacy, emotional literacy and emotional regulation.

Timothy Vella graduated in 2025 with a Bachelor of Science (Honours) in Mathematics and Statistics and Operations Research from the University of Malta. As part of his degree, he completed a dissertation on Structural Equation Modelling, focusing on the relationship between taste and socio-demographic factors. Since November 2023, he has been working at the Research and School Internal Review Directorate within the Ministry for Education, Sport, Youth, Research and Innovation, where his research focuses on students' mental health, academic performance, family backgrounds, and the experiences of students with disabilities.