

Chapter # 22

AN EXPLORATION OF ECO-ANXIETY AND ENVIRONMENTAL ENGAGEMENT IN MALTA

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ABSTRACT

The ecological crisis has triggered emotional, cognitive, and behavioral reactions. One such response, eco-anxiety, arises from concerns about environmental degradation, and can drive individuals to take action or otherwise. This study explored eco-anxiety and environmental engagement among a Maltese sample using an explanatory sequential mixed methods design, drawing on Appraisal Theory and the Campbell Paradigm of Attitudes. The 13-item Hogg Eco-Anxiety Scale assessed eco-anxiety levels in 243 Maltese adults via an online questionnaire, which also investigated pro-environmental intentions, behaviours, and climate change news exposure. Findings revealed positive correlations between eco-anxiety and both pro-environmental intentions and behaviours, though the latter was less pronounced. Eco-anxiety significantly correlated with climate change news exposure. In the second phase, four qualitative focus groups provided deeper insights into Maltese individuals' appraisals of the ecological crisis. Participants' negative emotions related to ecological degradation stemmed from feeling ineffective in addressing the crisis despite their intentions. They identified barriers, such as inconvenience, cost, and time, which outweighed their positive attitudes towards pro-environmental actions. The study highlights the need to reframe the ecological crisis to promote practical eco-anxiety and environmental engagement, with implications for environmental psychology, conservation and media reporting.

Keywords: eco-anxiety, environmental psychology, environmental engagement.

1. INTRODUCTION

Our world today is confronted with an array of urgent ecological challenges. These issues collectively give rise to what experts call the "triple planetary crisis" (United Nations, 2022). Such a crisis is rooted in three interconnected global predicaments, being: climate change, the loss of nature and biodiversity, and the pervasive issue of pollution and waste. Malta, a small island state in the middle of the Mediterranean Sea, has a dense population and is no exception to environmental challenges faced by larger countries (Environment and Resources Authority, 2020). These issues are being caused and perpetuated by human sources, mainly the widespread use of non-renewable fossil fuels, and extraction and abuse of natural resources (United Nations, 2022).

Meanwhile, such anthropogenic behaviours and their effects are posing imminent threats to Earth itself, and its human and non-human inhabitants. Indeed, nearly two-thirds of Maltese individuals acknowledge personal exposure to environmental and climate-related risks, highlighting a growing perception of climate change as a tangible personal threat (European Commission, 2023).

Besides physical threats, such as increased extreme weather and climate events, the ecological crisis also poses new psychological challenges, with eco-anxiety being a widely mentioned and studied phenomenon within the field of environmental psychology (Albrecht, 2011). Despite this, eco-anxiety, alongside resulting behaviours have not yet been explored within a Maltese context. Therefore, this study aimed to bridge this research and theoretical gap by exploring eco-anxiety among Maltese adults within the frameworks of Appraisal Theories (Arnold, 1970; Scherer, 2001) and the Campbell Paradigm of Attitudes (Kaiser, Byrka, & Hartig, 2010) using an explanatory sequential mixed methods research design.

2. BACKGROUND

Eco-anxiety has been classified as a non-pathological, inherent and natural response to the ecological crisis, rather than a mental health disorder that requires treatment. The appraisal of the ecological crisis as caused by anthropogenic actions, paired with its uncertain outcomes, is the main reason leading to eco-anxiety (Albrecht, 2011). Mathers-Jones and Todd (2023), while pointing towards the motivating effect of eco-anxiety on environmental engagement, also propose the possibility of eco-anxiety becoming maladaptive. Indeed, Hickman et al.'s (2021) study with 16-25 year-old participants exposed that nearly half of the participants thought that their emotions regarding the ecological situation were having an impact on their level of functioning, pointing towards eco-anxiety's potential of becoming severe in its effects (Kurth & Pihkala, 2022).

2.1. Eco-Anxiety and its Link to Environmental Engagement

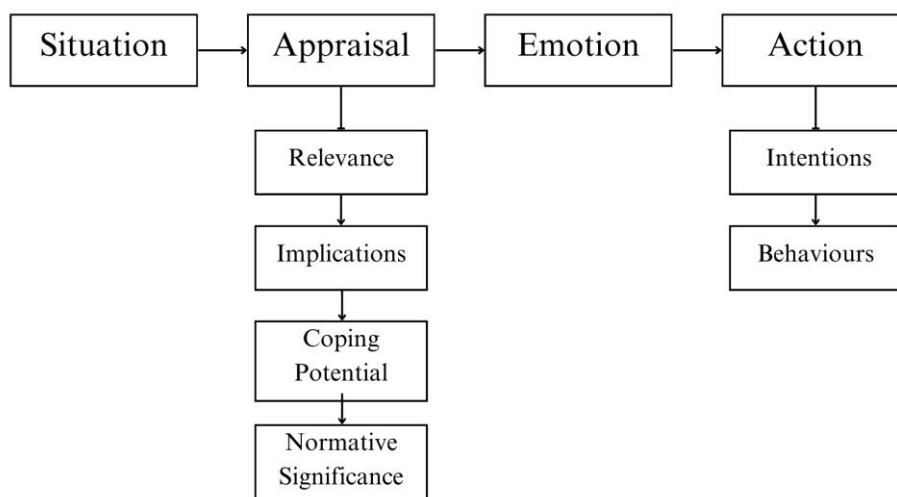
Kurth and Pihkala (2022) distinguished between practical and paralysing eco-anxiety that led to what Andrews and Hoggett (2019) called ecologically adaptive or maladaptive responses, respectively (Andrews & Hoggett, 2019). Practical eco-anxiety is characterised by self-reflection and concern, alongside eventual pro-environmental behaviours, such as information-seeking, regulating emotions and connecting with nature (Andrews & Hoggett, 2019). Meanwhile, fear and grief encompass paralysing eco-anxiety, that leads to defensive and withdrawal responses that characterise ecologically maladaptive responses. Indeed, several studies have exposed a positive correlation between eco-anxiety and pro-environmental behaviour, suggesting a practical form of eco-anxiety (Mathers-Jones & Todd, 2023; Verplanken, Marks, & Dobromir, 2020). Conversely, Stanley, Hogg, Leviston, and Walker (2021) found that eco-anxiety had no effect on personal environmental engagement, and a negative effect on environmental collective action. These conflicting findings point towards the necessity to explore the effects of eco-anxiety on environmental engagement further. Indeed, this study sought to test the correlation of eco-anxiety with pro-environmental behaviour.

Efficacy beliefs have been studied in relation to eco-anxiety and environmental engagement, being termed 'environmental efficacy' (Huang, 2016). Indeed, lack of efficacy in the face of ecological threats had been found to stimulate eco-anxiety (The Lancet Child and Adolescent Health, 2021). On the other hand, appraising one's capabilities to engage in pro-environmental behaviour, even when the ecological crisis is appraised as a threat, has been found to produce pro-environmental action, with high environmental self-efficacy also acting as a buffer for eco-anxiety's paralysing form (Mead et al., 2012). Building upon these findings, Innocenti et al. (2023), Maran and Begotti (2023) and Shao and Yu (2023) found that media and information on the ecological crisis were positively associated with both eco-anxiety, and individual and collective self-efficacy, pointing to the role of media in instigating practical eco-anxiety and subsequent environmental engagement.

2.2. Theoretical Framework

This study was framed within Magda Arnold's four-step Appraisal Theory of Emotion (Arnold, 1970), Scherer's Sequential Check Theory of Emotion (Scherer, 2001) and the Campbell Paradigm of Attitudes (Kaiser et al., 2010). Arnold (1970) proposed a four-step sequential process of responses triggered by exposure to a situation, which in the case of this study, is the ecological crisis. This process unfolds in the following sequence: 1) Situation, 2) Appraisal, 3) Emotion, and 4) Action (see Figure 1). Meanwhile, Scherer (2001) breaks Arnold's 'appraisal' step into four dimensions, being the appraisal of a situation's relevance, implications, normative significance and one's coping potential. The outcomes of the appraisal of the ecological crisis influences the resulting emotion and action taken, which can be both ecologically adaptive and maladaptive in nature.

Figure 1.
Theoretical Framework.



As seen in Figure 1, the last step of Arnold's Appraisal Theory of Emotion, being 'Action', has been framed within the Campbell Paradigm of Attitudes, making a distinction between pro-environmental intentions and pro-environmental behaviours (Kaiser et al., 2010). This paradigm contends that whether one's intentions translate into behaviour depends on their attitudes towards the ecological crisis, mitigating actions, and the appraised costs of behaving pro-environmentally (Kaiser et al., 2010). Therefore, having positive attitudes toward the environment does not necessarily mean that people would behave pro-environmentally. As an example, the Special Eurobarometer survey found that the majority of Maltese respondents were willing to adopt lifestyle changes for environmental improvement, suggesting the presence of pro-environmental intentions that are supported by positive attitudes (European Commission, 2023; Kaiser et al., 2010). Conversely, considering one's carbon footprint when planning vacations was the least reported behaviour performed by Maltese respondents, suggesting perceived difficulty in changing one's travel-related behaviours (European Commission, 2023; Kaiser et al., 2010).

Considering the above, this research aimed to explore eco-anxiety, environmental engagement, being operationalised as pro-environmental intention and behavior, and climate change news exposure, within the Maltese context through the collection and analysis of both quantitative and qualitative data within an explanatory sequential mixed methods research design.

3. OBJECTIVES

The objectives of this study, enabled through its mixed methods design, were to answer the following research questions:

- 1) How do participants appraise the ecological crisis?
- 2) Is there a relationship between eco-anxiety and pro-environmental intentions and behaviours?
- 3) Is there a relationship between eco-anxiety and climate change news exposure?
- 4) What are the perceptions of participants regarding the barriers to environmental engagement?

4. DESIGN AND METHODS

Coffey, Bhullar, Durkin, Islam, and Usher (2021) highlighted the need for research using mixed methods to study eco-anxiety. Hence, this study employed an explanatory sequential mixed methods research design (Creswell & Plano Clark, 2010). A quantitative survey was followed by focus group discussions, with the latter's question guide being influenced by the quantitative results obtained from the first phase. Subsequently, the quantitative and qualitative results were triangulated to enable an exploration of eco-anxiety and environmental engagement.

Participants of both the quantitative and qualitative phase consisted of Maltese adults aged 18 years and above recruited via convenience sampling methods.

4.1. Quantitative Phase

Phase 1 involved the administration of an online questionnaire through the social media platforms of Facebook, Instagram and LinkedIn. Data was collected between September 2022 and January 2023. The questionnaire was made up of 4 demographic items, followed by the 13-item Hogg Eco-Anxiety Scale (Hogg, Stanley, O'Brien, Wilson, & Watsford, 2021). This scale was chosen due to its ease of administration, brevity, and established validation across diverse populations (Hogg et al., 2021; Uzun et al., 2022). In addition, two other subscales were used. One subscale consisting of four items from the Willingness to Mitigate Scale (Evans, Milfont, & Lawrence, 2014) was used to measure pro-environmental intentions, and one subscale including nine items from the Ecological Behaviour Scale (Casey & Scott, 2006) to measure pro-environmental behaviours. Additionally, one self-constructed item gauging exposure to climate change news was included.

At the end of the questionnaire, participants were asked to contact the researchers via email should they wish to participate in the second qualitative phase of this study, assuring them that their correspondence would not be linked to their questionnaire responses.

4.2. Qualitative Phase

Four qualitative focus groups were conducted. Two groups comprised 9 and 7 participants aged 18-45, and two other groups of 5 each aged over 45 years. Focus group discussions were held between March and May 2023. Participants may or may not have completed the questionnaire in Phase 1. In all, 26 persons participated in the focus groups. The inclusion of four focus groups, two per demographic group, is in line with a guideline in conducting focus group research to achieve meaning saturation, being “the point at which we fully understand the issues identified and when no further insights or nuances are found”, that is to include at least two focus groups per demographic group (Hennink, Kaiser, & Weber, 2019; Krueger & Casey, 2015; Barbour, 2007; Fern, 2001; Greenbaum, 2000; Morgan, 1997).

The focus group guide was shaped by the theoretical framework, and informed by quantitative data results. The focus group discussions were recorded and transcribed verbatim. These texts were analysed utilising abductive thematic analysis, enabling themes to be both guided by the theoretical framework and open to emerging insights (Thompson, 2022).

4.3. Ethics and Verification Strategies

Ethical clearance was obtained from the Faculty Research Ethics Committee at the University of Malta. Informed consent was secured from all participants.

Validity, reliability and trustworthiness were ensured through the utilisation of standardised scales aligned with research objectives, reflexivity, audit trails, and triangulation of data, theory, and methodology (Creswell & Clark, 2010).

5. RESULTS

5.1. Quantitative Results

The online survey was filled in by 243 Maltese individuals aged 18 or over, following the exclusion of those participants who did not fill in more than 20% of the survey.

Eco-anxiety scores were measured using the Hogg Eco-Anxiety Scale (Hogg et al., 2021) between 1 (rarely/not at all) and 4 (almost always). The mean eco-anxiety score was 1.56 (SD = 0.52). Table 1 displays the demographic information of participants alongside each group's eco-anxiety mean score.

Table 1.
Demographic Information of Sample Participants and Cross-Tabulation of Eco-Anxiety Scores with Demographics.

Demographics	<i>n</i>	%	Eco-Anxiety Score	
			<i>M</i>	<i>SD</i>
Gender				
Female	185	76.1	1.56	0.50
Male	54	22.2	1.52	0.59
Age				
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				
Secondary education	34	14	1.53	0.56
Tertiary education	209	86	1.57	0.52
Work in Environment Field				
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

More than half of the participants in the sample (56.6%) reported watching or reading climate change-related news once a week or less, while 11.1% do so at least once a day. The percentages of participants within each demographic category who watched or read news related to climate change between less than once a week and several times a day are displayed in Table 2.

Table 2.
Percentages of Demographic Categories and Climate Change News Exposure.

Demographics	Climate Change News Exposure				
	Less than once a week	Once a week	Several times a week	Once a day	Several times a day
	%	%	%	%	%
Gender					
Male	18.9	30.2	30.2	11.3	9.4
Female	39.0	21.4	31.3	4.4	3.8
Age					
18-30 years	33.6	28.7	24.6	7.4	5.7
31-45 years	43.1	19.6	27.5	2.0	7.8
46-60 years	23.1	23.1	44.2	5.8	3.8
61+ years	42.9	0.0	50.0	7.1	0.0
Highest Education					
Secondary	50.0	23.5	23.5	2.9	0.0
Tertiary	31.2	23.9	32.2	6.3	6.3
Work in Environment					
Yes	31.8	11.4	25.0	13.6	18.2
No	34.4	27.8	31.1	4.4	2.2
Unsure	33.3	13.3	46.7	0.0	6.7
Total %	33.9	23.8	31.0	5.9	5.4
<i>n</i>	81	57	74	14	13

Additionally, a Kruskal Wallis H test was carried out to find whether there were any differences in eco-anxiety scores among participants with varying frequencies of climate change news exposure. This test showed that there were significant differences between the eco-anxiety score rank totals of 87.43 (less than once a week), 107.04 (once a week), 146.72 (several times a week), 151.11 (once a day) and 177.04 (several times a day), ($H(4) = 43.466$, $p < .001$). More so, by comparing mean ranks, it can be estimated that the scores for eco-anxiety significantly increased the more often one watched or read news related to climate change. The effect size of this difference was 17% ($\eta^2 = .17$), fitting in the large effect size interpretation value bracket. From this effect size, it can be said that 17% of variance in participants' eco-anxiety scores was due to climate change news exposure.

Pro-environmental intentions were measured on a 4-point Likert scale (1 = 'never', 2 = 'occasionally', 3 = 'often', 4 = 'always'; $M = 2.30$, $SD = 0.60$), in which participants were asked how often they think they would be performing four behaviours in the future. It was found that participants reported being most likely to proactively choose green electricity products and services ($M = 2.62$, $SD = 0.81$), followed by carpooling, walking, cycling or using public transportation for commutes less than 5 kilometres long ($M = 2.57$, $SD = 0.93$), and avoiding eating meat ($M = 2.17$, $SD = 0.98$). The behaviour participants stated that they intended to perform the least is cutting down on the amount they fly ($M = 1.84$, $SD = 0.89$).

A moderately significant positive correlation between eco-anxiety and pro-environmental intentions was found ($rs(238) = .413, p < .001$). Meanwhile, a very weak positive correlation between eco-anxiety and pro-environmental behaviour ($M = 3.35, SD = 0.45$) was found ($rs(236) = .190, p = .003$). The pro-environmental behaviour that participants reported performing the most was reusing plastic bags ($M = 3.72, SD = 0.57$). The behaviour performed the least was buying products with minimal packaging ($M = 2.81, SD = 0.86$).

5.2. Qualitative Results

The ecological crisis was described as being “precarious”, with “deforestation”, “lack of greenery”, “construction”, and a high “population density” being a few local ecological events mentioned by focus group participants.

In terms of their appraisal of the ecological crisis, focus group participants expressed that they view its outcomes as uncertain: “I don’t know what is going to happen in the future” (Female, 57 years), with this same participant stating that they experience “fear” resulting from this. Fear was also an emotion mentioned by another participant in relation to the lack of immediate action taken by people to combat the ecological crisis despite its urgency: “My fear is that we are converting people slowly and the damage will still be done” (Male, 56 years).

Most participants reported not feeling hopeful about the ecological crisis: “the level of apathy doesn’t lead me to feel any kind of hope” (Female, 25 years). Nonetheless, a few participants expressed feeling hopeful: “There is hope, through the skin in our teeth, but we can get through” (Male, 24 years), and “What I can do I will do” (Female, 59 years). Nonetheless, the latter female participant professed that she found herself “in between helplessness and hope”. Although the situation makes her feel “helplessness”, she stated that it is “useless feeling helpless”, that she wishes to learn more about the issue, and “if there is a small fraction of what I can do, then I will do it”, with such an outlook leading to “hope”.

Whether participants reported feeling hopeful or hopeless was linked to their perceived environmental efficacy, which was said to be influenced by the negativity of the media, politicisation of the ecological crisis, view of individual actions as “redundant” and “in vain” (Female, 21 years), and other people’s lack of pro-environmental action: “someone does something, the media continues as it was before, and it reinforces the idea that we’re getting worse, so they lose hope” (Male, 24 years). On the other hand, reasons for feeling hopeful included the perceived potential of the younger generation to propel “things [to] change” (Male, 24 years). This reasoning was also professed by other participants (Male, 24 years; Female, 41 years; Female 57 years; Male, 60 years). Meanwhile, some participants passed neutral comments on their predicted outcomes of the ecological crisis, with one stating that they are “not too hopeful”, continued by stating “But who knows? We’ll see.” (Male, 24 years). This is also echoed by another participant (Female, 59 years), who said “anything can happen”.

Felt hopelessness, together with other factors, such as convenience, comfort, efficiency, money and time, were mentioned as barriers to behaving pro-environmentally despite having pro-environmental intentions. Indeed, there was some incongruence between participants’ attitudes and their behaviour. For example, several focus group participants spoke about their desire to use public transportation and discussed how important this behaviour is to reduce carbon emissions. However, they also admitted that they found it very difficult to opt to use public transport instead of their car. Another ecologically-friendly transportation behaviour, being the bike, was mentioned, although safety and health issues were mentioned as barriers to adopting this behaviour. The impact of low environmental efficacy on pro-environmental behaviour also contributed to the incongruence between attitudes and behaviours, with one

focus group participant who appraised the urgency of the ecological crisis expressing their intention to adopt a vegetarian diet, only to later abandon the idea due to low self-efficacy and the belief that this individual action would have little impact.

6. DISCUSSION

The findings of this study show that eco-anxiety scores in survey respondents were relatively low. Similar findings of eco-anxiety levels were found in studies that used the HEAS to measure eco-anxiety in Germany (Heinzel et al., 2023), Argentina and Spain (Rodríguez Quiroga et al., 2024) and Turkey (Çimşir, Şahin, & Akdoğan, 2024). Nonetheless, focus group participants in this study predominantly expressed experiencing negative emotions towards the ecological crisis, such as anxiety and fear. The discrepancy between quantitative measures and qualitative insights of eco-anxiety and environment-related emotions calls for a deeper examination of the methodologies used to assess eco-anxiety and related emotions. Quantitative scales, such as the HEAS, may not fully capture the complexity or intensity of individuals' emotional responses, particularly when those emotions are tied to personal appraisals and lived experiences of the ecological crisis. The qualitative insights reveal that eco-anxiety may manifest in ways that are not easily quantified, such as through narrative expressions of fear, guilt, or helplessness. This suggests that eco-anxiety could be more context-dependent and situationally nuanced than standardised measures can reflect.

When framing focus group participants' emotions within the theoretical framework of the study (Arnold, 1970; Scherer, 2001; Kaiser et al., 2010), these emotions stemmed from their appraisal of the ecological crisis as being relevant to themselves while having negative implications, alongside their appraisal of their own coping potential as low. Indeed, participants stated that their low environmental efficacy and environment-related coping potential acted as barriers to behaving pro-environmentally, despite having pro-environmental intentions. Innocenti et al. (2023) found that low environmental efficacy acted as a moderator in the relationship between risk perception and ecologically adaptive behaviour performance. This highlights the importance of feeling environmentally efficacious, as well as appraising one's coping potential positively in order to transform pro-environmental intentions into behaviours. This points to the link of appraising the ecological crisis with behavioural plans and actions, in line with the theoretical framework of this study. More so, low environmental efficacy has been said to lead to paralysing eco-anxiety, subsequently resulting in defence mechanisms and ecologically maladaptive responses (Andrews & Hoggett, 2019; Kurth & Pihkala, 2022).

The quantitative phase exposed a moderately significant positive correlation between eco-anxiety and pro-environmental intentions, coinciding with findings of Gao, Zhao, Wang, and Wang (2020). With reference to the theoretical framework, this indicates that eco-anxiety may stem from appraising the ecological crisis in a way that instills the intention to behave pro-environmentally. Meanwhile, a very weak positive correlation between eco-anxiety and pro-environmental behaviour was found, contrasting to the stronger correlation found by Verplanken et al. (2020) between habitual worry about environmental issues and pro-environmental behaviour. The weaker relationship of eco-anxiety with pro-environmental behaviour may suggest a paralysing form of eco-anxiety that hinders environmental engagement, as proposed by Kurth and Pihkala (2022). This also highlights appraisal processes that lead to paralysing eco-anxiety as an emotional response to the ecological crisis. However, the difference in the correlation strength between habitual worry

and pro-environmental behaviour observed in Verplanken et al.'s (2020) study, compared to this study's finding, could be the result of variations in the definition of constructs.

Additionally, eco-anxiety levels significantly and positively correlated with news exposure on climate change. This finding is congruent with the findings of Innocenti et al. (2023), Shao and Yu (2023), and Maran and Begotti (2023). Shao and Yu (2023) also found that climate change news exposure increased pro-environmental behaviour. However, focus group participants raised concerns about the media's negativity and its effects on their pro-environmental intentions and behaviours. Media was identified as a factor reinforcing participants' belief in the futility of individual actions. It also led to appraising their coping potential as being low, resulting in feelings of hopelessness and eco-anxiety. Perceived lack of efficacy points to the dual nature of eco-anxiety, being either practical or debilitating. The difference is determined by the situation one is exposed to (e.g., type of news on climate change), the antecedent appraisal processes, which then influence subsequent ecologically adaptive or maladaptive behaviour.

Survey participants reported being more likely to carpool, walk, cycle or use public transportation, than avoiding eating meat or cutting down on flying, suggesting the relative easiness of more environmentally-friendly means of transportation when compared to changing one's diet and travel plans. Similarly, the Special Eurobarometer Survey found that considering one's carbon footprint of one's transport when planning a holiday was the least performed pro-environmental behaviour in both the Maltese and general EU sample (European Commission, 2023). Applying the Campbell Paradigm of Attitudes (Kaiser et al., 2010) implies that Maltese people's positive attitudes towards using more environmentally-friendly ways of travelling for holidays were outweighed by the costs of and barriers to performing this behaviour. However, it is important to note that, given that Malta is an island, alternative means of travelling other than flying, such as trains and ferries, are limited when compared to mainland Europe. Also, Coates, Kelly, and Brown (2024) found that having low or high levels of climate anxiety, compared to moderate levels, led participants to give preference to options that take less time and cost less. Thus, the above results could also be explained in terms of participants' intensity level of eco-anxiety, with participants that reported performing more costly pro-environmental behaviours possibly having more moderate levels of eco-anxiety, while low ratings given to more costly pro-environmental behaviours indicate participants' low or high levels of eco-anxiety. This calls for further research that takes into account the intensity levels of one's eco-anxiety, the appraisal processes that influence the intensity, and their effects on environmental engagement (Coates et al., 2024).

Nonetheless, the vast majority of Maltese respondents in the Environmental Attitude Survey stated that they were willing to change their lifestyle in order to help improve the environment (Environment and Resources Authority, 2022). This points towards the need for a more nuanced understanding of the changes Maltese individuals are willing to make the perceived barriers to and costs of making such changes, as well as the stimuli that facilitate environmental engagement also require further investigation. Additionally, supplemental research is needed to find out how specific appraisal processes might trigger moderate levels of eco-anxiety. This could, in turn, motivate individuals to adopt more costly pro-environmental behaviours.

6.1. Limitations

There are several limitations to this study. Non-probability sampling restricted generalisability to the general Maltese population and beyond due to selection bias and external validity concerns (Trochim & Donnelly, 2008; Cook & Campbell, 1979; Jager, Putnick, & Bornstein, 2017). Additionally, unequal distribution of gender, age, and education levels in both quantitative and qualitative phases further impacted representativeness. Reliance on non-parametric tests limited statistical power (Siegel & Castellan Jr., 1988). Meanwhile, wide age ranges in focus groups diluted generational perspectives, making qualitative interpretation difficult (Krueger & Casey, 2015). Self-reported data posed risks of response and social desirability biases (Rosenman, Tennekoon, & Hill, 2011). To measure pro-environmental intentions and behaviours, subscales rather than full standardised scales were included in the study questionnaire, limiting construct validity. Eco-anxiety scores may have been influenced by time-sensitive ecological events. The exploratory nature of the study precluded causality or temporal insights, while qualitative thematic analysis risked reductionism and subjectivity, although mitigated through researcher reflexivity (Braun & Clarke, 2006). These findings highlight the need for follow-up studies to address these constraints (Creswell & Plano Clark, 2018).

7. CONCLUSION

The aim of this study was to explore the link between eco-anxiety and environmental engagement. Results showed positive and significant correlations of eco-anxiety with pro-environmental intentions, pro-environmental behaviour and climate change news exposure. The media was perceived as a barrier to environmental engagement. These findings are in line with some findings, such as those of Verplanken et al., 2020, while contradicting others, such as Shao & Yu's (2023) findings.

Despite valuable insights, the study's limitations, such as the use of a convenience sample, limit the generalisability of results to the broader Maltese population. Nevertheless, this research adds to the understanding of eco-anxiety and environmental engagement, and sets the stage for future investigations in Malta. By identifying facilitators of environmental engagement and promoting hopeful narratives in the media, more practical forms of eco-anxiety can be fostered that may inspire hopeful action and meaningful participation in addressing environmental crises and fostering resilience.

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