Attitudes and Environmental Behaviours: A Comparison Between Millennials and Generation Z Background Data.

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Introduction and Theoretical Framework

Addressing contemporary environmental challenges increasingly requires a focus on behavioural change. Sustainable development depends not only on technological advances and regulatory interventions, but also on transforming individual and collective behavioural patterns (Rogerson & Bellingham, 2010; Steg & Vlek, 2009). Understanding how people perceive and interact with their environment is therefore essential, as behavioural analysis provides key insights for designing effective and lasting solutions to environmental problems (Bronfman et al., 2015; Lehman & Geller, 2004).

In this perspective, research on pro-environmental behaviour has emphasised the importance of both internal and external factors in shaping individual engagement (Bamberg & Möser, 2007; Corral-Verdugo, 2002; Kollmuss & Agyeman, 2002; Scott & Willits, 1994). Among internal drivers, environmental attitude is one of the most frequently studied predictors of sustainable behaviour (Corral-Verdugo et al., 2009; Kaiser et al., 1999). However, a persistent attitude-behaviour gap is widely documented: individuals who express strong environmental concern do not necessarily act in accordance with their stated intentions (Kollmuss & Agyeman, 2002). Moreover, perceived effort plays a crucial role in shaping behavioural outcomes: people are more likely to adopt environmentally friendly practices when the perceived cost or effort is low.

External characteristics, such as gender, educational attainment, and broader socio-economic or institutional contexts, further affect the likelihood of adopting pro-environmental behaviours. Exploring how these factors operate among younger generations is increasingly relevant, as both Millennials and Generation Z are often portrayed as environmentally conscious, yet empirical evidence comparing their behavioural patterns remains limited.

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Research objective and conceptual approach

This study examines the mechanisms underlying pro-environmental behaviours among young Italians. The analysis draws on the Theory of Planned Behaviour (TPB) (Ajzen, 1985, 1991), a prominent reasoned action framework widely used to understand, predict, and promote changes in human social behaviour. According to the TPB, intention is the most immediate antecedent of behaviour and is shaped by three core components: attitude toward the behaviour, reflecting an individual's evaluation of performing it; subjective (social) norms, referring to perceived social approval or pressure; and perceived behavioural control, indicating the perceived ability to perform the behaviour. In addition to these three components, the model integrates environmental knowledge as a relevant cognitive antecedent that can reinforce positive attitudes and perceived control.

Adequate awareness of environmental issues may strengthen one's motivation to act and reduce perceived barriers. At the same time, socio-economic resources (Bonanomi & Luppi, 2019), positive attitudes (such as environmental awareness), and the perception that one's individual actions may condition access to knowledge and the perceived feasibility of adopting sustainable practices. Therefore, the translation of pro-environmental concern into action may reflect both individual motivation and structural opportunities or constraints. This study examines whether younger cohorts exhibit stronger environmental knowledge, attitudes, and perceived behavioural control, and whether these cognitive advantages translate into more consistent pro-environmental behaviour, or whether structural obstacles maintain a persistent attitude-behaviour gap across groups.

Data and Method

Data derive from the 2023 wave of the *Rapporto Giovani* survey, a nationally representative CAWI study conducted by the Istituto Toniolo on Italians aged 21-34. The analytical sample (N = 2,001) includes respondents belonging to both Millennials (27-34) and Generation Z (21-26), allowing for a direct comparison between successive youth cohorts in Italy.

Pro-environmental engagement is captured through three dependent variables. First, responsible consumption is measured using the 14-item scale (Heyl et al., 2013). An exploratory factor analysis confirms a single latent dimension (9 retained items; eigenvalue > 1; factor loadings ≥ 0.50), and the resulting factor score is analysed through ordinary least squares (OLS) regression. Second, participation in environmental

associations is modelled as a binary outcome estimated through logistic regression. Third, intention to join an environmental movement in the future is also operationalized as a binary variable and estimated through a logistic model.

Key predictors reflect the components of the Theory of Planned Behaviour. Attitude is operationalised through a self-rated environmental sensitivity scale. Perceived behavioural control is proxied by the belief that climate change is primarily human-caused. Subjective (social) norms are measured by parental support for environmental protection. Environmental knowledge is assessed through respondents' belief that individual actions contribute to sustainable development.

The analyses include a set of demographic and socio-economic covariates—gender, educational attainment, living arrangement, employment status, and area of residence. Socio-economic background is proxied by the mother's tertiary education, as an indicator of early-life family resources. Models are estimated separately for Millennials (aged 27–34) and Generation Z (aged 21–26), and fully adjusted for all covariates to examine whether generational differences remain after accounting for compositional characteristics.

Preliminary Results

Preliminary findings show that the attitudinal and cognitive components of the Theory of Planned Behaviour are positively associated with responsible consumption. Individuals reporting stronger environmental attitudes and higher perceived behavioural control display significantly higher levels of sustainable consumption practices. Social norms also correlate with responsible consumption, although they do not appear to influence participation in environmental associations or intentions to engage in environmental movements.

Environmental knowledge is positively associated with responsible consumption but does not significantly predict collective forms of engagement. This suggests that cognitive awareness may support everyday sustainable practices, but it does not necessarily motivate participation in collective action. Socio-economic background, proxied by mother's tertiary education, is positively associated with both participation and behavioural intention, indicating that family resources may facilitate access to environmental activism.

Age-cohort differences further reveal that older respondents (Millennials) tend to show higher levels of responsible consumption, but lower participation and intention to engage in environmental movements. This pattern suggests a potential shift across young adult cohorts (i.e. Generation Z) from collective activism to more individualized pro-environmental practices.

Building on these results, a mediation model will be developed to assess the indirect effects of environmental knowledge and socio-economic resources on pro-environmental behaviour through attitudes, subjective norms, and perceived behavioural control. This analytical extension will contribute to identifying the pathways through which structural and cognitive factors shape environmental engagement among younger generations.

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