Environmental Education Research

Routledge
Taylor & Francis Group

ISSN: (Print) (Online) Journal homepage: https://www.tandfonline.com/loi/ceer20

From external to internal locus of control – identifying attitudes among adults and teens to foster environmental responsibility towards the trash in the public domain

Nimrod Batzon & Michal Zion

To cite this article: Nimrod Batzon & Michal Zion (2023): From external to internal locus of control – identifying attitudes among adults and teens to foster environmental responsibility towards the trash in the public domain, Environmental Education Research, DOI: 10.1080/13504622.2023.2202364

To link to this article: https://doi.org/10.1080/13504622.2023.2202364

Published online: 19 Apr 2023.

Submit your article to this journal

View related articles

View Crossmark data

Full Terms & Conditions of access and use can be found at
https://www.tandfonline.com/action/journalInformation?journalCode=ceer20

ENVIRONMENTAL EDUCATION RESEARCH
https://doi.org/10.1080/13504622.2023.2202364

Routledge
Taylor & Francis Group

Check for updates

From external to internal locus of control – identifying attitudes among adults and teens to foster environmental responsibility towards the trash in the public domain

Nimrod Batzon and Michal Zion

Faculty of Education, Bar-Ilan University, Ramat Gan, Israel

ABSTRACT

Awareness of the individual's harmful impact on the environment has been rising in recent years. One example of harmful impact is the littering of public spaces – which is significantly hazardous to ecosystems. A possible solution to the problem is a shift of emphasis. Rather than reinforcing external responsibility embodied in bins, cleaning staff, inspectors and authorities, emphasis should be placed on fostering the personal responsibility of citizens to collect the garbage they produce and transport it for safe, organized disposal. This approach is at the heart of a new initiative – *Take the Garbage with You*. This qualitative study examines how adults and adolescents perceive environmental responsibility – in general and, more specifically, regarding the littering of public spaces. We interviewed 24 participants divided into four groups: environmentally inclined adults, indifferent adults, environmentally inclined teens, and indifferent teens. Both inclined and indifferent, adults and teens alike, believe that others litter because there is someone in charge of cleaning and that the greater a person's sense of social belonging, the greater the efforts they take to protect the environment. Our findings also show that only environmentally inclined adults believe that *Take the Garbage with You* stands a good chance to succeed.

ARTICLE HISTORY
Received 19 December 2022
Accepted 9 April 2023

KEYWORDS
Environmental motivation; environmental responsibility; locus of control; sustainability education; take the garbage with you

Introduction

Environmental education, sustainability education, and environmental literacy

The late 1980s saw a rising interest in Environmental Education (EE), leading to the formulation of an international agenda intended to encourage awareness and recognition of the interrelationships between economics, society, politics, and the environment. This overarching agenda sought to provide every person with an opportunity to acquire the knowledge, values, awareness, commitment, and skills needed to protect and preserve the environment while fostering new behavior toward the environment among individuals, groups, and societies. The late 1990s saw the branching of a new trend, focusing on education for sustainability (EfS), emphasizing a more thoughtful and better-planned use of natural resources while considering the long-term condition of nature and future generations (UNESCO (United Nations Educational) 2019).

CONTACT Michal Zion michal.zion@biu.ac.il Faculty of Education, Bar-Ilan University, Ramat-Gan, Israel 5290002
© 2023 Informa UK Limited, trading as Taylor & Francis Group

More recently, UNESCO (2020) published a roadmap to education for sustainable development in the coming decade – ESD for 2030. This UNESCO roadmap emphasizes educating for sustainability to promote future generations' physical, social, and emotional well-being. The roadmap emphasizes cognitive, social, and emotional skills: thinking critically, analytically, and reflectively; learning collaboratively; solving problems; making decisions in the face of uncertainty; planning, and self-efficacy. These competencies are essential to the transformation of the learner in environmental, social, cultural, and economic respects.

As first coined by Roth in 1968, environmental literacy (EL) refers to the content knowledge, skills, and processes required of the learner to understand the essence of the connection between humans and the environment (Roth 1992). Developing EL has become the primary goal of EE. Environmental literacy is the ability to process information into everyday decision-making based on real-world experiences. Environmental literacy is expressed in accepting responsibility for any move that may have an impact on the environment, in being able to understand and interpret the health and stability of natural systems, and in taking appropriate action based on the desire to restore, maintain, and improve the condition of these systems (Ben-Peretz 1980; Hungerford and Volk 1990; Kaiser, Wolfing, and Fuhrer 1999).

For finer resolution, EL can be divided into three strands: the cognitive strand includes knowledge and skills; the affective strand includes sensitivity and awareness about the environment; and the behavioral strand includes personal responsibility and the will to act. These can be examined separately or summarily in assessing EL on a continuum from low to high, often ranked on one of three levels. The basic, nominal level includes rudimentary knowledge about how natural and environmental systems operate and how these interact with human systems. This basic level is expressed in recognition of basic concepts and their meaning. The functional level includes extensive knowledge and understanding of nature, the environment, and the interface between natural and human systems. The functional level concerns negative interactions between these systems and evidence of motivation to take public and personal action. The operational level means an in-depth understanding of natural systems and their interactions with human systems based on skills for evaluating interactive consequences. The operational level is expressed in taking explicit action to benefit the environment from the local to the global scale (Roth 1992).

Despite many publications about EL and its components, the understanding of the concept is still changing. There is an extensive discussion about the exact interpretation of EL and an ongoing attempt to map the interactions between the EL components. This mapping attempt focuses on the role and improvement of the behavior strand (Stables and Bishop 2001). Some consider this strand the crux of EL. Others believe that focusing on the behavioral component while neglecting one's motivation and values goes against the very definition of the education process (Robottom and Hart 1995). Others, suggest focusing on the inner world of learners and their learning process rather than on quantifiable learning outcomes (Wals and van der Leij 1997). For example, environmentally-minded adults impact teens and inspire them to take action to benefit the environment (Klein, Watted and Zion 2021). In recent years, human society's complex challenges call for scientifically and environmentally literate citizens (Kinslow, Sadler, and Nguyen 2019). The primary goal of educating for EL is to foster pro-environmental behavior and to educate for sustainability. A range of studies published in recent years have considered different environmental or sustainability curricula for their impact on attitudes, behavioral norms, and responsibility for protecting the environment (Christensen 2023). The direct impact of locus of control on environmental responsibility, however, has yet to be investigated in a dedicated study.

Environmental activism

Recent studies have investigated motivations for environmental activism and leadership. Corning and Myres (2002) define activism as the involvement of individuals in a joint action to bring

about social change – out of a desire for a better society or out of a sense of resentment and discrimination. Accordingly, environmental activism refers to collective activity seeking to bring change and affect society (Chawla 1999). A study examining the factors motivating citizens to act for the environment found that environmental activism is driven by environmental values (Stern 2000). Stern's study observed that environmental values are associated with biospheric, altruistic, and egoistic values, by a belief that humanity has a detrimental impact on the environment – a situation begging change, and by norms relating to the necessity of environmental action (Stern 2000). A study by Ceaser (2015) examining the worldviews and actions of environmental activists found that populations of higher socioeconomic characteristics are motivated by a positive connection to the environment and a desire to preserve it. Ceaser (2015) compared these motivations to those prevalent in vulnerable populations, who are often motivated by the potential harm to their immediate environment while sometimes taking action as a means of personal empowerment.

Laor, Gan, and Avisar (2018) drew a list of personal and social motivations that promote environmental involvement. These motivations included personal and social motivations. Personal motivations included family support, childhood experiences that led to responsibility for society and nature, environmental education at school that fostered management skills, self-confidence, ambition, a desire to lead and influence others, charisma and initiative, love of nature and protectiveness of the environment, environmental justice, and connection to place. Social motivations included shared environmental activism, values and social norms. The study found that environmental activists in Israel are affected by direct and indirect social interactions. These interactions occur at the micro level of family and friends, at the mezzo level of local initiatives, at the exo level that includes group interactions, and at the chronological, intergenerational level that covers love for the land and nature. However, the authors found no effect from the macro level of government and public policy. Other studies have also found that personal motivations potentially lead to environmental activism (Gifford and Nilsson 2014). A study reporting that childhood experiences can motivate environmental activism described feelings of care for the environment and of being able to influence the environment that originated in parental mediation of nature (Almers 2013).

Locus of control as an approach to environmental responsibility

Rotter (1966, 1990) proposed a theory of social learning that holds that the potential for a particular behavior in a given situation is a function of the individual's expectations that their behavior will lead to the desired result. According to Rotter, people believe that achieving a certain result is either within their control or under the control of external factors. Rotter defines this as a difference in the locus of control. This personality dimension explains an individual's belief in the ability to control events that affect that person's life. Rotter outlines the tendency to attribute success or failure to internal or external sources.

Internal locus of control refers to the individual's perception of the positive and negative events in their life as resulting from their actions and responsibilities and their control over them. People with an internal locus of control believe in their ability to influence events around them by taking the initiative and making personal efforts.

External locus of control refers to the individual's perception of the positive and negative events in their life as being outside their control, resulting not from their behavior but external factors. People with an external locus of control believe that events are driven by fate, luck, coincidence, the difficulty of a task, or the decisions of others (Rotter 1966, 1990). Very little has been written about the locus of control in the context of environmental responsibility.

A study by Goldman, Ben Zvi Assaraf, and Shaharabani (2013), for example, examined the effect of informal education programs on the development of EL among middle school students. One program discussed in the study introduced environment-related concepts and provided

tools to enhance a sense of environmental efficacy, that is, students' belief that they can positively influence their environment. Although the program's contribution to the development of environmental responsibility was limited, students completing it demonstrated increased sensitivity to human impact on the environment, shifting from an anthropocentric to a more ecocentric orientation. Students' internal locus of control was also improved by participation in the program, but when environmental protection entailed personal economic trade-offs, their motivation remained apparently unchanged.

Ortal-Ivry (2021) discusses the locus of control, and provides operational examples: an external locus of control is expressed as the student attributes the ability to successfully lead environmental change to circumstances or other people. An internal locus of control is expressed as the student attributes the ability to successfully lead environmental change to themselves or their group. It is this definition of locus of control that the present study follows.

Oluyinka (2011) examined the connection between personality traits and environmental behavior. The study noticed that despite a multi-billion-dollar investment in sanitation, the streets of Nigeria remain littered. Analyzing data from its 1,360 participants suggested that keeping public spaces clean requires one to focus on the internal locus of control. Developing the individuals' sense of personal responsibility for their environment and fostering environmental awareness – an internal locus of control – can be accomplished through schools and by enlisting public figures in the effort. Adler, Zion, and Mevarech (2016) found that explicit environmentally-oriented metacognitive guidance facilitates an environmental internal locus of control among junior high school students.

An internal locus of control regarding environmental responsibility may be expressed by agreeing to keep one's trash until they can dispose of it safely at home rather than leaving it in public spaces. Having internalized environmental values to the point of identifying with these values is the key. An internal locus of control controls behavior, not because of external supervision based on legislation, enforcement, or sanction.

Recent years have seen a rise in the phenomenon of public spaces polluted with litter, but also of cleanup initiatives and organizations. The goals of EE in the education system focus on raising awareness and strengthening collective responsibility toward the environment rather than a rigid focus on behavioral change, which has so far not yielded the expected results in fostering such responsibility (Tamar, et al. 2020). The present study is concerned with the alarming amounts of waste left behind by people – and explores how people view this problem's roots and solutions. Our study aims to examine the impact of locus of control on environmental responsibility. It is our hypothesis that an internal (rather than external) locus of control can better assist in protecting the environment. We based our hypothesis on the fact that perceptions marked by an internal locus of control have been found to predict health-promoting behavior in several studies (Schreiber, Job, and Dohle 2020).

Take the Garbage with You

Environmental problems are becoming increasingly complex and multifaceted, relating to many aspects of life. Many green outdoor spaces have seen increasing litter and odor pollution in recent years. An initiative called *Take the Garbage with You* has been operating to raise public awareness of the severity of the problem of littering public space. The initiative has grown in response to societal needs unaddressed by government policy. At the time of this publication, almost 10,000 volunteers have joined the call to remove inadequate bins and waste collection spots from public spaces, obliging travelers to carry waste home with them when they leave the site. It is an obligation based on two premises. The first is that having to return all of their trash home will drive travelers to carry fewer items out to the public space in the first place, thereby already reducing potential waste. The second premise is that public bins are not a

solution, but part of the problem, as waste dumped in or next to these bins often ends up being distributed over a wide area by scavenging local wildlife.

Aiming for a clean public space requires, on the one hand, both EE and EfS beyond simply teaching appreciation of nature and love of the land. On the other hand, it requires significantly deterrent enforcement by competent authorities, such as municipal inspectors. Only a combined approach will ensure the apt collection of waste and its removal from public space at the end of the excursion to be disposed of more safely back home.

Take the Garbage with You is an initiative based on a perception that highlights an internal locus of control. The internal locus of control is in this case expressed in constructing a positive attitude toward initiative principles, and in the individual taking personal responsibility to collect their waste from public space. The present study examines the link between two variables: locus of control and environmental responsibility, both considering participants' ages and environmental orientation. We hypothesize that participants with an internal locus of control will express more positive views about the initiative. We also expect to find these participants more skeptical about the efficiency of external factors such as official cleaning services and deterrent fines in reducing litter in public spaces.

Research rationale

Volunteering in the *Take the Garbage with You* program has exposed us to images of uncollected litter around streets and campsites. We believe in encouraging individuals' internal locus of control to promote the prevalence of positive perceptions and behaviors expressing environmental responsibility – notions at the core of *Take the Garbage with You*. Having determined that many currently applied methods often fail to protect public space from pollution, we propose that elaborating the knowledge about adult and teen attitudes can help advance environmental responsibility. This qualitative study attempts to understand how adults and teens perceive environmental responsibility and its practical expression – particularly in fostering an internal locus of control in light of *Take the Garbage with You*.

Method

Research approach and principles

Phenomenological research is based on the principles of the qualitative-constructivist paradigm, taking a holistic approach to phenomena (Lieblich, Tuval-Mashiach, and Zilber 2010; Shkedi 2003). The present study applies a phenomenological approach, studying a central, fundamental meaning of human experience (Willis 1991). The approach focuses on certain phenomena as perceived through the consciousness of the experiencing person (Holstein and Gubrium 1994, 1998). Phenomenological research perceives the world being studied as a set of interactions. This research method observes the phenomenon holistically while striving to interpret it by reconstructing reality from its participants' points of view. The methodology aims to understand a phenomenon as subjective and relative to the view within which it is structured. Following this approach, we looked at personal experiences and perceptions of the environment. We focused on the locus of control for environmental responsibility, which enabled us to obtain broad narrative information. The present study looks for the locus of control regarding environmental responsibility in general, particularly concerning the *Take the Garbage with You* initiative. Phenomenological research focuses on understanding people and the processes in their lives through their vocabulary, views, and perceptions (Shkedi 2003). Even when differences do not register on the level of explicit verbal testimony, phenomenological interviews enable the researcher to consider body language, recurring phrases, vocal emphases, and, generally, how

interviewees conduct themselves. These are potential indicators for environmental inclination and locus of control regarding environmental responsibility.

Participants

The study includes four groups: environmentally inclined adults, environmentally indifferent adults, environmentally inclined teens, and environmentally indifferent teens. Participants were recruited in different ways: some were contacted through official environmental services, some participants were brought in by others, and some responded to our calls posted on instant messaging platforms. Together, these enabled us to pool a variety of prospective participants.

Participants were divided into four groups following an initial classification based on their self-identification. Further verification took place at the beginning of each interview. We encountered no need to reclassify any of the participants; later interviews throughout the study only reinforced the initial classifications. Ages ranged from 16 to 21 in the teen groups and 21 to 53 in the adult groups. The average age of the environmentally inclined adult participants was 42, of the environmentally indifferent adult participants 38, of the environmentally inclined teens 18, and of the environmentally indifferent teens 20.

Environmentally inclined adults ($N=6$). For our purposes, these are the choir that does not need preaching. They have expressed extensive concern for the environment in care and practice, spreading the word through education, taking environmental and sustainability studies, and actively supporting environmental NGOs.

Environmentally indifferent adults ($N=6$). Participants from this generalized group have not expressed any active anti-environmentalist views. Most are independent professionals. They have been included in this group based on preliminary interviews establishing the authors' impression that the issue of environmental protection is not of great concern to them, that they invest no time or thought on the matter.

Environmentally inclined teens ($N=6$). Like their adult counterparts, inclined teens are environmentally active. Most are members of youth organizations and NGOs, promoting environmental issues, recycling, and sustainability, and taking part in beach cleanups.

Environmentally indifferent teens ($N=6$). Like their adult counterparts, indifferent teens do not express opposition to environmental protection, but they seem to have no time or effort invested in any such activity.

People that are not environmentally inclined do not generally express concern for the environment. They are, therefore, not active participants in protecting the environment or promoting an environmental agenda. The study did not include participants who expressed negative attitudes toward the environment or reported intentionally destructive behaviors. Such cases would essentially belong in a study of a different sort.

Research tools data analysis

Data were collected for the present study using semi-structured in-depth interviews, with participants being asked open-ended and more structured questions (Appendix A). Interviews provide an initial tool to acquire information directly from the participant, enabling us to explore and make sense of their feelings, thoughts, intentions, and behaviors through their point of view (Miles, Huberman, and Saldana 2013). We opted for a semi-structured open interview where data collection is carried out more in the form of conversation than formally asking structured questions to encourage participants to tell their story and construct its meaning with minimal intervention or guidance from the interviewer (Shkedi 2003; Olson 2016).

Qualitative content analysis is a systematic process of arranging and structuring information to interpret and derive meaning from the text, interview, or document (Dey 1993). The analysis

involves dividing the data into distinct and comparable parts to find similarities and differences, process its meaning, group it into clusters of meaning, and organize it into general categories and themes. The data collected in the present study was content-analyzed using the principles of qualitative research. Data were collected during the study, anchoring reference to participants' expressions rather than predetermined categories. We approached our analysis by defining our categories based on emerging data rather than existing perceptions and hypotheses.

Data were collected in a process that developed as the interviews progressed based on participants' expressions. An interview outline was prepared, but the conversation was not limited to this outline. Many findings were documented during the interviews, with some making no sense at first glance while others seemed irrelevant in the context of the study, as participants were encouraged to express their opinions on issues of their choice. After the interviews were completed, the next step was arranging them according to the groups we had initially defined. We read the interviews several times, marking central themes and important or interesting points that arose. In the early interviews, we noticed several recurring themes that would present themselves in every interview with participants of each group. In the process, we identified several prominent notions expressed by several participants, echoing the words of other group members who expressed a similar position. These were cataloged as significant content units, sharing common themes. However, to avoid predetermined conclusions, we refrained from defining our themes at this point, preferring to wait for later stages. During analysis, we emphasized pooling together similar pieces of data into the same unit of measurement. Direct quotations of participants were used to organize these units of measurement. While sorting into categories, we looked for meaning in the data, taking into account the essence of the experience for most participants to identify the common and unique core of the participants' expressions. During analysis, we looked for overlap and similarity in participants' descriptions, highlighting quotations that supported a particular idea. The category reflects the phenomenon's essence or perception rather than a participant's personal opinion or one-time reference. In the last step, we organized the themes that shared similar conceptual bases under main categories.

Data analysis and coding in the present study followed a content analysis using principles of qualitative research. Qualitative content analysis is the systematic process of organizing and structuring information to interpret and understand meanings that arise from an interview. The analysis involves dividing the information into distinct parts and comparing them to find similarities or differences, then processing the information to produce clusters of meaning. These clusters were organized into general categories and themes. The data was collected in a process that dynamically developed as the interview progressed, in response to participants' descriptions. When the interview stage was complete, all interviews were sorted by the participant groups defined at the beginning. Every interview was read multiple times, noting topics of importance or interest in the text. During this process, several statements were identified as prominently reflecting positions expressed in more than one interview, by more than one participant. Such expressions were categorized into meaningful content units, with shared themes. Direct quotes from participants were used to organize these units of information. In sorting into categories, we looked for words such as inclined, indifferent, environmental responsibility, locus of control, environmental motivation, *Take the Garbage with You*, and more. In the final stage, we drew links between themes and organized them based on conceptual proximity.

Findings

The present study included four groups of participants, differing in age (adult or teen) and environmental inclination (inclined or indifferent). It is an innovative study in this respect – we found no other study about the subject that combines these indices. We contemplated whether it would make more sense to present the accumulated findings by group, focusing on the unique voices of that group, or, rather, present the findings by theme as expressed for each

group, which we eventually did. Our decision was reached after noticing that most participants referred to the same issues, although sometimes participants expressed opposite attitudes. We believe that presenting the range and variety of voices better highlights the themes of interest here.

We divided the findings into themes referenced by all groups, supplying exemplary interview excerpts under each theme. Where necessary, we included a separate reference to a particular group, but overall, presenting the findings under common themes for all groups focuses and simplifies the analysis.

Our findings helped us outline four major themes: External locus of control and internal locus of control regarding environmental responsibility; Why litter? Intentional and unintentional littering, transfer of responsibility, sense of belonging; Education; *Take the Garbage with You*.

External locus of control and internal locus of control regarding environmental responsibility

This theme concerns the locus of control regarding environmental responsibility. Locus of control is an aspect of one's personality, explaining their belief and perception of their ability to control events influencing their lives and their tendency to relate their failure or success to internal or external factors (Rotter 1966). Locus of control in the present study refers to the explanations that participants, either environmentally inclined or not, offer for the reasons that the environment is protected or harmed. Note that the locus of control in our discussion does not refer to the participants themselves but rather to how they perceive others. Our findings indicate that environmentally inclined adults believe that enforcement and penalty (i.e. an external locus of control) would help protect the environment. The adults who are environmentally indifferent, and both teen groups, believe that advocacy and education (i.e. an internal locus of control) would do better in promoting environmental protection. See Table 1 below:

Excerpts from the interviews are provided below to demonstrate these differences:

> Inclined adult: 'Adults understand one thing, the thing that makes the world go round. Take the money – change the world. **We need enforcement and fines**. We already have great laws in this country. In almost every field, **the problem is that no one is enforcing** these laws. If you hit offenders with a serious fine, no backing down, littering would stop very quickly'.

> Inclined adult: '**Adults who litter should be fined**; the law should be **enforced**'.

> Inclined teen: 'I think schools and other youth institutions need to take the initiative and **try to convey to young people why it is important to protect the environment**'.

> Inclined teen: 'I'm not sure how to explain. **Say I was taught to recycle but did not understand at first** and I was doing it out of habit, **but after someone told me in a way that I finally understood why we do it, then I learned to love it**'.

> Indifferent adult: '**You can ask someone; you can't make them**'.

> Indifferent adult: 'But **if they raise awareness about this, I believe things would improve**'.

> Indifferent teen: 'Perhaps more **knowledge about the consequences of just tossing this little bottle cap**, to go into the details – I don't have that knowledge'.

Table 1. Different perceptions of the locus of control regarding other people's environmental responsibility.

Participant group	Inclined	Indifferent
Adult	External locus of control	Internal locus of control
Teen	Internal locus of control	Internal locus of control

Indifferent teen: '**First we need to raise awareness, to personally set an example for younger children** for what is appropriate and what is not, to explain that all this garbage is not going to just disappear. It is piling up and eventually will harm us and the animals that share our environment'.

Why litter?

This theme concerns the reasons that people litter. People litter the environment for many reasons that can be discussed in different contexts. This theme contains explanations that participants gave as to why others litter. We focused on three subthemes recurring in the interviews: intentional and unintentional littering, transfer of responsibility, and social belonging.

Intentional and unintentional littering

The first subtheme concerns intentional and unintentional littering. Our findings indicate a difference between explanations of littering behavior given by environmentally inclined participants (adult and teen) and participants who are not environmentally inclined (adult and teen). Environmentally inclined participants believe that people intentionally litter, even if not expressly, whereas indifferent participants believe that people litter unintentionally out of careless indifference. Indifferent participants tend to underestimate the impact of littering on the environment.

Inclined adult: '**When it's dirty everywhere – you litter, too**. Stuff is always laying around on the beach, so people don't tend to pick up their mess'.

Inclined adult: 'I think **it's just being lazy**, not cleaning up after myself. **I had my fun and then I leave**'.

Inclined teen: 'There are two reasons: **one – they don't give a damn, and two – they don't give a damn**. Even if they give a damn, it's too late – they've already littered'.

Inclined teen: 'Hmm, **this doesn't fit in the bin**. Oh well, **it's ridiculous to pick it up now**. Let's leave it here and move on'.

Indifferent adult: '**I don't think people do it on purpose, they're just unaware**. They have minimal awareness; like me – it's somewhere on my mind'.

Indifferent adult: '**People don't care much; they do whatever**. They behave badly toward nature and the environment **out of apathy, not malice**'.

Indifferent teen: '**You litter because you don't notice, and perhaps because you're uninformed,** you are unaware of the consequences'.

Indifferent teen: 'People **litter carelessly. They don't mean to**; perhaps there is not much awareness in that person's circles, you know? Or **maybe you try to be environmentally responsible but you just can't handle everything** – you lose a wet wipe, a bottle cap, a toothpick… nothing too bad'.

Transfer of responsibility

The second subtheme concerns the transfer of responsibility for environmental cleanup and relates to the *Take the Garbage with You* initiative. Both inclined and indifferent participants explain that people litter the environment because someone else is in charge of sanitation. Relieving the individual from this responsibility and transferring it to another authority eases their conscience – the environment will be taken care of. Opposing this fallacy is at the heart of *Take the Garbage with You* – an initiative to promote personal responsibility as the true solution that can help keep the environment clean. Rather than relying on external loci of control, such as sending out cleaning teams or placing more bins, *Take the Garbage with You* offers new solutions without absolving the individual of personal responsibility for their environment.

Inclined adult: '**It's somebody else's job; it's like transferring the responsibility for the waste to someone else.** I pay taxes. That's what the system is for, so there are people who take care of the trash'.

Inclined adult: '**If I paid to get into this site then they should clean the place up**'.

Inclined teen: '**People think that somebody picks up trash for a living**, somebody gets paid to do it, **so why bother to leave the place clean?**'

Inclined teen: '**I think people just don't understand how important the environment is to us**, how much it is each and every one's business'.

Indifferent adult: '**They're too lazy to pick up their trash and walk to the bin. I can't think of any other reason**. They probably think somebody else will do it eventually'.

Indifferent adult: '**If beach staff clean up after I leave, why bother myself?** Somebody is going to do it anyway'.

Indifferent teen: '**In today's world, generally speaking there is awareness, but it is ignored because protecting the environment makes no economic sense**. The person packing your washing machine doesn't care what happens to all the Styrofoam and plastic you're going to throw out after you've unboxed the appliance. They should start at the top, not with the little guy'.

Indifferent teen: '**People are unwilling to make an effort and find a proper disposal place; somebody is going to clean it up anyway**'.

Social belonging

The third subtheme concerns the individual's sense of belonging to their society – from belonging to significant others to belonging to one's wider environment. Here too, we found great similarity between statements made by inclined and indifferent participants. An individual may exhibit other behaviors indicating alienation and detachment, and environmental indifference may be just one aspect of this. A sense of belonging is also expressed in a tendency to protect the environment. In contrast, according to study participants, alienation causes an individual to behave carelessly about the environment and its state.

Inclined adult: '**This notion of belonging; I think that a dirty school is indicative of how the student perceives their school. How much they identify with where they are**. Same thing with the environment. If I don't identify with the country, it is much easier to litter, to leave trash behind without giving it a second thought'.

Inclined adult: '**How much a person thinks that they are part of their environment**'.

Inclined teen: '**Looking at the environment, not just as a physical place but also the people around me… it comes down to how I perceive the environment and my place in it – am I part of the environment and therefore I protect it**? Do I notice the people around me or do I focus on myself?'

Inclined teen: '**It's like not lifting a finger to help another in need. I mean, the environment is the other in need**. Nature, the animals inhabiting this place, they live here. Why would you not care for the other?'

Indifferent adult: '**People who feel disconnected – they care less, they don't care at all, so they don't clean up after themselves**'.

Indifferent adult: '**Littering means you don't care about your surroundings**, you know? **It's just one expression of how you couldn't care less about other people**'.

Indifferent teen: '**It means that if you care about anyone else then you would not litter**. The bottom line is that it's about society as a whole, not about me'.

Indifferent teen: '**It's just an expression of how you think about others**. Rebellious youth litter, but there are more ways to express what you think about people. **Practically every aspect of behavior has to do with what you think about others**'.

We focused on three primary subthemes running through participants' explanations of why people litter – these have just been detailed above. But it is also education, acquired both at home and through formal, institutional channels, that plays an important role in forming a perception of environmental responsibility. Therefore, we dedicate a separate section to its discussion below.

Education

This theme concerns the contribution of education to fostering a sense of environmental responsibility. From kindergarten to academia, curricula intended to change consciousness, values, and lifestyle are already in place. All participants interviewed discussed the integrated impact of education, primarily at home and secondarily at different education and societal institutions. All four groups believe that education has the greatest impact on the individual's attitude toward the environment. Given such broad agreement, we submit a single excerpt from each group.

> Inclined adult: '**Where does it all start? At home, of course**'.
>
> Inclined teen: '**I believe it all begins with education. Not necessarily any specific lesson, but also what you grow up with at home, what you see in your neighborhood, and how people around you behave in the closer and wider circles**. For instance, you're five years old, you're holding your mom's hand in the street and something happens – how does she react? Education bears a very broad impact on development; it starts there'.
>
> Indifferent adult: '**I believe it all starts at home and at school**. I don't recall this was ever really addressed at school. Maybe we had a lesson at some point, but nothing made an impact; nothing stayed with me'.
>
> Indifferent teen: '**It should start at home. For instance, you see Mom or Dad littering the street, so you grow up to do the same**, repeating that behavior'.

On the matter of education, we found a difference between inclined adults and inclined teens. Inclined adults believe that enforcement and penalty are necessary to protect the environment, whereas inclined teens believe there is more room for education and advocacy.

> Inclined adult: '**I think enforcement is the only option**, no more games. If you litter – you get kicked out of the nature reserve. Serious enforcement about these things – there is no other way'.
>
> Inclined adult: '**There is no enforcement. Enforcement is necessary here; it can only help**'.
>
> Inclined teen: '**Education can help; it goes hand in hand. If you nurture the habit, the kid will eventually go along with it. They won't just do it on their own.** I'm not sure how to explain – the important thing is that the kid does it'.
>
> Inclined teen: '**How do we handle this? I believe education is a long term process. Still, there's also a promotional approach – bombarding you with the idea that tossing a piece of plastic in the park is not ok,** and when you invest in massive promotion like clever brands know how to do these days, especially with all the online social platforms that surround us. You can change public opinion quite significantly'.

Take the Garbage with You

The fundamental idea behind the *Take the Garbage with You* initiative is fostering the individual's responsibility for the public space. One expression of this is collecting the trash produced throughout a day spent outdoors and carrying it to a pickup point. Everyone knows the pickup point is where the trash will be safely disposed of without getting dispersed again by wind, wildlife, or other hikers, as often occurs when waste is piled up around a small roadside trashcan. The present study examined the connection between environmental inclination and a belief in the chances of *Take the Garbage with You* to gain public response and cooperation. Our findings indicate that only environmentally inclined adults believe the initiative can succeed. All other participants were more skeptical and expressed concern that this initiative might fail.

This concern about failure highlights the differences that our study points to, as illustrated by the following interview excerpts, which indicate those solutions that each group is more or less hopeful will work:

> Inclined adult: '**I'm sure it'll work… it works; people – adults, youngsters, most people – inherently want to protect the environment.** When I take my students on a field trip, no one would ever toss away snack wrappings. When they ask if there's a bin somewhere, I say no, and the litter goes into the backpack. We pack our trash and find a safe, proper bin at the end of the day'.

> Inclined adult: '**Large underground bins are better. The over-ground bins should be removed** because the lid opens and trash escapes and piles up'.

> Inclined teen: '**Wherever there is a large bin you can see trash piling up around it. They should add more large bins, not small ones**. Make it easier for visitors to dispose of their trash – and they will do it properly'.

> Inclined teen: '**It could actually work in some places. Not everyone can do it, some people already have the habit built-in. It takes time and hard work to change habits. It takes a long time to change perceptions if we want to be realistic.** The next five years are not enough for this initiative to work'.

> Indifferent adult: '**This initiative is never going to pick up. What can I do? I'm not going to drive out of my way with my trash.** If there's no bin in the street, where will I take the waste? Carry it around with me?'

> Indifferent adult: '**Nobody will carry the trash back home with them, we're Israelis! We have hutzpah; we are lazy, and nobody will bring the waste they produced outside back into their home. If there are no bins outside – I don't know what to do.** This trash-carrying is not going to work'.

> Indifferent teen: '**This is not going to work, quite the opposite. They should add bins, not remove them.** People are going to look around and eventually drop their litter somewhere. Nobody is going to walk around with a banana peel in their pocket. It's unrealistic. I can't imagine anyone carrying waste in their pocket or backpack'.

> Indifferent teen: '**Not going to work! First, it stinks, and many people will not make that sacrifice.** Other people don't think big enough; they don't mind polluting their environment, it means nothing to them, so there is no point in asking them to carry their waste back home'.

Discussion

Recent years have witnessed an increase in environmental harm in the form of waste piling up in larger and larger amounts in public space. Active littering while using green outdoor spaces is the worst aspect of this phenomenon – a complete disregard by the individual toward their environment and others who share it. Study participants did not report active littering, either intentional or unintentional. They would likely feel uncomfortable admitting if they had. We assume this phenomenon occurs and impacts the environment, but we did not delve into it in the present study.

We were able to draw several conclusions from our findings. See Table 2.

One of the key issues examined in this study is the perception of study participants regarding other people's locus of control. Our findings indicate that only environmentally inclined adults believe that enforcement and penalties could help protect the environment. Members of the other groups believe that education and advocacy are the primary instruments that could assist in protecting the environment.

One of our findings is particularly interesting in this context: teens, regardless of their position on the spectrum of environmental inclination, believe that education and advocacy can make a difference for the environment, while adults are split on how the environment can effectively be helped. While environmentally inclined adults believe that enforcement and penalty will achieve this goal, indifferent adults believe in education and advocacy. One might assume

Table 2. Summary of findings.

Theme #	Theme	Subtheme	Participant group	Inclined	Indifferent
1	External locus of control and internal locus of control regarding environmental responsibility		Adult	Enforcement and penalties are efficient measures for protecting the environment	Education is an efficient measure for protecting the environment
			Teen	Education is an efficient measure for protecting the environment	Education is an efficient measure for protecting the environment
3	Why litter?	Intentional and unintentional littering	Adult	People litter on purpose	People do not litter on purpose
			Teen	People litter on purpose	People do not litter on purpose
		Transfer of responsibility	Adult	People litter because someone is in charge of cleaning it up	People litter because someone is in charge of cleaning it up
			Teen	People litter because someone is in charge of cleaning it up	People litter because someone is in charge of cleaning it up
		Social belonging	Adult	Social belonging helps protect the environment, while alienation contributes to environmental carelessness	Social belonging helps protect the environment, while alienation contributes to environmental carelessness
			Teen	Social belonging helps protect the environment, while alienation contributes to environmental carelessness	Social belonging helps protect the environment, while alienation contributes to environmental carelessness
3	Education		Adult	Environmental responsibility begins at home; enforcement and penalties should be applied	Environmental responsibility begins at home
			Teen	Environmental responsibility begins at home; more education and advocacy should be applied	Environmental responsibility begins at home
4	*Take the Garbage with You*		Adult	The initiative will succeed	The initiative might fail
			Teen	The initiative could succeed but could also fail	The initiative might fail

that environmentally inclined adults would support an education-driven approach while indifferent adults would think legal enforcement more realistically effective, but the findings indicate otherwise. A future study can further explore the reasons for this.

An interesting difference between inclined and indifferent participants was in response to the question, 'why do people litter?' While environmentally inclined participants perceive littering as intentional, indifferent participants think people litter unintentionally and carelessly. This insight could be crucial to the starting point of *Take the Garbage with You* – where success depends on individuals' disposition toward the initiative.

The present study asked participants why other people litter, assuming that most interviewees, if asked about themselves, would underreport instances of their own littering. We found that adults and teens who are environmentally inclined and adults and teens who are environmentally indifferent give different explanations as to why other people litter. Environmentally inclined adults and teens believe that other people litter intentionally. The adults and teens who are not similarly inclined assume that other people do not litter intentionally.

Our study finds prevalent the idea, both among the environmentally inclined and the environmentally indifferent, that if someone else is in charge of cleaning, the individual ignores their own responsibility in the matter. This is consistent with other findings of recent years indicating that sustainability is not a spontaneous or self-evident notion. These findings note that sustainability is hampered by such obstacles as lack of awareness, interest, and involvement (Kothe et al. 2019). Other studies point out that to encourage sustainability, working toward environmental action and education is required (Arnon, Orion, and Carmi 2015). This means working toward an individuals' internal locus of control regarding the environment.

There is no dispute among participants that education is of great significance in shaping an individual's perception as responsible for their environment. Both inclined and indifferent participants claimed that their perception of the environment stems from processes that originated in parental education and led to an affinity or lack of affinity for the environment. Parental education is merely a preparatory ground for institutional education at school. Where parental education about the environment is lacking, the impact of the institutional message is diminished, and an affinity for the environment will be difficult to grow. An interesting finding is that environmentally inclined teens believe that education and advocacy are more effective than enforcement and penalty, compared to environmentally inclined adults, who think that only a supplement of enforcement and penalty would ensure that education and advocacy become effective.

Most participants in the present study, including adults and teens who felt no affinity for *Take the Garbage with You*, explained that at the end of a day spent outdoors, they would collect the trash at one spot. Such a spot was usually next to a bin placed nearby or – if no bins were available – at an improvised collection spot, under a tree, for instance. While well-intentioned, this behavior is a primary contributor to pollution, as waste accumulated next to the bin rather than inside remains unattended and redistributed across a wide area by local wildlife.

Environmentally inclined participants seem to have much faith in the chances of *Take the Garbage with You* to succeed, while indifferent participants are more skeptical, regardless of age group. We attribute this difference to inclined participants' internal locus of control and indifferent participants' external locus of control. Furthermore, inclined participants believe that they and others would take care to collect trash where bins are unavailable. The indifferent participants think that neither they nor others using a public space would bother to hang on to waste if there are no bins around.

Take the Garbage with You is based on the presumption that a clean environment is possible only if travelers carry their trash to a collection spot where it would remain undisturbed by elements or wildlife until sanitation authorities arrive to dispose of it properly. Retaining trash until it can be disposed of properly would keep the environment clean. To encourage hikers and campers to do so, we believe that existing bins should be removed from such outdoor spaces, as they exacerbate the problem by contributing to a false sense of proper disposal, all the while being a source of pollution.

Recent years have seen a growing trend in favor of reinforcing the learner's conscientious, cultural, and social worldview. Bourn, Hunt, and Bamber (2017) found that nurturing the sense of responsibility for the environment, rather than a rigid focus on changing individual behavior patterns, supported the learners' development of an environmentally favorable point of view. The principles of the *Take the Garbage with You* initiative similarly suggest a worldview shift from an external to an internal locus of control, one based on the individual's drive to participate.

Recent years have seen a growing awareness of environmental protection and greater public demand for a cleaner environment, even among those not inclined to environmental activism. The present study teaches us that these goals require extensive effort through education, advocacy, and enforcement. *Take the Garbage with You* has been gaining momentum over the past year. Still, the activists promoting its implementation must be diligent in convincing the public and its policymakers to adopt this initiative on a wider scale.

The present study examined the locus of control and other perceptions regarding *Take the Garbage with You*, comparing participants by age and environmental inclination. In a future study, it would be interesting to examine the differential response to environmental problems in accordance with the variables discussed above and other variables. The present study covered only Israeli adults and teens; it would also be interesting to compare its findings with those acquired through a similar investigation in another cultural setting.

Future research building on the present study could explore different models for developing environmental responsibility among environmentally indifferent adults and youth. New studies could anchor investigations with the themes we identified and detailed above. The criteria used in the present study can also be useful in delving deeper into the strengths and weaknesses of the *Take the Garbage with You* initiative. We believe that our findings can help clearly define factors that contribute to this initiative's success, such as EfS at an early age and encouragement of an internal locus of control.

Acknowledgments

We would like to thank Ori Stav and Ze'ev Kaplan for their editorial assistance.

Disclosure statement

No potential conflict of interest was reported by the authors.

ORCID

Michal Zion http://orcid.org/0000-0003-2820-1923

References

Adler, I., M. Zion, and Z. R. Mevarech. 2016. "The Effect of Explicit Environmentally Oriented Metacognitive Guidance and Peer Collaboration on Students' Expressions of Environmental Literacy." *Journal of Research in Science Teaching* 53 (4): 620–663.

Almers, E. 2013. "Pathways to Action Competence for Sustainability: Six Themes." *The Journal of Environmental Education* 44 (2): 116–127. doi:10.1080/00958964.2012.719939.

Arnon, S., N. Orion, and N. Carmi. 2015. "Environmental Literacy Components and Their Promotion by Institutions of Higher Education: An Israeli Case Study." *Environmental Education Research* 21 (7): 1029–1055. doi:10.1080/13504622.2014.966656.

Ben-Peretz, M. 1980. "Environmental Education is Too Important to Be Left in the Hands of Teachers Alone." In *Environmental Education: Principles, Methods and Applications*, edited by T. S. Bakshi and Z. Naveh, 19–30. New York: Plenum Press.

Bourn, D., F. Hunt, and P. Bamber. 2017. *A Review of Education for Sustainable Development and Global Citizenship Education in Teacher Education*. Paris: UNESCO.

Ceaser, D. 2015. "Significant Life Experience and Environmental Justice: Positionality and the Significant of Negative Social Environmental Experiences." *Environmental Education Research* 21 (2): 205–220. doi:10.1080/13504622.2014.910496.

Chawla, L. 1999. "Life Paths into Effective Environmental Action." *The Journal of Environmental Education* 31 (1): 15–26. doi:10.1080/00958969909598628.

Christensen, D. 2023. "Computational Thinking to Learn Environmental Sustainability: A Learning Progression." *Journal of Science Education and Technology* 32 (1): 26–44. doi:10.1007/s10956-022-10004-1.

Corning, A. F., and D. J. Myers. 2002. "Individual toward Engagement in Social Action." *Political Psychology* 23 (4): 703–729. doi:10.1111/0162-895X.00304.

Dey, I. 1993. *Qualitative Data Analysis*. London: Routledge.

Gifford, R., and A. Nilsson. 2014. "Personal and Social Factors That Influence Pro- Environmental Concern and Behavior: A Review." *International Journal of Psychology : Journal International de Psychologie* 49 (3): 141–157. doi:10.1002/ijop.12034.

Goldman, D., O. Ben Zvi Assaraf, and D. Shaharabani. 2013. "Influence of a Non-Formal Environmental Education Programme on Junior High-School Students' Environmental Literacy." *International Journal of Science Education* 35 (3): 515–545. doi:10.1080/09500693.2012.749545.

Holstein, J. A., and J. F. Gubrium. 1994. "Phenomenology, Ethnomethodology and Interpretive Practice." In *Handbook of Qualitative Research*, edited by N. K. Denzin and Y. S. Lincoln, 262–272. Thousand Oaks, CA: Sage.

Holstein, J. A., and J. F. Gubrium. 1998. "Narrative Practice and the Coherence of Personal Stories." *The Sociological Quarterly* 39 (1): 163–187. doi:10.1111/j.1533-8525.1998.tb02354.x.

Hungerford, H., and T. Volk. 1990. "Changing Learner Behavior through Environmental Education." *The Journal of Environmental Education* 21 (3): 8–21.

Kaiser, F. G., S. Wolfing, and U. Fuhrer. 1999. "Environmental Attitude and Ecological Behavior." *Journal of Environmental Psychology* 19 (1): 1–19. doi:10.1006/jevp.1998.0107.

Kinslow, A. T., T. D. Sadler, and H. T. Nguyen. 2019. "Socio-Scientific Reasoning and Environmental Literacy in a Field-Based Ecology Class." *Environmental Education Research* 25 (3): 388–410. doi:10.1080/13504622.2018.1442418.

Klein, S., S. Watted, and M. Zion. 2021. "Contribution of an Intergenerational Sustainability Leadership Project to the Development of Students' Environmental Literacy." *Environmental Education Research* 27 (12): 1723–1758.

Kothe, E. J., M. Ling, M. North, A. Klas, B. A. Mullan, and L. Novoradovskaya. 2019. "Protection Motivation Theory and Pro-Environmental Behaviour: A Systematic Mapping Review." *Australian Journal of Psychology* 71 (4): 411–432. doi:10.1111/ajpy.12271.

Laor, T., D. Gunn, and I. Avisar. 2018. "Environemntal Activists in Israel – What Drives Them?" [Hebrew] *Ecology and Environment* 9: 58–64.

Lieblich, A., R. Tuval-Mashiach, and T. Zilber. 2010. "Between the Whole and Its Parts, and between Content and Form [Hebrew]." In *Reading, Analysis and Interpretation of Qualitative Material [Hebrew]*, 21–41. Beer Sheva: Ben Gurion University Publishing.

Miles, M. B., A. M. Huberman, and J. Saldana. 2013. *Qualitative Data Analysis: A Methods Sourcebook*. Thousand Oaks: SAGE Publications, Incorporated.

Olson, K. 2016. *Essentials of Qualitative Interviewing*. New York: Routledge.

Oluyinka, O. 2011. "Attitude towards Littering as a Mediator of the Relationship between Personality Attributes and Responsible Environmental Behavior." *Waste Management* 31: 2601–2611.

Ortal-Lvry, G. 2021. *Self-Regulated Learning (SRL) Strategy Fosters Environmental Literacy among Students of Education* [doctoral dissertation], Bar-Ilan University, Israel.

Willis, G. 1991. "Phenomenological Inquiry: Life-Word Perception." In *Forms of Curriculum Inquiry* , edited by E. C. Short, 173–186. Albany, NY: State University of New York Press.

Robottom, I., and P. Hart. 1995. "Behaviorist EE Research: Environmentalism as Individualism." *Journal of Environmental Education* 26 (2): 5–9. doi:10.1080/00958964.1995.9941433.

Roth, C. E. 1992. *Environmental Literacy: Its Roots, Evaluation and Directions in the 1990s*. Columbus, OH: ERIC Clearinghouse for Science, Mathematics and Environmental Education.

Rotter, J. B. 1966. "Generalized Expectancies for Internal versus External Control of Reinforcement." *Psychological Monographs: General and Applied* 80 (1): 1–28. doi:10.1037/h0092976.

Rotter, J. B. 1990. "Internal versus External Control of Reinforcement: A Case History of a Variable." *American Psychologist* 45 (4): 489–493. doi:10.1037/0003-066X.45.4.489.

Schreiber, M., V. Job, and S. Dohle. 2020. "Is Your Health Malleable or Fixed? The Influence of Implicit Theories on Health-Related Attitudes and Behaviour." *Psychology & Health* 35 (12): 1421–1439. doi:10.1080/08870446.2020.1761975.

Shkedi, A. 2003. *Words Attempting to Touch—A Qualitative Research Theories & Application*. Ramot: Tel Aviv.

Stables, A., and K. Bishop. 2001. "Weak and Strong Conceptions of Environmental Literacy: Implications for Environmental Education." *Environmental Education Research* 7 (1): 89–97. doi:10.1080/13504620125643.

Stern, P. C. 2000. "New Environmental Theories: Toward a Coherent Theory of Environmentally Significant Behavior." *Journal of Social Issues* 56 (3): 407–424. doi:10.1111/0022-4537.00175.

Tamar, M., H. Wirawan, T. Arfah, and R. P. S. Putri. 2020. "Predicting Pro- Environmental Behaviours: The Role of Environmental Values, Attitudes and Knowledge." *Management of Environmental Quality: An International Journal* 32 (2): 328–343. doi:10.1108/MEQ-12-2019-0264.

UNESCO (United Nations Educational). 2019. Educational content up close: Examining the learning dimensions of education for sustainable development and global citizenship education.

UNESCO. 2020. *Education for sustainable development: A Roadmap (ESD for 2030)*. Accessed 20 August 2022. https://unesdoc.unesco.org/ark:/48223/pf0000374802 ().

Wals, A., and T. van der Leij. 1997. "Alternatives to National Standards for Environmental Education: Process Based Quality Assessment." *Canadian Journal of Environmental Education* 2: 7–27.

Appendix A: Interview guide

Classifying participants into a group

The four research groups were: environmentally inclined adults, environmentally indifferent adults, environmentally inclined teens, and environmentally indifferent teens.

General background data

Participants background data included their age, marital status, place of residence, occupation, religious affiliation, education, military or national service status, and socio-economic status.

Environmental affinity questions

- Would you say that you are environmentally inclined? Since when?
- Have you chosen to join an environmental initiative, project, or program? What is your degree of involvement in the initiative/project/program?
- If you are involved – why did you choose to take part in this activity?
- If not – have you been invited to join any activity? If you refused, why did you reject the invitation?
- Do you consider polluting the environment inappropriate? Do you feel great concern regarding environmental pollution? Why so? Do you feel any responsibility for environmental pollution? How much, and why?
- Do you notice others in your close circles behave in environmentally responsible ways? What expressions of this do you notice?
- Where do you notice that people pollute the environment? What are the main reasons for this pollution?

Sources of environmental education

- Does your environmental education come from school, a youth movement, mass media, social media, or perhaps a different source?
- Where do people acquire motivation, perceptions, and insights regarding environmental responsibility?
- What is the community's contribution to promoting environmental responsibility?

Locus of control regarding environmental responsibility

When it comes to promoting environmental responsibility, can you identify the driving or inhibiting factors that reflect either an external or internal locus of control of those factors?

Take the Garbage with You

- Environmentally inclined participant – how do you feel about the initiative? Why did you choose to join it?
- Environmentally indifferent participant – have you heard about the initiative? What is your position regarding the main idea behind it? What are your own thoughts on the matter?
- Is it realistic to expect you to collect your waste rather than discard it on-site? What would help you meet this expectation?