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Shallow Ecological Relationships With the Biosphere and Climate Change Perceptions: An Ecopsychoanalytic Perspective

Andrea Marais-Potgieter and Andrew Thatcher

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Abstract

The psychology of the human-nature nexus remains largely understudied, hindering efforts to effectively address environmental issues such as climate change. To address this gap, there is a need for a theory that explains the ecopsychoanalytic processes that impact shallow relationships between people and the biosphere, as well as their perceptions about climate change. This article reports the findings of a grounded theory analysis that explored how insecure, ambivalent, and avoidant attachments shape the relationship of three groups of people (Disconnected, Uncommitted, and Pleasure Seeker) with the biosphere and how this relationship has influenced their perceptions about climate change. The study expands the reach of psychoanalytic theory to contribute toward the understanding of the ecological crisis and provides insights into how interventions could be tailored to address shallow ecological relationships.

Keywords: climate change; deep ecology; ecopsychoanalysis; grounded theory; human-nature nexus

Introduction

Climate change is a wicked problem because of the conscious and unconscious processes that impact the relationship between individuals and the natural environment (Dodds, 2021). Understanding the nuanced psychology of individuals in relation to the environmental crisis (Leiserowitz et al., 2021) addresses the lacuna of why sustainable behaviors (such as having one fewer child, living car-free, avoiding airplane travel, and eating a plant-based diet) that would reduce an individual's impact on the biosphere (those parts of the earth that support life) (Wynes & Nicholas, 2017) are not being adopted more broadly (Ertz & Sarigöllü, 2019; Rampedi & Ifegbesan, 2022).

Psychoanalytic theory is well poised to explain the impact of unconscious processes on shallow human-nature relationships (Allured, 2019; Rust, 2008). For example, psychoanalytically, material possessions become extensions of achievement and self (Dodds, 2011), and overconsumption is a consequence of problematic early attachments (Bigda-Peyton, 2004). However, a deeper exposition of how these relationships emerge is largely missing from environmental and climate change literature. It is with this gap in mind that this study aimed to develop type theory through a psychoanalytic framework to explain the psychological processes that impact shallow ecological relationships with the biosphere and their impact on climate change perceptions.

Shallow Ecological Relationships

There are two strands in the contemporary environmental movement, namely a deep and a shallow ecology (Naess, 1973). Deep ecology is a philosophy that views nature as having intrinsic value, independent of its value to humans (Roszak, 1992). It is egalitarian, viewing nature as not belonging exclusively to humans and viewing humans as a part of the natural world (Naess, 1973; Steiner & Lucht, 2023). Deep ecology argues that all life systems are

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interconnected (Frantz et al., 2005), and that ecological consciousness is essential for a healthy planet (Schroll, 2007). Shallow ecology is characterized by a mechanistic and anthropocentric view in which the world is perceived dualistically, environmental issues are seen to impact humans only, and there is a focus on exploitation for economic growth (McGeeney, 2016). As a result, technological optimism is preserved, as is the perpetuation of human privilege at the expense of the biosphere (Naess, 1973). These relationships with the natural environment, as well as the environmental crisis, are a matter of the psyche (Baker, 2013) and require further exploration.

Ecopsychoanalysis

Ecopsychoanalysis expands our understanding of the environmental crisis by applying psychoanalytic theory to ecological attachment. It provides insight into human's relationships with nature in terms of unconscious processes that prevent or promote engagement with environmental issues (Randall, 2005). There are a number of factors that prevent ecological engagement and attachment, including apathy (Lertzman, 2009), omnipotence (Mishan, 1996), fantasies (Randall, 2005), defensive strategies (Dodds, 2011), and relational barriers (Winter, 2000). Insecure, avoidant, and ambivalent attachments to nature serve as defenses against dependence and vulnerability (Dodds, 2011; Mishan, 1996;). Three shallow psycho-ecological relationships were identified by Dodds (2011). The first is that the environmental crisis is perceived as hopeless and information is repressed to reduce anxiety. These individuals seek control through power over nature in an attempt to avoid feeling vulnerable by the thought that nature is indifferent (Jordan, 2009). The second is characterized by denial and difficulty acknowledging that the crisis is anthropogenic (Dodds, 2011). Splitting is used as a defense in which intellectualization of the crisis is detached from emotional involvement, often through shifting responsibility (Dodds, 2011) or disavowal (Feuvre, 2012). The third is characterized by an irrational evaluation of risk and reaction formation in which attention gives expression to the opposite of what is required to address the crisis (Dodds, 2011). The individual perceives autonomy, separateness, and independence from nature with the view that nature exists for human pleasure (Dodds, 2011).

These relationships with nature are tied up with early affective relationships (Jordan, 2009). Object relations theory maintains that ecological attachment patterns are based on a template of the infant-mother relationship (Dodds, 2011). Humans remain in a schizoid position in relation to the environmental crisis, trying to deal with difficult emotions (Jordan, 2009). There is a range of psychic negotiations that takes place as the individual tries to deal with unconscious anxieties (Lertzman, 2009) through projecting (Hoggett, 2011), denying, splitting from dependency on the Earth (Feuvre, 2012; Mishan, 1996), or dissociating (Bodnar, 2008). Nature becomes "the bad other" (Bigda-Peyton, 2004) to reduce psychic pain and to allow the continuance of destructive behavior often expressed as apathy (Lertzman, 2009). People may employ different strategies and barriers to avoid psychic pain although these strategies generally keep individuals disconnected from themselves, others, and nature (Winter, 2000). On the other hand the depressive position relates to authentic and responsible engagement between the individual and nature, self, and the external world (Lertzman, 2009).

Individual Types to Understand Relationships

Psychological types serve as a way of understanding and distinguishing between individuals (Doty & Glick, 1994; McKinney, 1969). Types have the potential to explain what drives an individual and their environmental beliefs (Bernstein & Szuster, 2018; MacDonald et al., 2019; Poškus & Žukauskienė, 2017). Types identify common characteristics among individuals and therefore reduce complexity in the empirical realm by using the min-max rule to construct a minimum number of types, where each demonstrates a maximum amount of homogeneity (Doty & Glick, 1994).

Identifying types and their psychological composition acknowledges the role that human multidimensionality plays in addressing the environmental challenges (Doty & Glick, 1994). Research identifies the difference between types related to the biosphere (Bernstein & Szuster, 2018; de Groot & van den Born, 2003), climate change (Hall et al., 2018; Leiserowitz et al., 2009; Poortinga & Darnton, 2016), and behavior (Department for Environment, Food and Rural Affairs, 2008; MacDonald et al., 2019), but these approaches are incomplete (Ingulli & Lindbloom, 2013). They lack psychoanalytical interpretations, were conducted only in developed countries, used limited variables and singular methods, and typically exclude environmental affect and individual narratives. These studies fail to interpret types as complex entities that can build theory to add depth to nuanced environmental advocacy

approaches (Cowling, 2021; Kwan et al., 2019). There is a need for a deeper exploration of shallow ecological relationships to better understand how to address them. Furthermore, there is a need for a deeper empirical investigation to complement the theoretical psychoanalytic frameworks suggested by psychoanalysts such as Dodds (2011).

The research question posed in this study is: What type theory can explain three shallow ecological relationships with the biosphere and climate change perceptions from a psychoanalytic perspective?

Methods

Procedure and Participants

Ethical clearance (number H15/11/15) was granted by the Human Research Ethics Committee (nonmedical) of The University of Witwatersrand. Confidentiality and anonymity were guaranteed to participants.

The study is part of a larger quantitative project ($N = 721$). Cluster analysis identified six types using cognitive, affective, behavioral, and intrinsic constructs (Marais-Potgieter & Thatcher, 2020). The six types were characterized as either having a shallow ecological relationship or deep ecological relationship with the biosphere. For the qualitative component a mixture of purposive and maximal variation sampling was used. Purposive sampling was used to obtain a sample representation of a type. Participants were drawn from the original pool of participants in the quantitative project and were invited to participate based on their willingness, availability, and their type. The researcher applied the principle of maximal variation within each type (Teddlie & Yu, 2007). In total, 21 in-depth interviews were conducted with the three types (Disconnected, Uncommitted, Pleasure Seeker) of individuals who were determined to have a shallow ecological relationship with the biosphere (Marais-Potgieter & Thatcher, 2020) to explore the deeper psychological processes involved in their relationship. Table 1 describes the three types and shows the participant demographics within each type.

The interviews were on average an hour in length and conducted at a time and place convenient for both

Table 1. Participant Demographics Per Type

Participant	City	Race	Gender	Age
Disconnected **The Disconnected type was quantitatively described as: poorly connected to nature, lacking in an environmental worldview, apathetic, and living in a state of perceived survival.**				
CL1P1	Cape Town	White	Male	18-25
CL1P2	Cape Town	Mixed	Male	46-55
CL1P3	Cape Town	Black	Male	18-25
CL1P4	Durban	Black	Female	26-35
CL1P5	Johannesburg	Black	Female	18-25
CL1P6	Johannesburg	White	Male	36-45
CL1P7	Johannesburg	Indian	Female	18-25
Uncommitted **The Uncommitted type was quantitatively described as: having moderate concern about the natural environment, concern about animal exploitation and extinction, and a reduced sense of personal accountability, which they expressed.**				
CL2P1	Cape Town	Mixed	Female	36-45
CL2P2	Cape Town	Indian	Female	46-55
CL2P3	Cape Town	Refuse	Male	18-25
CL2P4	Durban	Indian	Female	26-35
CL2P5	Durban	White	Male	46-55
CL2P6	Johannesburg	Black	Male	26-35
CL2P7	Johannesburg	Black	Female	26-35
CL2P8	Johannesburg	Black	Female	26-35
Pleasure Seeker **The Pleasure Seeker type was quantitatively identified as having: a weak affective relationship with the biosphere, a low environmental worldview, lack of concern about environmental issues, and the perception that individuals were not responsible for environmental issues.**				
CL6P1	Cape Town	Mixed	Female	26-35
CL6P2	Cape Town	White	Male	26-35
CL6P3	Durban	White	Female	46-55
CL6P4	Durban	Refuse	Male	18-25
CL6P5	Johannesburg	Mixed	Male	26-35
CL6P6	Johannesburg	Black	Female	26-35

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participant and researcher. The main questions explored the participant's life, identity, relationship with nature, and climate change perceptions. The outcomes of the grounded theory fieldwork include a reflexive fieldwork journal in which the researcher reflected on emerging categories (White, 2008), type maps (theoretical sensitization), and anonymized verbatim transcripts loaded into ATLAS.ti, a computer-aided qualitative data analysis software (Friese, 2016).

Analysis

This study used grounded theory analysis (GT) (Strauss & Corbin, 1998) to explain the shallow human-nature nexus and climate change perceptions. The individual participants who comprise the types were treated as the cycles of interviews for grounded theory (GT) wherein each interview with a type built on the previous interview with the same type of individual.

Grounded Theory Analysis

Coding took place in cycles. In open coding (Strauss & Corbin, 1998) every line was coded in a process that fragments stories. Axial coding identified key categories that emerged. This rearranged the data into a new coherent whole, a single category at a time, at the center of analysis (Strauss & Corbin, 1998). Lastly, selective coding aimed for theoretical saturation and the incorporation of variability (Bohm, 2004). Saturation involved bringing the fractured story back together to describe a coherent analytical theory (Charmaz, 2006; Strauss & Corbin, 1998). The process included going back to the raw data and sampling for varied cases to create variation in a category (to form dimensions of categories) and analytic density (Charmaz, 2006). Analysis also included constant comparison (Hallberg, 2006), analytic memoing, and theoretical sampling for saturation (Saldaña, 2009). Table 2 shows the code frequencies per coding cycle.

Validation of GT Findings

Two processes of validation were followed: auditing and member checking (Creswell & Miller, 2000). Auditing was done by a neutral third party experienced in GT. The auditor checked the trustworthiness of the GT process and theory (Bowen, 2009). Member checking verified results and interpretations with study participants (Onwuegbuzie & Daniel, 2003).

Self-Reflection

According to GT, research positions must be stated in a self-reflective way to ensure an awareness of, and to account for, biases, assumptions, and worldviews while collecting, interpreting, and analyzing data (Charmaz, 2006). Research conceptualization and execution were influenced by the primary researcher's experiences and interests, which served as a pathway to uncover underlying psychological processes that influence the complexity of human-nature relationships. The primary researcher focused on obtaining "thick descriptions" during the interviews (Ponterotto, 2006). The data analysis process was laborious and challenging as the researcher reflected on her own relationship with nature and attempted to take an objective view while coding the transcripts. She was also aware of her own cultural background and how that, at times, contrasted with how various individuals relate to nature.

Grounded Theory Results

The Disconnected Type

The Disconnected type consists of individuals who feel removed from the world and feel a need to protect themselves. Two categories emerged for this type: abandonment, which underlies their reaction to life experiences and consequences, and detachment, which underlies their relationship with nature and climate change perceptions. Figure 1 shows the codes and categories for the Disconnected type.

Abandonment Category

The codes used that form this category describe a person's desire to belong, but an experience of rejection, which causes them to feel vulnerable and isolated from the world. To deal with the experiences and consequences of abandonment, they described seeking stability and security from religion. The codes used for this category were: abandoning experiences, vulnerability, isolation, and religion as safety.

Abandoning experiences. Participants described a range of abandoning experiences, including maternal, paternal, familial, and societal. Abandonment was traumatic because the

Table 2. Code Frequency Per Coding Phase

	Open Coding	Axial Coding	Selective Coding	Saturation
	Codes	Codes	Codes	Categories
Disconnected	1630	26	9	2
Uncommitted	1798	29	11	3
Pleasure Seeker	1199	27	14	4

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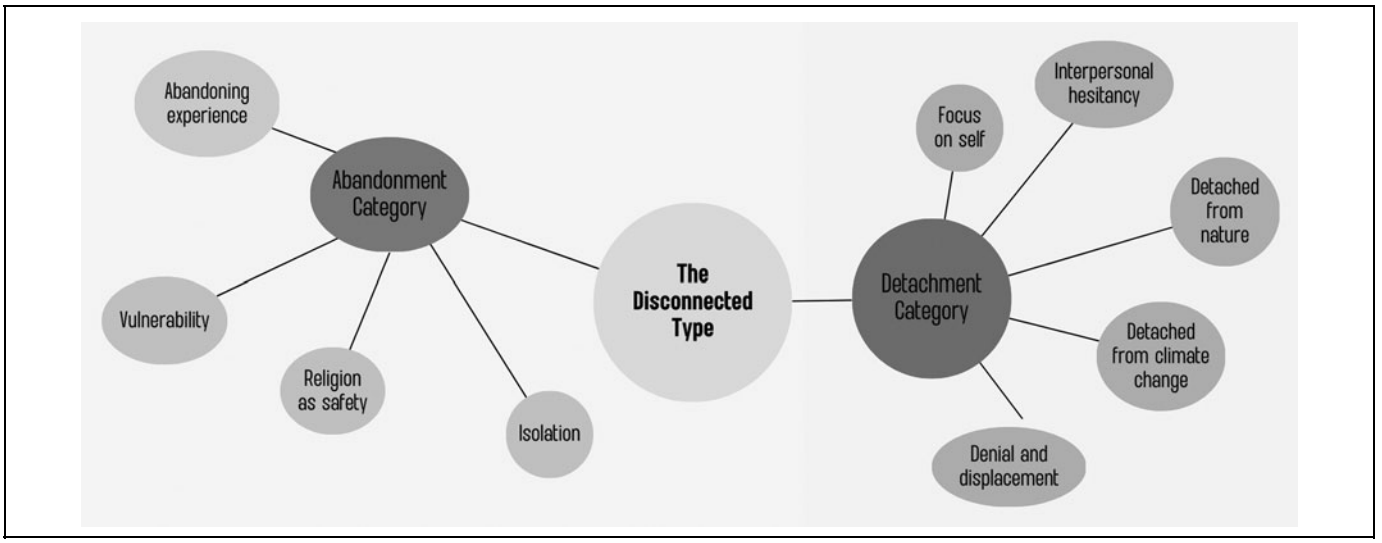


Figure 1. The Disconnected categories and their codes

individual's sense of safety was destroyed. CL1P1 described how being abandoned by his mother at the age of six months impacted him in adult relationships: "It affected me in such a way that I don't trust anybody now. I don't trust people, I can't. It feels like they are there for a short space of time and then I have to move out." CL1P4 detailed her abandonment by her father who left for another family, and how that impacted her life with her sister and mother: "My friend was my sister to the point that I cannot make friends, as an adult, because we were those very scary [sic] kids. My mother, every time, would be beating us."

Vulnerability. Individuals' abandonment experiences made them feel vulnerable in the world. CLP6 described feeling scared of being alone: "I fear most ending up alone. I don't want to not have anybody when I'm older. I don't know why it scares me so much." Due to their feelings of vulnerability these individuals felt that they had to do whatever was needed in order to survive. This was reflected in young women like CL1P5, who had relations with older married men: "I'd say 99 percent of the men have girlfriends outside their marriages." Being vulnerable meant that they had to depend on others to survive throughout their life. For CL1P1, this meant he had to depend on his uncle to pay his school fees: "I had an uncle that worked in mining, actually (my grandmother) forced him to send me to this primary school." Feelings and experiences of vulnerability created a chasm between them and the world.

Isolation. Feeling isolated was a consequence of abandonment and was associated with feeling vulnerable. CL1P1 felt isolated from his extended family because "they emotionally blackmailed" him for financial support. CL1P2 felt isolated because he was not able to talk to others about challenges: "I carry the world on my shoulders." Isolation was also a protective strategy that was expressed socially: "I like to keep things to myself." (CLP5) and emotionally: "I know my personality and that's probably what's coming through. I probably got this emotional block or something." (CL1P3). Isolation was also anticipatory: "I mean we are going to lose more things. Yes … no, in the world we are going to lose more things" (CL1P7).

Religion as safety. Religion emerged strongly for individuals in this type as it provided them with a sense of safety in the context of feeling vulnerable and isolated. "Whenever I feel it's too much, I think this is what kept me sane. In spite of everything happening, I just talk to God, and I believe in that [finding support in God]" (CL1P4). Religion reduced the experience of isolation: "I think God is my center. It's a very big part of me" (CL1P6). As a consequence, religion was a filter through which to process future threats of abandonment, isolation, or vulnerability. Natural disasters were normalized because of their perceived representation in biblical texts: "From a religious aspect, it's [natural disasters] a sign of doomsday, of judgment day" (CL1P2).

Detachment Category

Individuals in the Disconnected type were detached from certain aspects of life as a defense mechanism against their experienced abandonment, vulnerability, and isolation. The codes used to form this category are: focus on self, interpersonal hesitancy, detached from nature, detached

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from climate change, denial, and displacement.

Focus on self. Individuals in the Disconnected type were focused on self-preservation and self-enhancement. CL1P2 described making himself the priority: "If it's beneficial to me, then I will implement it. If it's not beneficial for me, I won't implement it" (CL1P2). As such, environmental issues were perceived from the perspective of how it would impact them personally: "It could kill me, if it kills" (CL1P7) without consideration for broader impacts. This type mentioned the importance of success, aspirations, wealth, and the need for status. CLP2 emphasized his own importance: "We were basically hand-picked to do this," and for CL1P it was important to note that he was a self-described "overachiever."

Interpersonal hesitancy. Individuals in the Disconnected type described being hesitant about opening up socially. CL1P4 said that she tended to be reserved when first meeting people and that she preferred "to keep things to myself." CL1P1 described feeling vulnerable around strangers: "I am not so good at meeting new people," contrasted with: "In my workspace I can, I love meeting new people, but in my personal space I don't." CL1P6 explained that she did not feel a sense of belonging interpersonally: "Sometimes, I am [a] bit too much for people." Due to the abandonment experienced and the consequences described, the desire to feel safe superseded the desire to belong for this type.

Detached from nature. A pattern of detachment continued for the Disconnected in their relationship with nature as they described anthropocentrism and apathy. Their detachment suggests damaged object relations where nature was perceived as having value only in as much as it benefits humans: "For me, what I think about nature is God provided us with all these things to make use of them. We believed God provided this for us to use" (CL1P4). The detachment from nature meant the individuals in this type perceived humans to be omnipotent: "We are the supreme of nature. We control everything that could happen in nature and we can decide if we want to do away with nature" (CL1P1). They lacked empathy for nature and protecting nature was for personal gain: "… you are using nature to your advantage but in a way, you are taking care of it, you are taking care of the tree for a tree to give you fruit" (CL1P3).

Detached from climate change. For the individuals in this group, their detachment from nature was reflected in their attitudes about climate change. The Disconnected felt that climate change was an inconvenience, too far into the future, and that it was not their problem. CL1P1 expressed inconvenience related to changing behavior: "You could just go green and try and use more e-mails and phone calls, but we don't want to." Temporal discounting was expressed by CL1P3, as climate change was not perceived to be an immediate threat and therefore did not require action: "I don't suppose it would impact me too much to see it, I will notice it, I mean there has [sic] been tornadoes in Johannesburg, for that I am a bit wary, I mean I don't want tornadoes."

Denial and displacement. Individuals in the Disconnected type denied the seriousness of climate change. CL1P3 expressed a lack of concern: "I don't really worry about, I see climate change, but it's not a worry. I think I am probably like most people just blind and that it is just happening." This type used their religious lens to justify their denial. Climate change was deferred to God's plan, proximity, or just not as a concern: "I believe that it is not about what man is doing to the planet but maybe it is just about God's plan because nobody can really explain the creation thing" (CL1P1). CL1P2 suggested that climate change was planned by the creator: "I'm looking at it from a religious perspective that, maybe, it's God's way of cleansing the Earth." As such, religion was used to make sense of climate change rather than science: "Umm, I don't believe it in a scientific perspective. I believe it in the religious perspective" (CL1P5).

The Uncommitted Type

Individuals in the Uncommitted type watch the world rather than participate in it. The categories that emerged are: observer, human-nature ambiguity, and climate change contrasts. Figure 2 shows the codes and categories for the Uncommitted type.

Observer Category

Those in this category struggle with assimilating with the world. The codes that formed this category are: distancing, resilience, contemplative, importance of knowledge, and world defined through close relationships.

Distancing. Individuals in the Uncommitted type created distance between themselves and the world, which served to help them make sense of situations and of themselves. They preferred to think, reflect, observe, and look at the world through (for some technological) "glasses," and focused on "the bigger picture." This type described an observational way of relating to the world: "Umm, a person just reflecting on life, you know, taking a step

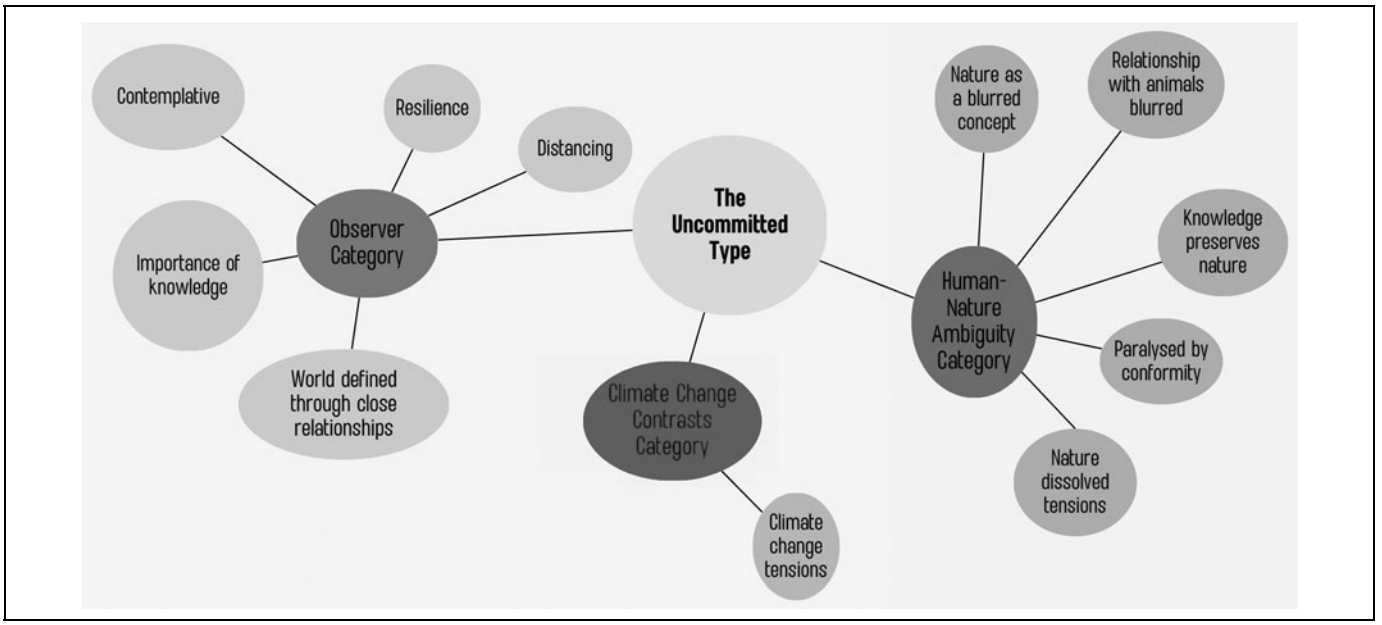


Figure 2. The Uncommitted categories and their codes

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back and thinking things through" (CL2P3). This distancing was experienced as an altered reality: "I see the world, particularly through my little artsy sunglasses, … and sometimes, maybe not too realistically" (CL2P6). Observing, rather than participating, was a coping mechanism: "I think I see the bigger picture sometimes. I think sometimes I couldn't be bothered with silly little things that I think are immaterial. But inside surely, these things are eating away at us? I think we need some way of exorcising the strange, unsettling things that are happening in the world" (CL2P4).

Resilience. Individuals in the Uncommitted type described how their ability to distance from the world made them inwardly resilient (being realistic, determined, confident, authentic) and resilient in the face of challenges (having a miscarriage, mother being diagnosed with cancer, or not knowing a father). They described emotional strength: "I think I can take in a lot without just crying over little things" (CL2P8). CL2P5 described being resolute: "I've been through a lot of things in my life as well but I'm still here, and I'm still pushing forward and, also persevering to get to the places I think I need to be." Their resilience made them confident in their decisions: "if I want to do something, I want to do it. I don't want to be insecure of my options. I have this massive thing against façade-ism, I can't take it" (CL2P4). They built resilience through dealing with difficulties: "If there's one thing about me, if there's a problem, I want it to be solved, now" (CL2P2).

Contemplative. Those in the Uncommitted type used contemplation as a strategy for distancing and building resilience. They described taking time alone as an opportunity to contemplate: "For me, I think being on the road, when I listen to music, I get time to zone out. Because I'm alone, I can actually think" (CL2P2). Being contemplative created distance in social situations: "I rather think before I speak than just blurt things out" (CL2P4). The process of contemplation was about exploration and curiosity: "I've always over-thought things, have been a bit of an over-analyst, and that kind of thing," and "because of the curious nature that I have, and the understanding of things" (CL2P6). The contemplative approach of this type made them agile and able to observe different perspectives: "I think that's a big thing with coming from a religious aspect [referring to other people], *people can be quite judgmental I think, or they can be very black and white. I just sort of look beyond that*" (CL2P8).

Importance of knowledge. The Uncommitted placed a high value on obtaining and dispensing knowledge, and having an education as a social norm. Individuals in this type shared the educational achievements of their family members (sister an industrial psychologist, father a doctorate in education), and their own educational pathways (master's degree in education, studying full-time, studying engineering). Knowledge provided them with the permission

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to contemplate: "Knowledge (was said to be the most important thing). Because of the curious nature that I have and the understanding of things" (CL2P6). Education held generational value: "My parents valued education a lot," she noted further, "so the ambition also stems from my mom in the sense that my mom always complained about how she never got the opportunity to work, to study" (CL2P5). They perceived themselves as educators: "So, for me it would be a matter of educating people about the environment itself. We don't have much knowledge about that" (CL2P2).

World defined through close relationships. Social norms were important to the people in the Uncommitted type. They valued a sense of belonging and conformed to gain acceptance. They expressed processes of being accepted and being accepting, being connected, and caring about others. It was important for them to gain approval from others: "Don't reject me. Like, I can literally cry," (CL2P2) and "My core being I would say, … I like to do right by others more than anything" (CL2P3). As such, those in this type placed a high value on relationships: "I value relationships. I don't think a person can actually live and go through their life without relationships" (CL2P1). Fitting in was a priority for them: "Not being in the spotlight. So, I prefer, like if I excel at something, and I do well at something, I don't like to be praised for it" (CL2P6).

Human-Nature Ambiguity Category

The Uncommitted type has a human-centered view of nature—nature is seen as human nature (characteristics of humankind), nature as environment, nature as intangible, and observant of nature. The codes are: nature as a blurred concept, relationship with animals blurred, knowledge preserves nature, paralyzed by conformity, and nature dissolved tensions.

Nature as a blurred concept. Uncommitted type individuals described an obscured self-nature relationship that indicated relational challenges. They found it difficult to relate to nature: "I'm not sure how to relate with nature on a personal level," (CL2P6) "you can't see it, or you can't touch it," (CL2P1) and "a thing with which we live" (CL2P6). Because of this relational challenge, it was easier for them to view nature as human constructed. Therefore, manicured or built spaces were perceived as nature: "I've always had this thing that I couldn't understand where you draw the line between something being natural, and synthesized? I couldn't understand that, because it's a very blurred line," (CL2P6) and "normal park, a suburban park is what I would consider nature" (CL2P7).

Relationship with animals blurred. The blurred relationship with nature, the importance of social norms (eating animals is justified, pigs are dirty, and snakes associated with evil), and intellectualization caused ambivalent feelings for the Uncommitted type when it came to animals. Their relationship with animals was expressed as being aligned with what is accepted by society, "You find people actually breeding farm animals just to put bread on the table so they will sell off animals so they can pay for their expenses," (CL2P1) and "*Eating animals is an accepted form of living, it is not something that is frowned upon*" (CL2P8). However, social norms contrasted with personal views that caused them ideological tension: "For me, as much as I drink milk, I feel guilty, sometimes. I'm taking something from someone," (CL2P2) and "It's just so hard because like a part of me hates eating something that was alive, but then you also get information that humans need it to sustain themselves and it's okay" (CL2P5).

Knowledge preserves nature. The importance of knowledge for the Uncommitted type impacted their relationship with nature. Knowledge (rather than action) played an important part in the preservation of nature: "I suppose in this sense the responsibility of just preserving it all, because I always come back to preserving, because I always feel knowledge is preserving," and "I suppose in some ways I try to do the bit I can but at the same time, like for me, I suppose knowledge is a priority" (CL2P5). However, knowledge did not lead to behavior: "I think I must do more because honestly I'm not doing much for nature, and I know I'm educated." A strategy to reduce guilt caused by non-action was to educate others: "I would want to educate Black people because I think we as Black people don't have much knowledge when it comes to nature itself," (CL2P2) and "I'm educating my kids about it but, I'm not necessarily doing it" (CL2P7).

Paralyzed by conformity. Because individuals in the Uncommitted type value social norms and knowledge, they struggled with taking individual action for the benefit of the environment. Individual behavior was not seen as making a difference: "You can change your household but, in the greater scheme of things, does it really make a difference?" (CL2P1). Similarly, there was the sentiment that responsibility should be taken by the collective, rather than the individual: "Everyone is responsible. I don't think one person can do all the work" (CL2P3). Even though they did not always agree with what society deemed acceptable, they described a

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sense of systemic paralysis: "I've heard a lot of those arguments and I can't say I agree or disagree with them. It definitely seems to me a cruel industry (factory farming). It seems to me a very polluting industry and it's something that I definitely would not want to support, but it's just something that due to practicality I kind of have to" (CL2P6).

Nature dissolved tensions. The Uncommitted type did not feel connected to nature, but saw it as a means to release tensions experienced by the need to conform. They described themselves as "not having a green thumb" or being more "interested in human-made elements." Regardless, nature provided an opportunity to release the pressure of conformity: "It's just a place that I could just let loose. You don't wear fancy clothes on the mountain," (CL2P6) and "It's also a process of just rejuvenating yourself as well and just getting geared up again for what is in front of you to be able to actually tackle that" (CL2P1). Nature provided a temporary reprieve from daily life: "Like when you want timeout that's where I would go. A peace of mind, that clarity that you need to make decisions" (CL2P3). They perceived nature to benefit them: "Nature helps restore balance; I think from nature I would say it's about balance. It's about balance, a balance of relationships, a balance of interfaces" (CL2P1).

Climate Change Contrasts Category

The tension experienced, combined with their blurred relationship with the biosphere, extends to climate change. The code used for this category is climate change tensions.

Climate change tensions. Due to the tensions experienced by individuals in the Uncommitted type, they had contrasting ideas about climate change. The validity of anthropogenic climate change was questioned; it was seen as part of a natural cycle or evolution. Some participants in this type reflected back on information received when young: "There was a biology teacher here once, she made me question this idea because she said, 'Maybe, there's no such thing and maybe over thousands of years those variations in weather patterns would happen naturally anyway.' I don't know for sure if we've caused it." (CL2P4). There was a belief that climate change might be natural: "I think that it's just evolution, not that it (factories) also doesn't contribute" (CL2P3). Climate change was not perceived to be due to human activity: "I mean we've gone through Ice Ages; we've gone through periods of time where the world has been insanely hot. So, like it's something that's going to happen. I think it's part of the nature of this world" (CL2P6).

The Pleasure Seeker Type

The Pleasure Seeker type avoids aspects of life that were not pleasurable. The categories that emerged for this type are: hedonist, struggles with the outside world, poor relationship with nature, and apathetic toward climate change. Figure 3 shows the codes and categories for the Pleasure Seeker Type.

Hedonist Category

The Pleasure Seeker type is focused on obtaining pleasure and/or reward and described impulsivity and struggles with social conformity. The codes used for this category are: search for pleasure/reward, importance of control, nonconformist, and having a typical life.

Search for pleasure/reward. The Pleasure Seeker type individuals described chasing gratification. It was about living in the moment, being outgoing, living for themselves, having no long-term plans, spontaneity, and instant reward. People of this type described getting lost in the pleasure of the moment: "When I get excited, I live in the moment," (CL6P1) and "I just lost interest. I really didn't have a purpose, a direction at that time because I was just living for myself," (CL6P2). CL6P4 discounted the future for short-term gain: "So, I don't have a ten-year plan, or I don't have a long-term goal, or ambition." Therefore it was a struggle to balance reality with the desire for pleasure "in exchange for the money, they kind of took away my life" (CL6P1).

Importance of control. It was deemed important for the Pleasure Seeker type to feel in control of situations: "Although I'm a control freak myself, I think I'm very tolerant to difference" (CL6P4). Not having control was frustrating: "I don't like it when things go out of control, when you have no say in something, and you just have to accept something" (CL6P3). There was a focus on seeking situations where they could control what they were exposed to: "Choose what it is that you want to indoctrinate yourself with" (CL6P1). Lack of control triggered a fear response: "I guess that's what I'm scared of most, people dictating, not people, but being dictated to in terms of how things will work, or how things will run, or being unable to affect something" (CL6P3). The desire for control extended to how people perceived them, as CL6P2 explained: "I feel, even though I do nonsenses, I must get praise."

Nonconformist. The Pleasure Seekers saw themselves as unique. CL6P1 described countering the status quo with his way of seeing the world: "What I'm looking at doing is, it's kind of like a socialist system. It's, again, a weird idea that I have," and

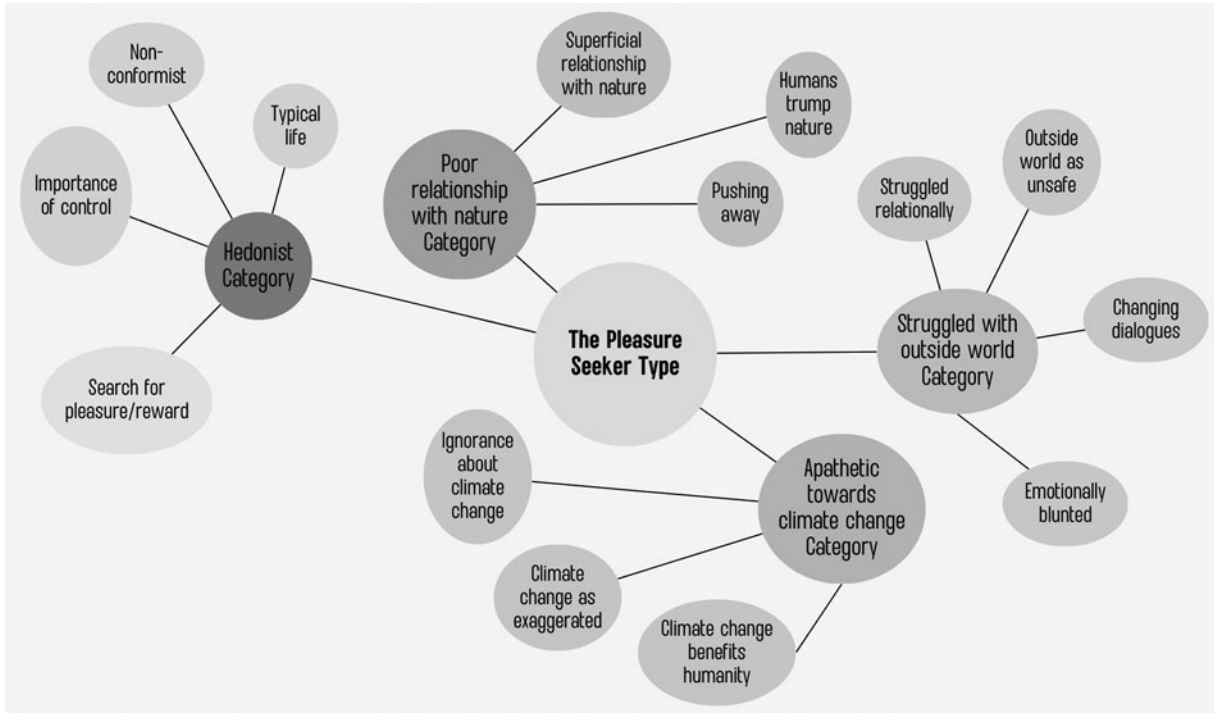


Figure 3. The Pleasure Seeker categories and their codes

"… it's really about keeping things open to interpretation." He reflected on having an instinctive drive toward death that made him relate to the world differently: "Life and death have been in love for longer than you have words to describe. Life sends us countless gifts to dare and death keeps them forever." Not conforming was an important part of their identity: "I like to think I don't inflict or project the typical White guy sort of tendencies, particularly through things like music or dress codes and stuff like that" (CL6P3).

Typical life. Regardless of some challenges, the Pleasure Seekers maintained a positive view about their lives. CL6P2 described relationship challenges: "I would sometimes go, maybe once a month, to see my dad. We never really had that close relationship until we were older." CL6P4 described family challenges: "My one brother is somewhat estranged from the family." Regardless of some typical challenges, they mostly experienced supportive home environments: "I lived in a very close-knit community. Like, my uncles all live literally like next-door—uncle, uncle, uncle, aunty. My whole family was literally there, so I never had to go out, or whatever" (CL6P1). CL6P4 described a joyful youth: "I grew up in a very loving, generous, or spirited type family."

Struggled with Outside World Category

Although the Pleasure Seekers described mostly growing up in supportive home environments, they described relational challenges when it came to individual relationships. The codes used for this category are: struggled relationally, outside world as unsafe, changing dialogues, and emotionally blunted.

Struggled relationally. The Pleasure Seekers mostly described positive home environments, but when it came to close relationships, they struggled. CL6P2 struggled forming a close relationship with his mother: "I never had that very close relationship with my mother." CL6P3 avoided getting close to his mother: "… my gran moved in because she got quite sick. So, now she's come to live with us until the end of her days, which is taking a little bit of the pressure off my mom's expectancy on me to form a solid relationship with her." Avoidance was used as a process to deal with relational challenges: "There are days where I will just be at home, and someone would knock, and I will act as like there's no one at home. I will just sit and keep quiet, and I'm living in a very small house. So, like when you pass, there's a window, so I will see, okay, someone is passing. So, when they come and knock, I just turn down the volume and keep my phone on silent" (CL6P2). They were comfortable spending time by themselves: "I'm mostly a bit of a loner" (CL6P5).

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Outside world as unsafe. The Pleasure Seekers perceived the outside world as threatening and unsafe. CL6P1 explained: "We've got the degrees you know, but the jobs are not there, and the work isn't there. I'm now thinking to myself if I went back and told my 20-year-old self, everything I know now, I wouldn't have believed me. I honestly wouldn't have believed me!" Their experiences reinforced perceptions of a threatening world: "I had to leave school early to go and work." (CL6P6), and for CL6P2 the outside world was not the same as her home environment: "It's no longer that place we grew up with our uncles taking care of us living at home. So now, you're even afraid for them to touch your daughter because you're thinking something might happen. So, the world is no longer a safe place." The experience of the world as unsafe reinforced their fear of not having control: "… the first thing that comes to mind is I fear not being able to take care of myself when I'm old, which everyone laughs at me about" (CL6P4).

Changing dialogues. Relational challenges and experiencing the world as unsafe meant that the Pleasure Seekers developed alternative discourses. CL6P3 described a passion for buildings and creating spaces for dialogue without speech: "I'm studying architecture. There is no real intermingling. So, I'm using visual arts, performance arts, and craft as a means of creating dialogue." CL6P1 used creativity to relate to the world: "I sketch. I'm looking to move professionally into the comics direction," and "I went and worked for a local community radio station as a presenter … and produced my own show." Technology was also used as a safe way in which to relate to the world: "Facebook. I'm 24/7 on Facebook. My boss said I must get a job at Facebook. I love interacting on Facebook" (CL6P6), and "I usually spend about two to three hours playing games" (CL6P5). Technology helped them navigate the world: "… if I'm at the mall, I love big signs because they let me know where I am" (CL6P1).

Emotionally blunted. The Pleasure Seekers described having a limited range of emotions that impacted the way in which they could relate to people and how people could relate to them: "I'm the type of person that needs to knock their head to really understand that I feel something because I don't know… a lot of people say I'm closed-off" (CL6P1). CL6P2 described a general lack of emotion that was heightened after she experienced a loss: "… at work, when I came back after my fiancé's funeral and all, everybody was like sad, and they didn't want to sing, and all. I knew 'Okay, everybody is expecting me to fall down.' When I walked in, I was like this person they never expected… laughing." Emotional bluntness was combined with apathy for CL6P5: "I don't really care for that many things which unfortunately sometimes, includes people, and obviously that just makes it even more difficult to relate to them," and "… there's very, very little things that I attach real value to."

Poor Relationship with Nature Category

The Pleasure Seeker's relationship with nature is characterized by a lack of affect, physical contact, and anthropocentric beliefs. In order to deal with nature in this context, they push nature away through creating negative associations and redefining the concept of nature. The codes that emerged for this category are: superficial relationship with nature, humans trump nature, and pushing away.

Superficial relationship with nature. Nature did not play an important role in the life of the Pleasure Seeker. CL6P6 explained a distant and volatile relationship with nature through a human lens: "I've got a manager who I work for, and this morning he didn't speak to me and I thought, 'What the hell did I do, to him?' One day, they're nice and jolly and the next day, they don't want to talk to you for some stupid reason [describing her relationship with nature]." They were unable to physically connect with nature: "I would say not much [relationship with nature] … as I said, I'm not the person with the flowers and all, they all die. I don't really have that close relationship with nature" (CL6P2), and admitted that their attempts were not meaningful: "I try to be kind to nature, but it's probably at quite a superficial level" (CL6P4). They struggled to distinguish between what is undamaged nature and what is damaging to nature. Therefore their interpretation of something damaging to nature was absurd: "For me, it's like I view plastic as natural. I know people say, 'You know what, it doesn't degrade, and it doesn't do this, and it's bad for the environment,' I'm like 'rocks don't de-grade.'" (CL6P1).

Humans trump nature. This type's poor relationship with nature means that they were only able to relate to nature from an anthropocentric perspective. Therefore nature is seen as a resource to be used: "From your trees and all, you get your books, you get your furniture, that's what it gives us" (CL6P2). They view nature not for its own sake, but for what it could provide them: "Farm animals are just humans taking animals out of the wild and reinventing them for another purpose, which is production. Nature is just an ultimate supplier of comfort even if we don't recognize it or realize it" (CL6P3). Humans are

perceived as having superior capabilities: "Now, a human being is capable of doing so much more. We can build cities. We can build houses. We can build forests" (CL6P1).

Pushing away. The Pleasure Seekers were unable to relate to nature and therefore perceived nature as something in the distance, or something that should be in the distance. CL6P4 only spent time in nature while on a different continent: "I don't spend a lot of time in nature on a day-to-day basis, but when on my [reference to an exotic island] trips, which is probably five weeks of the year I'm in [reference to an exotic island], always at the exact same place, and that is literally being close to the earth of nature so perhaps that's my little dose I get." Nature was perceived as menacing: "… from the time you're born nature is trying to kill you. It [nature] just throws stuff at me and it's like 'let's see what it's going to do.' That's literally my relationship with nature," and "It doesn't matter that it's a shark. It just looks violent, putrid and disgusting" (CL6P1). Nature was experienced as an irritation and therefore further pushed away: "A lot of people can find nature to be a nuisance in terms of maintenance, in terms of what they attract, back to the bird and insect life" (CL6P3).

Apathetic Toward Climate Change Category

The Pleasure Seekers were apathetic toward climate change because they had no relationship with nature. Climate change was irrelevant to their lives, and they showed ignorance and apathy. The codes used for this category are: ignorance about climate change, climate change as exaggerated, climate change benefits humanity.

Ignorance about climate change. The Pleasure Seekers had limited knowledge and engagement with climate change. They struggled to discuss climate change: "What would I say about climate change? How can I put this one? The climate? I don't know how to put this one" (CL6P2), and used the current drought as a reference point: "You can't really say with the drought 'it's this guy's fault or it's that one's fault.' You sort of just have to acknowledge that these things happen" (CL6P5). They were unable to identify the cause of climate change: "Yes, we don't understand with plastic, and there's toxic waste, and these chemicals, and what the things are doing within nature" (CL6P1). As such, climate change was seen as natural for CL6P3: "Climate change, again, I haven't read all the research, I haven't done all the studies, and things, but I mean there's evidence that shows it's happened before" and "I think nature has just had years and years and years of doing that." Generally they experienced climate change as confusing: "Confusion and I say that because you read and hear so much and there are so many different points of view" (CL6P4).

Climate change as exaggerated. Climate change is not a topic that featured in the life of Pleasure Seekers. For them climate change was not a serious issue: "… some of them make jokes about it as in it's like 'Jo'burg is going to be the only safe place left to live, so we're alright.' Again, some people take climate change more seriously than I do" (CL6P1). They believe that the emphasis placed on climate change was unnecessary: "A lot of people, I guess, it is human nature to sort of blow the problem out of proportion. People really drive that death thing, what's going to happen to us" (CL6P3). If they thought climate change was serious, they could see how it would impact their lives using drought as a reference: "I always think automatically of global warming, which has all kinds of consequences, in terms of water." The Pleasure Seeker tended to dissociate from the threat of climate change: "I'm not going to try and posture, I'm going to be very honest and say that I feel like climate change is a big thing happening there, and in my little world here I don't know if that can impact on it" (CL6P4).

Climate change benefits humanity. To deal with negative emotions stimulated by the broad communications about the negative impacts of climate change, they deployed defense mechanisms related to human mastery: "… is it [climate change] really a bad thing? But, I don't think it's a bad thing" (CL6P1). They believed that humans were equipped to live in an altered world: "We're quite comfortable to live in the kind of dystopian worlds that are created in things like the Chronicles of Riddick [anti-hero science fiction film]" (CL6P3). They positioned climate change as having personal benefits: "I will be glad because I hear it [a natural disaster]; normally when it happens, it crushes everything, so I will be clear from my debts" (CL6P2). They also viewed climate change as being emphasized due to its economic potential, "Look, I am concerned about it in the sense that big businesses are making a lot of money from going green, and people don't kind of see [that] this aspect of climate change has created a new market, especially, for the people who are propagating climate change" (CL6P1).

Discussion and Conclusion

This study aimed to develop theory that could explain the shallow ecological relationships of three types of individuals, using an ecopsychoanalytic lens. Ecopsychoanalysis can

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shed light on superficial connections with nature, which are often shaped by early attachment experiences. This has significant implications for later life, as impaired object relations can lead to a lack of concern for environmental issues. The results show that shallow attachment patterns to nature precipitate avoidance and ambivalence related to issues of dependency and vulnerability (Bigda-Peyton, 2004; Dodds, 2011; Hoggett, 2011; Winter 2000).

The findings suggest that the Disconnected type individuals had an insecure relationship with the biosphere that reflected their insecure relationship with the world. They experienced abandonment, vulnerability, isolation, and used religion for safety. There emerged an association between experiences of abandonment and their relationship with nature (see Lertzman, 2009; Randall, 2005). They were possibly in denial about their dependency on the Earth because of fear of further abandonment when ecosystems collapse. Their aim was to separate from any dependencies to seek independence to self-preserve. This finding aligns with Lertzman's (2009) theory on the role that apathy plays as a mechanism for protection, and Melmed's (2020) argument that their insecurity is driven by their fear of continuing loss. Their apathy potentially has unconscious roots, acting as a form of defense against the anxiety of further abandonment (Lertzman, 2009). Disconnectedness of individuals in this type was further expressed in the form of a focus on self, interpersonal hesitancy, detachment from nature and climate change, and denial. In this context disconnectedness emerged as a further defense mechanism (Feuvre, 2012) and confirms the role that damaged object relations (Winter, 2000) possibly plays in their relationship with the biosphere. Detachment or disconnectedness was generalized, impacting the ability of these individuals to form meaningful human and nonhuman natural relationships (Winter, 2000). Based on the psychological expressions of the Disconnected, fear messaging will lead people in this type to disconnect further as suggested by Hornsey and Fielding (2020). On the other hand, guided immersive nature experiences could aim to close the gap with nature and climate change assisting with taking responsibility (Duerden & Witt, 2010). Closing the gap will provide them with an opportunity to connect with their role in the causes of climate change and perhaps inspire them to reflect on their own behaviors that might not be pro-environmental. Targeting sustainable behaviors that these individuals would see as within their control and that would help them feel like they belong to a larger group could be effective (Gatersleben et al., 2014).

The findings suggest that the Uncommitted type has an ambivalent relationship with the biosphere. These individuals described oscillating between avoidance, uncertainty, and connection. They also described seeking assimilation between themselves and the world (Randall, 2005). The Uncommitted type activated defense strategies in the form of intellectualization to divest emotional meaning from emotionally upsetting situations (Dodds, 2011; Lertzman, 2009), which is typical of ambivalence as it assists with neutralizing negative emotions like anger or guilt (Jordan, 2009). The Uncommitted individuals experienced nature and their relationship with animals as blurred because they used knowledge as a way to preserve nature, and a way to deal with the paralysis experienced by the need to conform. This internal conflict extended to climate change. The "blurred-ness" experience indicated a confused self-nature relationship and indicated that they experienced relational challenges (Winter, 2000). Mishan (1996) describes tension, such as this, as a consequence of a human-centered view of nature that makes it difficult to move psychically to a more ecological view. The tension experienced by conformity and intellectualization could lead to splitting and manic defenses as discussed by Lertzman (2009). However, Uncommitted type individuals expressed the ability of nature to dissolve tensions they experience in their world, suggesting a potential move toward the depressive position (Lertzman, 2009). This type would not be likely to respond to calls for activism, as discussed by Molinario et al. (2020). Nuanced interventions such as feedback-signaling consequence (Dwyer et al., 1993), messages around community adaptation (Bendell, 2018), a social norms approach (Handgraaf et al., 2013), low-commitment active citizenship (Stern et al., 1999), increasing access to information (Axon, 2017), and enabling community discussions (Goldberg et al., 2019) could be effective for this type.

The findings suggest that the Pleasure-seeker type individual exhibits an avoidant relationship with the biosphere characterized by a lack of interest or concern. This type shows narcissistic traits with a focus on seeking pleasure and/or reward, prioritizing control, and were nonconformist (unlike the Uncommitted type)—they perceived themselves as unique. Their behavioral expressions possibly suggest a fragile sense of self (Dodds, 2011). They expressed a lack of self-control in seeking pleasure and reward (often financial) that is related to the pleasure principle (Bigda-Peyton, 2004) and narcissistic gratification (Jordan, 2009).

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Challenges had little impact as they adopted omnipotent fantasies about the world. According to Hoggett (2011) these fantasies, and the need for control, act as a cover for a sense of helplessness. The avoidance and sense of helplessness was observed in this type by how they struggled to connect with people, experienced the world as unsafe, were emotionally blunted, and had to change the way in which they relate to an unsafe world.

The Pleasure Seekers have a superficial relationship with nature, believing that humans trump nature, they push nature away. Their lack of affect, physical contact, and anthropocentric beliefs characterizes their relationship with nature, similar to Jordan's (2009) observations about nature being seen as "the other." These individuals expressed reaction formation (Dodds, 2011), but through redefining nature they attempted to retain their idealized world. Their goal is to nurture their narcissistic omnipotent fantasy of domination over the natural world. It is difficult for them to accept their dependence on nature because they do not feel a close relationship with nature. They believe that climate change is exaggerated, that it could benefit humanity, but they admit to not knowing much about it.

Their response to climate change links with Dodd's (2011) concept of irrational risk appraisal. They described an unconscious fear of death that explains their illusion of human mastery (Jordan, 2009) and activation of their defenses of denial and dissociation (Dodds, 2011; Lertzman, 2009). These responses indicate that individuals of this type would not respond to interventions that are an inconvenience or impact their idea of a life of pleasure. Positive incentives (Steg & Vlek, 2009) for eco-friendly behavior, such as getting money back for recycling, could be effective in changing their behavior since it can be done without having to change dominant worldviews (Yau, 2010). Sanctions that disincentivize unsustainable behaviors (Axon, 2017) in the shape of Pigouvian taxes could be considered (Glaeser, 2014). Other interventions could focus on alternative hedonism (Soper, 2007).

Typically, environmental types (Flint et al., 2013) have been considered to be linear. Although researched in developed countries, types failed to adequately explain underlying and nuanced psychological processes that impact how types relate to nature and climate change. This study adds to the type literature showing how shallow ecological relationships have been psychoanalytically shaped and expressed through insecure, ambivalent, and avoidant attachment processes emerging from experiences of abandonment, tension, and narcissism. This deeper and more meaningful understanding informs and adjusts the baseline for interventions to overcome generalized messaging (like fear messaging) designed for developed countries, and superficiality while taking the psychoanalytic context into account when it comes to sustainable behavior. It also clarifies what could be expected from individuals and could impact how the efficacy of interventions are structured and measured. For example, expecting a Pleasure Seeker to reduce air travel or a Disconnected to eat plant-based food is unreasonable given their profile and associated psychological processes (Wynes & Nicholas, 2017).

Some limitations should be mentioned. This study was conducted with a small qualitative sample and would benefit from quantitatively tested theoretical outcomes. The qualitative findings are not generalizable since they are exploratory in nature and aimed at building theory. The possibility that the researcher who conducted the analysis inserted herself in the interpretations must be acknowledged, but this was, to a certain extent, mitigated by member checking. Future research should look at how shallow ecological types compare to more deep ecological types and what that means for sustainable behaviors. Research is also needed to test different interventions across the various types. It is not feasible to classify individuals into a type before campaigning, but rather to design interventions to target specific types of individuals based on the insights from this study.

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Authors' Contributions

Andrea Marais-Potgieter: conceptualization, formal analysis, data curation, investigation, project administration, investigation, methodology, writing/original draft preparation. Andrew Thatcher: conceptualization, supervision, writing/review and editing.

Ethics and Informed Consent Statement

The authors declare that ethical approval was received from the University (H210314). The authors

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confirm that all participants provided informed consent for participation.

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