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From ego-centred to eco-centred: An investigation of the association between authenticity and ecological sensitivity

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Abstract

This study aimed to assess the empirical validity of Carl Rogers' vision of the authentic person to be ecologically minded. 238 participants were asked to complete the Authenticity Scale, the Connectedness to Nature Scale, the Love and Care for Nature Scale, the Ethically Minded Consumer Behaviour Scale, and the Brief Social Desirability Scale. It was found that higher scores on authenticity were associated with higher scores on feelings of connection to nature, love and care for nature, and ethically minded consumer choices. Associations remained statistically significant even controlling for social desirability effects. This is the first study to provide empirical support for Rogers' hypothesis that more congruent individuals will be more environmentally aware and concerned.

Keywords: authenticity; connectedness to nature; ecological sensitivity; ethically minded consumer behaviour

1. Introduction

Deforestation, extinction of species, global warming, depletion of natural resources, intensive livestock farming – there are many scholars who conclude that human civilization as we know it is on the edge of destruction (e.g., Neville, 2018; Orr, 1994, Oskamp, 2000). It is therefore imperative that people take preventative action. However, while the last few decades have seen advanced sustainable technologies in the generation of renewable energy for housing and transportation, as well as ‘eco-friendly’ statutory legislations such as the separate collection of waste, become increasingly available, these have not been as widely implemented as they could be to reverse the destructive trend. Such destruction might seem perplexing given the assumption of the person-centered approach that it is the intrinsic tendency of human nature to always be striving towards a constructive way of being - the maintenance, enhancement and interdependence of the organism (Rogers, 1959).

An internal motivation to live in a constructive rather than destructive relationship with the ecological world is not an unknown psycho-ecological concept. In fact, various tribal cultures have lived in interdependent co-existence with their natural surroundings until present days (Barrett-Lennard, 2013). While indigenous tribes are renowned to have lived in such a proposed sustainable coexistence with their ecological surroundings (Barrett-Lennard, 2013), for a long time, this ideology of being had gained little recognition and interest within the field of psychology. Such recognition only came in the 1940s when the founders of humanistic psychology deviated from the disease oriented psychological approach at the time and offered an alternative that sought to explore human potentials and growth (O’Hara, 2010). It does not seem inevitable therefore that humans are destructive of their environment. If they are, this must arise, person-centered theory suggests, because peoples’ intrinsic tendency towards a more constructive relationship with the world has been thwarted by external incentives and sanctions; that is to say,

destructive behaviors arise as a result of incongruence (Rogers, 1959). In this paper we propose to examine a hypothesis derived from Rogers' person-centered theory that when people are in a state of congruence, they will be more ecologically sensitive.

Understanding ecologically sensitive behaviours as an expression of congruence has not received much attention within the person-centered literature, but it is one of the ways in which the approach has wider application, as was recognised by Rogers (1980) in his later writings about a new way of being. Rogers saw the responsibility of humanistic psychology to address impending social and environmental predicaments. Claiming human beings to have an intrinsic potential to “feel a closeness to, and a caring for, elemental nature” (Rogers, 1980, p. 351), he proposed a clear vision of an ecologically minded ‘person of tomorrow’ that is invested in environmental, social and political happenings in the world. Rogers used the term ‘ecologically minded’ to describe his concept of the ‘person of tomorrow’, but in this study, we also use the term ‘ecologically sensitive’, as we believe it better describes the wide spectrum of relevant experiences that are not only cognitive but also physical, experiential and emotional.

Above all, Rogers was interested in an over-arching, psychologically healthy humanity beyond the clinical setting. Various humanistic, person-centered scholars, have followed his footsteps and have called for active participation in helping to prevent environmental crises (see, e.g., Barrett-Lennard, 2013; Cornelius-White, 2006, 2007b; Joseph, 2015b, Neville, 2013; O'Hara, 2010). For these scholars of the person-centered approach, a response to the planetary emergency is to be found by focusing on the facilitation of personal development and congruence, or authenticity to use a more contemporary term (Joseph, 2016).

A considerable research body has now been established around authenticity since the emergence of positive psychological research (Seligman & Csikszentmihalyi, 2000) and the development of psychometric self-report measures with which to assess authenticity (e.g. Kernis

& Goldman, 2006; Wood, Linley, Maltby, Baliousis, & Joseph, 2008). Using these measures much research has been conducted examining the association of authenticity with various different constructs related to fully functioning, such as well-being (e.g., Huta & Waterman, 2014; Joseph, 2015a; Sheldon, Ryan, Rawsthorne & Ilardi, 1997; Steger, Kashdan & Oishi, 2008; Robbins, 2015), life satisfaction and self-esteem (e.g., Boyraz, Waits & Felix, 2014; Wood, Linley, Maltby, Baliousis, & Joseph, 2008), and self-determination (e.g., Pelletier, Tuson, Green-Demers and Noels, 1998; Pelletier, 2002). It can also be predicted that with greater authenticity comes the ability to encounter the world ecologically (Cornelius-White, 2007a, 2007b), and to organically develop constructive rather than destructive relationships to other human beings and the natural world (e.g., Blair, 2013; Chatalos, 2013; Kuhn, 2001; Neville, 2012, 2013). But as yet, no such research has tested for an association between authenticity and ecological sensitivity. As such, this study represents a new contribution to humanistic psychology and ecopsychology.

While the human-nature relationship has already been researched within the field of environmental psychology, no research effort has yet been made to better understand the human-nature connectivity as part of personality development and growth. One of the first measures to examine such a construct was the *Inclusion of Nature in Self Scale* (INS) developed within the field of environmental psychology (Schultz, 2002). It was followed by other measures, such as the *Connectedness to Nature Scale* (CNS) (Mayer & Frantz, 2004), and the *Love and Care for Nature Scale* (Perkins, 2010). Research conducted by Schultz (2002) showed that human beings are indeed more ecologically sensitive, the more their self-identity incorporates their natural habitat. He stated “if humans are part of nature, if they are connected symbiotically with nature, then perhaps they have a responsibility to protect nature” (pp. 64-65).

For Rogers (1980), there was no sharp line between the experience of the self and the external world. This proposition acknowledges a fundamental difference between ‘environment’

and ‘ecology’. While ‘environment’ is characterised as something by which the individual is surrounded by, ‘ecology’ emphasises a place which is inhabited by the individual (Bazzano, 2013; Naess, 1986, 1989; Roszak, 1992). In this paper, the person is understood as an ‘ecological self’ (i.e. ‘human in nature’ relationship), rather than as an ‘environmental self’ (i.e. ‘human and nature’ relationship). It is proposed that only with the recognition of an ‘ecological self’, people will realise their responsibility to become more ecologically sensitive and active (Neville, 2018). Concomitant with this take on the human-nature alliance, Neville stated in his speech at the 13th Conference of the *World Association for Person-Centered & Experiential Psychotherapy & Counselling* (WAPCEPC) in 2018, that “we and our clients need to be congruent [...] not only within our own organism. We need to be in harmony with the rhythm of nature”. This outlook holds the process of becoming more authentic as key for ecological sensitivity.

Person-centered theory states that as organismic beings we are inevitably in touch with this rhythm of nature, simply by being in touch with our true selves. In Rogers’ (1959) terminology, we are ecologically sensitive the more we are in touch with our organismic valuing process. This process exists of two tendencies that are intrinsic to the organism. These are the actualising and the formative tendency. The actualising tendency is the organismic tendency towards fulfilment, maintenance, enhancement and maturation of one’s own potentials (Rogers, 1951, 1963). This organismic force or ‘intrinsic motivation’ (Deci & Ryan, 1985) functions as an energizer for experiencing and acting in the world by freely manifesting and self-authenticating itself towards actualisation, self-responsibility and relational interdependence with the external system (Bazzano, 2013; Rogers, 1957b; Schmid, 2013). This directional, organismic actualising tendency is part of a broader formative tendency. The formative tendency encompasses Rogers’ (1980) wider vision of wholesome interconnectedness in the world and the cosmos. It theorises the existence of directional movement in all that is and suggests that the universe itself is an

organism that is alive and constitutes an internal tendency to move towards greater complexity and harmony. These emerging ideas from the person-centered literature are exciting, but they rest on the fundamental hypothesis that when people are in relation with themselves in an authentic way, they will also be in a state harmonious with nature.

The aim of this research study was to contribute a new perspective to the literature around authenticity and the understanding of it in a wider ecological context. Based on Rogers' (1980, p. 351) description of the authentic person as ecologically minded, it was the aim of this research study to empirically examine whether more authentic individuals would be more connected to nature, have a greater love and care for nature, and be more ecologically sensitive.

2. Method

The fundamental question driving this study was whether as people move towards greater congruence, if they also become more ecologically sensitive. We recognised that this is a research question in the tradition of logical positivism. As such, it was deemed that the most appropriate way to test the hypothesis that greater congruence was associated with greater ecological sensitivity was to conduct a quantitative statistical study, in order to observe whether this assertion of an association derived from person-centred theory was supported by evidence. This was possible given the availability of existing psychometric instruments with which to assess the degree to which individuals are ecologically sensitive, on the one hand, and authentic, on the other; thus allowing us to observe the extent to which scores on these instruments are covariant.

2.1. Participants

The study involved 238 participants (177 females, 58 males, 2 participants identified as other, and 1 participant responded ‘refuse to answer’), ranging in age from 18 to 75 years (Range = 18-75, Mean = 43.2, SD = 14.6). Participants were asked to fill out a brief 10-12 minutes online survey that was made accessible via the Bristol Online Survey Service (BOSS). To distribute the survey and recruit participants, various social media platforms such as Twitter and Facebook were used by the authors. Only people in the United Kingdom (UK) were asked to participate in the survey. The survey consisted of five self-report measures.

2.2. Measures

Authenticity Scale (AS: Wood, Linley, Maltby, Baliousis & Joseph, 2008). The AS was developed specifically to be a measure of what Rogers’ (1959) referred to as congruence. Congruence, as Barrett-Lennard (1998), one of the foremost proponents of Rogers’ theoretical system wrote:

‘...implies consistency between the three levels of (a) a person’s primary experience, (b) their symbolized awareness, and (c) their outward behaviour and communication. The concept is theoretically centred on consistency between the first two of these levels, this being considered the main determining condition for congruence between awareness and communication’ (p. 82).

Based on Barrett-Lennard’s definition, items were developed by the authors of the AS. The AS consists of 12 items which can be scored to produce three 4-item subscales: authentic living (AL), (e.g., ‘I think it is better to be yourself, than to be popular’); self-alienation (SA), (e.g., ‘I don’t know how I really feel inside’); and acceptance of external influence (AEI), (e.g., ‘I am strongly influenced by the opinions of others’). Each item is rated on a 7-point Likert scale of

1 (Does not describe me at all) to 7 (Describes me very well). Higher scores on SA and AEI indicate lower levels of authenticity, and higher scores on AL indicates greater authenticity. In this study we only used the total score which is calculated by reverse scoring the 8 items for self-alienation and accepting external influence and then summing all 12 items. Scores on the total AS have a possible range from 12 to 84, with higher scores indicating greater authenticity.

The *Connectedness to Nature Scale* (CNS: Mayer & Frantz, 2004). The CNS is a 14-item self-report scale that measures the level of experienced connectedness to nature. The scale was developed as an extension of the Inclusion of Nature in Self Scale (INS: Schultz, 2002). Each participant rates their responses to each item (e.g., “I think of the natural world as a community to which I belong”) on a 7-point Likert scale, score range from 1 (Strongly disagree) to 7 (Strongly agree). Scores on the CNS have a possible range from 14 to 98, with higher scores on the scale indicating greater connectedness to nature.

The *Love and Care for Nature Scale* (LCN: Perkins, 2010). The LCN scale is a 15 item self-report scale aimed at measuring the level of emotional connection of the participants towards nature. This scale is empirically and theoretically related to the CNS (Mayer & Frantz, 2002). In comparison to the CNS, the LCN claims to measure the emotional, rather the cognitive connectedness to nature (Perrin & Benassi, 2009). Each participant rates their responses to each item (e.g., “I often feel a strong sense of care towards the natural environment”) on a 5-point Likert scale, score range from 1 (Strongly disagree) to 5 (Strongly agree). Scores on the LCN have a possible range from 15 to 75, with higher scores on the scale indicating more love and care for nature.

The *Ethically Minded Consumer Behaviour* scale (EMCB: Sudbury-Riley & Kohlbacher, 2015). The EMCB scale, also referred to as ‘Ecologically Minded Consumer Behaviour Scale’, is a 10-item self-report scale aimed at measuring the participants’ ecologically sensitive behaviour

(e.g. eco-friendly and ethical consumer choices). The EMCB incorporates both environmental and social issues, hence embraces the totality of the ecological context in which individuals find themselves in. Each participant rates their responses to each item (e.g., “When there is a choice, I always choose the product that contributes the least amount of environmental damage”) on a 5-point Likert scale ranging from 1 (Never true) to 5 (Always true). Scores on the EMCB have a possible range from 10 to 50, with higher scores on the scale indicating more ethically minded consumer behaviour.

The *Brief Social Desirability Scale* (SDRS-5; Haghghat, 2007). The SDRS-5 is a five-item self-report scale that measures the participants’ inclination to answer in a socially favourable manner that does not accurately represent their actual behaviour and attitudes (Edwards, 1957; Randall & Fernandes, 1991). Each participant rates their responses to each item (e.g., “No matter who I’m talking to, I’m always a good listener”) on a 5-point Likert scale, ranging from 1 (Definitely true) to 5 (Definitely false), but for scoring purposes only extreme responses are counted such that each item is coded as 0 or 1 and scores on the total SDRS-5 have a possible range from 0 to 5, with higher scores on the scale indicating more socially desirable responding.

3. Results

Table 1 presents the descriptive statistics for all four measures used in the study, their bivariate correlations, and their correlations with the effects of social desirability partialled out. The mean score for the AS was almost identical to other similar population-based surveys, and represents a moderate degree of psychological functioning, as compared to a clinical sample which typically would score lower at around 50 on the AS (i.e., Bayliss-Conway, Price, Murphy, & Joseph, 2020). Similarly, scores on the CNS, LCN and the EMCB were essentially the same as those

found in previous population-based surveys (i.e., CNS Mean = 68, Perkins, 2010; LCN Mean = 80, Perkins, 2010; EMCB Mean = 32, Sudbury-Riley & Kohlbacher, 2015).

It was found that higher scores on the AS were statistically associated with higher scores on the CNS, LCN, and EMCB, with 11%, 6%, and 7% of shared variance, respectively.

Statistically significant associations were found between CNS, LCN, and EMCB confirming the findings of previous research (Mayer & Frantz, 2004; Perkins, 2011; Schultz, 2002). It is possible, however, that our results are a function of social desirability effects as all of our self-report measures assess behaviours and attitudes that are socially desirable. As a result, we also tested for correlations, with scores on the SDRS-5 (Mean = 1.04, SD = 1.17) partialled out. Our results show that the correlation coefficients between the AS and the ecological sensitivity measures remain largely unchanged (see Table 1).

-insert Tables 1 and 2 about here-

When these data were further analysed by gender, also controlling for social desirability, we found that the results between male and female participants remained essentially the same (see Table 2). However, the results showed a difference in the association between the EMCB and the AS for men and women. While a statistically significant association was found between these two variables for women there was no statistically significant association for men. While it was noted that the sample size was smaller for men which reduced the power of this analysis to detect association, the strength of association is actually weaker – a finding consistent with the theoretical body around ecofeminism and its claim of a stronger relationship between women and nature due to a perceived shared oppression of women and nature in a majorly patriarchal society (Mellor, 1992).

4. Discussion

The aim of this research was to empirically validate Rogers' hypothesis that the authentic person would be more ecologically minded. As predicted, the findings showed statistically significant positive associations between authenticity and connectedness to nature, love and care for nature, and ethically minded consumer behaviour. These initial and exploratory results support the growing, contemporary theoretical discussion on an 'eco-person-centered psychology'.

However, there are some limitations to the present study. First, it was a cross-sectional study which limits our ability to infer causality; but having found some initial support for an association, prospective research is now clearly warranted. Longitudinal studies to test how authenticity influences, and is influenced, by ecological sensitivity are needed.

Second, a possible limitation is our use of an online recruitment method via social media. This may have restricted diversity in our respondents. We did obtain a range of ages but otherwise our collection of demographic information was minimal. We cannot be certain of the representativeness of our sample in terms of socio-economic factors. Also, while we asked for participants from the UK it is possible that we had responses from elsewhere that we are unaware of. As such, further research seeking to replicate our findings might use other sampling techniques and ask for a wider range of demographic variables.

Third, we relied exclusively on self-report measures. While appreciating the benefits of the quantitative research method, we recognise the limitations of any research study that is exclusively based on self-report measures. It may also be that our choice of measures influenced the results. It was down to the researchers' interpretation to choose adequate measures that would do justice to Rogers' theoretical conceptualisation of an authentic, ecologically minded person. Furthermore, all constructs used in this study are complex. Three different measures were used to assess ecological sensitivity from various perspectives. In comparison, only one scale was used to

assess authenticity. Authenticity is however a complex construct and the validity of such self-report measures, while widely used, may be limited. Indeed, we think that this is one possible reason for the relatively low percentage of shared variance found between authenticity and the measures of ecological sensitivity. Ideally, other more objective and behavioural measures would be used. It may also be possible to collect third party ratings of participants' behaviours as a way to compliment self-report data.

We were only able to explain a relatively low percentage of shared variance, and while that might be due in part to some measurement issues, we also think it is possible that we did not take into account the extent to which people have the resources to act on their ecological sensitivity. It is possible that some people high on authenticity are living in a context in which they are not able to fully engage with environmental and ecological issues in the way they would otherwise choose to. For example, they may be living in urban environments with little access to outdoor spaces, have limited financial resources to afford ecologically friendly products, or access to recycling stations. Hence, in further studies it is important to be able to control for external situational constraints.

Despite these limitations, this is the first study to test for an association between authenticity and ecological sensitivity, and as such we think it offers a novel perspective on applications of person-centred theory, that promise to be of much real-world significance. Up until now, ecopsychological critique has mainly been raised by environmentalists and ecologists. It is time for psychologists to become more involved in acting to help prevent the present planetary crisis (Neville, 2013). Due to the fact that this planetary emergency is due to human behaviour, it is understandable that the psychological discipline has been criticised for not showing more dedication and interest in understanding the human-nature relationship (Kidner, 2001). Rogers' person-centered ideas offer a way to respond psychologically to the planetary

crisis.

Although Rogers' sustainable ideas have been around for more than half a decade, they have not received as much attention as they warrant. Consequently, today the person-centered approach is widely understood as a psychotherapy that is (almost exclusively) dedicated to the understanding of the suffering self in the human-human relationship. This widespread interpretation dismisses the implication of the positive psychological and ecological dimension in Rogers' work and with it the proposed human potential to be ecologically sensitive. Therefore, it is our interest, among other contemporary person-centered practitioners and researchers, to acknowledge Rogers' theoretical and practical vision of an 'ecological self'; his organismic theory and description of the 'person of tomorrow'. Ultimately, it is this organismic, holistic approach to life – as promoted in Rogers' work that perceives humans as to be tightly interconnected and embedded within the organismic web of life – that carries the potential for a more sustainable and symbiotic human-nature relationship.

If further research was to demonstrate authenticity as a pre-condition for ecological sensitivity, then the person-centered theory and practice could be used to promote an alternative 'inward approach' to increased sustainability. This, for example, could shape the process to achieve the 17 Sustainable Development Goals (SDGs) of the 2030 Agenda for Sustainable Development of the United Nations. If longitudinal research was to demonstrate authenticity as a stimulus for increased ecological sensitivity, then Rogers' therapeutic core conditions (1957a) could be utilised to facilitate not only authenticity but also ecological connectedness and eco-friendly behaviour. Hence, the person-centered approach could take a catalyst role for positive change in the planetary crisis. Indeed, the implications of this empirical study for the person-centered and positive psychological theory and research are vast – when taken seriously.

Finally, the recognition of an 'eco-person-centered approach' could transform the way

sustainability, harmonious co-existing and ecological sensitivity are promoted beyond external incentives, forceful policies and legal punitive systems. In becoming aware of an existing association between authenticity and ecologically sensitive behaviour, the person-centered field of application broadens into a wider landscape that embeds various different disciplines and activities outside of the therapeutic setting. For example, upstream ‘eco-person-centered’ interventions could take place in education, politics, organisational psychology and leadership trainings (also see Rogers, 1977). Developing society in such a way as to nurture each person’s authenticity promises to be for the collective good as much as for the individual’s benefit. Hereby, the claim for a broader integration of an ‘eco-person-centered approach’ into the public and private sectors is in line with the ‘grand vision’ of positive psychology and its quest to think “differently about what we already do” (Joseph, 2015b, p. 824). Ancient, tribal cultures that resemble Rogers’ concept of the ecologically sensitive ‘person of tomorrow’ could serve as practical raw models and source of inspiration (see: Norberg-Hodge, 1991).

This vision is related to the widely discussed and accepted assumption of social justice and environmental sustainability to be inextricably linked and mutually interdependent (Agyeman, Bullard & Evans, 2003; Wilkinson & Pickett, 2009). However, despite a growing body of literature on the relationship between social justice and environmental sustainability, only little empirical research has been conducted that would confirm or deny this proposition (Dobson, 2003). Hence, in order to build up a cohesive body on the human-nature relationship and the link between social well-being and ecological health, a more consistent empirical body with collaborative contributions from different disciplines is needed.

Finally, in this study, Rogers’ hypothesis of the authentic person to also be ecologically minded was found to be supported. The main issue that can be taken forward from here is the understanding of the person-centered approach to imply an ecopsychology. This recognition

challenges the traditional understanding of the approach to be mainly designed to understand the human self and inter-human relationships. Psychologists and person-centered practitioners are asked to expand their understanding of person-centered theory and to become aware of their broader range of responsibilities that include Rogers' vision of an ecologically minded 'person of tomorrow'.

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Table 1. Descriptive statistics, Bivariate Correlations and Partial Correlations (with social desirability partialled out)

| | Mean | SD | α | AS | CNS | LCN | EMCB |
|--|-------|-------|----------|--------|--------|--------|--------|
| Authenticity Scale (AS) | 63.71 | 11.33 | 0.85 | | .324** | .241** | .255** |
| Connectedness to Nature Scale (CNS) | 68.28 | 14.97 | 0.88 | .316** | | .817** | .525** |
| Love and Care for Nature Scale (LCN) | 81.19 | 19.58 | 0.97 | .232** | .815** | | .487** |
| Ethically Minded Consumer Behaviour (EMCB) | 35.08 | 8.15 | 0.78 | .242** | .519** | .479** | |

NB. Bivariate correlations shown above the diagonal and partial correlations shown below the diagonal

** Correlation is significant at 0.01 level (1-tailed)

* Correlation is significant at 0.05 level (1-tailed)

Tables 2. Correlation Matrix by gender (with social desirability partialled out)

| | AS | CNS | LCN | EMCB |
|--|--------|--------|--------|--------|
| Authenticity Scale (AS) | | .352** | .254* | .146 |
| Connectedness to Nature Scale (CNS) | .355** | | .834** | .498** |
| Love and Care for Nature Scale (LCN) | .263** | .812** | | .550** |
| Ethically Minded Consumer Behaviour (EMCB) | .301** | .510** | .443** | |

NB. Correlations for males shown above the diagonal and for females below the diagonal

** Correlation is significant at 0.01 level (1-tailed)

* Correlation is significant at 0.05 level (1-tailed)