



A relational model of perceived restorativeness: Intertwined effects of obligations, familiarity, security and parental supervision



Silvia Collado ^{a,*}, Henk Staats ^b, Miguel A. Sorrel ^c

^a Department of Psychology and Sociology, University of Zaragoza, Teruel, Spain

^b Centre for Energy and Environmental Research, Department of Social and Organizational Psychology, Leiden University, Leiden, The Netherlands

^c Department of Social Psychology and Methodology, Autonomous University of Madrid, Madrid, Spain

ARTICLE INFO

Article history:

Received 30 May 2016

Received in revised form

18 August 2016

Accepted 24 August 2016

Available online 26 August 2016

Keywords:

Constrained restoration

Behaviour setting theory

Children

Agriculture

Restorative environment

ABSTRACT

Research on psychological restoration has mainly focused on how exposure to certain physical characteristics of the environment leads to restorative benefits. However, restorative processes are inherently relational, and more attention should be paid to qualities of human-environment transactions in restorative experiences. We developed and tested a model to describe the relation between the individual and the restorative environment, partially based on behaviour setting theory. The model employs the concepts of spatial and leadership interdependence to explain how familiarity, sense of security and company constrain perceived restorativeness of children ($N = 362$, $M_{age} = 10$, 50.1% boys) living in agricultural communities.

A multiple mediator regression model showed that being involved in work-related activities in agricultural areas constrained children's perceived restorativeness. This effect was mediated by children's familiarity with agricultural areas, perceived security and their preference for not being under family surveillance.

© 2016 Elsevier Ltd. All rights reserved.

1. Introduction

Extant empirical evidence shows that exposure to relatively natural environments provide physical and psychological benefits to both adults (e.g., Gatersleben & Andrews, 2013; Staats, Jahncke, Herzog, & Hartig, 2016) and children (Bagot, Allen, & Toukhsati, 2015; Berto, Pasini, & Barbiero, 2015; Kelz, Evans, & Röderer, 2015). Adults are happier in nature (Kinnafick & Thøgersen-Ntoumani, 2014; MacKerron & Mourato, 2013), and feeling connected to nature is associated with increased happiness too (Capaldi, Dopko, & Zelenski, 2014). Moreover, contemplating pictures of nature can be awe-evoking (Joye & Bolderdijk, 2015), and nature exposure appears to improve pro-social behaviours (Zhang, Piff, Iyer, Koleva, & Keltner, 2014) and creativity (Plambech & Konijnendijk van den Bosch, 2015). Contact with nature has also been linked to a better capacity for self-regulation in children (Faber Taylor, Kuo, & Sullivan, 2002), improved motor skills (Fjørtoft, 2004) and more favorable environmental attitudes and

behaviors (Cheng & Monroe, 2012; Collado, Staats, & Corraliza, 2013), amongst others.

Psychological restoration has been described as an important pathway through which exposure to nature enhances people's wellbeing and health. Based on either attention restoration theory (ART; Kaplan & Kaplan, 1989), stress reduction theory (SRT; Ulrich, 1983) or a combination of both, researchers have consistently demonstrated that time spent in natural settings is beneficial for people's health (Hartig, Mitchell, De Vries, & Frumkin, 2014). Restoration can be defined as the process of recovering the physical and psychological resources that have been diminished in meeting the demands of everyday's life (cf. Hartig, 2004). A restorative environment not only imposes relatively few demands on depleted resources, but also has positive features that enable a faster, more complete renewal of depleted resources. In this study we analyze restoration according to Kaplan and Kaplan's (1989) approach. The focal point of ART is people's capacity to direct attention and its depletion through dealing with daily burdens, leading to *attentional fatigue*. ART proposes four main qualities that make an environment restorative: (1) it catches our involuntary attention, allowing directed attention to recover (*fascination*), (2) the person is physically and/or psychologically away from the source of mental fatigue

* Corresponding author.

E-mail addresses: scollado@unizar.es (S. Collado), staats@fsw.leidenuniv.nl (H. Staats), miguel.sorrel@uam.es (M.A. Sorrel).

(*being away*), (3) the environment is compatible with the person's needs (*compatibility*) and (4) the environment is coherently ordered and invites exploration (*extent*).

The empirical evidence accumulated to date in research on restoration shows that the presence of vegetation in work offices (Kweon, Ulrich, Walker, & Tassinary, 2008), schools (Li & Sullivan, 2016) and hospitals (Park & Mattson, 2008), among others, makes these places more restorative compared to similar settings without natural elements. The restorative potential of nature experience is also supported in relatively large scale natural environments. For instance, Roe and Aspinall (2011) found that a walk in a natural rural area was more restorative than an urban walk, especially for people with poor mental health (e.g. suffering from stress or depression). Similarly, walks through parks increased positive affect and decreased negative affect, although the effect was stronger for tended than for wild parks (Martens, Gutscher, & Bauer, 2011). Differences about the possible restorative effects of different types of natural settings have also been studied. White, Pahl, Ashbullby, Herbert and Depledge's (2013) findings show that coastal environments were associated with more feelings of restoration than other natural areas such as the countryside and open spaces.

The general trend emerging from these studies is to equate the presence of certain physical characteristics in a setting (mainly green elements) to its restorative potential. Thus, natural places have generally been assumed to be intrinsically restorative, and researchers do not usually contemplate the personal and contextual variables (e.g., previous visits or the social context of the experience of a certain environment) that might act as barriers or facilitators of the restorative process.

The aim of the present study is to advance the understanding of the restorative process by extending a limited series of studies on how person-environment transactions constrain or foster restoration (Hartig, Kylin, & Johansson, 2007; Von Lindern, 2015; Von Lindern, Bauer, Frick, Hunziker, & Hartig, 2013). More precisely, our intent is to further specify the results of a previous study on the constraining effect that being involved in agricultural activities (such as harvesting) has on the restorative quality children perceive in a rarely studied kind of natural environments, i.e., agricultural environments (Collado, Staats, & Sorrel, 2016). In the following paragraphs we review the empirical literature on the physical and psychological benefits children gain through nature exposure and on children's perceptions of the restorative value of environments. We then proceed to describing some of the facilitators and barriers for restoration and set out our objectives and hypotheses.

1.1. Nature exposure and children's restoration

As a general trend, natural environments and urban environments containing natural elements are experienced and perceived as more restorative than built ones (Berto, 2014; Collado, Staats, Corraliza, & Hartig, 2016; Staats, 2012). This also applies to children. For instance, access to nearby nature in the home and its surroundings buffers the negative effects of exposure to stressful events (Wells & Evans, 2003) and increases children's self-discipline (Faber Taylor et al., 2002). More recently, Chawla, Keena, Pevec, and Stanley (2014) found, based on ethnographic observations and interviews, that the presence of nature in school playgrounds helps children and adolescents escape from stress, focus and build competence. Similarly, the findings of a longitudinal, quasi-experimental study demonstrated that introducing natural elements in the school playground improves children's restoration (registered as blood pressure and psychological well-being) compared to children with no nature present in their schools' playgrounds (Kelz et al., 2015). Exposure to nature also

ameliorates the symptoms of ADD/ADHD children and adolescents (Faber Taylor & Kuo, 2011; Van den Berg & Van den Berg, 2011).

Although the study of children's restorative experiences is still in its infancy, the pattern emerging from the literature resembles the results obtained with adults in two ways. First, nature exposure seems to be restorative for children and they appear to acknowledge this. Second, the research tendency is also to study restoration with a focus on the environment's physical characteristics, leaving aside the role played by the relational dynamics between the person and the environment in the restorative process. Even though natural environments tend to boost restoration more than non-natural ones, it is not so clear what aspects of the human-setting transactions facilitate or constrain people's restorative experiences. The literature on the personal and situational characteristics of restoration as it is beginning to develop (Bagot et al., 2015; Hartig, Kylin, & Johansson, 2007; Von Lindern, 2015; Von Lindern et al., 2013) is briefly reviewed in the following section.

1.2. Contextual barriers and facilitators of restorative experiences

Only a limited number of researchers have evaluated people's restorative experiences while extending beyond the physical qualities of the environment to consider the person's relationship with the environment. These few studies show that the experience of restoration depends not only on the physical presence of certain elements, but also on characteristics of person-environment transactions such as familiarity with the setting (Kaplan, Bardwell, & Slakter, 1993; Hernandez, Carmen, Berto, & Peron, 2001), sense of safety (Herzog & Rector, 2009; Staats & Hartig, 2004), social context (Bagot et al., 2015; Staats & Hartig, 2004) and the possibility of disengaging from social and/or cognitive demands (Hartig, Catalano, & Ong, 2007; Von Lindern, 2015). For example, considering *safety*, Kaplan (2001) argues that perceiving danger in a place would lead to the use of directed attention in order to deal with the dangerous situation. Thus, the place is unlikely to allow directed attention to rest and, concomitantly, unlikely to be restorative. Following this line of thought, safety can be considered a prerequisite for restoration (Ulrich, 1983) and, according to Herzog and Rector's (2009) findings, when safety is not ensured, the perceived likelihood of restoration is constrained. Researchers have suggested two main ways of ensuring a sense of safety in a place. First, a person could be familiarized with the environment which might, in turn, foster restoration by supporting people's feelings of competence with the setting, allowing them not to spend cognitive resources worrying about uncertainties (Bingley, 2013; Warr, 1990). Findings from previous studies show that a visit to a museum is more restorative for those who are familiarized with this specific type of setting (Kaplan et al., 1993), and people describe more profound restorative experiences from a retreat in a monastery when familiarized with the activity and the setting (Ouellette, Kaplan, & Kaplan, 2005). *Familiarity* might, however, play a double role in the restorative process, as being familiarized with an environment might also negatively affect the restorative qualities described by Kaplan and Kaplan (1989). Being familiarized with a specific setting might constrain people's sense of being away, diminishing the possibilities of restoration (Von Lindern, 2015; Von Lindern et al., 2013).

Second, in order to feel safe in an environment, a person does not necessarily need to be highly familiarized with the setting. The experience of safety can also be obtained by being accompanied by significant others, such as friends and family members. Staats and Hartig (2004) found that company can facilitate restoration, with adults preferring to have the company of a close one for a walk in a forest when this activity is not perceived as safe. However, in line with ART's propositions, when safety is ensured, participants

Download English Version:

<https://daneshyari.com/en/article/7245399>

Download Persian Version:

<https://daneshyari.com/article/7245399>

[Daneshyari.com](https://daneshyari.com)