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**OD PRACTITIONER VALUES AND THE IMPACT  
ON ENVIRONMENTAL BEHAVIOR**

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**A Research Project  
Presented to the Faculty of  
The George L. Graziadio  
School of Business and Management  
Pepperdine University**

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**In Partial Fulfillment of  
the Requirements for the Degree  
Master of Science  
in  
Organization Development**

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**by  
Arielle Threlkeld-Sullivan**

**August 2016**

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This research project, completed by

ARIELLE THRELKELD-SULLIVAN

under the guidance of the Faculty Committee and approved by its members, has been submitted to and accepted by the faculty of The George L. Graziadio School of Business and Management in partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE  
IN ORGANIZATION DEVELOPMENT

Date: **7/14/16**

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## **Abstract**

Organization Development has the potential to play an active role in supporting environmental change initiatives. This study explores the values of a group of OD practitioners who are working with environmental concerns as a consideration in their practice. Nine qualitative interviews were conducted to explore values and surface factors that have influenced those values. The Schwartz Value Questionnaire (SVQ) and the Nature Relatedness Scale were administered to better understand practitioner values. Elements of self-transcendent values were revealed amongst practitioners through both quantitative and qualitative methods. In addition, these practitioners scored higher than the average population on Nature Relatedness. This study supported research, which linked an individual's self-transcendent values to feelings of environmental concern. This study also supported research by Schein (2014), which showed that certain experiences shaped ecological worldviews of sustainability leaders over their lifespan. OD has an opportunity to enable more of its students and practitioners to adopt this ecological worldview and gravitate towards leveraging OD expertise in the environmental sustainability space.

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## **Chapter 1**

### **Introduction**

This chapter sets the foundation for why there is a need for the field of Organization Development to evolve to focus on larger scale environmental issues. It also explains the intended outcomes of the research study.

The purpose and focus of Organization Development (OD) has been evolving since its inception. From the early days of T-groups and sensitivity training to present days of LEAN Change Management, the field has adapted and flexed to its environment.

Our future as a planet depends on our environmental health yet a consensus of scientists (Pawlik, 1991; Ryland, 2000; Stern, 1992; Stern & Oskamp, 1987) have validated that we are slowly teetering towards self-destruction. How can the field of OD become a more active force in making a positive impact to the natural environment?

In this study, OD practitioner values are explored amongst a group of practitioners who expressed concern about the natural environment and are working in some capacity related to environmental issues. The goal of this study is to better understand the values and surface factors that have influenced these individuals. Through this, the field of OD will be more informed on how to leverage OD to create positive environmental change.

The deconstruction of the natural world is impacting our forests, land, water, and atmosphere in an endangering way. Species are becoming extinct, rainforests are being destroyed, and the protective layer of the ozone is deteriorating. Some climatologists believe that we are already past the point of being able to turn the damage around (Bourne, 2008). The unceasing and accelerating overuse and devastation of natural

resources, such as air, forest, and water is a serious threat to human environments (Pawlik, 1991; Stern, 1992; Stern & Oskamp, 1987).

According to the U.S. Environmental Protection Agency (2014), the earth's temperature has risen by 1.4% over the past century and is estimated to increase another 2-11.5% over the next hundred years. A slight increase in temperature has the potential to create dangerous shifts in climate and weather. Climate change negatively impacts human well-being and its supportive ecosystems (Bourne, 2008). Furthermore, the ocean's acidity has risen by a quarter since pre-industrial times due to rising carbon emissions. This impacts future sources of food and the 400 million people that depend on the ocean for food (Seeker, 2014).

The most alarming aspect of this upsetting current state is while many are aware of these challenges, little is being done. Providing more intellectual knowledge and more information on energy use, recycling programs, and consumption has not caused enough action to make noticeable improvements to the earth's environmental deterioration. A rational approach to solving the environmental crisis is not sufficient. A 1994 Finger study of the Swiss showed that more information does not lead to action (Ryland, 2000). The awareness is there yet the action is not.

Given this unsettling research, why is the field of OD not saturated with work to promote positive environmental change? According to 2013 survey on OD practitioner values, making the world a better place was at the top of the list but protecting the environment was not (Schull, Church, & Burke, 2014). The focus of OD today does not address the harsh reality of the environment's decline. Christopher Worley, a leading OD

practitioner, has also noticed this gap and has connected it to the field's declining sense of purpose and focus. He states,

If humans and organizations are a disease and OD lacks purpose, globalization becomes an excuse for economic growth at the expense of our physical ecology. But if humans and organizations are not a disease – if we are smarter than that – and OD regains purpose and focus...then we can be a powerful, formidable, hopeful and influential movement in the future. (C. Worley, Beijing Pepperdine lecture, March 21, 2016)

This leader encourages OD students to take the road less traveled and to use OD practices to influence the world in a positive way. At his 2016 presentation for the Pepperdine MSOD Rho Prime Cohort in Beijing, he repeatedly pointed outside the window indicating the concentration of smog and pollution dwelling over the city. Worley raised the group's awareness of pollution and reminded us that we ourselves have had a role in contributing to it.

Why is this conversation one that is not addressed more regularly among OD practitioners? Why is the field not discussing this opportunity to influence and drive change? At the 2015 Global OD Summit in Portland, there were zero breakout or large group sessions discussing OD's role in preserving the natural environment. This seemed surprising given the conference was held in one of the most environmentally conscious cities in the country. Furthermore, there are few OD focused roles advertised on popular job search engines that emphasize positive, sustainable environmental change.

Mckinsey Global did a 6th annual global survey on corporate sustainability and found that companies are still not doing much to embed sustainability into their internal communications or employee engagement strategies. Given employee engagement is a key goal of Organization Development it appears as though OD does not appear to be a core element in most corporate approaches to environmental sustainability.

In addition, Verdantix published an analysis of nineteen consulting firms and fifteen US customers of the work they were doing on environmental sustainability. Their findings also support the McKinsey study. Verdantix found most of the firms had hired consultants focusing on strategy development and greenhouse gas (GHG) footprints. The report analyzed which consulting firms provided services including clean tech advice, energy efficiency, sustainability product development, and operational analysis. Organization Development was not found among consultants or corporations.

Peter Nicholson is the founder of Foresight Design Initiative, which is a sustainability-focused innovation, firm based in Chicago (Vaccaro, 2012). He stated,

There are a lot of consulting firms advising around environmental sustainability in Chicago. I see a focus on logistics, procurement, energy, and carbon. However, I do not see any consulting firms or companies taking an Organization Development approach. The closest would be companies that have a cross-functional green team that reports to the CEO. (Vaccaro, 2012, para. 5)

Despite this, there are a handful of OD leaders who are passionate about creating positive environmental change through OD. An example of this is David Cooperrider. Cooperrider creates sustainable change through his world-renowned approach, Appreciative Inquiry. He is passionate about using a positively framed mindset and uses a series of positively framed questions to open up new possibilities around problems, including those of the natural environment and sustainability.

Another key OD leader is Chris Laszlo, who is interested in making a normative impact on society, and has been teaching and researching sustainability for business and world benefit since 1999. David Cooperrider, Chris Laszlo and John Ehrenfeld published articles in the Journal of Corporate Citizenship special edition of The Positive Psychology of Sustainable Enterprise (2013). They discuss the impact to sustainability

using a positive mindset and appreciative approach as being beneficial for society and the individual.

Christopher Worley also promotes the impact sustainability can have on organization systems and strategy. If an organization wants to be sustainable, it must address, “modifying its purposes and formulating strategies that focus on economic success, social justice, and ecological health as an integrated set of outcomes” (Worley, 2016, p. 5). In order to do this, Worley and Mohrman argue that the organization will “have to ensure that its various design features are aligned with this intent and with the new capabilities the organization needs to achieve these outcomes” (Worley & Mohrman, 2010, p. 5).

Bauback Yeganeh and Ante Glavas are two additional OD leaders who have introduced the field to the term Green Organization Development. Green Organization Development focuses on organizations who are seeking to change core practices so that they benefit our society and environment while also adding value to the organization (Yeganeh & Glavas, 2008). They share an inspiring message in a 2008 article in the OD Practitioner stating,

We have seen Green OD serve the parallel purpose of reinvigorating the hearts of OD folks and reenergizing their commitment to OD work. This effect is going to increase exponentially in the years to come. We don't know about you, but we do not get particularly excited about work that solely increases profit margins for businesses; the notion of increasing profit margins by helping the society and environment is far more compelling. The world is rapidly changing and as a result so is the field of OD. By developing Green OD we are helping organizations commit to real changes that unite corporate and Earthly flourishing. (Yeganeh & Glavas, 2008, p. 11)

Feyerherm (2008) writes in an article called “Forward to the Past” about responsible progress, ecological sustainability and OD. Ecological sustainability is the

environment's long-term ability to sustain life and contribute to diversity and growth. She cites Lovings, Lovings and Hawken's 1999 view of the benefit of ecological sustainability as being a lynch pin to responsible progress; it suggests that business strategies built around the productive use of natural resources can solve environmental problems at a profit. The idea is very simple: economic growth models from the 1980's to the early 2000's do not support an ever-increasing demand for finite and fundamental natural resources with the decreasing supply of those resources. OD practitioners must be ready to raise this issue in conversations with client systems. Feyerherm writes it may be difficult, and require courage at first, given traditional models of decision making have not included ecological constraints as a fundamental criteria. There are thought leaders who champion positive environmental change and sustainability however there is an opportunity to embed this mindset into the general population of OD practitioners.

This study connects environmentally conscious OD practitioners to a previously defined set of general sociological values (Schwartz Value Theory). Environmentally conscious is defined as having a heightened awareness and concern for the protection of the natural world including land, sea, air, plants, and animals. The definition derives from the two words, environmental and conscious. Environmental, according to the Merriam Webster dictionary, is defined as "concerned with the protection of the natural world of land, sea, air, plants, and animals" (Merriam Webster, June, 2016). Conscious, according to the Merriam Webster dictionary, is defined as "being aware, realizing or noticing something" (Merriam Webster, June, 2016). Those who are environmentally conscious are aware of the current state of the natural environment and have a felt concern for it. This study also explores sustainability's role in Organization Development and unearths

general values and surfaces factors that have influenced this group of OD practitioners.

A better understanding of those who are already embodying this mindset will help inform the field about new opportunities in the positive environmental change and sustainability space. As a result of this study, my hopes are to better understand what the field needs to be intentional if it wants to develop an increasing amount of practitioners who can address large systemic environmental issues.

## Chapter 2

### Organization Development Practitioners

Chapter 2 defines Organization Development Practitioners and explores how values are viewed by the field of OD. The concept of values is further discussed with the Schwartz Theory of Basic Values and Schwartz' Motivational Emphasis of Adjacent Values. Among values are conflicting paradigms, which share opposing worldviews. This includes the Dominant Social Paradigm and the New Environmental Paradigm, which are explained. Lastly, the Nature Relatedness Scale is discussed.

An OD practitioner is an individual who adopts a behavioral science approach to develop or change an organization to improve its effectiveness (Feyerherm & Worley, 2008). They use an action-learning approach to gather data from the environment to better guide choices on how to enhance effectiveness. They reflect on the impact of the choice made and consider it in future behavior. OD practitioners leverage their self-awareness and personal mastery to bring about a shift in the system they are working with. Lastly, they work with a philosophy to transfer knowledge into the system to enable it to manage change in the future

OD practitioners work in public, private, and non-profit sectors in virtually any industry where a human element or need for better effectiveness is present. Key strengths in the field of OD include a systemic orientation, change management, teamwork, leadership development, and values (Wirtenberg, Abrams, & Ott, 2004). The field has always been intentional about its values and has spent years defining and re-defining the values that govern the field. This study focuses on values pertaining to OD practitioners



who are environmentally conscious.

### **The OD Practitioner and Values**

Values play a role in the context of self and in the context of Organization Development. Handsla, Gamble, Juliusson, & Garling restated Rokeach and Swarts's idea that "values are conceptualized as guiding principles important in a person's life" (2007, p. 2). These guiding principles reinforce and shape our worldview. Values produce the forces that drive and restrain because values influence the way we think and feel (Lewin, 1951). Given this, there seems to be a connection among values, perception of self, perception of world and consequent action. Hultman brings great meaning to values by stating,

Values are to people what instincts are to animals. Without the capacity to formulate and act on values, life on the human level would not exist. Within the organization system, values play an executive role in personality and organizational culture, serving those guiding principles for prioritizing and taking action. (Hultman, 2005, p. 40)

According to Gellerman et al. (1990), the Organization Development human systems development community has segmented values into fundamental values, personal/interpersonal values and system values. Fundamental values are defined as "life and the quest for happiness: people respecting, appreciating, and loving the experience of their own and others' being while engaging in the search for and the process of co-creating 'good' life" (Gellerman, 1990, p. 375). Herb Shepard, one of the founders of OD-HSD calls this "loving life." The higher the alignment of system and personal purposes, the greater the amount of energy to serve both purposes. It is also defined as "freedom, responsibility, and self-control: people experiencing their freedom, exercising it responsibly and being in charge of themselves" (Gellerman, 1990, p. 375). By valuing

freedom, we support an individual's empowerment. In the same sense, valuing freedom empowers the system when an individual's purpose is aligned with the system.

Personal and interpersonal values involve human potential and empowerment, where people are healthy and recognize their personal power in realizing their potential individually and collectively.

On the one hand, as human beings become more powerful, more power is available to the system through those human beings and, support the system's empowerment. On the other hand, as the system becomes more powerful, that power can be experienced as increased support by the members of the system for their own empowerment. (Gellerman et al., 1990, p. 135)

Power can be transferred to the system and then back to support individuals and is inherently a positive element when speaking of empowerment and human potential.

Another aspect of these personal and interpersonal values is respect, dignity, integrity, worth, and fundamental rights of individuals and other human systems. Here people appreciate one another and their rights as human beings, including the quest for happiness (Gellerman et al., 1990). Authenticity, congruence, honesty and openness, understanding and acceptance are included in that people being true to themselves, acting consistently with their feelings, and being honest and appropriately open with one another, and understanding and accepting others who do the same. Another piece included in the personal and interpersonal component is flexibility, change, and pro-action. This involves people changing themselves continually for optimal growth and being assertive in that growth.

The other segment of values as defined by OD-HSR is that of the system. This is defined as learning, development, growth, and transformation. Individuals grow collectively and individually to realize their potential. System related values also include

whole-win attitudes, cooperation-collaboration, trust, community and diversity. This is seen as people caring about one another and working together to achieve results that are good for everyone individually and collectively, experiencing the spirit of community and honoring the diversity that exists within a community (Gellerman et al., 1990). System values honors both individual contribution and collective contribution in a mutually supportive way.

Values in the context of Organization Development are inherently humanistic. The field of OD stands for the importance of incorporating values such as empowerment, democracy, human dignity, quality of work life. Continuous learning in the workplace (Janine, Allan, & Burke, 1995). Burke (1998) adds to these with human development, fairness, openness, and choice. OD values focus on the heart of people and highlight the meaning and vibrant life within an organization. According to a 2004 study by Wirtenberg, Abams, and Ott, values were stated to be a defining aspect of OD work. Values are “to be both a core tool and a platform from which both OD practitioners and the organizations they work with achieve results and effective change” (Wirtenberg et al., 2004, p. 471). Values are an inherent element to OD; they drive behavior and support the essence of the work that we do.

Survey data collected on practitioners in the 1990’s, highlighted a divide between a belief in humanistic values and the promotion of bottom line results in OD work (Shull, Church & Burke, 1994). Bill Passmore also restates research by (Bradford & Burke, 2004; Burnes 2009; Church et al., 1994; Greiner & Cummings, 2004; Worley & Feyerherm, 2003; Worren, Ruddle, & Moore, 1999) saying that practitioners faced a dilemma between balancing market driven needs and promoting OD’s core humanistic,

optimistic, and participative values. Although the heart of OD is humanistic, the ultimate driver can be financial. OD practitioners can therefore be forced to balance the paradigm of those two needs. Schein echoes this in his dissertation when he states, “despite a growing awareness of the environmental issues in the private sector, the quarterly earnings report is still the major driver in the corporate world” (2014, p. 1).

According to the 2013 survey on OD values, humanistic values such as empowering employees, creating openness of communication, and promoting ownership and participation remained strong where as a focus on enhancing business effectiveness declined in the last 20 years. This re-emphasizes the solid humanistic values that continue to guide practitioners in many foundational elements of OD work. Shull et al. (2014). Despite concerns raised in the 1960’s and 1990’s, core elements as effectiveness and efficiency have not become more important than the foundational humanistic values that have guided the field from its onset. While the balancing act remains, Schull et al. (2014) might even go so far as to suggest that the debate between humanistic and bottom line values may be over. Shull et al. (2014) stated,

Although an emphasis on the bottom-line was arguably not a core value in OD originally and is even somewhat contradictory with OD’s humanistic roots, it can coexist, and in 50 years’ time has not entirely overshadowed the “missionary” components of the field. (p. 25)

Schwartz initially classified human values in 1992. Later in 1994, Stern and Dietz defined three value orientations, egoistic, social altruistic and biospheric. Egoistic values include care for self; social-altruistic values include care for others; and biospheric values include care for nature and the environment. These value orientations are the underpinnings of the 10 basic values that Schwartz developed. These ten exist cross-culturally and guide perceptions and behavior: universalism, benevolence, conformity,

tradition, security, power, achievement, hedonism, stimulation, and self-direction.

Schwartz Value Theory (SVT) is based upon the following principles around values described in Figure 1 below.



Figure 1. Theoretical model of relations among ten motivational types of value

**Figure 1**

### *Schwartz Value Theory (SVT) and Self-Transcendence*

#### **An Overview of Schwartz Theory of Basic Values (Schwartz 2012)**

- Values are beliefs and when they are activated they become infused with feeling. The presence or the absence of the value impacts the individual's emotional state, for the better or worse.
- Values refer to desirable goals that motivate action. They transcend specific actions and situations, meaning they are relevant anytime and everywhere. This distinguishes values from norms and attitudes that usually refer to specific actions, objects, or situations.
- Values serve as standards or criteria for judgment around what is right or wrong. Values enter awareness when the actions or judgments one is considering have conflicting implications for different values one cherishes.

- Values are also ordered by importance relative to one another. This ranked feature also separates values from norms and attitudes.
- The relative importance of multiple values guides action. Any attitude or behavior typically has implications for more than one value. For example, attending church might express and promote tradition and conformity values at the expense of hedonism and stimulation values. The tradeoff among relevant, competing values guides attitudes and behaviors (Schwartz, 1992, 1996).

To summarize Schwartz' work, values influence action first when they are important to the individual and second when they are likely to be activated in a particular situation. According to Schwartz, values that are more accessible are more likely to be activated. Values that are more important are more accessible; therefore they exert more influence and are activated more often. Activation experiments are particularly important because they illustrate the connection between values and behavior. The circular nature of the continuum means that the closer the values are along the wheel, the more similar their underlying motivations. The more distant, the more opposed their underlying motivations. This means that the ten values relate to one another in a cohesive and systematic manner. The two main dimensions that these values relate to one another are self-transcendence versus self-enhancement and openness to change versus conservation. Self-transcendence and self-enhancement are most opposed to one another, thus they are opposite sides of the wheel. The values that sit adjacent to one another on the wheel are more likely to work together to motivate behavior.

According to Schwartz et al, (2012) in their article, "Basic Individual Values: Sources and Consequences," each value is a fuzzy set that blends gradually into its adjacent

values. Substantial evidence supports dividing the motivational circle into ten values but doing so is actually a scientific convenience. It is sometimes more effective to divide the circle into four broader values or into as many as 19 more narrowly defined values.

Research in over 80 countries, using five different measuring instruments, largely confirms the circular motivational continuum, although it is not always possible to discriminate all of the values.

An example is a 2001 study of the Italian national elections. The center-right coalition supported policies compatible with power and security values such as entrepreneurship, the market economy, security, and family and national values. The center-left coalition supported policies compatible with universalism values such as social welfare, social justice, equality, and tolerance of groups that could disturb the conventional social order. Here, the center-left or universalist view is in conflict with the center-right group that promotes individual power and security values.

Individual power and security are two values that are next to one another on the value wheel therefore they work together to motivate behavior. A center-right individual has the mindset, which includes and promotes both security and individual power.

According to Schwartz (2012), values influence action when they are important to the person and likely to be activated. They also influence action or behavior when people have already considered the tangible or typical applications of those values. Values motivate the pursuit of valued goals and are more likely to be activated when a certain goal is supported. Individuals automatically respond to actions that will serve their highest prioritized values because those values are essentially central to the self-concept.

**Motivational Emphasis of Adjacent Values (Schwartz, 2012)**

- Power and achievement – social superiority and esteem
- Achievement and hedonism – self-centered satisfaction
- Hedonism and stimulation – a desire for affectively pleasant arousal
- Stimulation and self-direction – intrinsic interest in novelty and self-mastery
- Self-direction and universalism – reliance upon one’s own judgment and comfort with the diversity of existence
- Universalism and benevolence – enhancement of others and transcendence of selfish interests
- Benevolence and conformity – normative behavior that promotes close relationships
- Conformity and tradition – subordination of self in favor of socially imposed expectations
- Tradition and security – preserving existing social arrangements that give certainty to life
- Conformity and security – protection of order and harmony in relationships
- Security and power – avoiding or overcoming threats by controlling relationship and resources

The self-transcendence value type consists of two values, universalism and benevolence. Hansla, Gamble, Juliusson, and Garling (2007) restated Schein’s 2001 definition of universalism, which is assumed to “reflect the degree to which a person includes other people and other living things in their notion of self” (p. 336). Its defining goal is: the understanding, appreciation, tolerance, and protection for the welfare of all people and for nature (Schwartz, 2012). Universalism values derive from survival needs



of individuals and groups. Universalism “combines two subtypes of concern—for the welfare of those in the larger society and world and for nature (broadminded, social justice, equality, world at peace, world of beauty, unity with nature, wisdom, protecting the environment)” (Schwartz, 2012, p. 7).

The other self-transcendent value type is benevolence. Schwartz (2012) explains that benevolence values derive from the basic requirement for smooth group functioning and from the organismic need for affiliation. Its defining goal is preserving and enhancing the welfare of those with whom one is in frequent personal contact (Schwartz, 2012). Family and social relations are deemed most critical. Benevolence values emphasize voluntary concern for others’ welfare, which includes qualities such as being helpful, honest, forgiving, responsible, loyal, true to friendship, and expressing mature love.

According to Schwartz (2012), although individuals differ with regard to importance of values, there is a surprising consensus regarding the hierarchical order of values within societies. Benevolence, universalism, and self-direction values rank most important across representative samples. This is because values function to maintain societies and accepted behavior. Values that clash with human nature are unlikely to be deemed important. Values relieve the need for control and elicit desired behaviors, therefore it is important for them to promote positive and supportive group functioning. Benevolence, universalism and self-direction all foster positive group relations and does not threaten social relations.

Hansla et al. (2007) restates that “several studies have demonstrated the positive correlations between universalism and environmental or biospheric concern emphasizing

the intrinsic value of nature” (p. 2). These include Nordlund and Garvill, 2002, 2003; Schultz, 2001; Schultz & Zelezny, 1999; and Stern et al., 1995. Another study showed that people who more strongly endorsed self-transcendence values showed stronger eco-centrism, personal moral norms, and behavioral intentions to protect the environment (Cheung, Luke, & Maio, 2014). Hedlund-de Witt’s 2012 research also shows the reverse, where self-enhancing values (achievement and power) are negatively related to environmental or biosphere concern.

As stated in the Climate Outreach and Information Network, people who hold self-transcendent values (especially pro-environmental values, and high levels of altruism) are more likely to engage in sustainable behavior (Stern, 2000), show higher concern about environmental risks like climate change (Slimak & Dietz, 2006), are more likely to perform specific actions such as recycling (Dunlap et al., 1983) and are more likely to support climate mitigation policies (Nilsson et al., 2004).

Price, Walker, and Boschetti (2014) voice Schult’s definition of environmental concern as,

The collection of beliefs, affect, and behavioral intentions a person holds regarding environmentally related activities or issues. From this perspective, environmental concern is one aspect of environmental attitude and environmental worldview as a person’s belief about humanity’s relationship with nature. (p. 9)

Dessai, Adger, Humle, Turnpenny, Kohler and Warren (2004) believe attitudes toward climate change are informed most by personal experiences, values, and worldviews than by scientific considerations like global climate models, greenhouse gas concentrations, social vulnerability or adaptive capacity. In addition, Dietz et al did a study in 1998, which showed that social structures such as age and gender are poor indicators of environmentalism. Instead, environmentalism is better predicted by social psychological

constructs such as worldview and values.

Price et al. (2014) restate Nodrud and Garvil's 2002 perspective of pro-environmental behavior in that it often involves personal sacrifices for the long-term interest of the collective of the environment. Behaviors with beneficial environmental outcomes can result in increased costs, effort, or inconvenience, whilst simultaneously resulting in reduced status, comfort and opportunities (Steg & Vlek, 2009). This supports Schwartz's value of self-transcendence because the consideration of something much larger overvalues the inconvenience to self.

Dietz et al. (1998) found a link between viewing nature as sacred – either because it is created by God, or because it is spiritual or sacred in itself – and the willingness to sacrifice pro-environmental consumer behavior. Individuals who believed nature is spiritually sacred were more likely to sacrifice than other groups and those who saw nature as sacred in itself were more likely to exhibit pro-environmental consumer behavior. This reveals that viewing nature as sacred or spiritual enables environmental behavior. Furthermore Mayer and McPherson Frantz (2004) found connectedness with nature to have positive correlations with biospheric concerns and negative correlations with egoistic concerns.

### **Value Paradigms: Dominant Social Paradigm and New Environmental Paradigm**

There have been two paradigms that have emerged related to values and the environment. The Dominant Social Paradigm (DSP) starts from the assumption that unlike other species, humans are exempt from ecological constraints. This view sees humans as superior to other species, and permitted to use earth's limited resources unlimitedly. This has been the dominant view until Dunlap and Van Liere's 1978

research, which spawned the New Environmental Paradigm. The NEP was developed in recognition of a changing environmental worldview, which includes humans as being a part, rather than separate from natural systems and the natural world (Dunlap & Van Liere, 1978). The NEP was designed to measure eco-centrism by measuring beliefs regarding nature's balance, limits to growth, and human superiority over nature. It also shares features with the egalitarian cultural bias about the environment, which views physical nature as fragile and interconnected, human nature as pro-social and altruistic but corrupted by social institutions (Price et al., 2014).

Another tool that supports the NEP view is Nisbet's Nature Relatedness (NR) Scale. The NR scale assesses the affective, cognitive, and experiential aspects of individual's connection to nature. Individuals who scored higher in NR reported more environmental concern and endorsement of pro-environmental attitudes as well as more self-reported environmental behavior. In addition, higher levels of NR were predictive of ecological perspective, as well as strong views about the seriousness of ecological problems and human treatment of the environment (Nisbet et al., 2009). Having a sense of Nature Relatedness is also a better predictor of involvement in environmental groups, sustainable consumption, and identification as an environmentalist. Nisbet's (2009) study also stated that those who have Nature Relatedness also have a biospheric orientation, which is a self-concept that includes the natural world. Having this orientation provides a motivational force toward nature protection and preservation.

Schein (2014) explores the deeper psychological motivations and behavior of sustainability leaders. Schein was interested in exploring the individual motivations of corporate sustainability leaders. His study focused on ecological worldview and post-

conventional action logics of global sustainability. He defined ecological worldview as “a belief that human beings are dependent on and literally embedded in the Earth's ecosystem” (Schein, 2014, p. 24). This is in contrast to an anthropocentric worldview, which sees human beings as being at the center of the universe and the most significant species on earth. This worldview assumes all world experiences should be interpreted in terms of human values and perspectives. The ecological worldview and Nisbet's NEP both have biospheric value orientations, in that they hold a care for the natural environment. In addition, the anthropocentric worldview and the DSP have an egoistic value orientation of caring for self.

The other element of worldview that Schein explores is action logics, which is the frame through which people translate their thoughts, feelings, and perceptions into actions. His review of the literature showed that action logics may be conventional and less complex or post-conventional and more complex. It is the leaders with post-conventional action logics that have enhanced capacities to transform organizations. His study dives deeper into how ecological worldviews and action logics allow us to understand deeper psychological dimensions of sustainability leadership.

Schein's first major theme concerned experiences that shaped ecological worldviews over one's lifespan. These included family of origin and early childhood experiences in nature; environmental education, teachers, and mentors; seeing poverty and environmental degradation in developing countries; perceiving capitalism as a vehicle for environmental activism; and a sense of spirituality and service. The second broad theme focused on expressions of ecocentric worldviews. Within this theme, Schein

found participants had an awareness of ecological embeddedness, an awareness of the fragility of planetary ecosystems, and a belief in the intrinsic value of nature.

This is a key study because it mirrors the approach of this research study and speaks to the importance of an ecological embeddedness in the shaping of values. It also speaks to a developmental perspective of values, including how they evolve throughout our lifetime.

### **Summary**

Research from the literature supports self-transcendent values as being linked to environmental concern. Environmental concern supports an ecocentric worldview and a biospheric orientation in that both revolve around the well-being of the planet. The New Environmental Paradigm worldview also supports this perspective because human beings are viewed as being embedded in natural systems. Lastly, having a high level of Nature Relatedness supports the intrinsic value of nature that is found among those who value self-transcendence and environmental concern. These value orientations and paradigms are mutually supportive of one another in the health and preservation of the earth as a whole.

Schein's research also supports the same line of thinking that underscores the relative importance of the earth and the role of humans. His research on sustainability leaders showed that those who addressed environmental sustainability also had this ecological worldview. Values and worldviews create this sense of environmental concern, which leads to environmental behavior.

There has been extensive research done on values in OD and in social psychology although there exists an opportunity for further exploration given the field of OD has the

potential to make a lasting and meaningful impact. Leaders such as Chris Worley and David Cooperrider are well aware of OD's role in the sustainability effort. Many OD thought leaders recognize this vision, yet it is still not widely promoted amongst the masses. This study will further explore the bright spots of where OD practitioners are already leveraging their values to impact positive environmental change and sustainability. The data will be used in the future development of the field as well as in the cultivation of aspiring OD practitioners.

## **Chapter 3**

### **Research Study**

The purpose of this study is to better understand the values that guide behavior amongst environmentally conscious OD practitioners. The process of data collection is described and the interview questions are shared. In addition, methods of data analysis and the steps to ensure IRB approval are addressed.

#### **Data Gathering Approach and Sampling Strategy**

A mixed methods study was leveraged to assess a sample of the OD population. The aim was to interview a sample of the OD population who specifically are passionate about the environment and/or are working in roles close to environmental issues. To qualify as an OD practitioner, they had to be already be working to create positive change in their organizations. It was not necessary for the individual to have a formal title of Organization Effectiveness or Organization Development, rather that they identify as change agents, working with a systems perspective to engage and create positive change for people and the natural environment.

Practitioners were found through the network of the OD community. This included attending the 2016 Global Organization Development Network Conference. OD conferences are the epicenters of convening practitioners. Furthermore, the 2016 Global ODN Conference was held in Portland, a city known for its environmental consciousness.

Personal contacts helped to identify additional qualified participants. Snowball sampling allowed the identification of additional contacts to reach out to for the study. Those additional contacts then bridged to a new set of contacts, and so on. Preliminary conversations allowed for the discussion of a few screening questions, which confirmed



whether or not the participant was qualified for the study. Interviews were conducted in tandem while identifying additional qualifying candidates in order to stay true to the timeline of the study.

The screening questions were:

1. What is the focus of your role today?
2. Is the environment important to you? Why?
3. What do you strive towards in the work that you do?

### **Data Collection**

Two quantitative assessments were used in this study – the Schwartz Personal Values Questionnaire and the Nature Relatedness Scale (see Appendices A and B). The Schwartz Personal Values Questionnaire helped to better understand the nature of self-transcendence vs. self-enhancement values among interview candidates. In addition, the Nature Relatedness Scale assessment helped better understand the value and role of nature for each participant. The purpose of both quantitative assessments was to better understand the values held by this group of OD practitioners.

The main concentration of data lies within the qualitative interviews. The interviews allowed deeper connection and understanding of each participant's personal story. Questions explored participants' role in their current work, their present-day values as well as the factors or circumstances that shaped those values. In addition, questions were asked to better explore relationships with nature and respective perspectives on the natural environment. These semi-structured interviews provided a broad range of data collection and each elicited a unique story about the person.

**Table 1**  
***Participant Demographics***

#	Role	Focus of work	Educational background	Years in the field
1	External consultant	Urban Sustainability (land use, built environment, transportation, housing and open space)	MSOD	16
2	External consultant	OD Consulting (indigenous culture, lands and rights)	MSOD	20 years (4 external)
3	External consultant	Government Org Processes, systems and capital projects (including environmental projects)	MSOD	14 years (4 years org focus)
4	Executive director	Leadership, strategic planning, operations, funds deployment for a Rebuilding Center	BA. Columbia, MA Northwestern	20 years health care, 10 NGO
5	External consultant	Providing OE services to non-profit conservation organizations in Canada and Western US.	B. Comms, MSOD	25 years
6	External consultant	Appreciative Inquiry + TOS (Transitioning Orgs for Sustainability)	BA Env Studies, MLA (Master of Landscape Architecture), MSOD	6 years
7	External consultant	Leadership development and executive coaching; gender diversity consulting	MSOD, masters in Geology	22 years
8	External consultant	Sustainability strategy development, reporting, branding and stakeholder engagement	BA from Stanford in Communication; MS in Journalism from Columbia University; MS in Org Change from Northwestern, LEED Green Associate, Certificate in Leadership & Sustainability Management University of Chicago Graham School	7.5 years
9	Executive director	Non profit change leader managing natural capital in financial sector	MSOD	16 years

## **Interview Questions**

1. What is the focus of your OD work?
2. What outcomes do you strive towards in your OD role?
3. What are you most passionate about in the work that you do?
4. How would you explain your personal values?
5. How did your upbringing shape your values?
6. What were some defining moments in your lifetime that led you to where you are today?
7. What is your perspective on the current state of the natural environment?
8. What is your relationship with nature?
9. Does spirituality show up for you in your life? How?

Nine interviews were conducted virtually via telephone and Webex. Interviews were recorded using Webex and the data was typed in real-time. The recording helped ensure that the data typed adequately reflected the views and statements of each individual. Each interview lasted 45 to 60 minutes, depending on the length of the participant's story as well as their personal schedules and needs.

## **Data Analysis**

Using the Schwartz Values and Nature Relatedness scale, a multi-step thematic analysis process was used. First, interviews were printed out and read through for a general sense of each conversation. Emergent themes were highlighted along with scribbled, colorful notes filled with personal insights and connections. The data was coded after highlighting key words and phrases. These were then synthesized into broad

themes that supported the research question. For this study, the technique of hermeneutic methodology was used to better interpret text.

### **IRB Approval**

The study received IRB approval at Pepperdine University. To ensure that all volunteer participants understood the purpose of the study and their role, an informed consent letter was included as well as a detailed description of the study.

## Chapter 4

### Findings

Qualitative data was captured through two focus areas – values and the surface factors that influenced those values. Three main values emerged which were nature appreciation and importance, belief in interconnection or spirituality, and the adoption of a collective mindset. Four surface factors emerged which included exposure to different living environments, experiences and time spent outside in nature, influence of key people – family and educators, and intentional reflection. The quantitative data included high Nature Relatedness scores and high self-transcendence values in the Schwartz Value Questionnaire.

#### Qualitative and Quantitative Data Analysis

**Values.** Through the data analysis, three values emerged:

1. Nature appreciation and importance
2. Belief in interconnection or spirituality
3. Adoption of collective mindset

*Nature appreciation and importance.* This value coincides with elements of Schwartz's four main value quadrants, specifically self-transcendence and openness to change. The first theme, nature appreciation and importance, refers to an admiration for the beauty of the natural world and an acknowledgement of our living human connection and reliance on it. An ecological sustainability consultant describes nature as having a way of sustaining itself through symbiotic relationships between different parts of a

community of organisms, including a relationship with humans. She reflects and says that,

During the industrial age we lost the wisdom of being a part of a web of other organisms as a collective consciousness. We forgot we are organisms that need natural things like clean air and water to survive. The ecosystem provides that for free because that is how nature works... we could mimic that and we would be better off. We need to prioritize the environment, people, and then the economy, not the other way around.

Here nature validates our own existence because as living things, we need to connect to a source in order to survive. We currently lack the necessary respect for the ancient systems and processes from which we have evolved. Nature is important in that it should be prioritized, otherwise we may destroy what we depend on, thus threatening our own livelihood.

A geologist turned OD practitioner shows her appreciation for nature by pointing out the immensity and grandiosity of the earth's evolutionary process. She views the earth as a million years in the making; each mountain signifies millions of years of development. When she lays on the ground, she visualizes and feels the earth deep down to its magnum core and through to the other side. She perceives our existence relative to geologic time – there is a recognition of just how miniscule we are. Her appreciation of nature is both scientific and spiritual. Nature is not only a tangible element of natural evolution and geology, but is also connected to something much greater.

Nature surfaced as important to most of the OD practitioners in this study because they not only recognized their connection to it but they valued it as a peaceful place to reflect and reconnect to their selves. Whether it is for spiritual connection, creative inspiration, relaxation, recreational enjoyment or physical health, nature is a place where these individuals can regain a wholesome feeling of wellbeing.

An independent consultant specializing in sustainable trans-organizational work with non-profits reflected ,

I value places where I can rest and reflect and restore myself. I value peace and quiet because I live in a busy city. I think we're all connected to each other and we're all connected to the natural world. The more we take care of the planet, the healthier and more meaningful our lives will be.

Another independent consultant native to Alaska remarked,

Land is what gives you life. It is not something you own; it is how you interact with the space and the life in it. How it helps you to survive and thrive is really important. I have a deep reverence for nature. I'm not going to be here forever so I view it as a gift that I can use.

This individual expresses sincere respect and appreciation for our connection and dependency to nature.

Nature is a driving force in the lives of the OD practitioners interviewed. Eight out of the nine interview participants scored a 4 or higher out of a score of 5 on the Nature Relatedness Scale. These OD practitioners feel connected to and appreciate nature.

***Belief in interconnection or spirituality.*** The second major theme that emerged from the data was the presence of spirituality as a driving force. A large majority of the participants mentioned the feeling of being connected to something much larger, including that of the environment. One participant equated going to church with being on a beach and looking at the ocean. She says,

My spirituality is completely and entirely connected to nature. Nature supplies the lessons that I learn. It is this grounding that determines the work I want to do. The lack of nature and spiritual connection is the reason I left landscape architecture. I started to feel empty and drained spiritually and emotionally. If I feel like I'm not making an impact to it, then I won't be myself.

Another practitioner shares her spiritual connection to nature through the receiving of insights and messages. She states,

When I am feeling confused I go outside and walk on the earth. It is as if the neurological integration to the earth allows me to receive insights from the universe. Being outdoors enables me to get more in touch with that.

This practitioner had worked for years at Amaco helping them to be as responsible as they could. After all, she says, “You can change more from the inside than the outside.”

One consultant remarks on the power and responsibility that results from a spiritual connection to others. She says, “We’re all interconnected, we all impact each other, even in our independence we are dependent, and we need to own our responsibility and action.” She is intentional about being conscious of sustainable and ecologically friendly means to a solution. In her consulting role she has worked with organizations that implement new environmentally friendly building standards.

One independent consultant experiences his spiritually by taking a moment to watch a moonrise and a sunset. He urges his clients to conduct offsites outside in nature versus in a hotel or conference center. It is in this space that intuitions are generated and meaningful, productive work is created.

Another explained,

The natural environment is a spiritual anchor, it connects me to a bigger world that we are all a part of. It connects me to other people. It connects me to a deeper sense of self. It gives me self-appreciation and self-insight.

In all of these cases, spirituality has environmental roots and connects the individual to something larger than him or herself.

*Adoption of collective mindset.* Five participants mentioned the idea of a collectivist mindset, in which there is a preference of valuing the whole vs. the



individual. The Director at a sustainable housing non-profit organization names this concept as “the commons.” He sees the lack of consideration of the commons as a huge reason we are driving the planet into the abyss. He says,

Because every corporation is hell bent on their quarterly bottom line, they aren’t paying attention to the rest of the world...people are so stressed out in their daily lives that they are desperately trying to defend their own visibility and space. They are not putting any energy into making sure the commons is defended.

His mindset, however, is geared toward the commons. He drives an equity agenda by hiring low income, diverse employees even if they have a criminal record. He works to shift inequality in the world through his actions and creates opportunities for those who may be disadvantaged from the beginning.

A collective mindset entails having a sincere appreciation and care for the whole.

One participant echoed this by stating,

Part of our dignity is feeling like we matter and make a difference in a positive way. Also part of that dignity is the idea of belonging and being connected to something larger. I value appreciating and loving people; it is the emphasis on connection versus the individual.

Another participant compared a collective mindset to having a socialist perspective where he cares about society more than himself. This would be the opposite of a conservative perspective, which values the health of the individual. He relates this to nature by saying, “Nature is owned by the common – individuals can destroy it but we can only restore it collectively.” It takes the common whole to be able to address a systemic issue so large and complex. It is only by adopting a collective mindset that we will be able to transcend our individual needs and address larger societal and environmental problems. Another participant echoes this by stating “the challenge of

community is how we do environmentalism together. There is a sense of community duty and a pressing need for the collective to partner and overcome some of these challenges.”

The Pepperdine MSOD program has a Latin saying called *non nobis solum* which means “not for ourselves alone.” This is a mantra that one OD practitioner repeats to herself every day because she says the work she is doing is bigger than herself. She gets up every day to work on her new model called the Versatility Factor, which is the balance between masculine and feminine energy in organizations. Given this work takes time to develop the concept theory and the science and technology behind it, she reminds herself of her work’s larger purpose with this mantra. She adopts a collective mindset by putting her time and energy into something that will eventually help to balance our society with shared masculine and feminine elements. She believes this will allow us to return to our appreciation for more feminine concepts, such as mother earth.

**Factors that have influenced the forming of values.** The next question asked was how did these values become instilled in the first place? Why do these OD practitioners hold the values that they do today? Through the data collection, a number of factors emerged. The main themes are:

- Exposure to different living environments
- Experiences and time spent outside in nature
- Influence of key people – family and educators
- Intentional reflection

***Exposure to different living environments.*** There were multiple instances where interviewees had been exposed to different living environments at influential times in childhood or young adulthood. It was this exposure which helped to form values and new

behavior. One independent consultant had grown up in an affluent beach town nestled next to plenty of nature and outdoor elements. When he took a teaching job at the LA Unified School District, he was exposed for the first time to a different educational system where there was no access to parks, open space, clean water or fresh air. That experience

...kind of shifted me. It made me start thinking about how we can green the city. After that, I served on a board of directors for an environmental justice organization working to green and bring more nature into a neighborhood that was disinvested in for little green space, park space and little pollution.

He adopted a desire to grant access to healthy living spaces for the commoner, not just the privileged. He also spent time living in an intentional community which demonstrated healthy and sustainable values in the heart of the city. This community was a “living laboratory of people who care about the environment in an urban context.” That experience exposed him to people working on environmental issues. Both of these experiences heightened his awareness to a broader set of societal and environmental issues.

Another example was the geologist turned consultant, who lived as an expat in South America in her youth. In contrast to the United States, she explained that South America has such a feminine and familial environment, honoring the collective and the earth. Living in this environment, “helped her become aware of her masculine paradigm.” When she returned to the U.S., she went into the field of geology and ended up working in oil and gas. It was this contrast that caused her to pursue a new form of OD, which helps organizations better understand the balance between masculine and feminine energy in their own systems.

Outward bound exposed another consultant to a whole new way of being after working in the corporate world. The experience allowed him to pursue outdoor education and influence people to change for the better and have a positive impact in the world. He said it was the single most significant decision in his life and it completely shifted him in a different direction.

Another consultant lived in Europe for 6 months with her family when she was 9 years old. Her parents had decided to sell everything they had and move to Europe, which was unconventional at the time and an atypical experience for any nine year old to have. She reflects and says, “being exposed to smart people and challenging intellectual opportunities makes it impossible to ignore the world.” This exposure opened up new opportunities and shaped her to be more aware of the world around her.

Lastly, one participant noticed the change in the environment when living in Alaska over an extended period of time. An extended exposure to the same area caused a new perception because of the change in climate over the years. He stated,

I can see the change happening in front of my eyes year after year. I feel the earth is in a very touchy place; there are so many people on the earth expending resources, and we're seeing the impact happen all around us.

In this situation, it was the prolonged exposure to an environment versus the exposure to a new environment, which caused a shift in thinking. Witnessing the ice caps melting more each year was striking enough to create that shift.

The majority of these examples are situations where a new exposure to a surrounding environment helped to shift the pre-existing dominant worldview and allow participants to open up to new information. This willingness to flex to a new environment and allow a new perception to form is an example of how our values can change over

time. New values emerge over the course of our lifetimes, which allow for new passion, growth and action.

***Experiences in nature.*** Experiences in nature have shaped the value of nature for many of the practitioners. One participant spent a lot of her youth taking vacations to Maine, where she spent time next to the ocean. She described a very beautiful coastline with evergreen trees, rocky shores, blueberries, and exposed stones. Her outdoor activities included kayaking and camping. These experiences helped her develop what she describes as ecocentric values, which place intrinsic value on all living organisms.

Another consultant describes family trips to national parks such as Yosemite and Crater Lake. He reflects on living next to the ocean where he spent time bicycling outdoors and experiencing the coast changing with the seasons. These experiences made him appreciate the outdoors more. He shared an example from his friend who is an urban planner turned artist. When this urban planner asks people to create models of childhood memories, they consistently share memories of being outside. Today he designs living places with those memories of nature.

Lastly, another sustainability consultant reflects that he started to care about nature in his teenage years. He spent a large part of his childhood in the Swiss mountains, camping out on glaciers and experiencing nature's true magnificence.

***Influence of key people: Family and educators.*** Key individuals including family and educators have influenced the participants' values in the study. One consultant grew up in a family that already had a strong vein of open mindedness. When she was young they belonged to a group called "Beyond War." This experience forced she and her brother to learn how to respect people from different cultures, the planet and resources.

She sees her parent's values instilled in her from a young age as the values that she still lives by today.

Another consultant said she had adopted some of the same values and principles as her mother. She recalls,

My mother was an avid gardener and raised four kids for a living. She worked at plant nurseries and fully understood and was very aware of what chemicals did. She was constantly battling colleagues and customers regarding chemicals and trying to get them to use more natural means. She would plant marigolds among the tomatoes to ward off the bugs that liked marigolds but hated tomatoes.

Because of her mother, she was more aware of a sustainable and ecological way of producing results.

Gardening also left an impact on another participant who said, "My grandmother loved gardening – we would go outside and say good morning to the roses and the tomatoes. It was a ritual of appreciating nature." His entire family liked the outdoors whether it was spending time in a cabin in the mountains, fishing or skiing. Their influence exposed him to the environment.

Just as family has been a core factor that has shaped values, education has also had a profound impact on participant values. The MSOD program, in particular, has made an impact in many of the participants' lives. One individual remarked, "The MSOD program was a turning point for me. I was coming from the corporate side and I was trying to figure out what the next step was for me." Her career felt empty and in her studies she was inspired by Chris Worley, a teacher in the MSOD program, who had shared with her the possibility of OD making a noticeable difference on a global scale. This personally resonated with her own desire to leave the world in a better place thereby

impacting her career direction. After the program, she connected with a new network in Canada focusing on sustainability.

***Intentional reflection.*** Many OD practitioners mentioned intentionally reflecting on their lives as adults. This reflection enabled the individuals to re-assess how they were living their lives for maximum meaning and purpose. Each of the participants mentioned made a conscious choice to reflect inwards, whether through developmental workshops, a sabbatical, or simply putting time aside to wonder. The impact of this conscious choice has been powerful enough to re-direct paths and influence behavior.

One consultant reflected on a point in her late 40's when she went on sabbatical to New Zealand for 6 months. It was the first time since age 9 that she had not worked. During this time she realized, "I was always doing OD work but realized I had a hunger to better marry my personal commitments to the planet with business and professional expertise. I wanted to bring leadership and transformation to a more meaningful client base." She had always been interested in the human potential movement and sustainability, and it was at this point in her career that she re-directed her efforts to work on big problems that matter, like sustainability. Now she is a co-chair of a working group partnering with a UN global contact creating new standards of government. She is now an expert of sustainability. This intentional reflection allowed her to feed her soul versus her ego, which she is proud of from a soul standpoint.

Another practitioner who always had a connection to the natural world realized that landscape architecture wasn't satisfying enough. Through self-discovery, she found OD. She loved the environment and wanted to find the issues she could really impact. Her personal goals of impacting one community at a time and one individual at a time

were her drivers. It took a period of intentional reflection to make the connection reconnecting her with a career where she could live out her purpose.

Another interviewee describes his moment of intentional reflection in a Leadership Development intensive where he learned about his relationship to power. He had been reticent to hold power, having witnessed it being abused in his family household. He had to understand “why I had an uneasy relationship with power. I had to understand that I would not abuse power. I didn’t need to be shy of how I held power on my own.” That moment helped him realize that he could pursue positions of power. In his role he is an activist for equal rights and sustainable growth. This defining moment of intentional reflection helped him own his leadership potential to the benefit of his career.

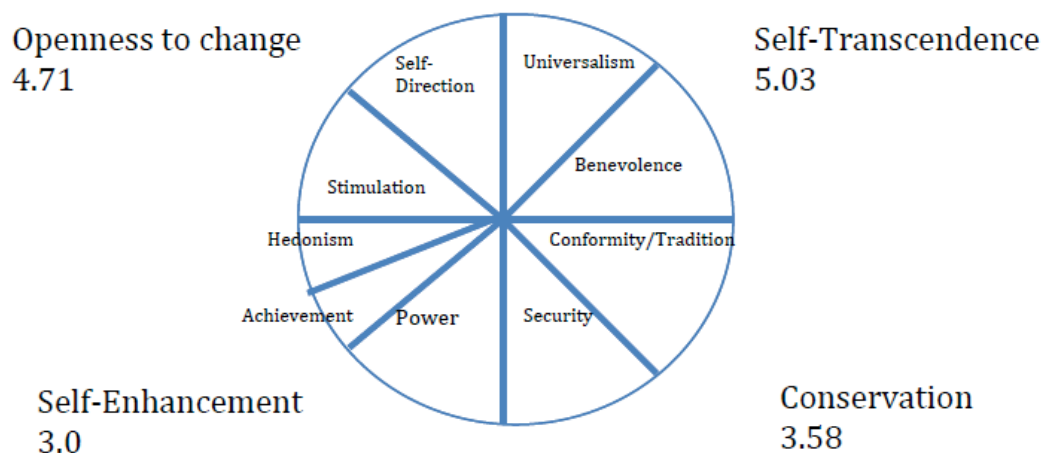
Intentional reflection is a factor that has influenced the values and behaviors of these OD practitioners. Each instance directly impacts the behaviors of these individuals.

### **Quantitative Analysis**

Participants were also asked to fill out two quantitative assessments. The first assessment, the Schwartz Personal Value Questionnaire highlighted the values that were covered in Chapter 2. Many of these research findings correlate with the Schwartz Value Theory. Values such as self-transcendence and self-enhancement were the most opposed or in the opposite position on the wheel. In addition, values that were next to one another on the wheel had a stronger connection. In Figure 2, the average scores are displayed and in Table 2, the individual scores are listed. The average of the participants’ self-transcendence values scored a 5.03 whereas self-enhancement values scored a 3.0. Openness to change scored a 4.71 and conservation scored a 3.58. Because self-transcendence and openness to change are values that sit next to one another on the



wheel, they are more closely related to each other than the opposing values of self-transcendence and self-enhancement.



**Figure 2**

*Schwartz Value Average Data*

**Table 2**

*Schwartz Individual Data*

Participant	Self-transcendence (universalism and benevolence)	Self-enhancement (achievement and power)	Openness to change (self-direction, stimulation, and hedonism)	Conservation (security and conformity/tradition)
1	4.87	2.00	4.83	3.43
2	4.93	4.56	4.92	4.29
3	5.53	2.22	4.58	3.24
4	5.07	2.89	4.50	3.43
5	5.33	3.33	4.33	3.43
6	5.40	3.44	4.67	4.29
7	5.47	4.00	5.00	3.76
8	5.53	3.33	4.92	4.95
9	5.20	4.00	4.58	3.74
Average	5.03	3.00	4.71	3.58

Note.  $N = 10$ .

100% of participants scored highest on self-transcendent values. This is important because it shows that the individuals have prioritized universalism and benevolence values over achievement and power. Self-transcendent values typically appear at the top of the hierarchy where as self-enhancement values appear at the bottom (Schwartz, 2012). The data in table 2 confirms this trend and mirrors the normative data.

The second quantitative assessment used was the Nature Relatedness scale, which is reflected in Table 3. The OD practitioners scored an average of 4.52 on the Nature Relatedness scale. This was higher than the range (approximately 3.28-3.71) reported for most student and community samples (Nisbet & Zelenski, 2013). However, when we compare this information with environmentally focused individuals, the scores of the OD participants are closer. A group of environmental educators from the Council of Outdoor Educators of Ontario scored a relatively high average of 4.53 with ranges from 4.05 to 4.90 (E. K. Nisbet, personal communication, May 11, 2016). Research with the David Suzuki Foundation on the 30x30 Nature Challenge in 2013 was performed with individuals interested in connecting with nature. They scored a mean 4.29 on the Nature Relatedness (Nisbet, E., 2013). This shows that environmentally aware and conscious individuals score higher on NR than the average population.

This aforementioned validates research (Nordlund and Garvill, 2002, 2003; Schultz, 2001; Schultz & Zelezny, 1999; and Stern et al., 1995) showing a connection between self-transcendent values and environmental concern. These OD practitioners not only are environmentally conscious, but also high in Nature Relatedness and self-transcendent values.

**Table 3****Average Scores of Nature Relatedness**

Participant	Average Nature Relatedness Score
1	4.71
2	4.10
3	4.52
4	3.90
5	4.62
6	4.10
7	4.62
8	4.90
9	4.33
Average	4.52

## **Chapter 5**

### **Findings and Implications**

Chapter 5 discusses the findings and implications of the research study performed. Parallels are drawn between self-transcendence values found both in the Schwartz Value Questionnaire and the qualitative interviews. The qualitative interviews are compared to Schein's research because both contain key experiences that shape ecological worldviews. The Nature Relatedness scale and New Environmental Paradigm are discussed as they are present among OD practitioners and enable this ecological worldview. The findings conclude by hypothesizing what experiences influence OD practitioners to action.

#### **Links Between Schwartz Value Questionnaire and Qualitative Interviews**

The results from the data collection showed that this group of OD practitioners scored highest in self-transcendence values in the quantitative portion. The qualitative interview data validated their high self-transcendence scores. Self-transcendence values are comprised of universalism and benevolence. Universalism is characterized by attributes such as equality, broadmindedness, protecting the environment, inner harmony, a work of beauty and at peace, social justice, and unity with nature. Benevolence is characterized by attributes such as mature love, meaning in life, a spiritual life, honesty, helpfulness, true friendship, responsibility, and loyalty. These characteristics showed up in the participant interview responses. For example, three values that emerged in the qualitative data were nature appreciation and importance, a belief in interconnection or spirituality, and the adoption of a collective mindset. These support the self-transcendent values – universalism and benevolence.

Qualities of the lowest scoring value, self-enhancement, did not show up in the qualitative data. The two values that combine to make self-enhancement are power and achievement. Qualities that lay within power are social power, wealth, perseverance of public image, social recognition, and authority. Qualities that lay within achievement are intelligence, success, ambition, capability, and influence. Achievement characteristics actually were qualities pertaining to the participants in this study, but they were not broadly discussed within the context of the interviews. These can be implied given the professional status of the individual, the accomplishments throughout his or her career, and the deep knowledge and expertise in each individual's responses. They channel achievement and power through self-transcendent actions, wherein the result of benefitting the whole is greater than the individual.

The openness to change value was rated the second highest among 100% of participants. Characteristics of this value are self-direction, stimulation, and hedonism. Independence and freedom are traits of self-direction, which were visible attributes in the qualitative interviews. This relates to each participant's sense of choice and purpose in fulfilling their career. All of the interviewees have used their independence and freedom to pursue a career that aligns with their values. This value sits next to the self-transcendence value category on the Schwartz Wheel, which means that these elements are more likely to work together to drive behavior. Many participants also remarked on enjoying the beauty in life, another aspect of openness to change. Whether it is meditating by a waterfall in a nature preserve in Canada, spending time active in the outdoors, or appreciating the soul and aesthetics of a certain place, all these practitioners

do not take life for granted. As change practitioners it makes sense that they are open to the changing world around them.

### **Factors in Support of Schein's Research**

The main factors or circumstances that shaped OD practitioner values were explored in the qualitative interviews. These were exposure to different living environments, experiences and time spent outside in nature, influence of family members or education, and intentional reflection. These themes are similar to the themes from Schein's 2014 dissertation, "Ecological Worldviews and Post-Conventional Action Logics of Global Sustainability Leaders." Schein's themes were grouped into two categories: experiences that shaped ecological worldviews over the lifespan and expressions of eco-centric worldviews. The experiences that shaped ecological views include family of origin and early childhood experiences in nature; environmental education, teachers, and mentors; seeing poverty and environmental degradation in developing countries; perceiving capitalism as a vehicle for environmental activism; and a sense of spirituality and service. This study supports his findings in the sense that there are common themes of nature, family, and the influence of new perspectives resulting from a change in surrounding environment. From both studies we can conclude that key influencers and life experiences have been a major driver in the development of values.

### **The Importance of Nature Relatedness and the New Environmental Paradigm**

Participants also scored slightly higher than the average score for Nature Relatedness. Given that many of the participants have self-identified as caring and dedicating their lives to working close to the environment, it is not surprising to see that they had high Nature Relatedness Scores. The participants interviewed went into great

depth and detail about the importance of nature in their lives. Many participants mentioned details about the interconnectedness of life and their spiritual connection to nature. Nature Relatedness indicates a biospheric orientation, which is a self-concept that includes the natural world. This orientation provides a motivational force toward nature protection and preservation. When individuals see themselves in nature, they are more inclined to behave in ways to protect nature because essentially they are also protecting themselves. The interviews revealed that the interviewees' behavior was geared towards a concern for environmental change. This view supports an ecological worldview, where humans are dependent on and embedded in the Earth's ecosystem.

The research suggests that these participants may have the New Ecological Paradigm worldview because of their intrinsic view of humans as included in the broader natural world. The OD practitioners in my study as well as the corporate sustainability leaders in Schein's study are a part of this changing demographic of individuals who have an evolved ecological worldview. If more practitioners have this worldview, the practice itself could evolve to have a larger focus on humanistic values within the context of the natural environment. As a practice, the field has always had humanistic values but those values haven't necessarily extended to all that is life, such as the environment. This could be an evolutionary shift, that the practice of OD includes sustainability of the natural environment within the whole system.

The results from this study confirm the view of Dessai et al. (2004) that environmental attitude is influenced more by personal experiences, values, and worldviews than by scientific considerations such as global climate models, greenhouse gas concentrations, social vulnerability, or adaptive capacity. This is also consistent with

the Swiss Finger study that proved sharing more information about climate change was not the influencing factor in behavior (Ryland, 2000). It is values and the experiences that have shaped these practitioners rather than scientific information or models.

### **Experiences That Influenced OD Practitioners to Action**

According to Schwartz, benevolence, universalism and self-direction values appear at the top of the hierarchy. Power, tradition and stimulation values appear at the bottom (Schwartz, 2012). From this we can discern that there are aspects of human nature and social functioning that shape individual value priorities among all human beings. Included in this are OD practitioners. This poses a question for further investigation – If OD practitioners are a subset of the general population then they also have benevolence, universalism and self-direction at the top of the hierarchy. According to the research data, OD practitioners have highest scores self-transcendence and openness to change, which include benevolence, universalism and self-direction. What separates the OD practitioners from the general population? What causes them to take action on the environment?

One possibility is the experiences or “surface factors” that shaped the practitioners’ values in the first place. For many of the participants, it was the profound personal awakenings caused by being thrust into a new situation or environment, which enabled some sort of reflection or “ah-ha” moment. Meaningful experiences with nature, influential people, reflection, and new exposures were more powerful than values alone.

Another key and critical differentiator that separates this group of practitioners is their high Nature Relatedness score and a worldview that is supportive of the New Environmental Paradigm. It is the self-transcendent mindset with the critical realization



of the importance of the earth's interconnected ecosystem that truly separates this group from the rest.

### **Limitations**

The limitations to the study are several.

1. Small sample size. Only 9 participants were interviewed, versus the original goal of 10. This could have impacted some of the themes and aggregate quantitative data.
2. Gap between OD and sustainability. Research data done by Verdantix and Mckinsey confirm the fact that there is a gap connecting OD and sustainability. The lack of environmental focus at popular OD conferences or amount of OD job openings related to sustainability could also support the fact that there are not that many OD people in the field working with environmental concerns at the forefront of their minds.
3. Sustainability roles vs. OD roles. People committed to environmental activism are simply not identifying as OD practitioners. There could be a large group of environmental activists who are working to create a change in a system, and could possibly be using techniques from the field of OD, but do not identify themselves as OD practitioners. There exists an opportunity to explore the environmental field to see if there are people who are or could benefit from using OD philosophy and tools to help create positive environmental change.

### **Recommendations**

The purpose of this study was to highlight that there is a need in the field of Organization Development to focus on sustainability. One way to create a higher awareness of sustainability within OD is through an intentionally designed OD

curriculum. Being intentional about the types of learning experiences offered to OD students can facilitate new thinking and ultimately new behavior. One example is to contract consulting experiences with environmentally focused clients. This would shed light on environmental issues and offer students new and different experiences from that of the corporate world. Exposure to powerful, systemic environmental issues could be the catalyst for many to make an impact in this area.

Curriculum development is not the only way to influence OD to be more sustainability focused. Another is to make environmental change a strategic priority within the OD profession. In order to shift in this direction, the field essentially needs to adjust, using its own change philosophy. OD needs to perform change on its own practice. Thankfully, change is something quite familiar to the OD field. Change leaders can use their influence, methodologies and tools to help support an increased awareness and value around sustainability. After all, a key driver of values and behavior in this study was the impact of influential people.

Including the impact on nature as a factor in an OD practitioner's organizational assessment is another point of influence. Focusing solely on profit will not allow organizations to be sustainable in the long term. Integrating people, profit and the planet in a holistic way will be the new future and a differentiator for OD consultants. The importance of the natural environment has been a key value amongst the OD practitioners in this study. Exposing the OD community to the role of nature in our existence will help remind us of our interconnectedness. Linking the role of nature to an organization's strategy and bottom line will heighten both our effectiveness and our clients' awareness.

Furthermore, it will position the organization to adopt a holistic approach to having a competitive and sustainable edge.

The future is changing quickly, and in order to adapt and continue to stay relevant, OD must change too. The field has tremendous opportunity to influence important systemic, global issues upon which our future as a civilization depends. It is time to heighten our sensitivity to that which we are ultimately a part. OD is the field of strategic change and it is here to stay. It is here to play a vital role in the next stage of human and planetary evolution.

## References

- Bourne, E. J. (2008). *Global shift: How a new worldview is transforming humanity*. Petaluma, CA: Noetic Books, Institute of Noetic Sciences.
- Burke, W. (1998). Living OD values in today's changing world of organization consulting. *Organization Development Practitioner Journal*.
- Cheung, W.-Y., Luke, M. A., & Maio, G. R. (2014). On attitudes towards humanity and climate change: The effects of humanity esteem and self-transcendence values on environmental concerns. *European Journal of Social Psychology, 44*, 496-506.
- Climate Outreach and Information Network. (December 2015). Values and Frames. Retrieved from <http://talkingclimate.org/wp-content/uploads/2011/10/Values-frames.pdf>
- Conscious. 2016. In Merriam-Webster.com. Retrieved June 10<sup>th</sup> 2016, from <http://www.merriam-webster.com/dictionary/conscious>
- Cooperrider, D., Laszlo, C., & Ehrenfeld, J. (2013). The positive psychology of sustainable enterprise. *Journal of Corporate Citizenship, 46* 2-8.
- Dessi, S., Adger, W. N., Humlme, M., Turnpenny, J., Kohler, J., & Warren, R. (2004). Defining and experiencing dangerous climate change. *Climate Change, 64*, 11-25.
- Dietz, T., Stern, P. C., Gaughano, & G. A. (1998). Social structural and social psychological bases of environmental concern. *Environment and Behavior, 25*, 450-505.
- Dunlap, R. E., & Van Liere, K. D. (1978) The new environmental paradigm. *Journal of Environmental Education. 9*, 10-19.
- Environmental. 2016. In Merriam-Webster.com. Retrieved June 10<sup>th</sup> 2016, from <http://www.merriam webster.com/dictionary/environmental>
- Feyerherm, A., & Worley, C. G. (2008). Forward to the past: Reclaiming OD's influence in the world. *OD Practitioner, 40* (4) 2-7.
- Gellerman, W., Frankel, M. S., & Ladenson, R. F. (1990). *Values and ethics in organization and human systems development: Responding to dilemmas in professional life*. San Francisco, CA: Jossey-Bass. 135-375
- Hansla, A., Gamble, A., Juliusson A., & Garling, T. (2007). The relationships between awareness of consequences, environmental concern, and value orientations. *Journal of Environmental Psychology, 28*, 1-9.

- Hedlund-de Witt, Annick. (2012). Exploring worldviews and their relationship to sustainable lifestyles: towards a new conceptual and methodological approach. Amsterdam, The Netherlands: Institute for Environmental Studies, Environmental Policy Analysis.
- Hultman, K. (2005). Evaluating organizational values. *Organization Development Journal*, 23(3), 39-47.
- Janine, W., Allan, H. C., & Burke, W. (1995). Women in organization development A profile of the intervention styles and values of today's practitioners. *Journal of Organizational Change Management*, 8, 1-12.
- Langer, E. (2011, August 10). Ray Anderson, 'greenest CEO in America,' dies at 77. *Washington Post*. Retrieved from <https://www.washingtonpost.com>
- Lewin, K. (1951). *Field theory in social science*. New York, NY: Harper & Brothers.
- Nisbet, E. K., Zelenski, J. M., & Murphy, S. A. (January 01, 2009). The Nature Relatedness Scale: Linking Individuals' Connection with Nature to Environmental Concern and Behavior. *Environment and Behavior*, 41, 5, 715-740.
- Nisbet, E. K. (2013). Results of the David Suzuki Foundation 30x30 Nature Challenge Survey May 1-31, 2013. Retrieved from the David Suzuki Foundation website: <http://www.davidsuzuki.org/publications/2013/07/23/30x30%20Nature%20Challenge-Final%20report.pdf>
- Nisbet, E. K., & Zelenski, J. M. (2013). The NR-6: A new brief measure of nature relatedness. *Frontiers in Psychology: Personality Science and Individual Differences*, 1-11. doi: 10.3389/fpsyg.2013.00813
- Mayer, S. F., & McPherson, F. C. (2004). The connectedness to nature scale: A measure of individual's feeling in community with nature. *Journal of Environmental Psychology*, 24, 503-505.
- Passmore, W. (2014). Deconstructing OD: A closer look at the emergence of OD values and their impact on the field. *OD Practitioner*, 46(4) 31-34.
- Pawlik, K. (1991). The psychology of global environmental change: Some basic data and an agenda for cooperative international research. *International Journal of Psychology*, 26, 547-563.
- Price, J. C., Walker, I. A., & Boschetti, F. (2014). Measuring cultural values and beliefs about environment to identify their role in climate change responses. *Journal of Environmental Psychology*, 37, 8-20.
- Ryland, E. (2000). Gaia rising: A Jungian look at environmental consciousness and sustainable organizations. *Organization & Environment*, 13, 381-402.

- Schultz, P. W. (2000). Empathizing with nature: The effects of perspective taking on concern for environmental issues. *Journal of Social Issues, 56*, 391-406.
- Schwartz, S. H. (1992). Universals in the content and structure of values: Theory and empirical tests in 20 countries. In M. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 25, pp. 1-65). New York, NY: Academic Press.
- Schwartz, S. H. (in press). Basic individual values: Sources and consequences. In D. Sander and T. Brosch (Eds.), *Handbook of value*. 9-24. Oxford, UK: Oxford University Press.
- Schwartz, S. H. (2011). Schwartz: An overview of the Schwartz theory of basic values. Berkely, CA. Berkley Electronic Press.
- Seeker. (2014, October 8). Climate change has raised ocean acidity by a quarter. Retrieved from <http://news.discovery.com/earth/global-warming/climate-change-has-raised-ocean-acidity-by-a-quarter-141008.htm>.
- Schein, Steven. (2014). The ecological worldviews and post-conventional action logics of global sustainability leaders. Fielding Graduate University.
- Shull, A., Church, A., & Burke, W. (2014). Something old, something new: Research findings on the practice and values of OD. *OD Practitioner, 46*(4) 23-39.
- Steg, L., & Vlek, C. (2009). Encouraging pro-environmental behavior: An integrative review and research agenda. *Journal of Environmental Psychology, 29*, 309-317.
- Stern, P. C. (1992). Psychological dimensions of global environmental change. *Annual Review of Psychology, 43*, 269-302.
- Stern, P. C., & Dietz, T. (1994). The value basis of environmental concern. *Journal of Social Issues, 50*(3), 65-84.
- Stern, P. C., & Oskamp, S. (1987). Managing scarce environmental resources. In D. Stokols & I. A. Altman (Eds.), *Handbook of environmental psychology* (Vol 2, 1043-1088). New York, NY: Wiley.
- U.S. Environmental Protection Agency. (2014). Climate change indicators in the United States, 2014 (EPA 430-R-14-004). Retrieved from <http://www.epa.gov/climatechange/indicators>.
- Vaccaro, G. (2012, August 8). Sustainability and organizational development. Retrieved from <http://www.environmentalleader.com/2012/08/08/sustainability-and-organizational-development>.
- Wirtenberg, J., Abrams, L., & Ott, C. (2004). Assessing the field of organization development. *The Journal of Applied Behavioral Science*. Vol 40 No. 4, December 200 465-479.

Worley, C., & Mohrman, S. A. (2010). The organizational sustainability journey: Introduction to the special issue. CEO Publication G 580, 5-10.

Yeganeh, B., & Glavas, A. (2008). Green organization development. *OD Practitioner*, 40(2), 6-11.

**Appendix A: Nature Relatedness Scale**



### Nature Relatedness Scale

**Instructions:** For each of the following, please rate the extent to which you agree with each statement, using the scale from 1 to 5 as shown below. Please respond as you really feel, rather than how you think “most people” feel.

1 Disagree strongly	2 Disagree a little	3 Neither Agree or disagree	4 Agree a little	5 Agree strongly
---------------------------	------------------------	-----------------------------------	---------------------	------------------------

- |  |   |
|--|---|
| <p>1. I enjoy being outdoors, even in unpleasant weather. _____</p> <p>2. Some species are just meant to die out or become extinct. _____</p> <p>3. Humans have the right to use natural resources any way we want. _____</p> <p>4. My ideal vacation spot would be a remote, wilderness area. _____</p> <p>5. I always think about how my actions affect the environment. _____</p> <p>6. I enjoy digging in the earth and getting dirt on my hands. _____</p> <p>7. My connection to nature and the environment is a part of my spirituality. _____</p> <p>8. I am very aware of environmental issues. _____</p> <p>9. I take notice of wildlife wherever I am. _____</p> <p>10. I don't often go out in nature. _____</p> <p>11. Nothing I do will change problems in other places on the planet. _____</p> | <p>12. I am not separate from nature, but a part of nature. _____</p> <p>13. The thought of being deep in the woods, away from civilization, is frightening. _____</p> <p>14. My feelings about nature do not affect how I live my life. _____</p> <p>15. Animals, birds and plants should have fewer rights than humans. _____</p> <p>16. Even in the middle of the city, I notice nature around me. _____</p> <p>17. My relationship to nature is an important part of who I am. _____</p> <p>18. Conservation is unnecessary because nature is strong enough to recover from any human impact. _____</p> <p>19. The state of non-human species is an indicator of the future for humans. _____</p> <p>20. I think a lot about the suffering of animals. _____</p> <p>21. I feel very connected to all living things and the earth. _____</p> |
|--|---|

### **Scoring Information**

Reverse scored items: 2, 3, 10, 11, 13, 14, 15, 18; NR-self items: 5, 7, 8, 12, 14, 16, 17, 21; NR-perspective items: 2, 3, 11, 15, 18, 19, 20; NR-experience items: 1, 4, 6, 9, 10, 13

**Overall NR score is calculated by averaging all 21 items** (after reverse scoring appropriate items). Scores on the 3 NR dimensions are also calculated by averaging appropriate items after reverse scoring.

**A short-form version of the NR scale (NR-6) consists of items: 4, 5, 7, 9, 17, 21.**

Items are averaged to create a score on the brief measure of NR. No items are reverse scored.

### **Referencing information:**

#### **if using 21-item scale:**

Nisbet, E. K. L., Zelenski, J. M., & Murphy, S. A. (2009). The Nature Relatedness Scale:

Linking individuals' connection with nature to environmental concern and behaviour. *Environment and Behavior*, 41, 715-740.

#### **if using short-form 6-item (NR-6) scale:**

Nisbet, E. K., & Zelenski, J. M. (2013). The NR-6: A new brief new measure of nature

relatedness. *Frontiers in Psychology: Personality Science and Individual*

Differences, 1-11, doi: 10.3389/fpsyg.2013.00813

**Appendix B: PVQ-RR Male (10/2013)**













