Psychological and Interpersonal Implications of Believing that Everything is One: Identity, Personality, Values, and Worldviews

by

Kathryn Jean Diebels

Department of Psychology and Neuroscience
Duke University

Date:_______________________
Approved:

Mark R. Leary, Supervisor

Rick H. Hoyle

Timothy J. Strauman

Gavan J. Fitzsimons

Dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in the Department of Psychology and Neuroscience in the Graduate School of Duke University

2016
ABSTRACT

Psychological and Interpersonal Implications of Believing that Everything is One: Identity, Personality, Values, and Worldviews

by

Kathryn Jean Diebels

Department of Psychology and Neuroscience
Duke University

Date: ______________________

Approved:

___________________________
Mark R. Leary, Supervisor

___________________________
Rick H. Hoyle

___________________________
Timothy J. Strauman

___________________________
Gavan J. Fitzsimons

An abstract of a dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in the Department of Psychology and Neuroscience in the Graduate School of Duke University

2016
Abstract

For thousands of years, people from a variety of philosophical, religious, spiritual, and scientific perspectives have believed in the fundamental unity of all that exists, and this belief appears to be increasingly prevalent in Western cultures. The present research was the first investigation of the psychological and interpersonal implications of believing in oneness. Self-report measures were developed to assess three distinct variants of the belief in oneness – belief in the fundamental oneness of everything, of all living things, and of humanity – and studies examined how believing in oneness is associated with people’s self-views, attitudes, personality, emotions, and behavior. Using both correlational and experimental approaches, the findings supported the hypothesis that believing in oneness is associated with feeling greater connection and concern for people, nonhuman animals, and the environment, and in being particularly concerned for people and things beyond one’s immediate circle of friends and family. The belief is also associated with experiences in which everything is perceived to be one, and with certain spiritual and esoteric beliefs. Although the three variations of belief in oneness were highly correlated and related to other constructs similarly, they showed evidence of explaining unique variance in conceptually relevant variables. Belief in the oneness of humanity, but not belief in the oneness of living things, uniquely explained variance in prosociality, empathic concern, and compassion for others. In contrast, belief in the oneness of living things, but not belief in oneness of
humanity, uniquely explained variance in beliefs and concerns regarding the well-being of nonhuman animals and the environment. The belief in oneness is a meaningful existential belief that is endorsed to varying degrees by a nontrivial portion of the population and that has numerous implications for people’s personal well-being and interactions with people, animals, and the natural world.
Dedication

This dissertation is dedicated to the memory of Jonathan William Diebels, whose rubber boots will forever be my symbol of determination and perseverance, encouraging me to march on through challenges.

And to my Godson, William Ennis Hartman, whose impending arrival helped keep me moving along on this project so that I may sooner meet him.
2.1 Method.............................................................................................................................................. 19

2.1.1 Participants.................................................................................................................................... 19

2.1.2 Measures........................................................................................................................................ 20

2.1.2.1 Belief in Oneness...................................................................................................................... 20

2.1.2.2 Mystical Experiences Scale (Hood, 1975).............................................................................. 21

2.1.2.3 Sources of Spirituality (SOS) Scale (Davis, Rice, Hook, Van Tongeren, DeBlaere, Choe, & Worthington, 2015).................................................................................................... 22

2.1.2.4 The Metapersonal Self Scale (Decicco & Stroink, 2007)...................................................... 22

2.1.2.5 Allo-inclusive Identity Scale (Leary, Tipsord, & Tate, 2008).............................................. 23

2.1.2.6 Connectedness with Nature Scale (CNS; Mayer & Frantz, 2004)................................ 23

2.1.2.7 Spiritual Transcendence Scale (STS) – Universality subscale (Piedmont, 1999)......................................................................................................................... 23

2.1.3 Procedure..................................................................................................................................... 24

2.2 Results .............................................................................................................................................. 24

2.2.1 Item Selection.............................................................................................................................. 24

2.2.2 Experiences.................................................................................................................................. 25

2.2.2.1 Qualities of Mystical Experiences....................................................................................... 25

2.2.2.2 Sources of Spirituality ......................................................................................................... 29

2.2.3 Identity and Connections........................................................................................................... 31

2.3 Discussion...................................................................................................................................... 35

Study 2: Correlates of the Belief in Oneness ......................................................................................... 38

3.1 Method........................................................................................................................................... 41

3.1.1 Participants.................................................................................................................................. 41
3.1.2 Measures ..................................................................................................................42
3.1.2.1 Belief in Oneness .................................................................................................42
3.1.2.2 Short Marlowe-Crowne Social Desirability Scale (Reynolds, 1982) ..............42
3.1.2.3 The Immutable Self Scale (Burris & Sani, 2014) .................................................43
3.1.2.4 Self-attributed Need for Uniqueness Scale (Lynn & Harris, 1997) .................43
3.1.2.5 Self-absorption Scale (McKenzie & Hoyle, 2008) .............................................43
3.1.2.6 Selfism Scale (adapted from Phares & Erksine, 1984) ......................................43
3.1.2.7 Self-compassion Scale – Common Humanity & Isolation subscales (Neff, 2003) ..........................................................................................................................44
3.1.2.8 Three-dimensional Wisdom Scale (Ardelt, 2003) ..............................................44
3.1.2.9 Intolerance for Ambiguity (Martin & Parker, 1995) ...........................................45
3.1.2.10 Values ................................................................................................................45
3.1.2.11 Monetary Generosity .......................................................................................46
3.1.3 Procedure ...............................................................................................................47
3.2 Results .......................................................................................................................47
3.2.1 Belief in Oneness Scale ..........................................................................................47
3.2.1.1 Confirmatory Factor Analysis ............................................................................47
3.2.1.2 Social Desirability Bias ....................................................................................48
3.2.1.3 Two Ways of Assessing Belief in Oneness .......................................................49
3.2.2 Self-views and Self-focus .....................................................................................49
3.2.3 Cognitive Traits, Perspective-taking, and Compassion ....................................53
3.2.4 Concern for the Welfare of Others and Generosity ..........................................55
3.2.4.1 Values ................................................................................................................55
4.2.1.3 Oneness and Separation.................................................................77
4.2.1.4 Development of Belief in Oneness of Everything .......................78
4.2.1.5 Sources of Belief in Oneness .....................................................79
4.2.2 Experiences of Oneness .................................................................81
4.2.3 Oneness-related Activities ............................................................82
4.2.4 Spirituality and Religiosity .............................................................85
4.2.5 Other Beliefs About the World .....................................................88
  4.2.5.1 Big Picture Beliefs .................................................................88
  4.2.5.2 Variety of Existential Beliefs .....................................................89
4.2.6 Reasons For Not Believing in the Oneness of Everything .................92
4.3 Discussion .......................................................................................94

Study 4: Distinguishing Belief in Oneness of Living Things and Belief in Oneness of Humanity ...............................................................97

5.1 Method ............................................................................................98
5.1.1 Participants ...................................................................................98
5.1.2 Measures .....................................................................................98
  5.1.2.1 Belief in Oneness of Everything, Living things, and Humanity ........98
  5.1.2.2 Allo-inclusive Identity Scale (Leary et al., 2008) .........................99
  5.1.2.3 Character Strengths (IPIP-VIA; Goldberg, Johnson, Eber, Hogan, Ashton, Cloninger, & Gough, 2006) .................................................99
  5.1.2.4 Selfism (adapted from Phares & Erksine, 1984) .........................100
  5.1.2.5 Compassionate Love for Humanity (Sprecher & Fehr, 2005) .......100
  5.1.2.6 Ubuntu ..................................................................................101
5.1.2.7 Distress in Response to the Suffering of Others and Harm to the Natural World ................................................................................................................................. 101
5.1.2.8 Brief Animal Attitudes Scale – short form (Herzog, Grayson, & McCord, 2015) ................................................................................................................................. 101
5.1.2.9 Wildlife Habitat Protection (Kellert, 1984) ................................................................................................................................. 102
5.1.2.10 Roadkill Remorse ........................................................................................................................................................................... 102
5.1.2.11 Environmental Worldview Scale (Nooney, Woodrum, Hoban, & Clifford, 2003) ................................................................................................................................. 102
5.1.2.12 Environmental Concern Scale (Dutcher, Finley, Luloff, & Johnson, 2007) ................................................................................................................................. 103
5.1.3 Procedure .......................................................................................................................................................................................... 103
5.2 Results ................................................................................................................................................................................................................. 103
5.2.1 Allo-inclusive Identity ........................................................................................................................................................................... 105
5.2.2 Prosocial Characteristics ........................................................................................................................................................................... 109
5.2.3 Concern for Other People ........................................................................................................................................................................... 112
5.2.4 Ecological Concerns ........................................................................................................................................................................... 115
5.3 Discussion ........................................................................................................................................................................................................... 119

Study 5: The Effects of Specific Beliefs in the Oneness of Everything, Living Things, and Humanity ................................................................. 121

6.1 Method ................................................................................................................................................................................................................. 122
6.1.1 Participants ................................................................................................................................................................................................................. 122
6.1.2 Procedure ................................................................................................................................................................................................................. 123
6.1.2.1 Oneness Mindset Induction ........................................................................................................................................................................... 123
6.1.2.2 Post-manipulation Questions ........................................................................................................................................................................... 124
6.1.2.3 Set of Beliefs with Oneness Embedded ........................................................................................................................................................................... 125
9.1 Study 4 - BIO Scale items for all living things and all of humanity .................. 167
9.1.1 Belief in Oneness of Living Things ................................................................. 167
9.1.2 Belief in Oneness of Humanity ......................................................................... 167
9.2 Distress in response to the suffering of others and harm to the natural world ... 168
Appendix C ..................................................................................................................... 169
10.1 Passages for Study 5 Experimental Manipulation ................................................. 169
10.1.1 Passage for Belief in Oneness of Everything .................................................. 169
10.1.2 Passage for Belief in Oneness of All Living Things ....................................... 170
10.1.3 Passage for Belief in Oneness of Humanity .................................................... 171
10.1.4 Passage for Art Control Condition .................................................................. 173
References ..................................................................................................................... 175
Biography ....................................................................................................................... 184
List of Tables

Table 1: The Belief in Oneness Scale ................................................................. 25
Table 2: Correlations of Mystical Experiences with BIO Scale Scores ............... 27
Table 3: BIO Scale Regressed on Mystical Experiences .................................... 28
Table 4: Correlations of Sources of Spirituality with BIO Scale ...................... 30
Table 5: BIO Scale Regressed on Sources of Spirituality ................................. 31
Table 6: Correlations of Identity and Connections with BIO Scale .................. 34
Table 7: BIO Scale Regressed on Allo-Inclusive Identity ................................. 35
Table 8: Self-views and Self-focus by Dichotomous BIO ................................ 51
Table 9: BIO Scale Regressed on Self-views and Self-focus ........................... 52
Table 10: Cognition, Perspective, Compassion and Belief in Oneness ............. 54
Table 11: Values and Belief in Oneness ........................................................... 57
Table 12: Spending Designations and Belief in Oneness ................................. 61
Table 13: Dichotomous BIO and BIO-Scale ..................................................... 74
Table 14: Conceptualizations of Oneness .......................................................... 76
Table 15: Conceptualizing the One Thing ....................................................... 77
Table 16: Context of First Exposure to the Concept of Oneness ...................... 79
Table 17: Sources of Belief in Oneness ............................................................. 80
Table 18: Qualities of Experiences of Oneness ................................................. 82
Table 19: Activities and Belief in Oneness ........................................................ 84
Table 20: Religiosity, Spirituality, and Belief in Oneness ................................. 86
Table 21: Big Picture Beliefs and Belief in Oneness ........................................ 89
Acknowledgements

I am incredibly grateful and fortunate to have amazing people who have supported me in this dissertation process and all the years leading up to it.

My mom sent care packages and countless letters (real mail) of support and encouragement. My dad, PMP, spent hours developing a project plan with me for my final semester, revisions included. My boyfriend has been extremely understanding of my absence and lack of quality time to spend with him over the past several months, and has helped compensate for my lack of time to cook and clean for myself.

My friends – from home, college, and graduate school – are the bread and butter of my life. The constant backdrop of humor, inside jokes, and prankthing from the friends I have made in my five years at Duke have provided balance to the stress that comes with being a graduate student. Soon-to-be Dr. Katrina Jongman-Sereno in particular has been an indispensable part of my graduate school experience and source of support during this dissertation process.

My undergraduate advisors played a huge role in my being where I am today. Kate McLean introduced me to research and let me audit her graduate seminar on “the self,” Jim Graham ignited my enthusiasm for statistics, and Alex Czopp went above and beyond in preparing me for graduate school, both shaping me as a researcher and reminding me to keep the challenges of school in perspective.
My committee members, Rick, Tim, and Gavan have provided thought-provoking discussion and thoughtful feedback to two fairly distinct projects. I appreciate their support in allowing me to pursue research ideas that truly interest me. Outside of the defense setting, Rick and Tim have both been sources of enriching intellectual stimulation, in classes and in meetings, and both are always ready with a warm smile and hello in countless hallway sightings throughout my five years.

The positive impact Mark Leary has had on me, as a researcher and a person overall, is immeasurable. When I interviewed at Duke, multiple people told me that Mark “really is as great as he seems.” Unequivocally, he has lived up to that reputation and has far surpassed what I even knew to hope for from a graduate advisor. He has constantly demonstrated how much he genuinely cares about his students and their development, as he has generously offered his time, assistance, and wisdom, using every teaching moment that arose to explain a new facet or fun fact about the field in which he has been so successful. During the dissertation process and throughout my five years at Duke, he maintained good humor at times when I had lost mine, always reminding me to keep things in perspective and not take myself and the (ultimately trivial) ups and downs of life and graduate school so seriously. And his quirky humor, in line with my own, has been a constant source of entertainment. Mark has been an enormous source of guidance throughout the whole dissertation process, as much with the intangible of keeping me sane as his direct assistance. This project would not have
come to fruition in the way it has without him. I will forever thank my lucky stars that I
was accepted to work with Mark. I have no doubt that he will always maintain his
standing as among the most influential people in the development of my understanding
of the world, human behavior, and myself.
Psychological and Interpersonal Implications of Believing that Everything is One: Identity, Personality, Values, and Worldviews

“A human being is part of the whole called by us universe, a part limited in time and space. We experience ourselves, our thoughts and feelings as something separate from the rest. A kind of optical delusion of consciousness. This delusion is a kind of prison for us, restricting us to our personal desires and to affection for a few persons nearest to us. Our task must be to free ourselves from the prison by widening our circle of compassion to embrace all living creatures and the whole of nature in its beauty. The true value of a human being is determined by the measure and the sense in which they have obtained liberation from the self. We shall require a substantially new manner of thinking if humanity is to survive.” (Albert Einstein, 1954).

The cognitive revolution had many effects on scientific psychology, one of which was to demonstrate that people’s beliefs about themselves and the world have a profound effect on their emotions and behavior. Thousands of studies have shown both that people’s beliefs relate to their reactions in predictable ways and that changing those beliefs, even in small ways, often has corresponding effects on how people feel and act (Eagly & Chaiken, 1993; Greenwald, Poehlman, Uhlmann, & Banaji, 2009; Katz, 1960; LaPiere, 1934).

Within social psychology, much of this work has examined individual differences in people’s beliefs about the nature of the world, including the nature of human beings. For example, research has examined personal beliefs regarding whether the world is inherently fair and just (Lerner, 1980), the existence of free will (Baumeister, 2008; Vohs & Schooler, 2008), the effects of catharsis (Bushman, 2002), the characteristics
of willpower (Baumeister & Tierney, 2011), whether intelligence is stable or malleable (Dweck, 2006), whether true altruism exists (Gebauer, Sedikides, Leary, & Asendorf, 2015), and the nature of love (Fehr & Russell, 1991). In all cases, research has shown that these kinds of personal beliefs have important implications for understanding thought, emotion, and behavior and for understanding why people differ from each other. This dissertation focuses on yet another fundamental belief about the nature of the world – and human beings’ place in it – the belief that everything is (or is not) one.

Since the beginning of written history, the belief that everything is fundamentally part of one unified whole has emerged in an array of cultures and with a variety of philosophical, scientific, and religious justifications (to be discussed in detail). Of course, everyday observation does not easily support such a view and, in fact, people’s normal phenomenological perspective suggests that all things that exist are, in fact, not one but rather multiple and separate. Not only do people see things in the world as separate from each other (e.g., they have boundaries that define them), but also people feel their bodies as distinct from their environment and experience the content of their minds as their own private experience (Metzinger, 2009). Yet, some have suggested that people’s subjective experience of themselves as separate from the rest of the world may be an “optical delusion of consciousness” (Einstein, 1954). A belief in oneness at a deep level implies a sense of interconnectedness among things that generally are perceived as separate at the level of ordinary perception – each “thing” exists embedded
in a greater, unified whole (Akyalcin, Greenway, & Milne, 2008; Capra, 1975; MacDonald & Holland, 2002).

The belief in oneness may have important implications for people’s emotions and actions and for how they treat others. Over 60 years ago, Einstein (1954) proposed that people’s tendency to experience themselves as separate from the rest of the world predisposes them to be self-interested and overly concerned for themselves and those closest to them, rather than embracing all living creatures and nature in their circle of compassion. Einstein found this self-centered perspective of separation so problematic that he hinged the survival of humanity on the development of a different manner of thinking. Some psychologists have echoed the same sentiment that this (literally) self-centered, individuated perspective in which people experience “[them]selves, [their] thoughts and feelings as something separate from the rest” (Einstein, 1954), can predispose people to be egocentric, egoistic, and self-focused, motivated to behave in line with their self-interests (e.g., Gilovich, Kruger, & Savitsky, 1999; Greenwald, 1980; Leary, 2004; Leary & Diebels, 2013; Twenge, 2006). And, they have also suggested that a less individual perspective may offer certain psychological and interpersonal benefits (Leary, Diebels, Jongman-Sereno, & Hawkins, in press; Wayment & Bauer, 2008). As we will see, believing in oneness may reduce the sense of separation and the consequences of that orientation, and foster a sense of interconnection that includes the perception of oneself as being connected with nature and the environment, including all of humanity
(Decicco & Stroink, 2007; Galin, 2003; Leary, Tipsord, & Tate, 2008; McFarland, Brown, & Webb, 2013). Thus, such a belief might have important implications for how people behave toward other people, nonhuman animals, and the natural world.

This dissertation is an initial investigation into people’s belief in oneness and the consequences of holding such a belief. The goals of the present research are to develop and validate a measure of belief in oneness, to begin characterizing the belief itself and the people who believe in oneness, and to investigate some of the interpersonal and ecological implications of believing in oneness, with a particular interest in examining whether believing in oneness contributes to people “widening [their] circle of compassion to embrace all living creatures” as Einstein (1954) suggested.

1.1 Belief in Oneness of Everything

The concept that everything is one can be found in myriad conceptual frameworks, including religions, wisdom traditions, philosophical perspectives, and science (particularly quantum physics) (Capra, 1975; DeLuca, 2003; Happold, 1963; James, 1961; Lande, 1971; Molloy, 2002). Although the basis for the belief differs across these frameworks, people may derive their belief in oneness from one or more of them.

For example, although people from different religious backgrounds (including atheists) differ in their beliefs about the world, many of them have a concept that refers to “all that is.” They may think about this universality as the absolute, God, the Tao, Brahman, cosmic consciousness, or many other labels that represent a “universal
whole” (Bolen, 1982; DeLuca, 2003; Eliade, 1984; James, 1961; Molloy, 2002). Intuitively, this whole encompasses many parts, and many religious perspectives (particularly Eastern traditions) explicitly conceptualize the parts as being deeply interconnected in this one whole. They may view the “parts” as many transient, changing, “forms” that manifest from the eternal “Tao” or “ground of all being.”

Similarly, some philosophical perspectives assert that nothing exists in isolation but that all things are deeply interconnected with everything else. The concept of oneness is captured in the philosophical perspective of neutral monism, which holds that the ultimate reality of the universe is all one kind of “substance,” which is neither all physical nor all mental (Mach, 1959; Spinoza, 1677). Philosophical beliefs about the non-dual nature of the world capture the idea that all of the diverse things that exist are ultimately manifestations of one underlying whole.

Despite religion and science often being pitted against each other, discoveries in quantum physics echo the themes of underlying unity and interconnectedness (Capra, 1975; Lande, 1971). Whereas the world was once conceptualized in terms of separate atoms or particles, new perspectives based on quantum mechanics conceptualize the universe as a single unified field, characterized by unity and interrelation (Lande, 1971). Under classical physics, people were viewed as passive observers of the material world, whereas in quantum models, people are seen as integrally connected with everything in the universe. Erwin Schrödinger, Nobel prize-winning physicist, even said, “quantum
physics thus reveals a basic oneness of the universe.” So, although their beliefs may be based on different considerations, people from a variety of intellectual perspectives believe that everything exists together in unity.

1.2 Variations in Beliefs in Oneness

Some people conceptualize oneness not in terms of the oneness of everything that exists but rather in terms of the oneness of all living things (e.g., plants, animals, people) and/or in terms of the oneness of humanity (e.g., oneness of people around the globe, from different backgrounds, across generations, from the past and in the future) (McFarland, Brown, & Webb, 2013). Of course, each of these specific beliefs in oneness is implied theoretically by the general oneness of all things, and people’s beliefs about general oneness, oneness of all living things, and oneness of humanity likely correlate. Yet, some people may focus on one or both of the specific beliefs in oneness without necessarily considering or believing in the oneness of all things in the universe.

1.2.1 Oneness of Living Things

A belief in the oneness of all living things focuses on the oneness among all living organisms, most obviously plants and animals (including human beings), but presumably also fungi, protists, archaea, and bacteria. People who believe in the oneness of living things view all of life as part of a deeply interconnected system with the various parts of the whole interdependent with other parts (Hill, 2006; Lowe, 2002). Whereas many people perceive themselves to be apart from nature instead of a part of
nature, believing in the oneness of living things explicitly acknowledges the connections between oneself and other forms of life (Frantz, Mayer, Norton, & Rock, 2005).

The idea of oneness and the interconnectedness of all life is deeply ingrained into the thinking and lifestyle of many aboriginal people, including Native Americans (Lowe, 2002; Neihardt, 1979). Both the concept of oneness and the way in which that view corresponds to views of oneself, other people, and nature is captured well by quotes from Black Elk, a member of the Oglala Lakota tribe: “I understood more than I saw; for I was seeing in a sacred manner the shapes of all things in the spirit, and the shape of all shapes as they must live together like one being” and “All things are relatives; what we do to everything we do to ourselves. All is really One.” Their belief in oneness and the interconnectedness of nature permeates the way they live their lives, treat animals and the environment, and behave toward other people (Molloy, 2002; Neihardt, 1979).

1.2.2 Oneness of Humanity

The belief in the oneness of humanity refers to the belief that all of humanity is fundamentally one. People may believe in the oneness of humanity in different ways or for different reasons. First, they may believe in the oneness of humanity because it is implied by the fundamental oneness of everything. This way of thinking about the oneness of humanity is reflected in some people’s views that each person is a unique expression of the whole universe (Tolle, 2005). Interestingly, the greeting, “Namaste,”
which is used across various religions and has been popularized within the context of yoga, roughly means something along the lines of “the place in me where the universe resides is one with the place in you where the universe resides” or “the divinity in me hails the divinity in you” (Ying, Coombs, & Lee, 1999).

People may also believe in the oneness of humanity by viewing all people as inextricably linked to each other through their common humanity, each sharing a common essence and part of the whole of humanity. This belief is captured in phrases from various religions such as “God hath made of one blood all nations of men” (Christianity) and “Human beings all are as head, arms, trunk, and legs unto one another” (Hinduism) (Moses, 1989). Moreover, the belief in the oneness of humanity is closely tied to perspectives and behavior that reflect such shared humanity (McFarland, et al, 2013). As President Obama said about Nelson Mandela, his greatest gift was “his recognition that we are all bound together in ways that are invisible to the eye; that there is a oneness to humanity; that we achieve ourselves by sharing ourselves with others, and caring for those around us.”

This concept of oneness is also captured by a South African word (and way of life), “Ubuntu.” According to Mangaliso (2001, p. 24), “Ubuntu can be defined as human-ness – a pervasive spirit of caring and community, harmony and hospitality, respect and responsiveness – that individuals and groups display for one another. Ubuntu is the foundation for the basic values that manifest themselves in the ways
African people think and behave toward each other and everyone else they encounter.”

Ubuntu is an example of how a worldview that is characterized by the oneness of humanity can translate into a communal orientation toward all people, not just close others. However it is conceptualized, identification with humanity is emerging as a moral concept that involves “a deep caring for all human beings regardless of their race, religious, or nationality” (McFarland et al., 2013, p. 194).

1.2.3 Unique Implications of Variations in the Belief

Framing oneness specifically in terms of all living things or of humanity may result in greater correspondence between each belief and the outcomes that are conceptually more aligned with each specific framing. For example, pro-environmental behavior or the protection of animals may be more related to the belief that all living things are one, whereas prosocial behavior might be more related to the belief in the oneness of humanity. Thus, the more specific framing of the oneness of all living things, and the even narrower framing of the oneness of humanity – may have unique implications that are worth exploring.

1.3 Psychological and Interpersonal Implications of Oneness

Believing in oneness may have a number of psychological and interpersonal implications, many of which may be psychologically and socially beneficial. Virtually no research has examined the implications of beliefs in oneness, so the following sections are necessarily speculative, but they set the stage for the proposed studies. Four primary
categories of interrelated outcomes of a belief in oneness seem likely: (1) reduction in self-focus and self-prioritization, (2) construing one’s identity more in terms of connections, (3) expanding inclusivity of connections with things outside oneself, and (4) having greater concern for things outside oneself, including people, nonhuman animals, and the environment.

1.3.1 Reduction in Self-focus and Self-prioritization

People can become so caught up with their own lives and concerns, pursuing their personal goals and operating from the perspective of their individualized identity, that they habitually and automatically focus on themselves. Myopic focus on oneself can preclude attunement to other people’s perspectives and needs as people act with regard only to their own interests. Furthermore, self-focus and self-prioritization tend to be fueled by the values of individualistic societies that reinforce self-focus through the value placed on individualism, autonomy, status, power, self-promotion, competition, and personal success (Twenge & Foster, 2010). Excessive self-focus and prioritization of one’s own concerns is often viewed as normal (Miller, 1999), if not desirable. Between the tendency for excessive self-reflection and focus, perceiving things (oneself included) as separate, and the tacit encouragement of self-focused values, people’s concern with their own interests and outcomes might preclude attention to the concerns of other people (Schwartz, 1994; Leary et al., in press).
Additionally, people who believe in the oneness of all things are likely more attuned to the larger whole, which can broaden people’s perspective beyond themselves and make them less self-preoccupied (Vago & Silbersweig, 2012; Wayment, Bauer, & Sylaska, 2014).

1.3.2 Construing One’s Identity in Terms of Connections

Believing oneself to be a separate entity is a normal consequence of being an inherently egocentric, self-aware organism that perceives itself and its environment through bodily senses, and that is treated by others as a social object that is distinct from other people and the rest of the world (Gergen, 2009; Mead, 1934; Metzinger, 2009; Sheldon, 2009). Perhaps because people’s sense of self as an individuated entity arises automatically as part of their experiences (Damasio, 2010), people may rarely recognize how limited the perspective is through which they experience life and perceive the world (Wilson, 2002). People may be so locked in to a particular egocentric and self-absorbed perspective that they don’t consider other ways to think about themselves.

People who believe in the fundamental unity of everything in existence should be likely to have a metapersonal identity (Decicco & Stroink, 2007) that is based on seeing themselves as extended into or connected with things outsides themselves (such as all living things or humanity). A metapersonal identity has been proposed as a third type of self-construal in addition to the independent and interdependent self-construals widely studied by social psychologists. Whereas an independent self-construal is
characterized by a stable sense of self that is separate from others, and an
interdependent self-construal is characterized by a variable, situation-dependent,
relationally-defined sense of self (Markus & Kityama, 1991), a metapersonal self-
construal conceptualizes oneself within a larger context that includes all things, all
groups, all life, or all creation (Decicco & Stroink, 2007; see also Maslow, 1970).
Construing oneself as part of a larger whole should promote identification and
connection with people, animals, and things outside oneself.

1.3.3 Expanding Inclusivity of Things “Outside” Oneself

Not only should a belief in oneness be associated with construing one’s identity
in terms of connections with things outside oneself, a belief in oneness might be
associated with a more expansive circle of things and others with whom people identify.
People who believe in oneness and the deep interconnectedness of all the various parts
of the whole presumably have an allo-inclusive identity – which goes beyond
individual, relational, and collective identities to an identity that includes other people
and the natural world (Leary, Tipsord, & Tate, 2008).

Numerous studies in social psychology demonstrate the malleability of group
definition, whereby people readily develop group identities based on trivial similarities
with others, thereby defining who is “us” versus “them” (e.g., minimal group paradigm;
Tajfel, 1970; Tajfel & Turner, 1986). Furthermore, recategorizing one’s ingroup to include
others who were previously considered to be outgroup members results in less in-group
favoritism and increased perceived homogeneity of the groups (Gaertner & Dovidio, 2000; Gaertner, Dovidio, Anastasio, Bachman, & Rust, 1993).

Similarly, a belief in oneness may facilitate redefinition of the groups with which one identifies, creating a new, broader ingroup that includes all living things or all of humanity. Along these lines, people value ingroup and outgroup members more equally the more identified they are with humanity (McFarland et al., 2013). Likewise, the sense of common humanity has been proposed to be at the heart of altruism (Monroe, 1996).

1.3.4 Concern for People, Animals, and the Environment

Including others in one’s identity has been associated with empathy, perspective taking, and prosocial behavior (Cialdini, Brown, Lewis, Luce, & Neuberg, 1997). Perspective taking and empathy have been shown to not only lead to prosocial behavior (Batson, Duncan, Ackerman, Buckley, & Birch, 1981) but to do so partly through a sense of oneness with the other person (operationalized using the Inclusion of Other in the Self Scale; Aron, Aron, & Smollan, 1992). From this perspective, empathic concern can be seen as “an emotional signal of oneness” (Cialdini et al., 1997; p. 481).

Thus, believing in oneness should not only prompt a perspective in which people are more concerned with the well-being of things outside themselves and lead to greater generosity, cooperation, and compassion (Crocker, Olivier, & Nuer, 2009; Leary, Diebels, Jongman-Sereno, & Hawkins, in press; Schwartz, 1994), but it should also expand the circle of targets toward whom people experience empathy and behave with compassion.
1.3.4.1 Natural World Concern

A belief in the oneness of the natural world (humanity included) should activate people’s concern for the well-being of the environment and animals. People differ in their consideration and concern for the environment (e.g., climate, deforestation, preservation, recycling) (Fransson & Gorling, 1999) and animals (e.g., animal rights, protection of endangered species) (Galvin & Herzog, 1992; Herzog, Betchart, & Pittman, 1991). The more that people believe in the deep interconnectedness of the natural world, themselves included, the more they should feel concerned for the well-being of the natural world and engage in preventative and reparative action (Kidner, 2001; Mayer & Frantz, 2004). People who believe in the oneness of the natural world and all living things would likely endorse the philosophical perspective of “deep ecology,” which recognizes the delicate interdependence of ecosystems and argues that human beings do not have the right to exploit the natural world (Naess, 1973).

1.3.4.2 Global Social Concern

Perceiving the oneness of humanity may lead people to be attuned to and invested in the well-being of humanity as a whole, caring for distant others and what goes on in other parts of the world as well as for future generations. Such attunement may involve identifying and addressing suffering around the world (e.g. starvation, poverty, access to clean water, access to healthcare) or various roadblocks to peace among groups and countries. Having a broader circle of compassion that encompasses
humanity in this global sense also means a broader circle of responsibility for relieving suffering.

1.3.4.3 Interpersonal Concern

Believing in the oneness of humanity should also manifest in people’s interactions with others in their daily lives and their general tendency to be prosocial. People who believe in the oneness of all things, particularly the oneness of humanity, should feel more connected to each individual, which may help them appreciate other individuals’ perspectives with a deeper sense of connection and common humanity. Focusing on the shared essence of being human should facilitate seeing past surface-level differences and facilitate perspective-taking and empathy (Batson, Duncan, Ackerman, Buckley, & Birch, 1981).

1.3.4.4 Psychological Downsides of an Expanded Circle

Expanding one’s circle of concern may not be unequivocally positive from the perspective of the individual. In fact, expanding the circle of targets with whom one feels connection, empathy, and a responsibility to help may increase negative emotions. People who believe in oneness might experience distress regarding the suffering of larger numbers of people and animals, sadness about the state of the world and the role that people play in causing harm, and/or frustration or guilt with their own inability to solve these problems and reduce suffering.
Although identification with the myriad ways that people around the world are suffering and the environment is being harmed is not pleasant, identifying with others’ suffering may motivate people to take action (Batson, 1991; Cialdini, Brown, Lewis, Luce, & Neuberg, 1997). Thus, although not pleasant, large scale change in alleviating the suffering of others and in protecting the environment may necessarily depend on individuals feeling bad.

1.4 Overview of Present Research

The purpose of the present project is to initiate research on the potentially important but largely unexamined topic of people’s beliefs in oneness. After developing and validating a measure of people’s belief in general oneness, studies examined relationships between the belief in oneness and personality, self-views, emotions, values, existential beliefs, spirituality, and behavioral reports. Then, to examine the specific beliefs with respect to the oneness of all living things and the oneness of humanity, additional measures were developed and used to examine belief-specific implications of these two varieties of oneness beliefs. Finally, an experiment was conducted in an attempt to lead people to temporarily adopt a perspective of each of the three varieties of oneness beliefs to examine whether the specific framings of oneness differentially affect outcomes such as breadth of connections, compassion, generosity, and concern for the well-being of people, nonhuman animals, and the natural world.
Study 1: Development of a Belief in Oneness Scale

The goals of Study 1 were to (1) develop a measure of people’s belief in oneness, (2) provide initial evidence for the construct validity of the scale, and (3) begin to contextualize the belief within related experiences, perceptions, self-views, and perceived connections with things outside oneself. In developing a measure of belief in oneness, the goal was to assess belief in oneness in its broadest sense, that is, a belief in the oneness of everything without reference to specific conceptualizations and contexts.

As a first step in examining construct validity, the relationship was examined between the belief in oneness and (1) indices of explicit experiences of oneness, both in which people perceive the oneness of everything and feel oneness, (2) self-views assumed to be associated with a belief in oneness (e.g., seeing oneself as extended into everything else or as connected to things outside oneself), and (3) greater inclusivity of connections with other people and the natural world.

First, although the actual experience of perceiving everything as fundamentally one is different from the conceptual belief in oneness, such a perception should obviously correlate highly with the belief that everything is one. Because the perception of unity is a key feature of mystical experiences (Hood, 1975), measures of mystical experience (and particularly the “unifying quality” in which everything is perceived as one), should correlate with a belief in oneness.
Second, people who believe in oneness should be more likely to have experiences in which they feel close, connected, or one with something larger than themselves. Although such experiences are not necessarily accompanied by the belief that everything is one, feeling oneness with something larger than oneself is likely a common experiential manifestation of a belief that everything, oneself included, is fundamentally one. The relationship between belief in oneness and the extent to which people derive a sense of closeness, oneness, connection, presence, or wholeness from a variety of sources was examined.

Third, people who believe in oneness may view themselves more in terms of their relations to others and the world. Their sense of identity is likely to extend beyond themselves as individuals to encompass wider aspects of humankind, life, or the cosmos, as indicated by the extent to which they have a metapersonal identity (Decicco & Stroink, 2007). They may be more likely to believe in the unitive nature of life and feel a common bond with other people and living things (Piedmont, 1999), and they may feel more connected to nature (e.g., Mayer & Frantz, 2004).

The extension of identity beyond oneself can also be measured by the extent to which people include other people (both close and, especially, distant others) and features of the natural world in their identity. One relevant construct, allo-inclusive identity (Leary, Tipsord, & Tate, 2008), involves the degree of overlap or connection felt between oneself and a variety of targets. Using a measure of this construct allowed
examination of overall connection between oneself and things outside oneself, and importantly, provided a way to examine one of the main hypotheses of the present research – that a belief in oneness is associated with greater inclusivity of people and things outside oneself.

Scales for construct validity were selected on the basis of conceptual overlap, where a sense of interconnectedness, if not oneness per se, is a central feature. Given the lack of empirical work in this area, the scales used for construct validity refer to either experiential perceptions of oneness or to self-views and identity assumed to be associated with a belief in oneness, rather than measures of the conceptual belief in oneness per se. These measures not only provide evidence relevant to construct validity but also begin to map the nomological network surrounding the belief in oneness.

2.1 Method

2.1.1 Participants

Two-hundred and sixteen participants (109 men, 107 women, $M_{age} = 34.2$, $SD = 10.3$) were recruited from Amazon’s Mechanical Turk. The sample was predominantly White (85%), with small numbers of participants describing themselves as Asian (9%), Black or African American (7%), American Indian or Alaska Native (4%), and Native Hawaiian or Other Pacific Islander (1%). Participants were Christian (39%), Buddhist (4%), Jewish (1%), Muslim (1%), Hindu (1%), Pagan or Wiccan (1%), Agnostic (23%), Atheist (22%), Other (2%), or None (6%). Participants classified themselves as: neither
religious, nor spiritual (40%), spiritual, but not religious (31%), religious, but not spiritual (6%), and both religious and spiritual (23%). Participants had completed: some high school (1%), high school or GED (10%), some college but no degree (22%), associate’s degree (12%), bachelor’s degree (4 year college) (40%), some graduate school but no degree (2%), master’s degree (9%), Ph.D. (1%), professional degree (JD, MD, etc) (2%).

2.1.2 Measures

2.1.2.1 Belief in Oneness

Participants first read a description about the belief in oneness: “Around the world, some people hold beliefs about “oneness” – the degree to which everything that exists is connected or is part of the same fundamental thing. Some people believe that everything is basically one, whereas other people do not believe that everything is one.” They were then asked to rate their familiarity with the concept: “To what extent have you thought about the idea that everything is one (before now)?” (1 = never, 2 = seldom, 3 = occasionally, 4 = many times, 5 = often).

Because of the possibility that only a small percentage of participants had considered the belief in oneness previously, the decision was made to ask how easy it was for them to believe that everything is one rather than whether they actually believed in oneness. Thus, participants were asked to indicate how easy or difficult it was for them to believe that each of 17 statements that reflected a belief in oneness is true on a 1-
5 response scale (1 = very difficult for me to believe this is true, 5 = very easy for me to believe this is true). Sample items included “Beyond surface appearances, everything is fundamentally one” and “Although many seemingly separate things exist, they all are part of the same whole.” Item selection for the Belief in Oneness Scale is described in the results.

2.1.2.2 Mystical Experiences Scale (Hood, 1975)

This 32-item scale was designed to tap into the eight characteristics of mystical experience as conceptualized by Stace (1960). Ego quality involves losing a sense of self; Unifying quality involves perceiving everything as “one,” that the multiplicity of objects of perception are united; Inner subjective quality involves the perception of an inner subjectivity or aliveness to all things; Temporal/Spatial quality involves modifications in one’s perception of time and space; Noetic quality involves believing the experience to be a source of valid knowledge about the world; Ineffability involves being unable to express the experience in conventional language; Positive affect is the positive affective quality of the experience; and Religious quality involves perceiving the experience as sacred and accompanied by feelings of mystery, awe, and reverence. For each feature, participants rated the extent to which each experience described was true of them on a four-point scale (1 = This description is definitely not true of my own experience or experiences; 4 = This description is definitely true of my own experience or experiences).
2.1.2.3 Sources of Spirituality (SOS) Scale (Davis, Rice, Hook, Van Tongeren, DeBlaere, Choe, & Worthington, 2015)

The SOS Scale assesses sources of spiritual experiences by having people write about their most significant spiritual experience and rate how much they agreed with statements that expressed a sense of closeness, oneness, or connection with: a theistic being (4 items, e.g., I felt close to God), the transcendent (i.e., something outside space and time) (4 items, e.g., I felt a bond with an indescribably force of being), humanity (3 items, e.g., I felt connected to all of humanity), and nature (3 items, e.g., I felt close to nature). They also rated the extent to which they felt authentic or genuine, or a sense of wholeness or integrity (Self as source, 4 items, I felt entirely authentic). Items were answered on a 5-point scale (1 = Strongly disagree to 5 = Strongly agree). In the interest of time, rather than having participants write about their most significant spiritual experience, they were instructed to think about it, consider the same prompt questions, and briefly describe it in a sentence.

2.1.2.4 The Metapersonal Self Scale (Decicco & Stroink, 2007)

This 10-item scale assesses the degree to which people have “a sense of one’s identity that extends beyond the individual or personal to encompass wider aspects of humankind, life, or the cosmos” (p. 84). Sample items include “I feel a sense of kinship with all living things” and “I believe that no matter where I am or what I’m doing, I am never separate from others.” Items were answered on a 7-point scale (1 = Strongly disagree to 7 = Strongly agree).
2.1.2.5 Allo-inclusive Identity Scale (Leary, Tipsord, & Tate, 2008)

This scale was adapted from the Inclusion of Other in the Self Scale (Aron et al., 1992), which presents seven Venn diagrams that range from non-overlapping circles to circles that completely overlap. Participants indicate which diagram best expresses their degree of connectedness with each of 16 targets that include people (both close others and people with whom the person has no relationship), animals (e.g., eagle), and inanimate features of nature (e.g., the moon). The scale has previously demonstrated a two-factor structure reflecting allo-inclusive identity vis-à-vis people versus the nonhuman natural world.

2.1.2.6 Connectedness with Nature Scale (CNS; Mayer & Frantz, 2004)

The CNS is a 14-item scale that assesses the degree to which people feel connected to the natural world, with items such as, “I think of the natural world as a community to which I belong.” Items were answered on a 5-point scale (1 = Strongly disagree to 5 = Strongly agree).

2.1.2.7 Spiritual Transcendence Scale (STS) – Universality subscale (Piedmont, 1999)

The 9-item universality subscale of the STS assesses “a belief in the unitive nature of life” (p. 989), including items such as “I feel that on a higher level all of us share a common bond” as well as other items not as closely tied to the conceptualization such as “I believe that death is a doorway to another plane of existence.” Items were answered on a 5-point scale (1 = Strongly disagree to 5 = Strongly agree).
2.1.3 Procedure

After providing informed consent, participants reported their religious affiliation, and orientation to religion and spirituality (neither religious, nor spiritual; spiritual, but not religious; religious, but not spiritual; both religious and spiritual), followed by the 17 belief in oneness items. Participants then completed each of the other measures, presented in randomized order, except for the sources of spirituality scale. Any participant who answered something other than “neither religious, nor spiritual” when asked to rate themselves then completed the Sources of Spirituality measure. They then reported their race, highest education completed, age, and gender. Participants were thanked for their participation, debriefed, and compensated $1.50 in Amazon credit.

2.2 Results

Given the large number of statistical tests, an alpha-level of .01 was used as the level of significance to control type 1 error.

2.2.1 Item Selection

A principal axis factor analysis was conducted on the 17 belief in oneness items. Based on eigenvalues, one factor was retained (eigenvalue = 12.67, with the next highest eigenvalue being .66). All loadings were above .70. With no strong empirical basis for selecting particular items, six items were chosen by identifying subsets of items that were conceptually similar and deciding which among them to keep for the scale to
maximize breadth of item content. The six items for the Belief in Oneness (BIO) Scale (α = .94) are shown in Table 1 with means, standard deviations, and item-total correlations.

The sum of these six items provided a belief in oneness score.

Table 1: The Belief in Oneness Scale

<table>
<thead>
<tr>
<th>Item</th>
<th>Corrected Item-total</th>
<th>Mean (M)</th>
<th>Standard Deviation (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Beyond surface appearances, everything is fundamentally one.</td>
<td>.87</td>
<td>3.0</td>
<td>1.26</td>
</tr>
<tr>
<td>2. Although many seemingly separate things exist, they all are part of the same whole.</td>
<td>.80</td>
<td>3.4</td>
<td>1.26</td>
</tr>
<tr>
<td>3. At the most basic level of reality, everything is one.</td>
<td>.88</td>
<td>3.0</td>
<td>1.36</td>
</tr>
<tr>
<td>4. The separation among individual things is an illusion; in reality everything is one.</td>
<td>.84</td>
<td>2.9</td>
<td>1.29</td>
</tr>
<tr>
<td>5. Everything is composed of the same basic substance, whether one thinks of it as spirit, consciousness, quantum processes, or whatever.</td>
<td>.78</td>
<td>3.3</td>
<td>1.32</td>
</tr>
<tr>
<td>6. The same basic essence permeates everything that exists.</td>
<td>.77</td>
<td>3.3</td>
<td>1.26</td>
</tr>
</tbody>
</table>

Note. N = 216.

2.2.2 Experiences

2.2.2.1 Qualities of Mystical Experiences

As noted, mystical experiences tend to be associated with an experience of unity or oneness. Reliability coefficients, means, and standard deviations for the qualities of mystical experiences subscales (Hood, 1975) are shown in Table 2, along with
correlations between belief in oneness and each of the qualities of mystical experience. Belief in oneness was most strongly correlated with the unifying quality of mystical experiences \((r = .66, p < .001)\), as expected. The more that people reported having experiences in which they perceived everything to be unified in a single whole, the easier they found it to believe in the oneness of everything. However, all of the other qualities of mysticism also correlated positively with the belief in oneness score (all \(r\)'s > .35).
Table 2: Correlations of Mystical Experiences with BIO Scale Scores

<table>
<thead>
<tr>
<th>Scale</th>
<th>α</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. BIO Scale</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mystical Experiences</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Ego</td>
<td>.92</td>
<td>2.09</td>
<td>.89</td>
<td>.54***</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Unify</td>
<td>.94</td>
<td>2.13</td>
<td>.96</td>
<td>.66***</td>
<td>.80***</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Inner</td>
<td>.87</td>
<td>2.08</td>
<td>.88</td>
<td>.54***</td>
<td>.76***</td>
<td>.81***</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Time/Space</td>
<td>.92</td>
<td>2.01</td>
<td>.94</td>
<td>.37***</td>
<td>.77***</td>
<td>.68***</td>
<td>.67***</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Noetic</td>
<td>.88</td>
<td>2.06</td>
<td>.87</td>
<td>.49***</td>
<td>.81***</td>
<td>.80***</td>
<td>.76**</td>
<td>.74***</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Ineffability</td>
<td>.92</td>
<td>2.48</td>
<td>.97</td>
<td>.42***</td>
<td>.70***</td>
<td>.65***</td>
<td>.57***</td>
<td>.61***</td>
<td>.63***</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Positive affect</td>
<td>.78</td>
<td>2.85</td>
<td>.75</td>
<td>.36***</td>
<td>.62***</td>
<td>.61***</td>
<td>.55***</td>
<td>.52***</td>
<td>.63***</td>
<td>.57***</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>9. Religious</td>
<td>.83</td>
<td>2.40</td>
<td>.89</td>
<td>.36***</td>
<td>.69***</td>
<td>.65***</td>
<td>.63***</td>
<td>.58***</td>
<td>.66***</td>
<td>.58***</td>
<td>.60***</td>
<td>1</td>
</tr>
</tbody>
</table>

A regression analysis was conducted to examine how much of the variance in belief in oneness is explained by all eight qualities of mystical experiences measured by the Mystical Experiences Scale and the degree to which the qualities uniquely predict belief in oneness in the context of each other. The model with all qualities of mystical experiences entered explained 44.5% ($R^2_{adj}$) of the variance in belief in oneness, $F(8, 207) = 22.57, p < .001$. As shown in Table 3, only the unifying quality of mystical experience uniquely predicted belief in oneness at the $\alpha = .01$ level, explaining 12% of variance in belief in oneness. Thus, scores of the Belief in Oneness Scale correlated uniquely with having experiences in which everything was perceived as one.

Table 3: BIO Scale Regressed on Mystical Experiences

<table>
<thead>
<tr>
<th>Quality</th>
<th>$b$</th>
<th>$SE$</th>
<th>$\beta$</th>
<th>$t$</th>
<th>$p$</th>
<th>$sr^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ego quality</td>
<td>.30</td>
<td>.14</td>
<td>.24</td>
<td>2.12</td>
<td>.035</td>
<td>.01</td>
</tr>
<tr>
<td>Unifying quality</td>
<td>.82</td>
<td>.12</td>
<td>.70</td>
<td>6.69</td>
<td>&lt;.001</td>
<td>.12</td>
</tr>
<tr>
<td>Inner subjective quality</td>
<td>.09</td>
<td>.12</td>
<td>.07</td>
<td>.71</td>
<td>.477</td>
<td>.00</td>
</tr>
<tr>
<td>Temporal/spatial quality</td>
<td>-.24</td>
<td>.10</td>
<td>-.20</td>
<td>-2.31</td>
<td>.022</td>
<td>.01</td>
</tr>
<tr>
<td>Noetic quality</td>
<td>-.10</td>
<td>.14</td>
<td>-.08</td>
<td>-.76</td>
<td>.450</td>
<td>.00</td>
</tr>
<tr>
<td>Ineffability</td>
<td>.03</td>
<td>.09</td>
<td>.03</td>
<td>.35</td>
<td>.725</td>
<td>.00</td>
</tr>
<tr>
<td>Positive affect</td>
<td>-.06</td>
<td>.11</td>
<td>-.04</td>
<td>-.59</td>
<td>.557</td>
<td>.00</td>
</tr>
<tr>
<td>Religious quality</td>
<td>-.16</td>
<td>.10</td>
<td>-.13</td>
<td>-1.62</td>
<td>.107</td>
<td>.01</td>
</tr>
</tbody>
</table>

Note. $N = 216$. 
2.2.2.2 Sources of Spirituality

As noted, the Sources of Spirituality Scale measures the extent to which participants derived a sense of closeness, oneness, connection, presence, or wholeness from a variety of sources during their most significant spiritual experience. Reliability coefficients, means, and standard deviations for the Sources of Spirituality subscales are shown in Table 4, along with correlations between belief in oneness and the sources of spirituality. Reliabilities were excellent for all subscales (all $\alpha$’s $> 0.81$).

Having felt a sense of closeness or connection with nature ($r = .45, p < .001$) and with humanity ($r = .49, p < .001$) during a spiritual experience were most strongly correlated with belief in oneness. Belief in oneness was moderately correlated with sensing something infinite or feeling a bond with an indescribable force of being (transcendent source, $r = .33, p < .001$). It also correlated with feeling entirely authentic and genuine and having a sense of integrity and wholeness during a spiritual experience (self as source, $r = .29, p < .001$). Having felt a sense of closeness or connection with a theistic being (God) during a spiritual experience did not correlate with belief in oneness.
Table 4: Correlations of Sources of Spirituality with BIO Scale

<table>
<thead>
<tr>
<th>Scale</th>
<th>α</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. BIO Scale</td>
<td>.95</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Theistic</td>
<td>.98</td>
<td>3.40</td>
<td>1.31</td>
<td>.03</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Transcendent</td>
<td>.82</td>
<td>3.80</td>
<td>.93</td>
<td>.33***</td>
<td>.56***</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Self</td>
<td>.93</td>
<td>4.07</td>
<td>.90</td>
<td>.29***</td>
<td>.30**</td>
<td>.66***</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Nature</td>
<td>.98</td>
<td>3.47</td>
<td>1.19</td>
<td>.45***</td>
<td>-.04</td>
<td>.22</td>
<td>.32***</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>6. Human</td>
<td>.96</td>
<td>3.45</td>
<td>1.12</td>
<td>.49***</td>
<td>.06</td>
<td>.37***</td>
<td>.44***</td>
<td>.66***</td>
<td>1</td>
</tr>
</tbody>
</table>

Note. N = 129 for all analyses except Self (N = 128). **p < .01. ***p < .001.
A regression analysis was conducted to examine how much variance in belief in oneness is explained by the five sources of spirituality together, and the degree to which the sources uniquely predict belief in oneness in the context of the others (see Table 5). The model with all sources of spirituality entered explained 27% ($R^2_{adj}$) of the variance in belief in oneness, $F(5, 122) = 10.59, p < .001$. Three of the sources (transcendent, nature, and human) predicted unique variable in belief in oneness at the $\alpha = .05$ level, but did not reach the $\alpha = .01$ criterion. Although Self as a source of spirituality zero-order correlated, it did not uniquely predict belief in oneness, in the context of the other sources. Experiencing closeness or connection with God (theistic source) did not uniquely predict belief in oneness in the context of the other sources of spirituality.

Table 5: BIO Scale Regressed on Sources of Spirituality

<table>
<thead>
<tr>
<th>Source of Spirituality</th>
<th>$b$</th>
<th>$SE$</th>
<th>$\beta$</th>
<th>$t$</th>
<th>$p$</th>
<th>$sr^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theistic</td>
<td>-.10</td>
<td>.08</td>
<td>-.11</td>
<td>-1.22</td>
<td>.226</td>
<td>.01</td>
</tr>
<tr>
<td>Transcendent</td>
<td>.33</td>
<td>.15</td>
<td>.27</td>
<td>2.27</td>
<td>.025</td>
<td>.03</td>
</tr>
<tr>
<td>Self</td>
<td>-.05</td>
<td>.13</td>
<td>-.04</td>
<td>-0.39</td>
<td>.694</td>
<td>.00</td>
</tr>
<tr>
<td>Nature</td>
<td>.22</td>
<td>.10</td>
<td>.23</td>
<td>2.25</td>
<td>.026</td>
<td>.03</td>
</tr>
<tr>
<td>Human</td>
<td>.26</td>
<td>.11</td>
<td>.26</td>
<td>2.41</td>
<td>.018</td>
<td>.03</td>
</tr>
</tbody>
</table>

Note. $N = 129$ for all analyses except Self ($N = 128$).

2.2.3 Identity and Connections

One would expect people who believe in oneness to perceive greater connections between themselves and other things, including people, other animals, and perhaps the natural world. Four measures assessed these connections: the Metapersonal Self Scale,
the Allo-inclusive Identity Scale, the Connectedness with Nature Scale, and the Spiritual Transcendence Scale. Correlations between belief in oneness and these measures are shown in Table 6. Belief in oneness positively correlated strongly with the Metapersonal Self Scale \( r = .65, p < .001 \). The easier it was for people to believe in oneness, the more they reported having a sense of identity that encompasses aspects of humankind, life, or the cosmos.

Because of questions regarding the factor structure of the Allo-inclusive Identity Scale, a principal axis factor analysis with a direct oblimin rotation was conducted on the 16 allo-inclusive identity items. The Kaiser-Meyer-Olkin measure of sampling adequacy was good (.93), and Bartlett’s test of sphericity was statistically significant, \( \chi^2 (120) = 2802.3, p < .001 \). Examination of the eigenvalues and scree plot indicated three factors (eigenvalues = 8.52, 2.20, and 1.17, with the next highest eigenvalue = .65). Inspection of the rotated pattern matrix showed that the three factors reflected allo-inclusive identity with respect to (1) the natural world (a wild animal, the moon, a dog, a tree, all living creatures, the Earth, an eagle soaring in the sky, the universe), (2) close other people (person with whom you feel closest, your best friend of your own sex, your best friend of the other sex, your family), and (3) distant other people (the average American, a homeless person on the street, a stranger on the bus, a person of another race). All loadings were greater than .5 on their respective factors, except for the item “a person of another race,” which loaded .34 on the distant others factor and .45 on the
natural world factor; on theoretical grounds, this item was used in the composite average for the AI-distant people subscale.

Not surprisingly, all three allo-inclusive identity subscales correlated with belief in oneness. The easier participants found it to believe in oneness, the more connected they felt to a variety of targets. But interestingly, belief in oneness correlated over four times as strongly with allo-inclusivity ratings of distant targets \( (r = .45, p < .001) \) and natural world targets \( (r = .50, p < .001) \) than it did with close targets \( (r = .20, p < .01) \).

Belief in oneness also positively correlated quite strongly with Connectedness with Nature \( (r = .67, p < .001) \) and with the Universality subscale of the Spiritual Transcendence Scale \( (r = .62, p < .001) \). The more participants found it easy to believe in oneness, the more they felt connected to the natural world, felt embedded in the cyclical process of living, believed in the unitive nature of life, and felt a common bond with others.
Table 6: Correlations of Identity and Connections with BIO Scale

<table>
<thead>
<tr>
<th>Scale</th>
<th>α</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. BIO Scale</td>
<td>.95</td>
<td>3.12</td>
<td>1.13</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Metapersonal Self</td>
<td>.92</td>
<td>4.54</td>
<td>1.32</td>
<td>.64***</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. AI – close people</td>
<td>.83</td>
<td>4.93</td>
<td>1.16</td>
<td>.20**</td>
<td>.37***</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. AI – distant people</td>
<td>.90</td>
<td>2.95</td>
<td>1.19</td>
<td>.45***</td>
<td>.49***</td>
<td>.52***</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. AI – natural world</td>
<td>.94</td>
<td>2.87</td>
<td>1.35</td>
<td>.50***</td>
<td>.53***</td>
<td>.38***</td>
<td>.75***</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. CNS</td>
<td>.88</td>
<td>3.57</td>
<td>.67</td>
<td>.64***</td>
<td>.72***</td>
<td>.22***</td>
<td>.42***</td>
<td>.62***</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>7. STS-universality</td>
<td>.92</td>
<td>3.39</td>
<td>.93</td>
<td>.62***</td>
<td>.77***</td>
<td>.23***</td>
<td>.34***</td>
<td>.36***</td>
<td>.56***</td>
<td>1</td>
</tr>
</tbody>
</table>

To follow up on the correlational analysis of the BIO Scale with allo-inclusive identity, a regression analysis was conducted with all three AI-subcales predicting oneness. The regression analysis indicated that the model was significant, with the three allo-inclusivity scales together explaining 26% of the variance in belief in oneness, \( F(3, 212) = 26.48, p < .001 \). Allo-inclusivity of the natural world uniquely explained 6% of variance in belief in oneness. The unique variance explained by allo-inclusivity of distant other people did not reach significance by the \( \alpha = .01 \) criterion.

### Table 7: BIO Scale Regressed on Allo-Inclusive Identity

<table>
<thead>
<tr>
<th>Allo-inclusive Identity</th>
<th>( b )</th>
<th>( SE )</th>
<th>( \beta )</th>
<th>( t )</th>
<th>( p )</th>
<th>( sr^2 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Close people</td>
<td>-.01</td>
<td>.02</td>
<td>-.05</td>
<td>-.78</td>
<td>.434</td>
<td>.00</td>
</tr>
<tr>
<td>Distant people</td>
<td>.04</td>
<td>.02</td>
<td>.22</td>
<td>2.33</td>
<td>.021</td>
<td>.02</td>
</tr>
<tr>
<td>Natural world</td>
<td>.04</td>
<td>.01</td>
<td>.36</td>
<td>4.08</td>
<td>&lt;.001</td>
<td>.06</td>
</tr>
</tbody>
</table>

Note. \( N = 216 \).

### 2.3 Discussion

Study 1 involved the development of a six-item Belief in Oneness Scale that demonstrated good reliability and provided initial support for construct validity. Virtually all correlations with other measures were consistent with expectations.

First, belief in oneness correlated with experiences in which participants either perceived the oneness of everything (as in mystical experiences) or felt oneness, closeness, or connection with something larger (e.g., nature, humanity, something infinite/transcendent) during a spiritual experience. For mystical experiences,
expected, belief in oneness was most strongly related to the unifying quality of mystical experiences, which was the only quality that significantly explained unique variance in belief in oneness. Thus, participants who found it easiest to believe that everything was one were more likely to have had experiences in which they experienced oneness.

Second, examination of the relationship between believing in oneness and sources of spirituality provided both convergent and discriminant validity. As expected, belief in oneness was related only to sources of spirituality that are associated with experiences of oneness or closeness (i.e., marginally uniquely related to nature, humanity, and the transcendent). Thus, the belief in oneness is associated with experiences that are characterized specifically by oneness or merging and not simply with a general sense of spirituality. In contrast, feeling entirely authentic and genuine or having a sense of integrity and wholeness during a spiritual experience (Self source) did not uniquely explain variance in belief in oneness, although it was correlated. Self as a source of spirituality is not explicitly about feelings of closeness or connections with a broader whole, in the way the other sources are. Additionally, belief in oneness was not correlated with a theistic source of spirituality, possibly because people who experience a connection with God often do so in the context of having a “personal relationship” with God that may involve the sense of feeling separate from the larger whole.

Third, belief in oneness was related to having an identity that extends beyond oneself to encompass wider aspects of humankind, life, and the natural world, as
indicated by correlations with the Metapersonal Self scale, Allo-inclusive Identity Scale, Connectedness with Nature Scale, and the Universality subscale of the Spiritual Transcendence Scale. The belief in oneness may be both an antecedent and consequence of viewing one’s identity more broadly. People who view themselves as deeply connected with everything may be more likely to develop a belief in oneness, or, believing in oneness may affect the way people think about themselves in relation to others and the world.

Finally, Study 1 provided support for the hypothesis that a belief in oneness is associated with greater inclusivity of people and things within one’s circle of connection. Specifically, belief in oneness correlated more strongly with allo-inclusivity ratings of distant people and natural world targets than it did with close people targets. And, when the three allo-inclusive identity subscales were included in a regression analysis to predict oneness, the connection felt with close targets was not a unique predictor. Because most people feel highly connected to people close to them regardless of their beliefs in oneness, oneness beliefs should not matter much for close targets. However, as hypothesized, oneness beliefs appear to be more relevant for one’s inclusion of distant people who typically fall outside the average person’s inner circle.
Study 2: Correlates of the Belief in Oneness

Beliefs – especially fundamental beliefs about the nature of reality – are part of the lens through which people perceive themselves, other people, and the world in general. The individuated perspective through which people typically view the world can predispose them to be egocentric, egoistic, and self-focused, and motivated to behave in line with their self-interests (e.g., Gilovich, Kruger, & Savitsky, 1999, Greenwald, 1980; Leary, 2004; Leary & Diebels, 2013; Twenge, 2006). In contrast, believing in oneness may be associated with less self-focus and self-prioritization, greater perspective-taking outside one’s own view, and more communal interpersonal orientations.

In addition to replicating the structure of the Belief in Oneness Scale using a confirmatory factor analysis, Study 2 had four general goals. First, Study 2 investigated how believing in oneness relates to a number of self-views: people’s sense of an immutable self (experiencing oneself as timeless), people’s need for uniqueness, level of self-focus (self-absorption), and the extent to which they view themselves as their top priority and prioritize putting themselves first.

Believing in an immutable self involves the sense that the part of people that thinks, feels, observes, and remembers will continue to exist after they die and/or existed before they were conceived (Burris & Sani, 2014). On the one hand, people who experience themselves as timeless, existing before and after their lifetime, might identify
with the “eternal homogenous reality” (Burris & Sani, 2014) and, thus, be likely to believe in the oneness of everything. On the other hand, believing that one’s individualized self continues in an afterlife may be associated with the sense of a relatively stable, homunculus-type “self,” which seems to make people feel separate and could be negatively associated with a belief in oneness.

Need for uniqueness could correlate negatively with belief in oneness to the extent that people equate oneness with sameness and think that the oneness of everything precludes the possibility of being distinct and unique. Alternatively, belief in oneness itself may be considered an unusual belief or associated with non-traditional worldviews and, thus, may correlate positively with need for uniqueness. People who believe in oneness were also expected to be less self-absorbed and caught up with thinking excessively about themselves. Similarly, belief in oneness was expected to correlate negatively with prioritizing self-interests. Of course, everyone prioritizes their personal concerns and well-being to some extent, but people who believe in oneness were hypothesized to prioritize themselves less.

The study’s second goal was to examine the relationship between belief in oneness and the degree to which people view the world from multiple perspectives. Integrating conflicting views and tolerating ambiguity, which reflects less black-white thinking, could be positively related to belief in oneness to the extent that a belief in oneness is at odds with dualistic ways of thinking. Interpersonally, belief in oneness
should be associated with taking other people’s perspectives. People who believe in oneness may appreciate other people’s perspectives with a deeper sense of common humanity and sharing in the human experience, which can facilitate perspective-taking and caring for others (Batson, Duncan, Ackerman, Buckley, & Birch, 1981; Neff, 2003).

Viewing the world from multiple perspectives, integrating conflicting views while tolerating ambiguity, and having general goodwill and sympathetic compassion for others are characteristics of Ardelt’s (2003) three-dimensional conceptualization of wisdom. Whether or not people who believe in oneness tend to be wiser in a colloquial view of wisdom, they may be more likely to be wise as defined by these characteristics, particularly the reflective (perspective taking) and the affective (compassionate) dimensions.

The third goal of Study 2 was to test the hypothesis that people who believe in oneness are more concerned about the welfare of others than those who don’t believe in oneness. In addition to examining the relationship between belief in oneness and the affective (compassionate) component of wisdom, the hypothesis was tested by examining the relationship between people’s belief in oneness and their values, as well as by how they spend money obtained from a windfall (i.e., do they donate to charity?). Of particular interest with values was whether people who believe in oneness more strongly endorse values of benevolence (preserving and enhancing the welfare of people with whom one is in frequent contact) and universalism (understanding, appreciating,
tolerating, and protecting the welfare of all people, as well as nature). Additionally, in line with the central hypothesis that belief in oneness involves broadening circles of concern beyond oneself and close others, and the findings of Study 1 that showed belief in oneness correlated more with people’s connection to distant others and the natural world than to close others, so too may belief in oneness correlate more strongly with universalism, which is all-encompassing compared to benevolence.

Finally, separate from the above themes, some people assume that belief in oneness might be more common among people with alternative or “new age” worldviews and might be more strongly endorsed by those who are politically liberal than politically conservative. And, to the extent that politically liberal people in the United States fulfill the stereotype of being more broadly socially concerned and environmentally proactive, a relationship between belief in oneness and being politically liberal is possible, prompting an examination of relationships between belief in oneness and political orientation and affiliation.

3.1 Method

3.1.1 Participants

Two-hundred and ninety-four participants (145 men, 149 women, $M_{age} = 34.9, SD = 11.78$) were recruited from Amazon’s Mechanical Turk. The sample was predominantly White (84%), with small numbers of participants describing themselves as Asian (10%), Black or African American (10%), American Indian or Alaska Native
(4%), and Native Hawaiian or Other Pacific Islander (.3%). Participants were Christian (45%), Buddhist (1%), Jewish (1%), Muslim (1%), Hindu (1%), Pagan or Wiccan (1%), Agnostic (15%), Atheist (16%), Other (7%), or None (14%). Participants had completed: some high school (.3%), high school or GED (13%), some college but no degree (27%), associate’s degree (10%), bachelor’s degree (4 year college) (35%), some graduate school but no degree (5%), master’s degree (7%), Ph.D. (1%), professional degree (JD, MD, etc) (2%).

3.1.2 Measures

3.1.2.1 Belief in Oneness

Participants first read the same description of the belief in oneness used in Study 1. They were then asked, “Do you believe that everything is fundamentally one?” (1 = no, 2 = yes) and completed the Belief in Oneness scale created in Study 1.

3.1.2.2 Short Marlowe-Crowne Social Desirability Scale (Reynolds, 1982)

Thirteen items from the original Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1960) were used to assess social desirability response bias. Participants responded with true or false to items such as, “No matter who I’m talking to, I’m always a good listener” and “I have never been irked when people expressed ideas very different from my own.”
3.1.2.3 The Immutable Self Scale (Burris & Sani, 2014)

Nine items assessed people’s sense that the possibility of preconception or postmortem existence “feels true.” Items include: “Whether it is true or not, I sometimes feel as if I have always existed,” and “I feel as if my consciousness—the part of who I am that thinks, feels, observes, and remembers—will continue to exist even after I am physically dead” (1 = Strongly disagree to 7 = Strongly agree).

3.1.2.4 Self-attributed Need for Uniqueness Scale (Lynn & Harris, 1997)

Four items assessed the importance of being unique and distinctive from others. Sample items include, “Being distinctive is _____important to me” (1 = not at all to 5 = extremely) and “I have a _____need for uniqueness” (1 = weak to 5 = very strong).

3.1.2.5 Self-absorption Scale (McKenzie & Hoyle, 2008)

This two-factor scale measures “excessive, sustained, and rigid attention” on oneself, both from one’s own perspective (private self-absorption, 8 items) and from imagining others people’s perspectives and evaluations (public self-absorption, 9 items). Sample items include “I think about myself more than anything else” (private self-absorption) and “I find myself wondering what others think of me even when I don’t want to” (public self-absorption) (1 = not at all like me to 5 = very much like me).

3.1.2.6 Selfism Scale (adapted from Phares & Erksine, 1984)

Ten items that tap into a selfish interpersonal orientation (the degree to which people prioritize their own desires, goals, or concerns above those of others) were
selected from the 28-item Selfism Scale. Items include “Thinking of yourself first is no sin in this world today” and “It is more important to live for yourself rather than for other people, parents, or for posterity” (1 = Strongly disagree to 5 = Strongly agree). This 10-item brief measure was validated in a previous study.

3.1.2.7 Self-compassion Scale – Common Humanity & Isolation subscales (Neff, 2003)

Four items assessed common humanity – the extent to which people see their setbacks and inadequacies as part of the human condition (e.g., When things are going badly for me, I see the difficulties as part of life that everyone goes through), and four items assessed isolation (inversely related to common humanity) – the extent to which people’s setbacks make them feel isolated from others (e.g., When I think about my inadequacies, it tends to make me feel more separate and cut off from the rest of the world; 1 = almost never to 5 = almost always).

3.1.2.8 Three-dimensional Wisdom Scale (Ardelt, 2003)

Three subscales measured self-reported indicators of wisdom along three dimensions – an affective dimension (13 items) that reflects people’s sympathetic and compassionate love for other people, a reflective dimension (12 items) that reflects the ability to perceive the world from multiple perspectives, and a cognitive dimension (14 items) that reflects the degree to which people accept the positive and negative nature of human nature, the limits of their own knowledge, and life’s uncertainties.
3.1.2.9 Intolerance for Ambiguity (Martin & Parker, 1995)

Eight items assessed intolerance of cognitive ambiguity. Items involve rigid
dichotomous thinking (e.g., “a person either knows the answer to a question or he
doesn’t,” “there is only one right way to do anything”) and fixedness of impressions
(e.g., “first impressions are very important,” “it doesn’t take long to find out if you can
trust a person”).

3.1.2.10 Values

Participants read short descriptions of each of Schwartz’s (1994) 10 values.
Although not a validated measure of values (participant time constraints did not permit
administration of Schwartz’s scale), this approach nonetheless provides an initial
examination of how belief in oneness relates to various values, including benevolence
and universalism. Additionally, an item about oneness was included to assess how
much participants valued believing in oneness as a guiding principle in their lives. (The
item read: “Oneness: Believing that everything that exists is ultimately part of the same
fundamental thing.”) The other value items can be found in Appendix A. For each value,
participants were asked, “To what extent do you live by the following principles and
values? That is, to what degree do these principles and values guide your decisions and
behavior?” Participants responded on a 5-point scale (1 = Not at all; this principle or value
is not important to me, 2 = slightly, 3 = somewhat, 4 = very much, 5 = Extremely; this is one of
my most important principles or values).
3.1.2.11 Monetary Generosity

Participants were provided with three hypothetical scenarios in which they indicated what they would do with money. In the first, they were told, “Imagine that you are employed and earning $50,000 per year. How much of your income, if any, would you donate to charitable causes in a year?”

In the second scenario, they were told to imagine that a wealthy individual gave them a choice. The individual would either give them $10,000 to keep for themselves OR they could give an amount greater than $10,000 to a person selected at random. They were then asked what the minimum amount is that the randomly chosen person would need to receive in order for them to decide to let the other person have that amount of money rather than to keep $10,000 for themselves, or, they could keep the $10,000 no matter how much the other person would receive.

In the third scenario, participants were told to imagine “that you suddenly received $50,000. You are not allowed to save any of the money but must spend or give it all away within a month. What would you do with this money?” Participants were asked to list one to five things that they would do with the money and to indicate how many dollars they would use for each purpose (the sum totaling $50,000). These responses were then coded into categories of spending, with particular interest in the proportion of money given (if any) to people outside oneself and one’s family or friends.
3.1.3 Procedure

After providing informed consent, participants completed the set of oneness items, followed by the set of values. They then completed each of the other measures, presented in randomized order. Finally, they reported their religious affiliation, and orientation to religion and spirituality (neither religious, nor spiritual; spiritual, but not religious; religious, but not spiritual; both religious and spiritual), race, gender, age, and highest education completed. To assess political leanings, participants indicated their political affiliation (Republican, Democratic, Independent) and rated their political liberal-conservatism on a 5-point scale (1=very liberal – 5 = very conservative). Participants were thanked for their participation, debriefed, and compensated $1.50 in Amazon credit.

3.2 Results

3.2.1 Belief in Oneness Scale

3.2.1.1 Confirmatory Factor Analysis

Confirmatory factor analysis (CFA) was used to confirm the factor structure of the six-item Belief in Oneness Scale, using statistical software Mplus version 6.1 (Muthen & Muthen, 1998-2010). Maximum Likelihood (ML) estimation was used, which was appropriate given multivariate normality and lack of missing data. Two indices were used to evaluate model fit: comparative fit index (CFI, Bentler, 1990) and root-mean-square error of approximation (RMSEA, Steiger & Lind, 1980). The CFI (.96) of the
specified model exceeded the cut-off of .95 for good fit (Mulaik & Millsap, 2000),
however the RMSEA (.17 [90% CI = .14, .20]) did not reach the cut-off for adequate fit
(represented by an upper bound of .08 or less for the RMSEA 90% confidence interval).

Modification indices provided by Mplus were examined to inform possible
respecification to the extent that suggested modifications were theoretically meaningful.
A modification index (64.63) indicated that the error terms of two items should be freed
to correlate. Examination of the two items revealed that both used the wording “same
basic” (“Everything is composed of the same basic substance, whether one thinks of it as
spirit, consciousness, physical matter, quantum processes, or whatever” and “The same
basic essence permeates everything that exists”), which provided enough justification on
theoretical grounds to pursue the modification. The re-specified model fit was good as
indicated by CFI = .996 and almost reached adequate fit as indicated by RMSEA = .05
(90% CI = .00, .10). The lowest loading item (.66) was “everything is composed of the
same basic substance, whether one thinks of it as spirit, consciousness, physical matter,
quantum processes, or whatever.” All other items loaded between .77 and .95. Overall,
the one-factor model offers an adequate account of the data. The reliability of the Belief
in Oneness Scale was $\alpha = .95$.

3.2.1.2 Social Desirability Bias

To ensure that responses to the Belief in Oneness Scale were not contaminated by
social desirability bias, a correlation was calculated between scores on the Belief in
Oneness Scale and the Short Marlowe-Crowne Social Desirability Scale ($\alpha = .74$), $r = .06$, $p = .315$. Given that many constructs that might be correlated with belief in oneness are considered socially desirable (e.g., empathy, generosity), the fact that the Belief in Oneness Scale itself did not correlate with social desirability is encouraging.

3.2.1.3 Two Ways of Assessing Belief in Oneness

Participants completed two distinct measures of the belief in oneness—the Belief in Oneness Scale developed in Study 1 (which assesses how easy it is for people to believe that everything is one) and a dichotomous measure that asked “do you believe that everything is fundamentally one” (no, yes). Not surprisingly, a one-way analysis of variance (ANOVA) showed that participants who believe in oneness (no, yes) scored higher on the Belief in Oneness Scale ($M = 3.99$, $SD = .76$) compared to people who did not believe in oneness ($M = 2.15$, $SD = .82$), $F(1, 292) = 400.00$, $p < .001$, $\eta^2 = .58$.

Because these two measures assess belief in oneness in rather different ways, the analyses that follow report results using both measures. In the tables of results, scores on the Belief in Oneness Scale are labeled “BIO Scale” and dichotomous belief ratings are labeled “Dichotomous BIO”.

3.2.2 Self-views and Self-focus

As noted, believing in oneness may be associated with particular views of oneself, one’s relation to others and the world as a whole. This section examines the relationships between belief in oneness and experiencing oneself as timeless (an
immutable self), need for uniqueness, self-absorption, and endorsement of a self-prioritizing approach to life. Reliability coefficients, means, and standard deviations for the self-related scales are shown in Table 8. Reliabilities were excellent for all the self-related scales. The relationships between belief in oneness and these measures were examined in two ways, by using answers to the question “Do you believe that everything is fundamentally one?” (no, yes) and by using scores on the Belief in Oneness Scale developed in Study 1.

To begin, the relationship between the dichotomous measure of belief in oneness and the outcome variables was tested at the multivariate level to protect against type 1 error. (As in Study 1, the alpha-level was set at .01 for all tests.) Homogeneity of variance was examined at both the multivariate and univariate levels, and neither Box’s M nor Levene’s tests was significant. The multivariate test of dichotomous BIO on the set of self-related scales was statistically significant, Pillai’s Trace = .12, $F(5, 288) = 7.72, p < .001$, $\eta^2 = .12$. The univariate effects of Belief in Oneness on self-related scales are presented in Table 8. As can be seen, believing in oneness was associated with believing in an immutable self and with higher need for uniqueness, but not with self-absorption or selfism.
Table 8: Self-views and Self-focus by Dichotomous BIO

<table>
<thead>
<tr>
<th>Scale</th>
<th>α</th>
<th>M</th>
<th>SD</th>
<th>F(1, 293)</th>
<th>p</th>
<th>η²</th>
<th>M</th>
<th>SD</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immutable Self</td>
<td>.85</td>
<td>3.71</td>
<td>1.52</td>
<td>32.86</td>
<td>&lt;.001</td>
<td>.10</td>
<td>3.23</td>
<td>1.49</td>
<td>4.19</td>
<td>1.39</td>
</tr>
<tr>
<td>N uniqueness</td>
<td>.85</td>
<td>2.86</td>
<td>.87</td>
<td>7.87</td>
<td>.005</td>
<td>.03</td>
<td>2.72</td>
<td>.85</td>
<td>3.00</td>
<td>.87</td>
</tr>
<tr>
<td>Self-absorption</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private</td>
<td>.93</td>
<td>2.23</td>
<td>.82</td>
<td>.89</td>
<td>.348</td>
<td>.00</td>
<td>2.18</td>
<td>.80</td>
<td>2.27</td>
<td>.84</td>
</tr>
<tr>
<td>Public</td>
<td>.85</td>
<td>2.59</td>
<td>1.00</td>
<td>.04</td>
<td>.833</td>
<td>.00</td>
<td>2.58</td>
<td>1.00</td>
<td>2.60</td>
<td>1.01</td>
</tr>
<tr>
<td>Selfism</td>
<td>.91</td>
<td>3.02</td>
<td>.87</td>
<td>.00</td>
<td>.991</td>
<td>.00</td>
<td>3.02</td>
<td>.86</td>
<td>3.02</td>
<td>.89</td>
</tr>
</tbody>
</table>

Note. \( N = 294 \). BIO = Dichotomous Belief in Oneness: No (\( n = 148 \)) Yes (\( n = 146 \)). N uniqueness = Need for uniqueness.
In addition to examining differences in belief in an immutable self, need for uniqueness, self-absorption, and selfism as a function of the dichotomous belief (or non-belief) in oneness, zero-order correlations between scores on the Belief in Oneness Scale and each of the self-views are shown in Table 9. As can be seen, Belief in Oneness scores significantly correlated only with believing in an immutable self ($r = .37$).

Additionally, a regression analysis examined how much of the variance in Belief in Oneness Scale is explained by the collection of self-views and the degree to which the individual variables uniquely predict belief in oneness. The model explained 15% ($R^2_{adj}$) of the variance in belief in oneness, $F(5, 288) = 11.34$, $p < .001$. As shown in Table 9, variance in belief in oneness was uniquely predicted only by immutable self (which explained 13% of the variance).

**Table 9: BIO Scale Regressed on Self-views and Self-focus**

<table>
<thead>
<tr>
<th>Predictor</th>
<th>$r$</th>
<th>$\beta$</th>
<th>$sr^2$</th>
<th>$t$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immutable Self</td>
<td>.37***</td>
<td>.36</td>
<td>.13</td>
<td>6.59</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>N uniqueness</td>
<td>.14</td>
<td>.12</td>
<td>.02</td>
<td>2.11</td>
<td>.036</td>
</tr>
<tr>
<td>Self-absorption</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private</td>
<td>.02</td>
<td>.04</td>
<td>.00</td>
<td>.55</td>
<td>.584</td>
</tr>
<tr>
<td>Public</td>
<td>-.03</td>
<td>-.08</td>
<td>.00</td>
<td>-1.13</td>
<td>.259</td>
</tr>
<tr>
<td>Selfism</td>
<td>-.08</td>
<td>-.13</td>
<td>.02</td>
<td>-2.16</td>
<td>.032</td>
</tr>
</tbody>
</table>

Note. $N = 294$. **$p < .01$. ***$p < .001$. $r = \text{zero-order correlation with BIO Scale.}$
3.2.3 Cognitive Traits, Perspective-taking, and Compassion

Reliability coefficients, means, and standard deviations for common humanity, the three dimensions of wisdom, and intolerance for ambiguity are shown in Table 10, along with correlations with the Belief in Oneness Scale and the results of ANOVAs on the dichotomous BIO. Reliabilities were acceptable for all measures.

A multivariate analysis of variance was conducted to examine the relationships between dichotomous BIO and scores on common humanity, the three dimensions of wisdom, and intolerance for ambiguity. Homogeneity of variance was examined at the multivariate and univariate levels, and neither Box’s M nor Levene’s tests were significant. A multivariate effect of dichotomous BIO was obtained, Pillai’s Trace = .05, $F(5, 288) = 2.91, p = .014, \eta^2 = .05$. Only the effect for common humanity was significant at the .01 level, showing that participants who believed in oneness scored high on the common humanity subscale.

Looking at Pearson correlations, scores on the Belief in Oneness Scale correlated positively with common humanity ($r = .18, p < .01$) and with the affective dimension of wisdom ($r = .18, p < .01$). Neither the reflective and cognitive dimensions of wisdom, nor intolerance for ambiguity, were significantly correlated with belief in oneness.
<table>
<thead>
<tr>
<th>Scale</th>
<th>α</th>
<th>M</th>
<th>SD</th>
<th>r</th>
<th>M</th>
<th>SD</th>
<th>M</th>
<th>SD</th>
<th>F(1, 293)</th>
<th>p</th>
<th>η²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common humanity</td>
<td>.80</td>
<td>3.17</td>
<td>.73</td>
<td>.18**</td>
<td>3.04</td>
<td>.76</td>
<td>3.31</td>
<td>.67</td>
<td>10.27</td>
<td>.002</td>
<td>.03</td>
</tr>
<tr>
<td>Wisdom</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Affective</td>
<td>.83</td>
<td>3.48</td>
<td>.65</td>
<td>.18**</td>
<td>3.21</td>
<td>.63</td>
<td>3.37</td>
<td>.65</td>
<td>4.76</td>
<td>.030</td>
<td>.02</td>
</tr>
<tr>
<td>Reflective</td>
<td>.79</td>
<td>3.46</td>
<td>.66</td>
<td>.14</td>
<td>3.39</td>
<td>.67</td>
<td>3.56</td>
<td>.64</td>
<td>5.17</td>
<td>.024</td>
<td>.02</td>
</tr>
<tr>
<td>Cognitive</td>
<td>.81</td>
<td>3.29</td>
<td>.65</td>
<td>.05</td>
<td>3.47</td>
<td>.65</td>
<td>3.45</td>
<td>.64</td>
<td>.12</td>
<td>.734</td>
<td>.00</td>
</tr>
<tr>
<td>Intol. ambiguity</td>
<td>.82</td>
<td>2.63</td>
<td>.80</td>
<td>.00</td>
<td>2.60</td>
<td>.80</td>
<td>2.67</td>
<td>.80</td>
<td>.56</td>
<td>.456</td>
<td>.00</td>
</tr>
</tbody>
</table>

3.2.4 Concern for the Welfare of Others and Generosity

Finally, people’s concern for the welfare of others and their generosity toward others were assessed by examining the relationship between people’s belief in oneness and their values, as well as by how they spend money obtained from a windfall.

3.2.4.1 Values

Homogeneity of variance was examined at both the multivariate and univariate levels. Box’s Test of Equality of Covariance Matrices (Box’s M) was statistically significant ($p = .048$), but inspection of the variance-covariance matrices of the dependent variables indicated the patterns of variances and covariances were acceptably comparable in size and direction between those who did and did not belief in oneness. At the univariate level, Levene’s Test of Equality of Error Variances was statistically significant for three values – valuing oneness, $F(1, 292) = 4.05, p = .045$; universalism, $F(1, 292) = 9.35, p = .002$; and power, $F(1, 292) = 5.68, p = .018$; however, inspection of the within-cell variances revealed that the ratio of the largest to smallest variances for each of the suspect dependent variables was under 1.3, which is considered acceptable.

Of Schwartz’s (1994) 10 universal values, benevolence and universalism were predicted to correlate most highly with belief in oneness. Means and standard deviations for the 10 values, as well as the value placed on belief in oneness, are shown in Table 11 along with correlations between scores on the Belief in Oneness Scale and
each of the values. Additionally, differences in the importance that participants placed on each of these values were examined as a function of dichotomous BIO (no, yes).

First, the multivariate effect of dichotomous BIO on values was statistically significant, Pillai’s Trace = .53, $F(11, 282) = 28.39, p < .001, \eta^2 = .53$. As seen in Table 11, participants who indicated that they believed in oneness scored higher in the value they placed on benevolence, universalism, and, of course, oneness than participants who did not believe in oneness.

Belief in Oneness Scale scores correlated strongly with how important participants rated oneness as a value that guides their decisions and behavior. Additionally, belief in oneness correlated with valuing universalism (i.e., understanding, appreciating, tolerating, and protecting the welfare of all people and nature) and benevolence (i.e., preserving and enhancing the welfare of people with whom one is in frequent personal contact). In line with findings from Study 1 and the central hypothesis of these studies that belief in oneness broadens people’s circles of concern and compassion, belief in oneness correlated four times more strongly with universalism ($r = .41, p < .001$) than with benevolence ($r = .23, p < .001$). Participants who believed in oneness valued oneness, universalism, and benevolence significantly more than those who did not.
Table 11: Values and Belief in Oneness

<table>
<thead>
<tr>
<th>Value</th>
<th>BIO Scale</th>
<th>Dichotomous BIO</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>r</td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td>F(1, 293)</td>
<td>p</td>
</tr>
<tr>
<td>Oneness</td>
<td>2.61</td>
<td>1.40</td>
<td>.78**</td>
<td>1.62</td>
<td>.92</td>
<td>3.61</td>
<td>1.03</td>
<td>303.39</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Universalism</td>
<td>3.68</td>
<td>1.12</td>
<td>.41**</td>
<td>3.35</td>
<td>1.15</td>
<td>4.01</td>
<td>1.00</td>
<td>27.22</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Benevolence</td>
<td>3.75</td>
<td>.97</td>
<td>.23**</td>
<td>3.59</td>
<td>.98</td>
<td>3.92</td>
<td>.94</td>
<td>8.76</td>
<td>.003</td>
</tr>
<tr>
<td>Power</td>
<td>2.16</td>
<td>1.09</td>
<td>.01</td>
<td>2.07</td>
<td>1.03</td>
<td>2.25</td>
<td>1.14</td>
<td>1.99</td>
<td>.159</td>
</tr>
<tr>
<td>Hedonism</td>
<td>2.63</td>
<td>1.17</td>
<td>.08</td>
<td>2.51</td>
<td>1.12</td>
<td>2.76</td>
<td>1.22</td>
<td>3.47</td>
<td>.064</td>
</tr>
<tr>
<td>Achievement</td>
<td>3.26</td>
<td>.98</td>
<td>-.04</td>
<td>3.26</td>
<td>.91</td>
<td>3.25</td>
<td>1.04</td>
<td>.01</td>
<td>.929</td>
</tr>
<tr>
<td>Stimulation</td>
<td>3.47</td>
<td>1.01</td>
<td>.20**</td>
<td>3.32</td>
<td>1.01</td>
<td>3.61</td>
<td>.99</td>
<td>6.00</td>
<td>.015</td>
</tr>
<tr>
<td>Conformity</td>
<td>2.64</td>
<td>1.16</td>
<td>-.02</td>
<td>2.65</td>
<td>1.15</td>
<td>2.62</td>
<td>1.18</td>
<td>.04</td>
<td>.852</td>
</tr>
<tr>
<td>Tradition</td>
<td>3.06</td>
<td>1.21</td>
<td>-.03</td>
<td>3.01</td>
<td>1.15</td>
<td>3.12</td>
<td>1.26</td>
<td>.69</td>
<td>.408</td>
</tr>
<tr>
<td>Self-direction</td>
<td>4.10</td>
<td>.84</td>
<td>.12</td>
<td>4.07</td>
<td>.87</td>
<td>4.12</td>
<td>.80</td>
<td>.25</td>
<td>.616</td>
</tr>
<tr>
<td>Security</td>
<td>4.09</td>
<td>.90</td>
<td>.05</td>
<td>4.08</td>
<td>.88</td>
<td>4.09</td>
<td>.93</td>
<td>.01</td>
<td>.940</td>
</tr>
</tbody>
</table>

Note. N = 294. **p < .01, ***p < .001. Dichotomous Belief in Oneness: No (n = 148) Yes (n = 146).
3.2.4.2 Monetary Generosity

To provide a first look at how belief in oneness might relate to prosocial behavior, participants responded to three scenarios in which they designated how they would spend or give away money. The primary interest was the degree to which their choices reflected a broader communal orientation beyond friends and family. These monetary choices were correlated with Belief in Oneness Scale scores and examined as a function of the dichotomous BIO rating.

In the first task, participants indicated how much of their income they would donate to charity if they were earning $50,000. Scores on the Belief in Oneness Scale did not correlate with charitable contributions ($r = .07, p = .228, N = 294$). Mean donations did not significantly differ between participants who believed in oneness ($M = 1889.52, SD = 189.97$) and those who did not ($M = 1696.52, SD = 188.04$), $F(1, 292) = .52, p = .471, \eta^2 = .00$.

Second, participants indicated how much a randomly selected person would have to receive in order for the participant to give up receiving $10,000 for themselves, (or they could choose to keep the $10,000 no matter what). Participants who indicated that they would give the money to someone else scored higher in belief in oneness ($M = 3.25, SD = 1.20$) than those who kept the money for themselves ($M = 2.96, SD = 1.22$), although this difference was not significant at the .01 level, $F(1, 292) = 4.01, p = .046, \eta^2 = .01$. Of the participants who indicated that they would give up their $10,000 (excluding one participant who said the other person would need to receive
$1,000,000,000,000,000,000), Belief in Oneness scores did not correlate with how much money they would have to receive ($r = -.09, p = .370, N = 105), which on average was $159,376 ($SD = $539,898). Additionally, the mean amount that participants said they would have to receive did not significantly differ between people who believed in oneness ($M = $175,076.39, $SD = $676,875.66) and those who did not ($M = $139,239.15, $SD = $287,070.03), $F(1, 103) = .11, p = .738, \eta^2 = .00$.

Third, participants listed up to five things they would do with $50,000 and indicated the dollar amount they would designate to each purpose. Twelve categories (and a 13th “non-classifiable response” category) were created based on participants’ responses. Two coders then categorized each response. Interrater reliability (proportion of agreement) was .94. Discrepant codes were resolved by a third coder.

Mean proportions and standard deviations for the 12 spending categories, the correlations between Belief in Oneness Scale and the proportion spent in each category, and results of ANOVAs that examine the relationship between dichotomous BIO and spending designations are presented in Table 12. Box’s M was statistically significant ($p < .001$), but the covariances were acceptably comparable in size and direction. Levene’s Test was statistically significant for proportion of money spent on charity ($p = .001$), vehicle ($p < .001$), electronics ($p < .001$), and pleasure ($p < .001$), but inspection the ratio of the largest to smallest variances for each of the suspect dependent variables was under 1.5, which is considered acceptable. The multivariate effect of dichotomous belief in
Oneness on the spending designations was nearly significant at the .01 level, Pillai’s Trace = .08, $F(12, 281) = 1.97$, $p = .027$, $\eta^2 = .08$.

The primary interest was whether participants spent or gave money to people or things outside themselves and their family. Donating money to charity or people in need was the only designation of money that was not for oneself, one’s family, or one’s friends. The proportion of money that people designated for charity correlated with Belief in Oneness scores ($r = .14$), and the mean proportion designated to charity was significantly higher (though not quite by the $\alpha = .01$ criterion) for participants who believed in oneness ($M = .15, SD = .25$) compared to those who didn’t believe in oneness ($M = .08, SD = .21$), $F(1, 292) = 5.64$, $p = .018$, $\eta^2 = .02$.

Belief in oneness correlated negatively with the mean proportion of money designated electronics ($r = -.18$, $p < .01$). The mean proportion designated to a vehicle was significantly lower for participants who believed in oneness ($M = .11, SD = .18$) compared to those who didn’t believe in oneness ($M = .18, SD = .24$), $F(1, 292) = 7.51$, $p = .007$, $\eta^2 = .03$. No specific predictions were made for designations, except that categories may differ meaningfully if they are spent on pragmatic necessities versus superfluous or luxury expenses, such as a vehicle or electronics.
Table 12: Spending Designations and Belief in Oneness

<table>
<thead>
<tr>
<th>Designation</th>
<th>BIO Scale</th>
<th>Dichotomous BIO</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Charity</td>
<td>.11</td>
<td>.23</td>
</tr>
<tr>
<td>Family</td>
<td>.20</td>
<td>.29</td>
</tr>
<tr>
<td>Savings</td>
<td>.06</td>
<td>.17</td>
</tr>
<tr>
<td>Bills/debt</td>
<td>.15</td>
<td>.27</td>
</tr>
<tr>
<td>House/rent</td>
<td>.15</td>
<td>.28</td>
</tr>
<tr>
<td>Remodel</td>
<td>.03</td>
<td>.10</td>
</tr>
<tr>
<td>Vehicle</td>
<td>.15</td>
<td>.22</td>
</tr>
<tr>
<td>Vacation</td>
<td>.04</td>
<td>.11</td>
</tr>
<tr>
<td>Clothes</td>
<td>.01</td>
<td>.04</td>
</tr>
<tr>
<td>Electronics</td>
<td>.01</td>
<td>.03</td>
</tr>
<tr>
<td>Pragmatic</td>
<td>.04</td>
<td>.14</td>
</tr>
<tr>
<td>Pleasure</td>
<td>.03</td>
<td>.09</td>
</tr>
</tbody>
</table>

Note. N= 294. **p < .01, ***p < .001. Dichotomous Belief in Oneness: No (n = 148) Yes (n = 146).
3.2.5 Political Orientation and Affiliation

Participants indicated how liberal vs. conservative they are on a 5-point scale (1 = very liberal to 5 = very conservative) and with which political party they most closely identify (1 = Republican, 2 = Democratic, 3 = Independent). People’s scores on the Belief in Oneness Scale did not significantly correlate with how liberal or conservative they are ($r = -0.09, p = .102, N = 294$). Nor were people who believed in oneness different in how conservative vs. liberal they were ($M = 2.50, SD = 1.01$) compared to those who did not believe in oneness ($M = 2.68, SD = 1.09$), $F(1, 292) = 2.21, p = .138, \eta^2 = .01$. And finally, an ANOVA revealed no mean differences in scores on the Belief in Oneness Scale between Republicans (15%, $M = 3.00, SD = 1.25$), Democrats (46%, $M = 3.05, SD = 1.21$), or Independents (39%, $M = 3.10, SD = 1.23$), $F(2, 291) = .13, p = .880, \eta^2 = .00$. Thus, belief in oneness was not associated with political orientation or affiliation.

3.3 Discussion

Study 2 provided additional insight into the psychological characteristics of people who believe in oneness using two distinct ways of measuring the belief.

Three measures of self-focus and self-interest did not relate to belief in oneness as expected. Neither private and public self-absorption (which reflect excessive and sustained attention on oneself) nor selfism (the extent to which people endorse prioritizing one’s own interests and looking out for oneself first) correlated with belief in oneness. These findings suggest that believing that everything is fundamentally one
might not involve diminished self-focus and self-interest as I had predicted it might. However, need for uniqueness did correlate with belief in oneness, which suggests that a belief that everything is one (and, thus, fundamentally the same on some level) is not incompatible with feeling unique. Although some people might think about oneness as everything being “made of the same stuff,” such a belief does not preclude multiplicity and diversity at the level of human perception.

Belief in oneness did correlate with concern for the welfare of others, as indicated by the affective dimension of wisdom, valuing benevolence and universalism, and donating to charity. As expected, belief in oneness correlated with benevolence and universalism, and importantly, the correlation was stronger for universalism than for benevolence, providing further support for the hypothesis that believing in oneness is associated with having broader circles of concern for others. Additionally, believing in oneness was associated with donating a larger portion of a windfall to charity rather than spending it all on oneself and one’s family.

Together, these findings suggest that belief in oneness is not related to people’s level of self-focus and selfism but rather to how much they care about others’ welfare. Everyone is somewhat self-focused and self-interested regardless of whether they believe in oneness, but people who believe in oneness might balance that self-focus with broader consideration and concern for others beyond themselves and those who are close to them.
Study 3: Belief in Oneness, Worldviews, and Experiences

The first two studies laid the groundwork for studying belief in oneness by providing a reliable and valid measure of the belief and taking an initial look at psychological correlates of the belief in oneness. Before moving on to examine specific beliefs in oneness and their conceptually relevant outcomes, Study 3 delves more deeply into the belief in oneness of everything by examining the origins and bases of the belief for individuals, personal experiences relevant to the belief in oneness, and the relationship between oneness beliefs and other worldviews and beliefs about the world. Four general questions were of interest, which were examined in two distinct samples.

First, to explore the nature of people’s belief in oneness and how it develops, participants who believe in oneness were asked questions about the precise way in which they conceptualize oneness, the origin of their belief, and the sources of information on which their belief in oneness is based. At the same time, to learn the reasons people have for not believing in oneness, participants who indicated that they did not believe in oneness were asked to indicate why not.

Second, although the focus of the present project is on people’s conceptual belief in oneness, Study 3 briefly explored people’s personal experiences of oneness and how they relate to the conceptual belief, in part to examine how experiences may contribute to the development of the belief. People who indicated that they had directly experienced or perceived oneness were asked about their experiences, and the relationship between
those experiences and their belief in oneness was examined. Additionally, participants were asked about activities they engage in that may offer contexts for experiences of oneness (e.g., nature) or may otherwise stimulate or maintain a belief in oneness (e.g., meditation).

A third focus of Study 3 was to examine how the belief in oneness relates to religiosity and spirituality, and to examine the relationship between belief in oneness and other religious/spiritual views, such as beliefs in a supreme being or higher power and conceptualizations of God. As noted, the belief in oneness is not necessarily a religious or spiritual concept, being found across many worldviews (including science and philosophy). However, the notion that everything is part of a larger whole is tied to an array of religious, spiritual, and new age beliefs, and as discussed earlier, direct experiences of oneness often occur in a religious or spiritual context (Hood, 1975; James, 1961).

Finally, to understand how the belief in oneness relates to other fundamental, existential beliefs, Study 3 examined how belief in oneness was associated with thinking about “big picture” questions generally (e.g., the fundamental nature of the universe) and with other beliefs about the world, such as whether an intelligent entity created the universe, minds are independent of bodies, people are made up of energy, death is the end of all existence, and physical processes can explain everything that occurs.
4.1 Method

4.1.1 Participants

4.1.1.1 Sample 1 – Amazon’s Mechanical Turk (MTurk)

Three hundred and twenty-eight participants (163 men, 165 women, $M_{age} = 36.3$, $SD = 12.82$) were recruited from Amazon’s Mechanical Turk. The sample was predominantly White (86%), with smaller numbers of participants describing themselves as Asian (7%), Black or African American (6%), American Indian or Alaska Native (4%), and Native Hawaiian or Other Pacific Islander (.3%). Participants were Christian (46%), Buddhist (2%), Jewish (2%), Muslim (1%), Hindu (1%), Pagan or Wiccan (.3%), Agnostic (19%), Atheist (18%), Other (3%), or None (8%). Participants had completed: some high school (1%), high school or GED (7%), some college but no degree (30%), associate’s degree (14%), bachelor’s degree (4 year college) (37%), master’s degree (10%), and doctoral degree (Ph.D., J.D., M.D., etc.) (2%).

4.1.1.2 Sample 2 – Psychology Department Subject Pool

One hundred and forty-two participants (42 men, 100 women, $M_{age} = 18.9$, $SD = .99$) were recruited from the Psychology and Neuroscience subject pool in exchange for partial credit for psychology course requirements. The sample was predominantly White (64%), with smaller numbers of participants describing themselves as Asian (28%), Black or African American (13%), and American Indian or Alaska Native (2%). Participants were Christian (47%), Jewish (16%), Buddhist (2%), Muslim (1%), Hindu
(1%), Agnostic (13%), Atheist (10%), Other (1%), or None (8%). Participants had completed: some high school (1%), high school or GED (25%), some college but no degree (72%), associate’s degree (1%), and bachelor’s degree (4 year college) (1%).

4.1.2 Measures

4.1.2.1 Belief in Oneness of Everything

Participants first read the description of the belief in oneness used in Studies 1 and 2 and were then asked, “Do you believe that everything is fundamentally one?” (1 = no, 2 = yes). They then rated their familiarity with the concept of oneness and completed the 6-item Belief in Oneness Scale.

4.1.2.2 Belief in a Supreme Being and Higher Power

Participants were asked “Do you believe in a supreme being?” and “Do you believe in a higher power (that is not a being)? (no, yes, undecided).

4.1.2.3 Conceptualization of God

Participants were asked to select which description best described their view of God: (1) God is a deity (or deities) with whom people can communicate; (2) God is a deity with whom people cannot communicate; (3) God is an impersonal force; (4) God is an essence or spirit that is everywhere; (5) God is a concept that could be defined as “all that is;” (6) I do not believe in any of these views of God.
4.1.2.4 Variety of Existential Beliefs

Participants indicated how much they believe each of 12 existential ideas about the nature of the universe, human experience, life, and death (1 = absolutely false, 2 = probably false, 3 = uncertain, 4 = probably true, 5 = absolutely true). The items were: (1) An intelligent entity created the universe, (2) The part of you that thinks, feels, observes, and remembers will continue to exist even after your body is physically dead, (3) Human beings are animals, (4) After biological death, a person’s soul begins a new life in a new body that may be human, animal, or spiritual (that is, people are reincarnated), (5) People’s minds are independent of their physical bodies, to which they are only temporarily “attached,” (6) People are ultimately made up entirely of energy, (7) Death is the end of all existence, (8) Everything in the universe is expanding from a very small starting origin (e.g., the big bang), (9) People praying or meditating for peace can enhance peace on earth, (10) All events that occur in the universe can be explained by physical processes, (11) Consciousness is the fundamental basis for the universe, and (12) All objects in the universe, including me, are physical manifestations or expressions of a basic, but invisible process.

4.1.2.5 Big Picture Views

To understand how the belief in oneness relates to other big picture beliefs and how much people think about the big picture in general, participants read the following statement: “People hold many different ideas and beliefs about “big picture” questions
about the world, such as the nature and origin of the universe and how it all works. Of course, people can go through their day-to-day life without necessarily thinking much about these kinds of questions at all. Some people rarely think about the big picture and find it irrelevant for their daily lives, whereas other people think about it frequently.” Then, they were asked how often they think of each of seven “big picture” ideas (1 = never or almost never, 2 = once a year or less, 3 = a few times a year, 4 = a few times a month, 5 = a few times a week, 6 = every day, 7 = more than once a day): the fundamental nature of the universe; how the universe started; the possibility that the universe has a spiritual dimension; the relationship between matter and energy; the nature of fundamental “reality”; how the microscopic (unable to be seen with the naked eye) and macroscopic (able to be observed) perspectives of the universe fit together; and what consciousness actually is.

4.1.2.6 Experiences of Oneness

Participants were then asked about personal experiences in which they have or have not perceived everything in the world to be part of the same whole or became aware of a unity to all things. The four items on the Unifying Quality Subscale from the Mystical Experiences Scale (Hood, 1975), also used in Study 1, assessed participants’ experience of oneness (e.g., I have had an experience in which I became aware of a unity to all things). Participants rated the extent to which the experience described was true of
them on a four-point scale (*This description is ____ of my own experience or experiences: 1 = definitely not true; 2 = probably not true; 3 = probably true; 4 = definitely true*)

If they reported having an experience of oneness (i.e., if they rated any of the above items as a 3 or 4), participants answered additional questions about how many such experiences they have had and whether they had previously (before their experience) believed that everything in the world is united into a single whole (no, yes). Additionally, they were asked how emotionally moved they were by their experience, the extent to which the experience impacted their views of the world and themselves, the extent to which the experience(s) was accompanied by a sense of awe, and to what extent they sensed a divine presence during the experience.

4.1.2.7 Activities

Participants reported how often they do each of six activities: go out in nature or observe the natural world (e.g., sit outside in nature, watch animals in nature); meditate (e.g., monitor your breath, practice mindfulness, use a mantra); do yoga, qigong, or similar activities; pray; do an activity in which their attention is fully engaged; do an activity in which they feel part of something bigger than themselves and their daily life (1 = never or almost never, 2 = once a year or less, 3 = a few times a year, 4 = a few times a month, 5 = a few times a week, 6 = every day, 7 = more than once a day).
4.1.2.8 Belief and Non-belief in Oneness

After completing the other measures, participants were assigned to complete one of two sets of additional questions depending on whether they indicated they did or did not believe in the oneness of everything (dichotomous BIO).

If participants indicated that they believed in oneness of everything, they were asked about how they conceptualize oneness. First, they were provided with a list of 12 ways that people may think about what the “one thing” is. These response options were gleaned from open-ended responses in Study 1. They were asked to check all descriptions that reflected how they may think about what the “one thing” actually is: (1) a higher or supreme being (e.g., God, Brahman, Allah), (2) all of God’s creation, (3) a unified quantum field, (4) energy, (5) matter, (6) consciousness, (7) light, (8) spirit, (9) life-force, (10) love, (11) the void, or (12) a hologram.

Second, they indicated how much each of four slightly different ways of thinking about oneness reflect how they think about the relationship between oneness and the multiplicity of things in the world: (1) All things consist of the same basic underlying substance; (2) The same essence permeates all things; (3) All things are part of the same fundamental thing; (4) All things come from the same source. (1 = Not at all to 7 = Completely).

Third, participants were asked about how they thought about the relationship between oneness and separation. Participants were told that:
“at the level at which people perceive the physical world, things generally look and feel separate from one another. People see objects as having boundaries, feel their bodies as distinct from the environment, and experience the content of their minds as their own private experience. Some people think this perception that individual things are separate is merely a function of the limited way that the brain processes information and is actually an illusion. Other people believe that the world does, in fact, consist of separate things, but that those separate things are fundamentally one at a more basic level; according to this view, individual things are both separate and one at the same time.”

Participants then indicated which of two statements aligns most closely with their view: (1) Oneness is the fundamental reality, and the apparent separation of individual things is an illusion, and (2) Individual things are separate while also being part of one entity, so both oneness and separation are equally true.

Finally, participants who believed in oneness answered questions about how their belief developed (how old they were, how they first learned about it, the extent to which various perspectives and sources influence their thinking about oneness).

If participants indicated that they didn’t believe in oneness, they were told,

“Below are a number of reasons why people may not believe in oneness. Please indicate the extent to which each of the following is a reason that you do not think that everything is one.” For each of 10 reasons (e.g., I hadn’t heard of the concept before now, I can’t imagine how it could be true, I can see and sense boundaries and separation between things), they answered on a 7-point scale (1 = Not at all to 7 = Completely).

Next, prefaced with “Even though you don’t believe in oneness, if it were true that everything in the universe is one, which of the following could you imagine being
what the “one thing” is?,” participants who did not believe in oneness were provided with the same list of 12 descriptions of what the “one thing” might be (e.g., a higher or supreme being, all of God’s creation, a unified quantum field) and asked to check all that reflect how they think about oneness.

4.1.3 Procedure

After providing informed consent, participants reported their age, sex, religious affiliation, and orientation to religion and spirituality (neither religious, nor spiritual; spiritual, but not religious; religious, but not spiritual; both religious and spiritual), how religious and how spiritual they consider themselves to be (1 = not at all – 7 = extremely), race, and highest education completed. They then completed questions about their belief in a supreme being, a higher power, and conceptualization of God, followed by the variety of existential beliefs. Then they completed the questions about their big picture views and the belief in oneness items. Next, participants completed the unity quality subscale of mystical experiences and answered follow-up questions if they had responded affirmatively to having had such an experience. Then they indicated how often they engaged in each of the six activities. Finally, participants completed one of the two sets of follow-up questions, depending how they responded to the Dichotomous BIO question. Participants were thanked for their participation and debriefed. Amazon’s Mechanical Turk participants were compensated $1.50 in Amazon credit and the Psychology and Neuroscience subject pool credit hours were granted.
4.2 Results

As noted, participants completed two distinct measures of the belief in oneness—the Belief in Oneness Scale developed in Study 1 (which assesses how easy it is for people to believe that everything is one) and the dichotomous measure that asked “do you believe that everything is fundamentally one” (no, yes). In Sample 1 (MTurk), 43% of the participants indicated that they believed in oneness; in Sample 2 (college students), 30% believed in oneness.

Not surprisingly, in both samples, a one-way ANOVA showed that participants who believed in oneness (yes, no) scored higher on the Belief in Oneness Scale compared to those who did not believe in oneness. (See Table 13.) Because these two measures assess belief in oneness in rather different ways, the analyses that follow report results using both measures. In the tables of results, scores on the Belief in Oneness Scale are labeled “BIO Scale,” and dichotomous belief ratings are labeled “Dichotomous BIO.”

Table 13: Dichotomous BIO and BIO-Scale

<table>
<thead>
<tr>
<th>BIO - Scale</th>
<th>No</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Sample 1</td>
<td>57</td>
<td>2.14</td>
</tr>
<tr>
<td>Sample 2</td>
<td>70</td>
<td>2.34</td>
</tr>
</tbody>
</table>

Note. Sample 1: N = 328, F(1, 326). Sample 2: N = 142, F(1, 140).

Results are presented in five sections. The first section examines the responses of participants who indicated that they believe in oneness to questions about the nature of
their belief and how it developed. Then, the responses of participants who have had oneness experiences are explored, along with the relationship between belief in oneness and engaging in activities that may support or emerge from such a belief. Then, the relationships between belief in oneness and other religious or spiritual beliefs are examined, followed by its relationship with other big picture beliefs. Finally, the reasons that participants who do not believe in oneness give for disagreeing that everything is one were examined.

4.2.1 Participants who Believed in Oneness

In this section, only those participants who indicated that they believed in oneness (on dichotomous BIO) are examined, which constituted 43% of Sample 1 and 30% of Sample 2.

4.2.1.1 Conceptualizing Oneness of Everything

Of the four ways of conceptualizing oneness shown in Table 14, believing that all things come from the same source was rated highest by the believers in both samples. All four ways of conceptualizing oneness correlated similarly with belief in oneness scores for Sample 1. All but one of the conceptualizations (all things consist of the same basic underlying substance) were significantly correlated with belief in oneness for Sample 2, particularly the view that the same essence permeates all things.
Table 14: Conceptualizations of Oneness

<table>
<thead>
<tr>
<th></th>
<th>Sample 1</th>
<th></th>
<th>Sample 2</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>r</td>
<td>M</td>
</tr>
<tr>
<td>Same basic underlying substance</td>
<td>5.74</td>
<td>1.41</td>
<td>.51***</td>
<td>4.83</td>
</tr>
<tr>
<td>Same essence permeates all things</td>
<td>5.65</td>
<td>1.39</td>
<td>.51***</td>
<td>5.29</td>
</tr>
<tr>
<td>All part of same fundamental thing</td>
<td>5.89</td>
<td>1.26</td>
<td>.53***</td>
<td>4.81</td>
</tr>
<tr>
<td>All things come from the same source</td>
<td>6.05</td>
<td>1.17</td>
<td>.44***</td>
<td>5.50</td>
</tr>
</tbody>
</table>

Note. Sample 1: N = 140; Sample 2: N = 42. **p < .01, ***p < .001.

4.2.1.2 Conceptualizing the “One Thing”

Participants (both believers and non-believers in oneness) selected all labels that reflected what they might imagine the “one thing” to be. Percentages were calculated separately for participants who answered “yes” and “no” to the dichotomous BIO question rather than for the total number in that sample (i.e., 68% = 68% of participants who believe in oneness in Sample 1). As seen in Table 15, “energy” was the most frequently endorsed answer for the nature of the “one thing” for believers in oneness in Sample 1 and non-believers of oneness in both samples. In contrast, “energy” was only the sixth most endorsed for believers of Sample 2, 20% below the most highly endorsed label, which was “love.”
Table 15: Conceptualizing the One Thing

<table>
<thead>
<tr>
<th>The one thing</th>
<th>Dichotomous BIO</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Sample 1</td>
</tr>
<tr>
<td>Energy</td>
<td>68</td>
</tr>
<tr>
<td>Consciousness</td>
<td>61</td>
</tr>
<tr>
<td>Spirit</td>
<td>56</td>
</tr>
<tr>
<td>Life-force</td>
<td>52</td>
</tr>
<tr>
<td>Supreme being</td>
<td>51</td>
</tr>
<tr>
<td>All of God’s creation</td>
<td>49</td>
</tr>
<tr>
<td>Love</td>
<td>48</td>
</tr>
<tr>
<td>Matter</td>
<td>39</td>
</tr>
<tr>
<td>Light</td>
<td>34</td>
</tr>
<tr>
<td>Unified quantum field</td>
<td>29</td>
</tr>
<tr>
<td>The void</td>
<td>16</td>
</tr>
<tr>
<td>A hologram</td>
<td>5</td>
</tr>
</tbody>
</table>

Note. Sample 1: Dichotomous BIO, yes (n = 140), no (n = 188). Sample 2: Dichotomous BIO, yes (n = 42), no (n = 100).

4.2.1.3 Oneness and Separation

Participants who believed in oneness selected which of two statements most closely aligned with their view of the connection between oneness and separation. Sixty-one percent of the 140 participants in Sample 1, and 88% of the 42 people in Sample 2 selected, “Individual things are separate while also being part of one entity, so both oneness and separation are equally true.” Thirty-nine percent of the participants of Sample 1, and 12% of the participants in Sample 2 selected, “Oneness is the fundamental
reality, and the apparent separation of individual things is an illusion.” Thus, believing in oneness tends not to preclude believing in separation as well. Although a nontrivial percentage of participants in Sample 1 believed that the separation of individual things is an illusion, overall, participants who believed in oneness tended to believe in oneness while still believing in the separation of individual things.

4.2.1.4 Development of Belief in Oneness of Everything

Participants who indicated they believed in oneness answered questions about the development of their oneness beliefs, including the age they first thought about it, how they were first exposed to the idea, and the sources of information on which their belief in oneness is based.

Recall the differences in ages for the two samples. For Sample 1, the age range was 18 – 75 years, with a mean of 36.31 (SD = 11.96), whereas for Sample 2, the age range was 18 – 22 years, with a mean of 18.92 (SD = .99). In response to how old they were when they first thought about oneness, the range of ages that participants in Sample 1 first began thinking about oneness in Sample 1 was 4 – 54 years (M = 19.0, SD = 8.45; mode = 15), and in Sample 2, the range was 3 – 19 years (M = 12.1, SD = 4.09; mode = 15). Despite the difference in ages, the fact that that the modal age for both samples was 15 provides convergence that people who eventually believe in oneness tend to first think about the idea in mid-adolescence. It was also striking that some participants reported thinking about oneness in early childhood!
In response to the question asking about the context in which participants were first exposed to the concept of oneness (see Table 16), the MTurk participants (Sample 1) were rather evenly divided among those who indicated that they read about the idea (30%), had an experience in which they perceived the oneness of everything (27%), or simply arrived at the belief on their own (25%). In contrast, almost half (48%) of the university students (Sample 2) indicated that the belief came to them based on other things they learned about the world, followed by having had someone teach it to them (30%). These differences may reflect the different times in which participants might have learned about oneness.

**Table 16: Context of First Exposure to the Concept of Oneness**

<table>
<thead>
<tr>
<th>Source of Exposure</th>
<th>Sample 1</th>
<th>Sample 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>It was taught to me by someone</td>
<td>18%</td>
<td>31%</td>
</tr>
<tr>
<td>I read about it and the idea made sense to me</td>
<td>30%</td>
<td>12%</td>
</tr>
<tr>
<td>It just came to me, based on other things I’ve learned about the world</td>
<td>25%</td>
<td>48%</td>
</tr>
<tr>
<td>I had an experience in which I perceived the oneness of everything</td>
<td>27%</td>
<td>10%</td>
</tr>
</tbody>
</table>

4.2.1.5 **Sources of Belief in Oneness**

Participants indicated the degree to which their belief in oneness is based on each of 11 sources of information. Means and standard deviations are shown in Table 17. For both samples, belief in oneness was especially based on personal experience and feelings (intuition, insight, or gut feelings; common sense; and personal experiences). For Sample
2, beliefs were based primarily on intuition, insight, or gut feelings as well as on personal experience and feelings. These findings suggest that a visceral, intuitive sense of “knowing” often bolsters the conceptual belief. Inspection of means shows that the samples rated sources of their oneness belief similarly overall, but Sample 2 (college) rated religious teachings and how they were raised as more of a source, and Sample 1 (MTurk) rated teachings from philosophers and others who believe in oneness as a more influential source.

**Table 17: Sources of Belief in Oneness**

<table>
<thead>
<tr>
<th>Sources of Belief in Oneness</th>
<th>Sample 1</th>
<th>Sample 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>information I learned</td>
<td>4.79</td>
<td>1.70</td>
</tr>
<tr>
<td>views of specific other people</td>
<td>3.97</td>
<td>1.86</td>
</tr>
<tr>
<td>intuition, insight, or “gut feelings”</td>
<td>5.23</td>
<td>1.57</td>
</tr>
<tr>
<td>common sense</td>
<td>5.21</td>
<td>1.59</td>
</tr>
<tr>
<td>religious teachings</td>
<td>3.24</td>
<td>2.03</td>
</tr>
<tr>
<td>non-religious spiritual teachings</td>
<td>3.89</td>
<td>1.91</td>
</tr>
<tr>
<td>teachings from philosophers</td>
<td>3.94</td>
<td>1.88</td>
</tr>
<tr>
<td>teachers who believe in oneness</td>
<td>4.12</td>
<td>1.87</td>
</tr>
<tr>
<td>personal experiences and feelings</td>
<td>5.83</td>
<td>1.27</td>
</tr>
<tr>
<td>how I was raised</td>
<td>3.56</td>
<td>2.08</td>
</tr>
<tr>
<td>science (e.g., quantum physics)</td>
<td>4.31</td>
<td>1.97</td>
</tr>
</tbody>
</table>

Note. Sample 1: \(N = 140\); Sample 2: \(N = 42\). **\(p < .01\), ***\(p < .001\).
4.2.2 Experiences of Oneness

In Sample 1, 143 participants (43% of the sample) had had an experience in which they felt everything in the world to be part of the same whole or became aware of the unity of all things. Of the 43% of Sample 1 who had an experience like this, 72% believed in oneness (i.e., answered “yes” on dichotomous BIO). Of the participants who had such an experience, 75% had 5 or fewer experiences; 19% had between 6 and 50 experiences; and the remaining 6% had 100 or more. However, the modal response was one experience.

In Sample 2, 60 participants (42%) reported an experience of oneness. Of the 42% of the sample who had such an experience, only 52% believed in oneness (i.e., answered “yes” on dichotomous BIO). Of the participants who had an experience like this, 67% had 5 or fewer experiences, 20% had between 6 and 10, and the remaining 13% experienced oneness 12 to 50 times. The modal response was one experience.

Of the participants who had such an experience, 52% of Sample 1 and 58% of Sample 2 had not previously believed that everything in the world is united into a single whole. Thus, directly experiencing or perceiving oneness seemed to create a belief in oneness for slightly more than half of the people who had such an experience.

As shown in Table 18, participants were generally emotionally moved by their experience(s) of oneness, their experiences affected their “big picture” views about the world and their views of themselves, and the experiences were generally accompanied
by awe. The average extent to which participants sensed a divine presence during the experience was lower than the other qualities of the experience. Overall, Sample 1 rated these qualities as more characteristics of their oneness experiences than Sample 2.

In Sample 1, belief in oneness was correlated with the extent to which the experiences were emotionally moving, impacted big picture views and self-views, and were accompanied by awe. For Sample 2, belief in oneness was significantly correlated (at the .01 level) only with how much their experience affected their big picture beliefs and self-views.

<table>
<thead>
<tr>
<th>Table 18: Qualities of Experiences of Oneness</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>During unity experience</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Emotionally moved</td>
</tr>
<tr>
<td>Affected big picture views</td>
</tr>
<tr>
<td>Affected self-views</td>
</tr>
<tr>
<td>Experienced awe</td>
</tr>
<tr>
<td>Sensed divine presence</td>
</tr>
</tbody>
</table>

Note. Sample 1: N = 149; Sample 2: N = 60. **p < .01, ***p < .001.

4.2.3 Oneness-related Activities

A MANOVA examined the frequency of activities as a function of dichotomous BIO. Homogeneity of variance was examined at both the multivariate and univariate levels, and neither Box’s M nor Levene’s tests were significant. The multivariate effect of
belief in oneness on the set of activities was statistically significant, Pillai’s Trace = .15, $F(6, 321) = 9.60, p < .001, \eta^2 = .15$. As seen in Table 19, among MTurk participants in Sample 1, believing in oneness correlated with how often people spent time in nature, meditated, practiced yoga, prayed, and engaged in activities in which they feel part of something bigger than themselves. In Sample 2, belief in oneness correlated only with how often participants did something in which they feel part of something bigger, which is arguably the most conceptually relevant to believing in oneness. Going out in nature, meditating, doing yoga, and praying can all be done without believing in oneness and were practiced equally by participants in Sample 2 regardless of their belief in oneness.
Table 19: Activities and Belief in Oneness

<table>
<thead>
<tr>
<th>Activity</th>
<th>Sample 1</th>
<th>Sample 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dichotomous BIO</td>
<td></td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Go out in nature</td>
<td>4.11 1.41</td>
<td>4.53 1.35</td>
</tr>
<tr>
<td>Meditate</td>
<td>2.41 1.70</td>
<td>3.61 1.85</td>
</tr>
<tr>
<td>Yoga</td>
<td>2.21 1.61</td>
<td>2.94 1.69</td>
</tr>
<tr>
<td>Pray</td>
<td>2.86 2.21</td>
<td>3.62 2.22</td>
</tr>
<tr>
<td>Attention fully engaged</td>
<td>5.40 1.32</td>
<td>5.46 1.34</td>
</tr>
<tr>
<td>Feel part of something bigger</td>
<td>3.05 1.79</td>
<td>4.25 1.74</td>
</tr>
</tbody>
</table>

Note. Sample 1: N = 140; Sample 2: N = 42. **p < .01, ***p < .001.
4.2.4 Spirituality and Religiosity

To test the hypothesis that belief in oneness is highest among people who consider themselves spiritual, and particularly among those who are spiritual but not religious, a one-way ANOVA tested differences in scores on the Belief in Oneness Scale across four classifications of spiritual and/or religious. Additionally, correlations between the Belief in Oneness Scale and how religious and how spiritual participants consider themselves (1 = not at all to 7 = extremely) were examined.

In Sample 1, participants differed in their belief in oneness as a function of their spiritual/religious classification, $F(3, 324) = 6.62, p < .001, \eta^2 = .06$. As shown in Table 20, participants who classified themselves as spiritual but not religious (34%) scored higher on the Belief in Oneness Scale than participants who classified themselves as religious but not spiritual (3%). (The other two groups--religious and spiritual (32%) and neither religious nor spiritual (31%)—did not differ.) Thus, pure spirituality but not pure religiosity was related to belief in oneness. In Sample 2, participants did not significantly differ from each other in their scores on the Belief in Oneness Scale as a function of their religious and spiritual classification, $F(3, 138) = 1.91, p = .132, \eta^2 = .04$. In Sample 2, 29% of the participants classified themselves as spiritual but not religious, 14% as religious but not spiritual, 32% as religious and spiritual, and 25% as neither religious nor spiritual. In both samples, the Belief in Oneness Scale correlated with how spiritual participants were, but not how religious.
Table 20: Religiosity, Spirituality, and Belief in Oneness

<table>
<thead>
<tr>
<th></th>
<th>Relig</th>
<th>Spirit</th>
<th>NS / NR</th>
<th>S / NR</th>
<th>NS / NR</th>
<th>S / R</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO Scale</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>r</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sample 1</td>
<td>.05</td>
<td>.27***</td>
<td>2.59ab</td>
<td>1.13</td>
<td>3.27b</td>
<td>1.24</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.50a</td>
<td>1.14</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3.08ab</td>
<td>1.24</td>
</tr>
<tr>
<td>Sample 2</td>
<td>.17</td>
<td>.22**</td>
<td>2.48 .89</td>
<td>2.71 .90</td>
<td>2.60 .94</td>
<td>2.95 .91</td>
</tr>
</tbody>
</table>

Note. Sample 1: N = 328. Sample 2: N = 141. **p < .01, ***p < .001. Relig = Religiosity. Spirit = Spirituality. NS/NR = Not spiritual, not religious; S/NR = Spiritual, not religious; NS/NR = Not spiritual, not religious; S/R = Spiritual and religious.

Belief in Oneness scores did not differ at the α = .01 level for participants who did and did not believe in a supreme being, Sample 1: F(2, 325) = 3.52, p = .031, η² = .02;

Sample 2: F(2, 139) = 3.42, p = .036, η² = .05. Similarly, a chi-square analysis conducted on the proportion of participants who believed in oneness (Dichotomous BIO) and also believed in the existence of a supreme being was not significant for either sample,

Sample 1: χ²(2) = 3.99, p = .136; Sample 2: χ²(2) = 2.80, p = .246.

Participants in Sample 1 who believed in a higher power (36%) scored higher on the Belief in Oneness Scale (M = 3.41, SD = 1.16) than participants who did not believe in a higher power (39%) (M = 2.64, SD = 1.30) or were undecided (25%) (M = 2.87, SD = 1.07), F(2, 325) = 13.13, p < .001, η² = .08, as revealed in Tukey’s post-hoc mean comparisons. Participants in Sample 2 did not differ in their belief in oneness scores as a function of their belief in a higher power (no, 28%; yes, 49%; undecided, 23%), F(2, 139) = .43, p = .650, η² = .01. A chi-square analysis conducted on the proportion of participants who believed in oneness who also believed in the existence of a higher power revealed a
significant effect for Sample 1, $\chi^2(2) = 22.83, p < .001$. Examination of cell frequencies revealed that participants who believed in oneness were twice as likely to believe in a higher power than those who did not believe in oneness. The chi-square analysis for Sample 2 was not significant.

People have different things in mind when they refer to a “supreme being” and “higher power.” Although not everybody thinks of a supreme being or higher power as “God,” God is the most commonly named. However, people conceptualize God in many different ways as well. Thus, various conceptualizations of God were examined as a function of dichotomous BIO.

Participants indicated which of six conceptualizations best described their view of God. The conceptualizations of God were endorsed as follows: God is an essence or spirit that is everywhere (25% of Sample 1, 25% of Sample 2); God is a deity (or deities) with whom people can communicate (21% of Sample 1; 25% of Sample 2); God is a concept that could be defined as “all that is” (17% of Sample 1, 11% of Sample 2); God is an impersonal force (5% of Sample 1, 10% of Sample 2); God is a deity with whom people cannot communicate (1% of Sample 1; 3% of Sample 2); and I do not believe in any of these views of God (31% of Sample 1, 26% of Sample 2).

An ANOVA was conducted for each sample to examine whether belief in oneness scores differed across different conceptualizations of God, using only conceptualizations that had more than 10% endorsement. In Sample 1, participants who
believed that God is a concept that could be defined as “all that is” \( (M = 3.54, SD = 1.09) \) and God is an essence or spirit that is everywhere \( (M = 3.30, SD = 1.11) \) scored higher in belief in oneness than participants who believed that God is a deity (or deities) with whom people can communicate \( (M = 2.67, SD = 1.29) \) or who did not believe in any of the views of God \( (M = 2.64, SD = 1.24) \), \( F(3, 306) = 10.34, p < .001, \eta^2 = .09 \). Although the ANOVA for Sample 2 was also significant, \( F(4, 133) = 3.55, p = .009, \eta^2 = .10 \), Tukey’s post-hoc tests did not reveal significant differences between belief in oneness scores as a function of how participants conceptualized God.

4.2.5 Other Beliefs About the World

4.2.5.1 Big Picture Beliefs

On average, people tended to think about big picture topics between a few times a year and a few times a month. The frequency with which people think about these beliefs about the world correlated with the belief in oneness across both samples. Correlations with belief in oneness, means, and standard deviations for each belief are shown in Table 21. Although the means do not differ markedly between samples, the frequency with which people think about most of the beliefs in Table 21 correlated with oneness somewhat more strongly for Sample 1 than Sample 2, with the exception of the possibility that the universe has a spiritual dimension.
Table 21: Big Picture Beliefs and Belief in Oneness

<table>
<thead>
<tr>
<th>Big Picture Question</th>
<th>Sample 1</th>
<th></th>
<th></th>
<th>Sample 2</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>r</td>
<td>M</td>
<td>SD</td>
<td>r</td>
</tr>
<tr>
<td>The fundamental nature of the universe</td>
<td>3.71</td>
<td>1.51</td>
<td>.43***</td>
<td>3.54</td>
<td>1.28</td>
<td>.18</td>
</tr>
<tr>
<td>How the universe started</td>
<td>3.29</td>
<td>1.25</td>
<td>.30***</td>
<td>3.07</td>
<td>1.13</td>
<td>.23**</td>
</tr>
<tr>
<td>The possibility that the universe has a spiritual dimension</td>
<td>3.58</td>
<td>1.77</td>
<td>.31***</td>
<td>3.51</td>
<td>1.62</td>
<td>.29***</td>
</tr>
<tr>
<td>The relationship between matter and energy</td>
<td>3.25</td>
<td>1.65</td>
<td>.43***</td>
<td>2.83</td>
<td>1.43</td>
<td>.30***</td>
</tr>
<tr>
<td>The nature of fundamental “reality”</td>
<td>3.57</td>
<td>1.67</td>
<td>.44***</td>
<td>3.33</td>
<td>1.62</td>
<td>.29***</td>
</tr>
<tr>
<td>How the microscopic and macroscopic perspectives of the universe fit together</td>
<td>3.17</td>
<td>1.61</td>
<td>.35***</td>
<td>3.10</td>
<td>1.60</td>
<td>.27**</td>
</tr>
<tr>
<td>What consciousness actually is</td>
<td>3.49</td>
<td>1.65</td>
<td>.45***</td>
<td>3.74</td>
<td>1.49</td>
<td>.25**</td>
</tr>
</tbody>
</table>

Note. Sample 1: N = 140; Sample 2: N = 42. **p < .01, ***p < .001.

4.2.5.2 Variety of Existential Beliefs

Correlations between belief in oneness and each of 12 other beliefs are presented in Table 22. Although the patterns of correlations between the specific beliefs and belief in oneness generally differed across the two samples, two beliefs correlated significantly with the belief in oneness for both samples: “People are ultimately made up entirely of energy” and “All objects in the universe, including me, are physical manifestations or expressions of a basic, but invisible process.” Even so, the correlations of these items with belief in oneness in Sample 1 were nearly four times stronger than in Sample 2.
Belief in oneness was generally associated with views of the world in which the mind or some other aspect of the individual continues after physical death. In Sample 2, belief in oneness correlated positively with the belief that “the part of you that thinks, feels, observes, and remembers will continue to exist even after your body is physically dead” and correlated negatively with the belief that “Death is the end of all existence.” In Sample 1, the belief that “After biological death, a person’s soul begins a new life in a new body that may be human, animal, or spiritual (that is, people are reincarnated)” was correlated with belief in oneness. The materialist beliefs and more scientifically grounded beliefs that were included to balance the spiritually-oriented beliefs were either not correlated with belief in oneness (i.e., All events that occur in the universe can be explained by physical processes) or had a small correlation with belief in oneness for just one sample (i.e., Human beings are animals; All events that occur in the universe can be explained by physical processes).
Table 22: Existential Beliefs and BIO-Scale

<table>
<thead>
<tr>
<th>Belief</th>
<th>Sample 1</th>
<th></th>
<th></th>
<th>Sample 2</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>BIO</td>
<td></td>
<td></td>
<td>BIO</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Scale</td>
<td></td>
<td></td>
<td>Scale</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intelligent entity created the universe</td>
<td>2.91</td>
<td>1.46</td>
<td>.13</td>
<td>2.96</td>
<td>1.29</td>
<td>.27**</td>
</tr>
<tr>
<td>Continue to exist after physical death</td>
<td>3.06</td>
<td>1.35</td>
<td>.10</td>
<td>2.93</td>
<td>1.25</td>
<td>.23**</td>
</tr>
<tr>
<td>Human beings are animals</td>
<td>4.01</td>
<td>1.40</td>
<td>.15**</td>
<td>4.20</td>
<td>1.13</td>
<td>.03</td>
</tr>
<tr>
<td>Reincarnation after death</td>
<td>2.40</td>
<td>1.17</td>
<td>.37***</td>
<td>2.39</td>
<td>1.06</td>
<td>.03</td>
</tr>
<tr>
<td>Minds independent of bodies</td>
<td>2.89</td>
<td>1.29</td>
<td>.27***</td>
<td>2.62</td>
<td>1.10</td>
<td>.20</td>
</tr>
<tr>
<td>People are made up of energy</td>
<td>3.19</td>
<td>1.31</td>
<td>.51***</td>
<td>2.83</td>
<td>.99</td>
<td>.25**</td>
</tr>
<tr>
<td>Death is the end of all existence</td>
<td>2.85</td>
<td>1.40</td>
<td>-.13</td>
<td>2.77</td>
<td>1.22</td>
<td>-.23**</td>
</tr>
<tr>
<td>Universe expanding (e.g. big bang)</td>
<td>3.61</td>
<td>1.14</td>
<td>.14**</td>
<td>3.65</td>
<td>1.01</td>
<td>-.06</td>
</tr>
<tr>
<td>Prayer/meditation for peace</td>
<td>3.08</td>
<td>1.36</td>
<td>.20***</td>
<td>3.22</td>
<td>1.15</td>
<td>.14</td>
</tr>
<tr>
<td>Physical processes explain everything</td>
<td>3.36</td>
<td>1.28</td>
<td>-.00</td>
<td>3.32</td>
<td>1.21</td>
<td>-.15</td>
</tr>
<tr>
<td>Consciousness is fundamental basis</td>
<td>2.98</td>
<td>1.03</td>
<td>.36***</td>
<td>3.04</td>
<td>.77</td>
<td>.14</td>
</tr>
<tr>
<td>All objects are physical manifestation</td>
<td>2.95</td>
<td>1.02</td>
<td>.44***</td>
<td>3.04</td>
<td>.78</td>
<td>.25**</td>
</tr>
</tbody>
</table>

Note. Sample 1: N = 328, N₁ = 327; Sample 2: N = 142. **p < .01, ***p < .001
4.2.6 Reasons For Not Believing in the Oneness of Everything

Participants who indicated they did not believe in the oneness of everything rated the extent to which each of 10 reasons contributed to their non-belief. As seen in Table 23, the two highest rated reasons for both samples were (1) that each person has their own separate, subjective experience, and (2) common sense (rationally and logically it makes no sense). These results suggest that a primary reason that people do not believe in oneness is that that notion is at odds with everyday observation and common sense. For Sample 1, the lowest rated reason was that they hadn’t heard of the concept before now. In contrast, having not heard of the concept was rated similarly to the other reasons for Sample 2. The patterns of correlations between belief in oneness and reasons for not believing in oneness were reasonably consistent across samples.
Table 23: Reasons for Not Believing in Oneness

<table>
<thead>
<tr>
<th>Reason</th>
<th>Sample 1</th>
<th>Sample 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$M$</td>
<td>$SD$</td>
</tr>
<tr>
<td>I hadn't heard of the concept before now</td>
<td>2.40</td>
<td>1.89</td>
</tr>
<tr>
<td>I haven’t thought about it</td>
<td>3.34</td>
<td>2.22</td>
</tr>
<tr>
<td>The idea of oneness goes against what I perceive in my experience</td>
<td>4.28</td>
<td>1.93</td>
</tr>
<tr>
<td>The idea of oneness goes against my understanding of science</td>
<td>4.31</td>
<td>2.03</td>
</tr>
<tr>
<td>I can’t imagine how it could be true</td>
<td>4.42</td>
<td>1.98</td>
</tr>
<tr>
<td>I don’t see the point in thinking about it</td>
<td>3.67</td>
<td>2.15</td>
</tr>
<tr>
<td>I can see and sense boundaries and separation between things</td>
<td>4.87</td>
<td>1.74</td>
</tr>
<tr>
<td>There are different elements within the universe so everything cannot be one</td>
<td>4.88</td>
<td>1.75</td>
</tr>
<tr>
<td>Each person has their own, separate, subjective experience</td>
<td>5.88</td>
<td>1.46</td>
</tr>
<tr>
<td>Common sense (rationally and logically it makes no sense to me)</td>
<td>5.12</td>
<td>1.85</td>
</tr>
</tbody>
</table>

Note. Sample 1: $N = 188$; Sample 2: $N = 100$. **$p < .01$, ***$p < .001$. 
4.3 Discussion

Study 3 was designed with four general goals in mind. The first was to examine some details about people who believe in oneness: how they conceptualize oneness, how their beliefs developed, and on what sources of information they base their beliefs. Results showed that participants had many opinions about what the “one thing” is, but “energy” was the most endorsed overall. Additionally, although some people believed that the separation among things that people perceive is an illusion (and that oneness is the fundamental reality), the majority of participants believed that oneness and separation are equally true depictions of reality. Presumably, most participants who endorsed this view believe that reality can be construed as both singular and multiple rather than believe in the paradoxical, non-duality perspective that it can be described as neither (as reflected in the Zen saying, “Not one, not two;” Suzuki, 2011).

Participants who believed in oneness developed the belief across a range of ages from childhood to middle age. However, the modal age at which both samples first thought about oneness was 15 years. Developmental research should be conducted to understand why adolescence appears to be a common period for the belief to arise. The contexts in which participants were first exposed to oneness were rather evenly spread for Sample 1, whereas about half of Sample 2 reported that the idea of oneness just came to them, and a third of Sample 2 indicated that someone taught them about oneness. Compared to Sample 1, Sample 2 may have had more information available and more
people from which to learn about oneness during their formative years, due to the recent increase of interest in such ideas in the West and their increasing availability in lectures, books, media, and on the Internet.

Second, Study 3 explored personal experiences that involve an experience of oneness. Just over half of the participants who had a oneness experience had not believed in oneness beforehand, which attests to the power of an experience to create or substantiate a conceptual belief. For both samples, the amount that their experience affected their views of the world and themselves was correlated with their belief in oneness. The interplay of people’s conceptual belief and experiences of oneness should be further explored. Presumably, experiences may be both an antecedent and consequence of the conceptual belief in oneness.

Given the popularity of activities such as yoga and meditation, and the findings showing that people who believe in oneness engage in these activities more frequently, research should explore the relationship between participation in various activities and belief in oneness. Do people construe activities such as yoga (which means “union”) and meditation as an experience of oneness with everything? Are these activities an antecedent to the belief, a consequence, or both? Does having a conceptual framework of oneness bolster the benefits that people derive from these activities?

Third, Study 3 examined the relationships between belief in oneness and other beliefs that are generally construed as religious or spiritual, as well as religiosity and
spirituality more generally. The results showed that belief in oneness was correlated with spirituality but not religiosity and that participants who classified themselves as “spiritual but not religious” rated oneness as easiest to believe compared to participants who classified themselves otherwise. Belief in oneness was not associated with believing in a supreme being but was related to believing in a higher power. And, belief in oneness was higher for participants who conceptualized God as a concept that could be defined as “all that is” or as an essence or spirit that is everywhere compared to those who conceptualized God as a deity or held an alternative conceptualization. Perhaps viewing God as a supreme being or a deity reflects a conceptualization of God as an entity that is separate from oneself and the rest of the world, which might not coincide with a belief in oneness.

Finally, the study examined the relationship between belief in oneness and other big picture beliefs. Overall, participants who thought more about other big picture views (such as how the universe started and the nature of fundamental reality) believed more strongly in oneness, although the interpretation of what this relationship means is unclear. Interestingly, the patterns of correlations between the various existential beliefs and belief in oneness differed across the two samples, which suggests that the relationship between belief in oneness and certain outcomes might be moderated by other psychological characteristics and the context in which their belief in oneness is held.
Study 4: Distinguishing Belief in Oneness of Living Things and Belief in Oneness of Humanity

The first three studies focused on the belief in oneness of everything. However, as discussed, people may also think of oneness in terms of the oneness of all living things and/or the oneness of humanity. Although the three variations of belief in oneness are likely to be highly correlated, they may differentially impact outcomes that are conceptually relevant to one specific belief. For instance, believing in the oneness of living things may be more strongly correlated with people’s ecological concerns, pro-environmental behaviors, and consideration of other life-forms than the broader belief in the oneness of everything in the universe (which, of course, includes everything in the natural world, yet doesn’t focus specifically on it) or the narrower belief of oneness of humanity. Or, the belief in the oneness of humanity might be more highly correlated with prosocial behaviors and broader circles of compassion for human beings compared to beliefs in the oneness of the universe or oneness of living things. The goals of Study 4 were to (1) examine correlations between beliefs in the oneness of everything, living things, and humanity with conceptually relevant measures and (2) test whether these specific beliefs in oneness uniquely predict conceptually relevant constructs.

Belief in the oneness of humanity, compared to the oneness of all living things, was expected to uniquely predict prosocial personality characteristics (such as being fair, trustworthy, forgiving, and unselfish), as well as greater concern and compassion for
other people. Similarly, belief in oneness of all living things, compared to belief in
oneness of humanity, was expected to uniquely predict a variety of views and concerns
about the well-being of nonhuman animals and the environment.

5.1 Method

5.1.1 Participants

Two hundred and ninety-nine participants (153 men, 146 women, \(M_{age} = 36.6, SD
= 12.82\) were recruited from Amazon’s Mechanical Turk. The sample was
predominantly White (78%), with smaller numbers of participants describing themselves
as Asian (10%), Black or African American (13%), American Indian or Alaska Native
(3%), and Native Hawaiian or Other Pacific Islander (.3%). Participants were Christian
(49%), Buddhist (1%), Jewish (1%), Muslim (2%), Hindu (3%), Pagan or Wiccan (2%),
Agnostic (16%), Atheist (15%), Other (2%), or None (9%). Participants had completed:
some high school (1%), high school or GED (11%), some college but no degree (34%),
associate’s degree (9%), bachelor’s degree (4 year college) (26%), some graduate school
but no degree (5%), master’s degree (12%), Ph.D. (.3%), professional degree (JD, MD,
etc.) (2%).

5.1.2 Measures

5.1.2.1 Belief in Oneness of Everything, Living things, and Humanity

Participants first read the description of the belief in oneness used in the
previous studies and were further told, “People think about oneness in different ways.
They may think about it in terms of the oneness of everything, the oneness of all living things, and/or the oneness of humanity. People may think about oneness in all of these ways, just one or two of these ways, or not at all.” They were then asked, “Do you believe that everything is fundamentally one?,” “Do you believe that all living things are fundamentally one?,” and “Do you believe that all of humanity is fundamentally one?” (1 = no, 2 = yes). Finally, they completed in random order (intermixed), the six items from the Belief in Oneness Scale, six parallel items that were adapted to refer to all living things (e.g., Beyond surface appearances, all living things are fundamentally one), and six parallel items that were adapted to refer to humanity (e.g., Beyond surface appearances, all of humanity is fundamentally one). See Appendix B for all items.

5.1.2.2 Allo-inclusive Identity Scale (Leary et al., 2008)

Participants completed the Allo-inclusive Identity Scale described in Study 1. This scale presents seven Venn diagrams on which participants indicate the degree of relatedness or connection they feel with each of 16 targets that include people, animals, and inanimate features of nature.

5.1.2.3 Character Strengths (IPIP-VIA; Goldberg, Johnson, Eber, Hogan, Ashton, Cloninger, & Gough, 2006)

A conceptually relevant subset of IPIP measures of character strengths were assessed: Citizenship/Teamwork that assessed general group-orientation (9 items, e.g., I enjoy being part of a group, I feel I must respect the decisions made by my group, I prefer to do everything alone [R]); Forgiveness/Mercy (9 items, e.g., I let bygones be
bygones, I try to respond with understanding when someone treads me badly, I hold grudges [R]); Trustworthiness (4 items, e.g., I believe that honesty is the basis for trust, I can be trusted to keep my promises); and Equity/Fairness (9 items, e.g., I treat all people equally, I give everyone a chance, I am committed to principles of justice and equality). Items were answered on a 5-point scale (1 = Not at all true of me to 5 = Very true of me).

5.1.2.4 Selfism (adapted from Phares & Erksine, 1984)

Ten items that tap into a selfish interpersonal orientation (the degree to which people prioritize their own desires, goals, or concerns above those of others) were selected from the Selfism Scale. Items include “Thinking of yourself first is no sin in this world today” and “It is more important to live for yourself rather than for other people, parents, or for posterity” (1 = Strongly disagree to 5 = Strongly agree). This brief measure was validated in a previous study.

5.1.2.5 Compassionate Love for Humanity (Sprecher & Fehr, 2005)

Twenty-one items assessed concern, caring, and support for humanity, as well as the motivation to understand and help humanity (strangers) when in need. Examples are “I spend a lot of time concerned about the well-being of humankind” and “I tend to feel compassion for people even though I do not know them” (1 = Not at all true of me to 7 = Very true of me).
5.1.2.6 Ubuntu

Participants indicated how often they felt a number of feelings that were described as translations from other languages (1 = Never to 6 = Almost every day). Embedded within these items was the item “Ubuntu – human-ness; a pervasive spirit of caring and community, harmony and hospitality, respect and responsiveness that individuals and groups display for one another.”

5.1.2.7 Distress in Response to the Suffering of Others and Harm to the Natural World

Participants were presented with the following prompt: “Many things happen in our lives and around the world that upset people to varying degrees. Below is a list of events that may or may not upset you. How much emotional distress would you feel personally in response to each of the following situations?” Participants responded on a 6-point scale (0 = none, 1 = a little, 3 = a moderate amount, 5 = a great deal). Situations included suffering of people (e.g., millions of people around the world lack access to clean drinking water, severe weather damages several of your neighbors’ homes) and harm done to the natural world (e.g., current rates of deforestation lead to the world’s rainforests vanishing in a hundred years, animal species are becoming extinct). See Appendix B for the full set of situations.

5.1.2.8 Brief Animal Attitudes Scale – short form (Herzog, Grayson, & McCord, 2015)

This 10-item scale assessed people’s attitudes toward various uses of animals. For example, “It is morally wrong to hunt animals just for sport” and “I do not think
that there is anything wrong with using animals in medical research.” Responses are on a
5-point scale (1 = Strongly disagree to 5 = Strongly agree).

5.1.2.9 Wildlife Habitat Protection (Kellert, 1984)

This 4-item scale captured people’s agreement with prioritizing protecting
wildlife habitats, even at inconvenience to people. Sample items include “Cutting trees
for lumber and paper should be done in ways that help wildlife even if this results in
higher timber prices” and “Natural resources must be developed even if the loss of
wilderness results in much smaller wildlife populations” (1 = Strongly disagree to 5 =
Strongly agree).

5.1.2.10 Roadkill Remorse

Participants indicated how bad they would feel (1 = Not at all bad to 5 = Extremely
bad) if they ran over or hit with a car each of the six animals: earthworm, beetle, frog,
bird, rabbit, wolf.

5.1.2.11 Environmental Worldview Scale (Nooney, Woodrum, Hoban, & Clifford,
2003)

This scale involves 10 items that assess views of the environment and humans’
relationship to it (e.g., “The balance of nature is very delicate and easily upset; “Humans
need not adapt to the environment because they can make it to suit their needs”).
Responses are on a 5-point scale (1 = Strongly disagree to 5 = Strongly agree).
5.1.2.12 Environmental Concern Scale (Dutcher, Finley, Luloff, & Johnson, 2007)

Five items measured environmental concern ("If things continue on their present course, we will soon experience a major ecological catastrophe;" “People worry too much about human progress harming the environment” [reverse-scored]; 1 = strongly disagree to 5 = strongly agree).

5.1.3 Procedure

After providing informed consent, participants completed the set of oneness items (whether they believe in oneness, familiarity with oneness, the three Belief in Oneness Scales). They then completed each of the other measures, presented in randomized order. Finally, they reported their religious affiliation, and orientation to religion and spirituality (neither religious, nor spiritual; spiritual, but not religious; religious, but not spiritual; both religious and spiritual), race, highest education completed, age, and gender. Participants were thanked for their participation, debriefed, and compensated $1.50 in Amazon credit.

5.2 Results

Cronbach's alpha coefficient showed that all three belief in oneness scales had high inter-item reliability: everything, α = .94; living things, α = .94; humanity, α = .94. Although it was expected that the scales would correlate highly with each other, the magnitude of the correlations was greater than expected. The Belief in Oneness of Everything Scale (BIO-everything) correlated 0.94 with the Belief in Oneness of Living
Things Scale (BIO-living things; \( p < .001, N = 299 \)) and 0.85 with the Belief in Oneness of Humanity Scale (BIO-humanity; \( p < .001, N = 299 \)). The Belief in Oneness of Living Things Scale correlated 0.90 with the Belief in Oneness of Humanity Scale (\( p < .001, N = 299 \)). The fact that the correlations between the scales approached their reliabilities diminishes the likelihood that important differences will be found in their relationships with other variables. The mean score on the belief in oneness scales were: everything (\( M = 3.15, SD = 1.24 \)), living things (\( M = 3.22, SD = 1.19 \)), and humanity (\( M = 3.39, SD = 1.17 \)).

The central purpose of this study was to examine whether specific beliefs in oneness (e.g., oneness of living things and oneness of humanity) uniquely predict constructs to which they are conceptually related. For each category of measures, two sets of analyses are shown. First, the reliabilities, means, and standard deviations are presented, along with correlations between the measures and each of the belief in oneness scales. Second, hierarchical multiple regression analyses were conducted to examine: (1) whether BIO-living things and BIO-humanity explain variance in the construct of interest, (2) whether BIO-living things and BIO-humanity differentially predict according to conceptual relevance (e.g., BIO-living things with concerns regarding the natural world; BIO-humanity and concerns regarding distant other people and prosociality), (3) whether BIO-everything explains additional variance above that explained by the specific BIO scales, and (4) whether the unique prediction for BIO-living things and BIO-humanity hold once BIO-everything is in the model. To answer
these questions, BIO-living things and BIO-humanity were entered together on the first step of a hierarchical regression analysis, followed by BIO-everything on the second step. Given the number of analyses conducted, significance was evaluated at $\alpha = .01$.

5.2.1 Allo-inclusive Identity

As in Study 1, three subscales were created for targets of allo-inclusive identity by averaging closeness ratings within three sets of targets. Close others consist of: the person with who you feel closest, your best friend of your own sex, your best friend of the other sex, and your family. Distant others consist of: the average American, a homeless person on the street, a stranger on a bus, a person of another race. The natural world consists of: a wild animal (such as a squirrel, deer, or wolf), the moon, a dog, a tree, all living creatures, the Earth, an eagle soaring in the sky, and the universe.

In Study 1, belief in oneness correlated with allo-inclusive identity and was uniquely related to the distant others and natural world targets. The primary question here was whether BIO-living things uniquely explains variance in the natural world factor and whether BIO-humanity uniquely explains variance in the distant others factor.

As shown in Table 24, all three belief in oneness scales correlated positively with the degree to which participants included distant others and the natural world in their identity. Belief in oneness of living things and humanity correlated with allo-inclusive identity with respect to close others, but belief in oneness of everything did not.
Table 24: Correlations of Three BIO Scales with Allo-Inclusive Identity

<table>
<thead>
<tr>
<th>Scale</th>
<th>α</th>
<th>M</th>
<th>SD</th>
<th>Belief in Oneness Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Everything</td>
</tr>
<tr>
<td>Allo-inclusive Identity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Close</td>
<td>.82</td>
<td>4.89</td>
<td>1.29</td>
<td>.14</td>
</tr>
<tr>
<td>Distant</td>
<td>.90</td>
<td>2.90</td>
<td>1.40</td>
<td>.35***</td>
</tr>
<tr>
<td>Natural</td>
<td>.93</td>
<td>2.90</td>
<td>1.49</td>
<td>.53***</td>
</tr>
</tbody>
</table>

Note. N = 299. **p < .01, ***p < .001.

Next, as described, hierarchical multiple regression analyses were conducted to examine variance in allo-inclusive identity explained by BIO-living things, BIO-humanity, and BIO-everything. As seen in Table 25, BIO-living things and BIO-humanity together explained a significant proportion of variance in allo-inclusivity of close targets (3.4%), distant targets (15.3%), and natural world targets (29.5%). BIO-living things uniquely explained variance in allo-inclusivity ratings of distant targets (2%) and natural world targets (7%), but not close targets. BIO-humanity did not uniquely explain variance in allo-inclusivity ratings. Importantly, most of the variance in allo-inclusive identity was predicted by the variance shared by BIO-living things and BIO-humanity. That is, subtracting the sum of the squared semi-partial correlations for BIO-living things and BIO-humanity from $R^2$ shows that 1.4% of the variance in AI-close others, 8.3% of the variance in AI-distant others, and 22.5% of the variance in AI-natural world was accounted for by the overlap between BIO-living things and BIO-humanity as opposed to their unique contributions.
Despite large zero-order correlations with AI-distant others and AI-natural world (see Table 24), adding BIO-everything to the model in Step 2 did not explain additional variance in allo-inclusive identity ratings. Furthermore, the patterns of unique variance explained remained the same for the two specific beliefs in oneness.
Table 25: Allo-Inclusive Identity Regressed on Three BIO-Scales

<table>
<thead>
<tr>
<th>Step 1</th>
<th></th>
<th>Oneness of living things</th>
<th></th>
<th>Oneness of humanity</th>
<th></th>
<th>Oneness of everything</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>DV</td>
<td>$R^2_{adj}$</td>
<td>$F(2, 296)$</td>
<td>$p$</td>
<td>$\beta$</td>
<td>$sr^2$</td>
</tr>
<tr>
<td>Close</td>
<td>.034</td>
<td>.002</td>
<td>6.25</td>
<td>.002</td>
<td>-.10</td>
<td>.00</td>
</tr>
<tr>
<td>Distant</td>
<td>.153</td>
<td>&lt;.001</td>
<td>27.98</td>
<td>&lt;.001</td>
<td>.36</td>
<td>.02</td>
</tr>
<tr>
<td>Natural</td>
<td>.295</td>
<td>&lt;.001</td>
<td>63.34</td>
<td>&lt;.001</td>
<td>.58</td>
<td>.07</td>
</tr>
</tbody>
</table>

Step 2

<table>
<thead>
<tr>
<th>Step 2</th>
<th>$\Delta R^2$</th>
<th>$F(1, 295)$</th>
<th>$p$</th>
<th>$\beta$</th>
<th>$sr^2$</th>
<th>$t$</th>
<th>$p$</th>
<th>$\beta$</th>
<th>$sr^2$</th>
<th>$t$</th>
<th>$p$</th>
<th>$\beta$</th>
<th>$sr^2$</th>
<th>$t$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Close</td>
<td>.001</td>
<td>.29</td>
<td>.590</td>
<td>-.02</td>
<td>.00</td>
<td>-.09</td>
<td>.928</td>
<td>.29</td>
<td>.02</td>
<td>2.22</td>
<td>.027</td>
<td>.09</td>
<td>.00</td>
<td>-.54</td>
<td>.590</td>
</tr>
<tr>
<td>Distant</td>
<td>.003</td>
<td>1.18</td>
<td>.278</td>
<td>.50</td>
<td>.02</td>
<td>2.77</td>
<td>.006</td>
<td>.05</td>
<td>.00</td>
<td>.44</td>
<td>.659</td>
<td>-.16</td>
<td>.00</td>
<td>-1.09</td>
<td>.278</td>
</tr>
<tr>
<td>Natural</td>
<td>.001</td>
<td>.59</td>
<td>.441</td>
<td>.49</td>
<td>.02</td>
<td>2.93</td>
<td>.004</td>
<td>-.04</td>
<td>.00</td>
<td>-.40</td>
<td>.692</td>
<td>.11</td>
<td>.00</td>
<td>.77</td>
<td>.441</td>
</tr>
</tbody>
</table>

Note. $N = 299$. 
5.2.2 Prosocial Characteristics

Prosocial personality characteristics were expected to be uniquely related to belief in oneness of humanity. As seen in Table 26, BIO-everything did not significantly correlate with any of the socially-relevant characteristics. However, BIO-living things and BIO-humanity correlated positively with group-orientation, tendency to forgive, and fairness but not with trustworthiness or selfism.

Table 26: Correlations of Three BIO Scales with Prosocial Characteristics

<table>
<thead>
<tr>
<th>Scale</th>
<th>$\alpha$</th>
<th>$M$</th>
<th>$SD$</th>
<th>Everything</th>
<th>Living</th>
<th>Humanity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group-orientation</td>
<td>.82</td>
<td>3.24</td>
<td>.70</td>
<td>.14</td>
<td>.16**</td>
<td>.18**</td>
</tr>
<tr>
<td>Forgiveness</td>
<td>.86</td>
<td>3.42</td>
<td>.78</td>
<td>.13</td>
<td>.17**</td>
<td>.21***</td>
</tr>
<tr>
<td>Trustworthy</td>
<td>.79</td>
<td>4.29</td>
<td>.62</td>
<td>.04</td>
<td>.05</td>
<td>.10</td>
</tr>
<tr>
<td>Fairness</td>
<td>.81</td>
<td>4.01</td>
<td>.59</td>
<td>.13</td>
<td>.19**</td>
<td>.23***</td>
</tr>
<tr>
<td>Selfism</td>
<td>.91</td>
<td>2.93</td>
<td>.89</td>
<td>.03</td>
<td>.03</td>
<td>-.04</td>
</tr>
</tbody>
</table>

Note. $N = 299$. **$p < .01$, ***$p < .001$.

As described, hierarchical multiple regression analyses were conducted to examine variance explained in each of these characteristics by BIO-living things and BIO-humanity together, then with BIO-everything added to the model. As seen in Table 27, BIO-living things and BIO-humanity together explained a significant amount of variance in the tendency to be group-orientated (3.1%), tendency to forgive (4.0%), and fairness (4.6%), but not for trustworthiness or selfism. Although the following results did not reach significance at the $\alpha = .01$ level, they are conceptually meaningful and
worth noting. BIO-living things uniquely explained variance in selfism (2%, $p = .020$).

BIO-humanity uniquely explained variance in tendency to forgive (2%, $p = .021$), trustworthiness (2%, $p = .034$), fairness (2%, $p = .022$), and selfism (2%, $p = .020$), but not in the tendency to be group oriented, perhaps because social groups can be narrowly construed to exclude much of humanity.

Adding BIO-everything to the model did not explain a significant amount of additional variance for any of the characteristics. Overall, as expected, belief in the oneness of humanity uniquely explained more variance in prosocial personality characteristics than the belief in oneness of living things or everything.
Table 27: Prosocial Characteristics Regressed on Three BIO Scales

<table>
<thead>
<tr>
<th>DV</th>
<th>( R^2_{adj} )</th>
<th>( F(2, 296) )</th>
<th>( p )</th>
<th>( \beta )</th>
<th>( s^2 )</th>
<th>( t )</th>
<th>( p )</th>
<th>( \beta )</th>
<th>( s^2 )</th>
<th>( t )</th>
<th>( p )</th>
<th>( \beta )</th>
<th>( s^2 )</th>
<th>( t )</th>
<th>( p )</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group</td>
<td>.031</td>
<td>4.75</td>
<td>.009</td>
<td>.02</td>
<td>.00</td>
<td>.17</td>
<td>.868</td>
<td>.16</td>
<td>.00</td>
<td>1.21</td>
<td>.227</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forgiving</td>
<td>.040</td>
<td>7.26</td>
<td>.001</td>
<td>-10</td>
<td>.00</td>
<td>-75</td>
<td>.453</td>
<td>.30</td>
<td>.02</td>
<td>2.33</td>
<td>.021</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trustworthy</td>
<td>.011</td>
<td>2.72</td>
<td>.068</td>
<td>-.20</td>
<td>.01</td>
<td>-1.50</td>
<td>.134</td>
<td>.28</td>
<td>.02</td>
<td>2.14</td>
<td>.034</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fair</td>
<td>.046</td>
<td>8.22</td>
<td>&lt;.001</td>
<td>-.08</td>
<td>.00</td>
<td>-60</td>
<td>.550</td>
<td>.30</td>
<td>.02</td>
<td>2.31</td>
<td>.022</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Selfism</td>
<td>.013</td>
<td>2.93</td>
<td>.055</td>
<td>.31</td>
<td>.02</td>
<td>2.34</td>
<td>.020</td>
<td>.31</td>
<td>.02</td>
<td>-2.37</td>
<td>.020</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
<td>( \Delta R^2 )</td>
<td>( F(1, 295) )</td>
<td>( p )</td>
<td>( \beta )</td>
<td>( s^2 )</td>
<td>( t )</td>
<td>( p )</td>
<td>( \beta )</td>
<td>( s^2 )</td>
<td>( t )</td>
<td>( p )</td>
<td>( \beta )</td>
<td>( s^2 )</td>
<td>( t )</td>
<td>( p )</td>
</tr>
<tr>
<td>Group</td>
<td>.002</td>
<td>.48</td>
<td>.489</td>
<td>.12</td>
<td>.00</td>
<td>.63</td>
<td>.531</td>
<td>.16</td>
<td>.01</td>
<td>1.24</td>
<td>.215</td>
<td>-11</td>
<td>.00</td>
<td>-69</td>
<td>.489</td>
</tr>
<tr>
<td>Forgiving</td>
<td>.010</td>
<td>3.06</td>
<td>.081</td>
<td>.16</td>
<td>.00</td>
<td>.81</td>
<td>.419</td>
<td>.31</td>
<td>.02</td>
<td>2.42</td>
<td>.016</td>
<td>-28</td>
<td>.01</td>
<td>-1.75</td>
<td>.081</td>
</tr>
<tr>
<td>Trustworthy</td>
<td>.002</td>
<td>.48</td>
<td>.491</td>
<td>-.09</td>
<td>.00</td>
<td>-.48</td>
<td>.632</td>
<td>.28</td>
<td>.02</td>
<td>2.17</td>
<td>.031</td>
<td>-11</td>
<td>.00</td>
<td>-69</td>
<td>.491</td>
</tr>
<tr>
<td>Fair</td>
<td>.018</td>
<td>5.84</td>
<td>.016</td>
<td>.27</td>
<td>.01</td>
<td>1.41</td>
<td>.160</td>
<td>.31</td>
<td>.02</td>
<td>2.44</td>
<td>.015</td>
<td>-38</td>
<td>.02</td>
<td>-2.42</td>
<td>.016</td>
</tr>
<tr>
<td>Selfism</td>
<td>.001</td>
<td>.24</td>
<td>.628</td>
<td>.23</td>
<td>.00</td>
<td>1.19</td>
<td>.236</td>
<td>-31</td>
<td>.02</td>
<td>-2.39</td>
<td>.018</td>
<td>.08</td>
<td>.00</td>
<td>.49</td>
<td>.628</td>
</tr>
</tbody>
</table>

Note. \( N = 299 \).
5.2.3 Concern for Other People

Concern for others was assessed using the Compassionate Love for Humanity Scale (Sprecher & Fehr, 2005), participants’ ratings of how often they feel Ubuntu, and empathy, as assessed by distress they feel in response to other people’s suffering. Zero-order correlations with the belief in oneness scales are shown in Table 28. All three BIO scales correlated with compassionate love for humanity, frequency of feeling Ubuntu, and empathy for suffering of other people.

Table 28: Correlations of Three BIO Scales with Concern for Others

<table>
<thead>
<tr>
<th>Scale</th>
<th>α</th>
<th>M</th>
<th>SD</th>
<th>Everything</th>
<th>Living</th>
<th>Humanity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compassion</td>
<td>.97</td>
<td>4.44</td>
<td>1.24</td>
<td>.34**</td>
<td>.38***</td>
<td>.39***</td>
</tr>
<tr>
<td>Ubuntu</td>
<td>n/a</td>
<td>4.61</td>
<td>1.08</td>
<td>.34**</td>
<td>.38***</td>
<td>.38***</td>
</tr>
<tr>
<td>Empathy</td>
<td>.87</td>
<td>3.73</td>
<td>1.40</td>
<td>.21***</td>
<td>.26***</td>
<td>.26***</td>
</tr>
</tbody>
</table>

Note. N = 299. **p < .01, ***p < .001.

Hierarchical multiple regression analyses examined variance explained in each of these measures by the three BIO scales. As seen in Table 29, BIO-living things and BIO-humanity together explained a significant amount of variance in compassionate love for humanity (15.0%), frequency of feeling Ubuntu (15.3%), and empathy (6.7%). BIO-humanity uniquely explained variance in compassionate love for humanity (1%), although it did not reach the .01 level (p = .040). However, neither BIO-humanity nor BIO-living things uniquely explained variance in frequency of feeling Ubuntu or empathy in response to others’ suffering. Despite BIO-humanity not significantly
explaining unique variance in compassion, Ubuntu, or empathy in either step, the two specific BIO scales did jointly explain a sizeable amount of variance. Adding BIO-everything to the model did not explain additional variance for compassionate love for humanity, Ubuntu, or empathy.
Table 29: Concern for Others Regressed on Three BIO Scales

<table>
<thead>
<tr>
<th>Step 1</th>
<th>DV</th>
<th>$R^2_{adj}$</th>
<th>$F(2, 296)$</th>
<th>$p$</th>
<th>$\beta$</th>
<th>$sr^2$</th>
<th>$t$</th>
<th>$p$</th>
<th>$\beta$</th>
<th>$sr^2$</th>
<th>$t$</th>
<th>$p$</th>
<th>$\beta$</th>
<th>$sr^2$</th>
<th>$t$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compassion</td>
<td>.150</td>
<td>27.36</td>
<td>&lt;.001</td>
<td>.16</td>
<td>.00</td>
<td>1.29</td>
<td>.199</td>
<td></td>
<td>.25</td>
<td>.01</td>
<td>2.07</td>
<td>.040</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ubuntu</td>
<td>.150</td>
<td>27.20</td>
<td>&lt;.001</td>
<td>.20</td>
<td>.01</td>
<td>1.68</td>
<td>.094</td>
<td></td>
<td>.20</td>
<td>.01</td>
<td>1.67</td>
<td>.096</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Empathy</td>
<td>.067</td>
<td>11.67</td>
<td>&lt;.001</td>
<td>.13</td>
<td>.00</td>
<td>1.03</td>
<td>.306</td>
<td></td>
<td>.15</td>
<td>.00</td>
<td>1.17</td>
<td>.244</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Step 2</th>
<th>$\Delta R^2$</th>
<th>$F(1, 295)$</th>
<th>$P$</th>
<th>$\beta$</th>
<th>$sr^2$</th>
<th>$t$</th>
<th>$p$</th>
<th>$\beta$</th>
<th>$sr^2$</th>
<th>$t$</th>
<th>$p$</th>
<th>$\beta$</th>
<th>$sr^2$</th>
<th>$t$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compassion</td>
<td>.002</td>
<td>.60</td>
<td>.439</td>
<td>.26</td>
<td>.01</td>
<td>1.43</td>
<td>.153</td>
<td></td>
<td>.25</td>
<td>.01</td>
<td>2.10</td>
<td>.037</td>
<td>-.12</td>
<td>.00</td>
<td>-.78</td>
</tr>
<tr>
<td>Ubuntu</td>
<td>.004</td>
<td>1.38</td>
<td>.242</td>
<td>.36</td>
<td>.01</td>
<td>1.99</td>
<td>.047</td>
<td></td>
<td>.21</td>
<td>.01</td>
<td>1.73</td>
<td>.085</td>
<td>-.18</td>
<td>.00</td>
<td>-1.17</td>
</tr>
<tr>
<td>Empathy</td>
<td>.012</td>
<td>3.95</td>
<td>.048</td>
<td>.41</td>
<td>.01</td>
<td>2.17</td>
<td>.031</td>
<td></td>
<td>.16</td>
<td>.01</td>
<td>1.27</td>
<td>.206</td>
<td>-.31</td>
<td>.01</td>
<td>-1.99</td>
</tr>
</tbody>
</table>

Note. $N = 299$. 

5.2.4 Ecological Concerns

Concern for animals was assessed using the Brief Animal Attitudes Scale (Herzog et al., 2015), the Wildlife Habitat Protection Scale (Kellert, 1984), and assessment of roadkill remorse (how bad people would feel if they hit or ran over a variety of animals). Concern for the environment was assessed with the Environmental Worldview Scale (Nooney et al., 2003), Environmental Concern Scale (Dutcher et al., 2007), and the distress felt in response to situations describing harm to animals and the environment.

As seen in Table 30, all three BIO scales correlated positively with animal attitudes and roadkill remorse, but only BIO-living things and BIO-humanity correlated significantly with the belief that wildlife habitats should be protected. All three BIO scales also correlated with environmental worldview and concern, and distress in response to situations that describe ecological harm.
Table 30: Correlations of Three BIO Scales with Ecological Concern

<table>
<thead>
<tr>
<th>Scale</th>
<th>α</th>
<th>M</th>
<th>SD</th>
<th>Belief in Oneness Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Everything</td>
</tr>
<tr>
<td>Animals</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitudes</td>
<td>0.86</td>
<td>3.46</td>
<td>0.80</td>
<td>0.25***</td>
</tr>
<tr>
<td>Wildlife</td>
<td>0.74</td>
<td>3.73</td>
<td>0.81</td>
<td>0.14</td>
</tr>
<tr>
<td>Remorse</td>
<td>0.88</td>
<td>16.94</td>
<td>5.46</td>
<td>0.27***</td>
</tr>
<tr>
<td>Environment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Worldview</td>
<td>0.88</td>
<td>3.73</td>
<td>0.80</td>
<td>0.23***</td>
</tr>
<tr>
<td>Concern</td>
<td>0.89</td>
<td>3.86</td>
<td>0.95</td>
<td>0.16**</td>
</tr>
<tr>
<td>Ecological Distress</td>
<td>0.87</td>
<td>3.96</td>
<td>1.14</td>
<td>0.29***</td>
</tr>
</tbody>
</table>

Note. $N = 299$. **$p < .01$, ***$p < .001$.

As before, hierarchical multiple regression analyses were conducted to examine variance explained in these measures of ecological concern by the three beliefs in oneness. As seen in Table 31, BIO-living things and BIO-humanity together explained a significant amount of variance in animal attitudes (6.8%), belief that wildlife habitats should be protected (3.1%), roadkill remorse (9.1%), environmental worldview (7.9%), environmental concern (3.8%), and distress in response to situations that describe ecological harm (10.9%). BIO-living things uniquely explained variance in animal attitudes (2%), roadkill remorse (3%), and environmental worldview (3%). The variance explained for distress in response to situations that describe ecological harm was marginal ($1\%, p = .046$), and the correlations for the belief that wildlife habitats should be protected and for environmental concern were not significant. As expected, BIO-
humanity did not predict unique variance in any of these constructs. Adding belief in oneness of everything to the model in Step 2 did not explain a significant amount of additional variance for any measures of ecological concern.
Table 31: Ecological Concern Regressed on Three BIO Scales

<table>
<thead>
<tr>
<th>DV</th>
<th>$R^2_{adj}$</th>
<th>$F(2, 296)$</th>
<th>$p$</th>
<th>$\beta$</th>
<th>$sr^2$</th>
<th>$t$</th>
<th>$p$</th>
<th>$\beta$</th>
<th>$sr^2$</th>
<th>$t$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Animals</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitudes</td>
<td>.068</td>
<td>11.82</td>
<td>&lt;.001</td>
<td>.32</td>
<td>.02</td>
<td>2.54</td>
<td>.012</td>
<td>-.06</td>
<td>.00</td>
<td>-.44</td>
<td>.660</td>
</tr>
<tr>
<td>Wildlife</td>
<td>.031</td>
<td>5.73</td>
<td>.004</td>
<td>.14</td>
<td>.00</td>
<td>1.08</td>
<td>.282</td>
<td>.06</td>
<td>.00</td>
<td>.45</td>
<td>.653</td>
</tr>
<tr>
<td>Remorse</td>
<td>.091</td>
<td>15.83</td>
<td>&lt;.001</td>
<td>.38</td>
<td>.03</td>
<td>3.05</td>
<td>.002</td>
<td>-.08</td>
<td>.00</td>
<td>-.65</td>
<td>.512</td>
</tr>
<tr>
<td>Environment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Worldview</td>
<td>.079</td>
<td>13.71</td>
<td>&lt;.001</td>
<td>.36</td>
<td>.03</td>
<td>2.88</td>
<td>.004</td>
<td>-.08</td>
<td>.00</td>
<td>-.65</td>
<td>.514</td>
</tr>
<tr>
<td>Concern</td>
<td>.038</td>
<td>6.87</td>
<td>.001</td>
<td>.23</td>
<td>.01</td>
<td>1.82</td>
<td>.070</td>
<td>-.03</td>
<td>.00</td>
<td>-.21</td>
<td>.838</td>
</tr>
<tr>
<td>Distress</td>
<td>.109</td>
<td>19.31</td>
<td>&lt;.001</td>
<td>.25</td>
<td>.01</td>
<td>2.00</td>
<td>.046</td>
<td>.10</td>
<td>.00</td>
<td>.81</td>
<td>.422</td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
<td>$\Delta R^2$</td>
<td>$F(1, 295)$</td>
<td>$p$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Animals</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitudes</td>
<td>.000</td>
<td>.04</td>
<td>.849</td>
<td>.35</td>
<td>.01</td>
<td>1.82</td>
<td>.070</td>
<td>-.05</td>
<td>.00</td>
<td>-.43</td>
<td>.668</td>
</tr>
<tr>
<td>Wildlife</td>
<td>.016</td>
<td>4.92</td>
<td>.027</td>
<td>.46</td>
<td>.02</td>
<td>2.38</td>
<td>.018</td>
<td>.07</td>
<td>.00</td>
<td>.56</td>
<td>.575</td>
</tr>
<tr>
<td>Remorse</td>
<td>.003</td>
<td>1.11</td>
<td>.294</td>
<td>.53</td>
<td>.02</td>
<td>2.81</td>
<td>.005</td>
<td>-.07</td>
<td>.00</td>
<td>-.59</td>
<td>.553</td>
</tr>
<tr>
<td>Environment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Worldview</td>
<td>.011</td>
<td>3.62</td>
<td>.058</td>
<td>.63</td>
<td>.03</td>
<td>3.34</td>
<td>.001</td>
<td>-.07</td>
<td>.00</td>
<td>-.56</td>
<td>.575</td>
</tr>
<tr>
<td>Concern</td>
<td>.009</td>
<td>2.74</td>
<td>.009</td>
<td>.47</td>
<td>.02</td>
<td>2.45</td>
<td>.015</td>
<td>-.02</td>
<td>.00</td>
<td>-.12</td>
<td>.902</td>
</tr>
<tr>
<td>Distress</td>
<td>.004</td>
<td>1.39</td>
<td>.240</td>
<td>.41</td>
<td>.01</td>
<td>2.21</td>
<td>.028</td>
<td>.11</td>
<td>.00</td>
<td>.86</td>
<td>.389</td>
</tr>
</tbody>
</table>

Note. $N = 299$. 
5.3 Discussion

Study 4 demonstrated additional support for the relationship between believing in oneness and expressing connection and concern for other people, animals, and the environment. Additionally, believing in oneness was associated with prosocial personality characteristics, such as being group-oriented, fair, and forgiving.

Importantly, the usefulness of specific variants of beliefs in oneness – belief in oneness of living things, humanity, and everything – was somewhat supported, although not unequivocally. Belief in oneness of humanity uniquely predicted socially oriented personality characteristics and (marginally) compassionate love for humanity, whereas belief in the oneness of living things did not. And, conversely, belief in oneness of all living things uniquely predicted a variety of ecological concerns (both for animals and the environment), whereas belief in oneness of humanity did not. Given the very high correlations between the three belief in oneness scales (0.85 < rs < .94), the fact that any the specific beliefs accounted for any unique variance is rather impressive.

Even so, a few expected relationships were not obtained. For example, belief in oneness of humanity did not uniquely explain variance in allo-inclusivity ratings of distant other targets, whereas belief in oneness of living things did. Additionally, belief in oneness of humanity did not uniquely explain variance in Ubuntu or empathy in response to others’ suffering as predicted, and only marginally explained compassionate love for humanity.
The fact that belief in oneness of everything did not account for additional variance beyond the two specific beliefs in oneness might suggest that the specific beliefs are more useful for understanding conceptually-relevant outcomes (e.g., environmental concerns, prosocial concerns) than the general belief from which they’re implied. The superiority of domain- and context-specific measures over general measures has been demonstrated in many areas of social and personality psychology (Davidson & Jaccard, 1979; Fleeson, 2004; Ozer, 1999).

Given that belief in oneness of living things and oneness of humanity are related to pro-environmental and pro-social attitudes (particularly with the potential for greater inclusivity of concern and compassion for others), they may be useful ideas to promote as a means of raising consideration and concern for the environment and other people. Importantly, Study 4 demonstrated that conveying specific ideas about oneness that correspond to the outcome of interest might be more effective in targeting particular, conceptually relevant outcomes than conveying ideas about general oneness.
Study 5: The Effects of Specific Beliefs in the Oneness of Everything, Living Things, and Humanity

Although people differ in the degree to which they believe in oneness, oneness beliefs may also be conceptualized in a state-like way. Even people who believe in oneness and value that worldview as a guiding principle may vary in the extent to which they operate from that perspective across situations. Other people may not generally operate from that perspective yet may still be receptive to and impacted by being prompted to think about such a worldview in a particular situation. The goals of Study 5 were to test (1) whether a oneness mindset can be induced in a state-like way, (2) whether being led to think about oneness is associated with greater connection, concern, and compassion (mirroring the findings obtained in the earlier studies), and (3) whether considering specific oneness beliefs—in the oneness of everything, living things, and humanity—differentially affect various outcomes.

Study 5 sought to examine the effects of experimentally-induced perspectives of oneness on many of the variables that were examined correlationally in the previous studies, particularly connections between oneself and others and connections between things outside oneself. In addition to the targets used previously, Study 5 incorporated some socially undesirable targets (e.g., member of ISIS, murderer) to examine how oneness mindsets affect people’s responses to people who do bad things. A “bad” person may be considered as one rotten apple that spoils the (oneness) apple barrel and,
thus, excluded from people’s circle of connection and compassion, or alternatively, a oneness mindset may extend one’s circles to include even bad people.

In addition to examining the breadth of inclusivity of connections felt with others, Study 5 examined the effects of a oneness mindset on helping behavior (donating) to a variety of targets and whether people donate to a broader range of targets when operating from a oneness perspective. Additional measures assessed concern for things beyond oneself and one’s close others, including other (distant) people, the environment, and nonhuman animals.

Finally, Study 5 examined whether specific oneness mindsets—the oneness of all living things and humanity—differentially affect outcomes that correspond to living things and the natural world (e.g., animals, environment) or to people. For instance, do people feel more distress at the suffering of distant other people after being led to think specifically about the oneness of humanity compared to the oneness of all living things?

6.1 Method

6.1.1 Participants

Five hundred and twenty-eight participants were recruited from Amazon’s Mechanical Turk. However, after removing participants who did not spend minimally adequate time overall on the survey (at least 7 minutes) and/or on the experimental manipulation stimulus (at least 10 seconds), 475 participants remained (234 men, 241 women, $M_{age} = 35.31$, $SD = 11.28$). The sample was predominantly White (87%), with
small numbers of participants who were Asian (7%), Black or African American (6%), American Indian or Alaska Native (3%), and Native Hawaiian or Other Pacific Islander (1%). Participants were Christian (43%), Buddhist (2%), Muslim (2%), Jewish (1%), Hindu (.4%), Pagan or Wiccan (1%), Agnostic (21%), Atheist (20%), Other (4%), or None (7%). Participants had completed: some high school (.2%), high school or GED (11%), some college but no degree (27%), associate’s degree (11%), bachelor’s degree (4 year college) (39%), master’s degree (10%), Doctoral degree (Ph.D., J.D., M.D., D.D.S.) (3%). Participants politically identified as Republican (18%), Democratic (50%), Independent (32%).

6.1.2 Procedure

After providing informed consent, participants reported demographic information: religious affiliation and orientation to religion and spirituality (neither religious, nor spiritual; spiritual, but not religious; religious, but not spiritual; both religious and spiritual), race, highest education completed, political affiliation, and political liberal-conservatism (1 = very liberal to 5 = very conservative), age, and gender.

6.1.2.1 Oneness Mindset Induction

Participants were randomly assigned to one of three oneness mindset conditions (in which they read about a belief in the oneness of everything, the oneness of all living things, or the oneness of humanity), a matched control condition in which they read about a belief in the importance of art to the human experiences (matched in structure,
length, and wording as much as possible), or to a true control condition in which they did not read anything. The three descriptions of oneness introduced the concept of oneness and described how oneness is conceptualized in multiple ways—in terms of science, religion, and philosophy—so that people might resonate with the perspective regardless of their belief system. Attempts were made to keep the descriptions broadly palatable to all participants. The descriptions focused on oneness and did not include implications of the belief that are to be measured as outcomes. The three oneness descriptions and matched control essay can be found in Appendix C.

Participants who read one of the four belief descriptions next completed the post-manipulation questions described in the next section; for obvious reasons, participants in the true control condition did not get these questions. Everybody (true control included) then indicated how easy or difficult it is to believe each statement is true (1 = very difficult for me to believe this is true to 5 = very easy for me to believe this is true) for a number of beliefs with two items for each belief in oneness embedded. They then completed the allo-inclusive identity measure, followed by the rest of the outcome measures in randomized order. Participants were then thanked for their participation, debriefed, and compensated $1.50 in Amazon credit.

6.1.2.2 Post-manipulation Questions

After reading the passage, participants (not including those in the true control condition) were asked: (1) How well did you understand the passage that you just read,
(2) How familiar are you with the belief that was just discussed in the passage?, and (3) How much do you agree with the belief or perspective in the passage that you read? (1 = Not at all, 2 = Slightly, 3 = Somewhat, 4 = Moderately, 5 = Very, 6 = Completely). Then, to ensure they processed the content of the passages before moving on, all participants who read a passage (art control included) were prompted with, “Take a moment to think about the perspective presented in the passage. Whether or not you agree with the passage, state in a phrase what you think the best explanation or evidence is for the belief in the oneness of everything/living things/humanity (or the importance of art to the human experience)” and provided with a space to respond.

6.1.2.3 Set of Beliefs with Oneness Embedded

Then, all participants (true control condition included) were asked to indicate how easy or difficult it was for them to believe that nine statements are true (1 = very difficult for me to believe this is true to 5 = very easy for me to believe this is true). Six of these statements consisted of two items from each of the three belief in oneness scales described in Study 4 (e.g., Beyond surface appearances, everything is fundamentally one; Although many separate things exist, they are all part of the same whole). The other beliefs were fillers, including one associated with the matched control condition (i.e., Art is an indispensable part of human experience).
6.1.2.4 Dependent Measures

Participants completed the Allo-inclusive Identity Scale (Leary et al., 2008) described in Study 1. This scale presents seven Venn diagrams on which participants indicate the degree of relatedness or connection they feel with each of 16 targets that include people, animals, and inanimate features of nature. After responding to the 16 targets from the original scale, participants continued with nine additional targets: three reflected people who had done bad things (e.g., a member of ISIS, murderer) and six reflected targets that varied in terms of their similarity to the participant (e.g., someone who views the world very similarly to the way you do, someone who has different worldviews from you) and in terms of physical closeness or distance (e.g., someone you see around town often but haven’t interacted with, the average person from Greenland).

To provide an index of the general tendency to perceive connections between things, participants used the same 7-option Venn diagrams to rate the degree to which three pairs of things are connected. Targets from three different categories (a wild animal, a tree, and the average person) were paired with each other: (1) a wild animal and the average person, (2) a wild animal and a tree, and (3) a tree and the average person. Participants’ ratings of the connection between each of these pairs were averaged to form a single perceived connection score.

In addition, participants selected from eight targets the two targets that they thought were most similar to one another and the two targets they thought were most
different from one another. (The eight targets were a wild animal [such as a squirrel, deer, or wolf], a tree, the Earth, the universe, a homeless person on the street, the average person from Greenland, someone who has different worldviews from you, and a member of ISIS [the terrorist organization]). The two targets that participants selected as most similar and the two targets that participants selected as most different were piped into two questions that followed so that participants rated the connection they perceived between their self-identified pair of “most similar” targets and between their self-identified “most different” targets. The seven Venn diagrams were again used for these ratings.

To assess generosity, participants were told: “For each person listed below, imagine that the person asks you if you would be willing to donate $10 for a fundraiser he/she is holding for his/her medical bills. How likely would you be to donate $10 to the person?” The targets were each of seven human targets from the Allo-inclusive Identity Scale (“Your best friend” was used as a single target rather than two separate items based on best friend of same sex and opposite sex), plus seven of the new human targets added in this study (someone you see around town often but haven’t interacted with, the average person from Greenland, someone who views the world very similarly to the way you do, someone who has different worldviews from you, a member of ISIS, someone who stole a car, a serial murderer, an artist).
To assess distress at others’ misfortunes, participants were presented with the following prompt: “Many things happen in our lives and around the world that upset people to varying degrees. Below is a list of events that may or may not upset you. How much emotional distress would you feel personally in response to each of the following situations? Participants responded on a 6-point scale (0 = none, 1 = a little, 3 = a moderate amount, 5 = a great deal). Situations included suffering of close others (e.g., severe weather damages several of your neighbors’ homes), suffering of distant others (e.g., millions of people around the world lack access to clean drinking water), and destruction of the natural world (e.g., current rates of deforestation lead to the world’s rainforests vanishing in a hundred years, animal species are becoming extinct).

To examine whether the induction of a belief in oneness affects self-interest, participants rated how likely they would be to choose one course of action over another when a trade-off between themselves and others must be made. Items included decisions between personal and collective interests (e.g., Spend time on goals that are personally beneficial vs. Spend time on goals that benefit a larger community), between environmentally friendly behavior vs. personal convenience (e.g., Buy a product that is slower and more difficult to use but is energy efficient vs. Buy a product that is faster and easier to use but uses more energy), and between environmental vs. humanity-focused outcomes (e.g., Use a community education event to teach simple environmentally friendly behaviors vs. to teach simple humanitarian behaviors). Each
item presented a scenario in a sentence (e.g., “You have 10 hours a week outside your normal responsibilities to work toward various goals), followed by “which would you do?" Participants indicated the likelihood of doing each of the two competing options on a 6-point bipolar scale (absolutely X, most likely X, probably X, probably Y, most likely Y, absolutely Y).

Participants were told to imagine “that you suddenly received $100,000. You are not allowed to save any of the money but must spend or give it all away in a month. Indicate the amount that you would spend on each of the following things (you could spend it all on just one or two of these, or distribute among as many of them as you wish).” The five choices were: spend on yourself, give to your family or friends, donate to a homeless shelter in your community, donate to foundations that save endangered species and their habitats, donate to an educational program that teaches peaceful and nonviolent perspectives to children around the world.

6.2 Results

6.2.1 Passage Familiarity, Understanding, and Agreement

Because the belief in oneness might be a new concept or one that people don’t agree with even if they have heard about it, participants were asked after reading the passage how familiar they were with the belief, how much they understood the passage, and how much they agreed with the belief presented in the passage. The effect of condition on familiarity, understanding, and agreement was tested with a MANOVA.
Homogeneity of variance was examined at both the multivariate and univariate levels. Box’s M was significant \(p = .019\), but inspection of the covariance matrices of dependent variables indicated that the covariances were acceptably comparable in size and direction. Levene’s Test was statistically significant for understanding, \(F(3, 373) = 7.79, p < .001\), and agreement, \(F(3, 373) = 2.882, p = .036\); however, the ratio of the largest to smallest variances for each of the suspect dependent variables was under 2.0, which is considered acceptable.

The multivariate effect of passage condition on familiarity, understanding, and agreement was statistically significant, Pillai’s Trace = .15, \(F(9, 1119) = 6.37, p < .001, \eta^2 = .05\). The univariate effects of passage condition on familiarity, understanding, and agreement are presented in Table 32. Not surprisingly, participants consistently reported being more familiar with, understanding, and agreeing with the art passage than the three oneness passages. More importantly, familiarity and agreement ratings did not differ significantly across the three oneness passages. However, participants indicated that they understood the oneness of everything passage less well than the oneness of living things passage or the oneness of humanity passage, which did not differ from each other. Importantly, any observed differences among the three oneness conditions on the dependent measures is not likely to be due to differences in agreement with the three oneness passages.
Table 32: Effect of Passage Condition on Familiarity, Understanding, and Agreement

<table>
<thead>
<tr>
<th>DV</th>
<th>F(3, 373)</th>
<th>p</th>
<th>$\eta^2$</th>
<th>M</th>
<th>SD</th>
<th>M</th>
<th>SD</th>
<th>M</th>
<th>SD</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Familiarity</td>
<td>5.37</td>
<td>.001</td>
<td>.04</td>
<td>3.18a</td>
<td>1.45</td>
<td>3.34a</td>
<td>1.29</td>
<td>3.16a</td>
<td>1.57</td>
<td>3.87b</td>
<td>1.38</td>
</tr>
<tr>
<td>Understanding</td>
<td>8.31</td>
<td>&lt;.001</td>
<td>.06</td>
<td>4.29a</td>
<td>1.23</td>
<td>4.65b</td>
<td>.92</td>
<td>4.72b</td>
<td>.99</td>
<td>5.02c</td>
<td>.87</td>
</tr>
<tr>
<td>Agreement</td>
<td>14.56</td>
<td>&lt;.001</td>
<td>.11</td>
<td>3.40a</td>
<td>1.53</td>
<td>3.39a</td>
<td>1.43</td>
<td>3.63a</td>
<td>1.41</td>
<td>4.53b</td>
<td>1.21</td>
</tr>
</tbody>
</table>

Note. N= 377. Everything (n = 89), Living things (n = 91), Humanity (n = 96), Art control (n = 101). Tukey’s post-hoc mean comparisons were assessed at $\alpha = .01$ level.
Although agreement did not differ across conditions, participants obviously varied in the degree to which they agreed with the passages within conditions. Across the three belief in oneness conditions, on the 6-point rating of how much participants agreed with the belief conveyed in the passage, 11% responded not at all, 17% responded slightly, 21% responded somewhat, 23% responded moderately, 22% responded very, and 7% responded that they agreed completely. This within-condition variability provided both a challenge and an opportunity for the analyses.

The challenge lies in the fact that, viewed in one way, the oneness manipulation varied in its impact on participants’ mindsets; some participants agreed with the sentiment expressed in the passage, and others did not. Given that the effects of a message induction on the dependent variables would vary with its received strength, analyses were conducted in which agreement was treated as a covariate, thereby removing its influence on participants’ responses. In these analyses, the effects of the three oneness passages are compared only to each other and the art control condition but not with the true control condition (because participants in the true control condition had no passage for which they rated their agreement).

The opportunity arises from the fact that within-condition analyses can be conducted to examine the relationship between agreement with the passage and each of the dependent variables separately by condition. Although this analysis does not directly address the effects of the manipulation, it does provide correlational evidence
regarding each of the three beliefs in oneness and the dependent variables. It differs from the correlational analyses in Study 4 in that agreement with a passage that attempted to influence participants’ views was assessed rather than measuring participants’ existing beliefs.

6.2.2 Post-passage Beliefs in Oneness

To begin, the effect of the five conditions on responses to the belief in the oneness of everything, living things, and humanity was examined using a MANOVA. The multivariate effect of condition was not significant, Pillai’s Trace = .02, $F(12, 1410) = .95$, $p = .498$, $\eta^2 = .01$, so univariate effects of condition were not examined.

Next, a MANCOVA was conducted to test the effect of the four passage conditions (eliminating the true control condition in which participants did not read a passage) on beliefs in the oneness of everything, living things, and humanity, including agreement with the passage as a covariate as explained earlier. Homogeneity of variance was examined at both the multivariate and univariate levels. Although Box’s M was significant ($p < .001$), the covariances were acceptably comparable in size and direction. Levene’s Test was statistically significant for belief in the oneness of everything, $F(3, 373) = 4.33$, $p = .005$, and belief in the oneness of all living things, $F(3, 373) = 2.97$, $p = .032$, but the ratio of the largest to smallest variances for each of the suspect dependent variables was under 1.3, which is considered acceptable.
Not surprising, ratings of agreement (the covariate) accounted for a sizable portion of variance in beliefs, Pillai’s Trace = .42, \( F(3, 370) = 90.76, p < .001, \eta^2 = .42 \). In addition, the multivariate effect of passage condition on beliefs in the oneness of everything, living things, and humanity was statistically significant, Pillai’s Trace = .09, \( F(9, 1116) = 3.91, p < .001, \eta^2 = .03 \). The univariate effects of passage condition on beliefs in the oneness of everything, living things, and humanity are presented in Table 33.

As can be seen, participants rated the oneness of everything, living things, and humanity as easier to believe after reading one of the three oneness passages compared to when they read the control (art) passage. However, the mean belief in the oneness of everything, living things, and humanity did not differ as a function of which of the three oneness passages they read. Thus, controlling for the degree to which participants agreed with the passages, reading the passage about belief in oneness did appear to shift their beliefs as desired relative to the control condition.
Table 33: Effect of Passage Condition on Three Types of Beliefs in Oneness, Controlling for Agreement

<table>
<thead>
<tr>
<th>DV</th>
<th>F(3, 373)</th>
<th>p</th>
<th>η²</th>
<th>M (SE)</th>
<th>M (SE)</th>
<th>M (SE)</th>
<th>M (SE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oneness</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Everything</td>
<td>9.76</td>
<td>&lt;.001</td>
<td>.07</td>
<td>7.34a</td>
<td>7.39a</td>
<td>7.37a</td>
<td>6.26b</td>
</tr>
<tr>
<td>Living things</td>
<td>6.49</td>
<td>&lt;.001</td>
<td>.05</td>
<td>7.33a</td>
<td>7.43a</td>
<td>7.34a</td>
<td>6.44b</td>
</tr>
<tr>
<td>Humanity</td>
<td>6.42</td>
<td>&lt;.001</td>
<td>.05</td>
<td>7.70a</td>
<td>7.68a</td>
<td>7.33a</td>
<td>6.69b</td>
</tr>
</tbody>
</table>

Note. N= 377. Everything (n = 89), Living things (n = 91), Humanity (n = 96), Art control (n = 101). Tukey’s post-hoc mean comparisons were assessed at α = .01 level.
6.2.3 Allo-inclusive Identity

A principal axis factor analysis with a direct oblimin rotation was conducted on the 25 allo-inclusive identity items (the original 16 from the scale plus the 9 new items). Examination of the eigenvalues and scree plot indicated four factors (eigenvalues = 14.08, 2.10, 2.00, and 1.01, with the next highest eigenvalue = .73). Inspection of the rotated pattern matrix showed that the four factors reflected allo-inclusive identity with respect to (1) distant other people (e.g., the average American, a stranger on the bus), (2) people who have done bad things (e.g., a member of ISIS, a murderer, someone who stole something), (3) close other people (your best friend of your own sex, your family), and (4) the natural world (the moon, a dog, a tree, the Earth). All loadings were greater than .5 on their respective factors. The three new “bad people” targets loaded on their own factor, but the other six new items all loaded with distant other people. Because these six new targets did not reveal any alternative pattern (they all loaded with distant others), they were not included in the average composite of allo-inclusivity ratings of distant others.

A MANCOVA tested the effect of passage condition on allo-inclusivity ratings of close people, distant people, bad people, and natural world targets, with agreement as a covariate. Homogeneity of variance was examined at both the multivariate and univariate levels, and neither Box’s M nor Levene’s tests was significant. The multivariate effect of passage condition on allo-inclusive identity was statistically
significant, Pillai’s Trace = .07, $F(12, 1113) = 2.30$, $p = .007$, $\eta^2 = .02$. The univariate effects of passage condition on allo-inclusive ratings of close people, distant people, bad people, and the natural world, controlling for agreement, are presented in Table 34.

The mean allo-inclusivity ratings of close targets did not differ across passage conditions. Participants felt equally connected to close others regardless of which passage they read. However, the mean allo-inclusivity ratings for distant others, bad people, and natural world targets were higher for participants who read one of the three belief in oneness passages compared to participants who read the art control passage. However, the allo-inclusivity ratings did not significantly differ across the three oneness conditions at the $\alpha = .01$ level.
Table 34: Effect of Passage Condition on Allo-Inclusive Identity, Controlling for Agreement

<table>
<thead>
<tr>
<th>DV</th>
<th>F(3, 373)</th>
<th>p</th>
<th>η²</th>
<th>M</th>
<th>SE</th>
<th>M</th>
<th>SE</th>
<th>M</th>
<th>SE</th>
<th>M</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Allo-inclusive</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Close</td>
<td>.25</td>
<td>.864</td>
<td>.00</td>
<td>4.97</td>
<td>.12</td>
<td>5.12</td>
<td>.12</td>
<td>5.02</td>
<td>.12</td>
<td>5.05</td>
<td>.12</td>
</tr>
<tr>
<td>Distant</td>
<td>3.82</td>
<td>.010</td>
<td>.03</td>
<td>3.13</td>
<td>.13</td>
<td>3.03</td>
<td>.13</td>
<td>2.90</td>
<td>.12</td>
<td>2.55</td>
<td>.13</td>
</tr>
<tr>
<td>Bad</td>
<td>5.92</td>
<td>.001</td>
<td>.05</td>
<td>2.20</td>
<td>.13</td>
<td>2.03</td>
<td>.13</td>
<td>1.94</td>
<td>.13</td>
<td>1.46</td>
<td>.13</td>
</tr>
<tr>
<td>Natural world</td>
<td>3.54</td>
<td>.015</td>
<td>.03</td>
<td>2.84</td>
<td>.13</td>
<td>2.99</td>
<td>.13</td>
<td>2.72</td>
<td>.13</td>
<td>2.41</td>
<td>.13</td>
</tr>
</tbody>
</table>

Note. N= 377. Everything (n = 89), Living things (n = 91), Humanity (n = 96), Art control (n = 101). Tukey’s post-hoc mean comparisons were assessed at α = .01 level.
Next, correlations between agreement with the passage and each of the allo-inclusivity ratings were examined separately by condition. As shown in Table 35, the more that participants agreed with any of the three beliefs in oneness, the more connected they reported feeling with all targets, with 11 of the 12 effects significant at the .01 level. Oddly, agreeing with the art passage was related to allo-inclusive identity vis-à-vis distant others. In discussing that the belief in the importance of art is shared across cultures and that art plays a role in how people relate to each other, the art passage may have created a sense of connection with other people, but this explanation is obviously speculative.

Table 35: Correlations Between Agreement and Allo-inclusive Identity, Within Condition

<table>
<thead>
<tr>
<th>r with agreement</th>
<th>Passage Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Everything</td>
</tr>
<tr>
<td>Allo-inclusive Identity</td>
<td></td>
</tr>
<tr>
<td>Close</td>
<td>.28**</td>
</tr>
<tr>
<td>Distant</td>
<td>.45***</td>
</tr>
<tr>
<td>Bad</td>
<td>.37***</td>
</tr>
<tr>
<td>Natural world</td>
<td>.47***</td>
</tr>
</tbody>
</table>

Note. **p < .01, ***p < .001. Everything (n = 89), Living things (n = 91), Humanity (n = 96), Art control (n = 101).

6.2.4 Connections Between Disparate Targets

Recall that participants rated the connections between five pairs of targets. Three pairs formed a composite to assess the average level of connection between other things
from various categories. The other pairs were the targets that participants selected as
most similar to one another and as most different from one another.

A MANCOVA was conducted to test the effect of passage condition on the three
variables that reflected perceived connections between other things, including
agreement as a covariate. Box’s M was significant ($p < .001$), but the covariances were
acceptably comparable in size and direction. Levene’s Test was statistically significant
for the rated connection between the two things that participants considered most
different, but inspection of the ratio of the largest to smallest variances for the suspect
dependent variable was only 3.1. The multivariate effect of passage condition on
connection between other things was statistically significant, Pillai’s Trace = .06, $F(9,$
1116) = 2.36, $p = .012$, $\eta^2 = .02$. The univariate effects of passage condition on the three
perceived connection measures are shown in Table 36.

The mean perceived connection ratings for the 3-item composite was higher for
participants who read the oneness of everything or the oneness of living things passage
compared to the art control condition. The mean perceived connection rating did not
significantly differ between the oneness of humanity condition and the art control
condition, and the three oneness conditions did not differ significantly from each other.

Ratings of the perceived connection between the targets that participants rated as
most similar to each other did not differ significantly across conditions. However,
ratings of the perceived connection between targets that participants rated as most
different from each other were higher in the three oneness passage conditions than in
the art passage control condition. Reading about beliefs in oneness, regardless of how
oneness was framed, made participants rate dissimilar things as more connected.
Table 36: Effect of Passage Condition on Ratings of Connections, Controlling for Agreement

<table>
<thead>
<tr>
<th>DV</th>
<th>$F(3, 373)$</th>
<th>$p$</th>
<th>$\eta^2$</th>
<th>Everything</th>
<th></th>
<th></th>
<th>Living things</th>
<th></th>
<th></th>
<th>Humanity</th>
<th></th>
<th></th>
<th>Art control</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>M</td>
<td>SE</td>
<td></td>
<td>M</td>
<td>SE</td>
<td></td>
<td>M</td>
<td>SE</td>
<td></td>
<td>M</td>
<td>SE</td>
<td></td>
</tr>
<tr>
<td>Connection</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Composite</td>
<td>2.65</td>
<td>.049</td>
<td>.02</td>
<td>3.09a</td>
<td>.13</td>
<td></td>
<td>3.18a</td>
<td>.13</td>
<td></td>
<td>2.90ab</td>
<td>.13</td>
<td></td>
<td>2.69b</td>
<td>.13</td>
<td></td>
</tr>
<tr>
<td>Similar</td>
<td>.49</td>
<td>.693</td>
<td>.00</td>
<td>4.71a</td>
<td>.19</td>
<td></td>
<td>4.94a</td>
<td>.19</td>
<td></td>
<td>4.96a</td>
<td>.18</td>
<td></td>
<td>4.76a</td>
<td>.18</td>
<td></td>
</tr>
<tr>
<td>Different</td>
<td>5.30</td>
<td>.001</td>
<td>.04</td>
<td>2.06a</td>
<td>.15</td>
<td></td>
<td>2.07a</td>
<td>.15</td>
<td></td>
<td>2.03a</td>
<td>.14</td>
<td></td>
<td>1.38b</td>
<td>.14</td>
<td></td>
</tr>
</tbody>
</table>

Note. $N=377$. Everything ($n=89$), Living things ($n=91$), Humanity ($n=96$), Art control ($n=101$). Tukey’s post-hoc mean comparisons were assessed at $\alpha = .01$ level.
Next, correlations between passage agreement and each of the connection ratings were examined separately by condition (see Table 37). Overall, the correlations between passage agreement and ratings of connections between other things were higher in the oneness conditions compared to the art control condition, with two exceptions (ratings of similar and different targets in the oneness of living things condition). In general, the more that participants agreed with the belief in oneness, the more highly they rated things as connected with each other.

### Table 37: Correlations Between Agreement and Connections, Within Condition

<table>
<thead>
<tr>
<th>Connection</th>
<th>Passage Condition</th>
<th>Everything</th>
<th>Living</th>
<th>Humanity</th>
<th>Art control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Composite</td>
<td>r with agreement</td>
<td>.37***</td>
<td>.38***</td>
<td>.56***</td>
<td>.18</td>
</tr>
<tr>
<td>Similar</td>
<td></td>
<td>.38***</td>
<td>.25</td>
<td>.31**</td>
<td>.13</td>
</tr>
<tr>
<td>Different</td>
<td></td>
<td>.28***</td>
<td>.07</td>
<td>.40***</td>
<td>.01</td>
</tr>
</tbody>
</table>

Note. **p < .01, ***p < .001. Everything (n = 89), Living things (n = 91), Humanity (n = 96), Art control (n = 101).

### 6.2.5 Donating to Close, Distant, and Bad People

Participants were asked how likely they would be to donate $10 to a fundraiser to pay medical bills for the 15 human targets described earlier. A principal axis factor analysis with a direct oblimin rotation was conducted on the 15 targets. Examination of the eigenvalues and scree plot indicated three factors (eigenvalues = 7.85, 2.53, and 1.53, with the next highest eigenvalue = .51). Inspection of the rotated pattern matrix showed
that the three factors reflected (1) distant other people, (2) close other people, and (3) bad people, as seen earlier with ratings of allo-inclusive identity. All targets loaded greater than .50 on their respective factors.

The effect of passage condition on likelihood of donating to close, distant, and bad targets, controlling for agreement, was tested with a MANCOVA. Because the multivariate effect was not statistically significant, Pillai’s Trace = .02, $F(9, 1116) = .85, p = .570, \eta^2 = .01$, univariate ANCOVAs were not examined. Correlations between passage agreement and the likelihood of donating to each of the targets were examined separately by condition.

As shown in Table 38, correlations between passage agreement and likelihood of donating to close people targets were not significant at the .01 level for any of the oneness passage conditions. Oddly, however, agreement with the art passage correlated .27 with the likelihood of donating to close others.

**Table 38: Correlations Between Agreement and Donating, Within Condition**

<table>
<thead>
<tr>
<th>Target of donation</th>
<th>Passage Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>r with agreement</td>
</tr>
<tr>
<td>Close</td>
<td>.09</td>
</tr>
<tr>
<td>Distant</td>
<td>.24</td>
</tr>
<tr>
<td>Bad</td>
<td>.23</td>
</tr>
</tbody>
</table>

Note. **$p < .01$, ***$p < .001$. Everything ($n = 89$), Living things ($n = 91$), Humanity ($n = 96$), Art control ($n = 101$).
6.2.6 Distress in Response to Suffering

Participants indicated how much emotional distress they would feel in response to a number of situations. Mean scores were computed for situations involving the suffering of “close” others (e.g., severe weather damages several of your neighbors’ homes; a friend must have surgery to fix a medical condition), distant others (rising sea levels in Bangladesh lead to homelessness for millions of people; millions of people around the world lack access to clean drinking water), and the natural world (e.g., coral reefs that support marine life are being destroyed; animals are being killed for their fur, hides, ivory, etc.).

The multivariate effect of passage condition on degree of emotional distress participants felt at the suffering of close people, distant people, and natural world targets was not statistically significant, Pillai’s Trace = .03, $F(9, 1116) = 1.03$, $p = .410$, $\eta^2 = .01$, so univariate ANCOVAs were not examined. Correlations between passage agreement and the degree of distress participants felt at the suffering of close people, distant people, and natural world targets were examined separately by condition and are presented in Table 39.

As can be seen, the more that participants agreed with the belief in the oneness of everything, the more distress they felt in response to close people’s suffering ($r = .26$) and harm to the natural world ($r = .30$). The more that people agreed with the oneness of all living things, the more distressed they felt in response to suffering of distant others ($r$
= .27) and the natural world (r = .34). The more that people agreed with the oneness of humanity, the more distressed they felt in response to harm done to the natural world (r = .31). Agreement with the art passage correlated with distress to the suffering of close others (r = .29), which mirrors the anomalous effect for generosity above. I have no explanation for this effect.

<table>
<thead>
<tr>
<th>Table 39: Correlations Between Agreement and Distress, Within Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passage Condition</td>
</tr>
<tr>
<td>Distress at Suffering of</td>
</tr>
<tr>
<td>Close</td>
</tr>
<tr>
<td>Distant</td>
</tr>
<tr>
<td>Natural world</td>
</tr>
</tbody>
</table>

Note. **p < .01, ***p < .001. Everything (n = 89), Living things (n = 91), Humanity (n = 96), Art control (n = 101).

6.2.7 Communal and Environmentally-oriented Decisions

Participants rated how likely they would be to choose one course of action over another when a trade-off must be made. A communal orientation score was created by combining scores from three items: (1) go along with a group preference vs. insist on personal preference, (2) help clean community centers vs. taking care of own home, and (3) spend time on goals that benefit a larger community vs. goals that are personally beneficial. An environmental care score was created by combining two items: (1) buy a product that is slower and more difficult to use but is energy efficient vs. buy a product
that is faster and easier to use but uses more energy and (2) properly dispose of a box of batteries vs. throw the batteries in the trash even though you know you shouldn’t. One item involved a trade-off of an environmental care focus and humanitarian focus: choosing which of two types of everyday behaviors should be taught at a community education event, low (negative) scores correspond to teaching simple environmentally friendly behaviors, high (positive) scores correspond to teaching simple humanitarian behaviors.

A MANCOVA tested the effect of passage condition on communal orientation, environmental care, and environmental/humanitarian trade-off, with agreement as a covariate. The multivariate effect was not statistically significant, Pillai’s Trace = .03, $F(9, 1116) = 1.11, p = .350, \eta^2 = .01$, so univariate ANCOVAs were not examined. Correlations between agreement with the passage read and composite trade-off scores described above were examined separately by condition.

As shown in Table 40, the more that people agreed with the oneness of everything passage, the more likely they were to favor the environmental behavior education compared to the humanitarian behavior (indicated by the negative correlation, $r = -.37$). Notably, agreeing more with the oneness of humanity was not associated with preferring humanitarian behaviors over environmentally-friendly behaviors.
The more that participants agreed with the oneness of humanity passage, the more likely they were to choose environmentally friendly behavior over personal convenience \((r = .36)\). The state of the environment is relevant for the well-being of humanity and might be particularly relevant if people who believe in the oneness of all humanity think more about future generations.

**Table 40: Correlations Between Agreement and Trade-off Decisions**

<table>
<thead>
<tr>
<th>Passage Condition</th>
<th>r with agreement</th>
<th>Everything</th>
<th>Living</th>
<th>Humanity</th>
<th>Art control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communal orientation</td>
<td>.18</td>
<td>.22</td>
<td>.11</td>
<td>.19</td>
<td></td>
</tr>
<tr>
<td>Environmental care</td>
<td>.26</td>
<td>.22</td>
<td>.36***</td>
<td>.21</td>
<td></td>
</tr>
<tr>
<td>Environ. / Human.</td>
<td>-.37***</td>
<td>-.16</td>
<td>-.02</td>
<td>-.11</td>
<td></td>
</tr>
</tbody>
</table>

Note. **\(p < .01\), ***\(p < .001\). Everything \((n = 89)\), Living things \((n = 91)\), Humanity \((n = 96)\), Art control \((n = 101)\). Environ. / Human. = Environmental vs. humanitarian focus

### 6.2.8 Selfish and Charitable Spending

The oneness manipulation, even controlling for agreement with the passage, had no effect on the proportion of $100,000 that participants designated to each of the categories. And, analyses used previously in which correlations with passage agreement were examined revealed no significant correlations.

### 6.3 Discussion

Getting people to temporarily adopt a perspective of oneness by quickly reading a brief passage was, overall, only minimally effective. Whether the ineffectiveness was due to the passage itself, lack of control over how deeply participants processed the
information, or indifference or resistance to the content is not clear. Many participants did not agree with the passages that described and justified the three oneness beliefs, and the effectiveness of the manipulation obviously depended on their agreement with the passage they read. However, controlling for the degree to which participants agreed with the passages in tests of the condition effect demonstrated some differences between the oneness passage conditions and the control passage, even though the three types of oneness messages did not have different effects.

Controlling for the degree to which participants agreed with the passages, reading about beliefs in oneness led participants to find the oneness of everything, living things, and humanity as easier to believe compared to when they read the control passage, showing that the passages did temporarily affect participants’ beliefs. However, their beliefs in oneness did not differ as a function of which of the three oneness passages they read.

After controlling for the degree to which participants agreed with the passages, mean allo-inclusivity ratings for distant others, bad people, and natural world targets were higher for participants who read one of the three belief in oneness passages compared to participants who read the art control passage. Consistent with the patterns of allo-inclusivity findings in Studies 1 and 3, participants felt equally connected to close others regardless of which passage they read.
Beliefs in oneness were not only associated with feeling more connected to other things, but they were also associated with generally rating things as more connected to each other, particularly dissimilar things. Participants who read the oneness passages rated pairs of dissimilar targets (e.g., a tree and a member of ISIS) as more closely connected with one another compared to participants who read the control passage, controlling for agreement with the passage. However, similar targets were not rated differently after participants read the oneness passages versus control condition.

The effect of condition, controlling for agreement, was not significant for participants’ likelihood of donating to close, other, or bad targets. And, the agreement with the passage they read did not significantly correlate with likelihood of donating.

Reading passages about oneness did not significantly affect how participants responded to suffering of other people or harm to the natural world. However, examining correlations of agreement with the passage separately by condition showed that the more that participants agreed with the belief in the oneness of everything, the more distress they felt in response to close people’s suffering and harm to the natural world; distress vis-à-vis distant others was not related to believing in the oneness of everything. In addition, the more that participants agreed with the oneness of all living things, the more distressed they felt in response to suffering of distant others and harm to the natural world, but, again, the effect was not obtained for close others. Interestingly, the more that participants agreed with the oneness of humanity passage,
the more distressed they felt in response to harm to the natural world, but not distant others (as was predicted) or close others. Some of the natural world scenarios included environmental harm (e.g., pollution), which could also be construed as harm to humanity (to the extent that people need clean air and water, for example).

The limited effectiveness of the manipulation makes drawing conclusions about differences between the three beliefs in oneness difficult. In general, the failure of the experimental manipulation to strongly affect participants’ beliefs in oneness compromised efforts to study the causal effects of the belief. However, the scattered findings were consistent with predictions and tended to converge with patterns demonstrated in the other studies.
Discussion

Five studies initiated research on the psychological and interpersonal implications of believing in oneness. Belief in oneness was shown to be a meaningful belief that is endorsed by a nontrivial portion of the population (44-50%, depending on the study) and that is associated with attitudes, emotions, personality characteristics, and identity-relevant variables. Even among people who do not endorse the belief, the degree to which people can imagine it being true relates to various outcomes.

Three belief in oneness scales were developed to assess how easy it is for people to believe oneness to be true. These scales measure beliefs in three conceptualizations of oneness – oneness of everything, all living things, and humanity. To some extent, the three forms of the belief imply each other – human beings are living things, humans and other living things are part of everything. The three variations of belief in oneness were highly correlated, related to other constructs similarly, and did not discriminately affect outcomes in the experimental study. However, they did show some evidence of uniquely explaining variance in conceptually relevant variables.

The constructs that were shown to be related to belief in oneness fall roughly into four broad categories—communal orientation and concern for others, ecological concern and connectedness to nature, breadth of concern, and experiences of oneness. To conclude, I will briefly discuss the findings in each of these categories.
7.1 Communal Orientation and Concern for Others

Overall, belief in oneness was associated with a more communal orientation toward other people, as indicated by its relationship with personality characteristics that reflect a prosocial orientation to treating other people well (such as being fair, forgiving, and trustworthy) and generosity (i.e., donating a portion of a windfall to charity rather than spending it all on oneself or family and friends). All three beliefs in oneness were associated with higher compassionate love for humanity, empathy (i.e., distress participants felt in response to other people’s suffering), and how often they feel Ubuntu (a pervasive spirit of caring and community, harmony and hospitality, respect and responsiveness that individuals and groups display for one another).

Belief in oneness was also associated with the degree to which participants valued both universalism (i.e., understanding, appreciating, tolerating, and protecting the welfare of all people and nature) and benevolence (i.e., preserving and enhancing the welfare of people with whom one is in frequent personal contact), but it did not correlate with most other values, suggesting that belief in oneness corresponds to an emphasis on “self-transcendent” values but not necessarily lower emphasis on “self-enhancement” values, such as power or hedonism (Schwartz, 1994).

Although belief in oneness predicted communal and prosocial outcomes across the three scales, belief in the oneness of humanity was generally most strongly, and sometimes uniquely, associated with interpersonal orientations and behaviors.
Specifically, belief in oneness of humanity uniquely (though marginally) predicted being forgiving, trustworthy, and fair, and having compassionate love for humanity, whereas the belief in the oneness of living things and of everything did not.

Given that belief in oneness was consistently related to communal orientation otherwise, the fact that it was not associated with selfism (prioritizing one’s own interests and looking out for oneself first) was unexpected. Belief in oneness was also not associated with private or public self-absorption. These findings suggest that people’s belief in oneness is not related to their level of self-focus and selfishness but instead to how much they care about others people’s welfare.

7.2 Ecological Concern and Connectedness to Nature

Belief in oneness was also consistently associated with feeling connected to nature, being concerned about animals and the environment, and believing that people are responsible for treating the natural world well. The more that people believe in the oneness of everything, the more they feel emotionally connected to the natural world. And, belief in the oneness of everything was associated with believing in the unitive nature of life. All three variants of belief in oneness correlated with concern for the well-being of animals and the environment, yet belief in oneness of all living things tended to uniquely explain variance in these outcomes, whereas belief in oneness of humanity did not. For instance, in Study 4, although all three beliefs in oneness correlated strongly with allo-inclusivity ratings of the natural world, the belief in oneness of living things
uniquely explained three times more variance in allo-inclusivity of the natural world compared to distant others, whereas belief in oneness of humanity did not uniquely explain allo-inclusivity of distant others or the natural world. Additionally, belief in the oneness of living things uniquely predicted people’s attitudes toward using animals for various purposes, how badly they would feel running over animals with a car, their views that people should respect the environment, and the distress they feel in response to harm to animals and the environment.

To the extent that belief in the oneness of living things can be promoted, fostering this belief may be a fruitful avenue for promoting greater concern for the environment, pro-environmental attitudes and, consequently, ecologically responsible behavior. Although environmental behavioral modification has received more attention as a target of environmental education, research suggests that environmental attitudes should be a target of environmental education as well (Eilam & Trop, 2012). Promoting the belief in oneness of all living things might aid in constructing more environmentally conscious attitudes, individually and collectively.

7.3 Breadth of Concern

A central hypothesis of the present research was that belief in oneness would be associated with greater breadth in people’s circle of connection and compassion for people, animals, and the inanimate natural world. That is, people who believe in oneness should feel more connected to and responsible for people and things outside of
their immediate family, friends, and local environment. This hypothesis was supported by a number of findings. In Studies 1 and 4, belief in oneness correlated strongly with the connection people felt with distant others and the natural world (as indicated by allo-inclusive identity; Leary et al., 2008). In Study 5, participants’ allo-inclusivity ratings were higher for distant others, bad people, and the natural world in the three conditions in which they read about the belief in oneness compared to the control condition. Clearly, believing in oneness fosters connections with more distant targets, whether human, nonhuman, or inanimate.

In contrast, belief in oneness was not related to people’s felt connection with close others. Given that everybody tends to feel highly connected to those who are close to them, belief in oneness matters more for how highly connected they feel to distant others and the natural world. Additionally, belief in oneness correlated four times more strongly with universalism (which refers to the welfare of all people and nature) than with benevolence (which refers to others with whom one is in frequent personal contact). The effect of believing in oneness on allo-inclusivity ratings of distant targets, the natural world, and even bad people suggests that people who believe in oneness may redefine the boundaries of their “ingroup” to be more inclusive (Gaertner & Dovidio, 2000; Gaertner, Dovidio, Anastasio, Bachman, & Rust, 1993) and identify with all of humanity (McFarland, Brown, & Webb, 2013), if not also the natural world.
7.4 Experiences of Oneness

Although this research focused primarily on beliefs, it also explored experiences of oneness. Study 1 demonstrated that belief in oneness of everything correlated with all qualities of mystical experiences (Hood, 1975) but was uniquely predicted only by the unifying quality (perceiving everything as one) and marginally by ego quality (experiencing a loss of sense of self), and temporal/spatial quality (modifications in the experience of time and space). Importantly, the unifying quality comparatively explained most of the variance. However, the relationship with ego quality that reflects a reduction in the sense of a separate self also fits well with other findings, specifically the high correlation between belief in oneness and the sense that one’s identity extends beyond oneself to encompass wider aspects of humankind, life, or the cosmos (metapersonal self; Decicco & Stroink, 2007).

Study 3 showed that about half of the participants who had an experience of perceiving everything to be one had not believed in oneness before the experience. This finding, along with participants indicating that personal experiences were a primary basis of their belief, suggests that experiences may play an important role in substantiating the belief in oneness.

Although spiritual experiences are not necessarily accompanied by seeing everything as one, many spiritual experiences reflect feeling connection or oneness with something larger than oneself (Davis, Rice, Hook, Van Tongeren, DeBlaere, Choe, &
Worthington, 2015). Study 1 demonstrated that belief in oneness of everything is associated with a sense of closeness or connection with *nature or humanity*, but not *God*, during a spiritual experience. It was also correlated with sensing something infinite or feeling a bond with an indescribable force or being during a spiritual experience.

In line with the finding that feeling closeness with *God* during a spiritual experience did not correlate with belief in oneness, Study 3 demonstrated that belief in oneness was not associated with believing in a supreme being (though it was with a higher power), and importantly oneness beliefs were associated with specific conceptualizations of *God*. Belief in oneness was higher for participants who conceptualized *God* as “all that is” or as an essence or spirit that is everywhere.

### 7.5 Limitations

A primary limitation of the present studies was the nature of the samples. Aside from the ways in which university students and MTurk workers may differ from other people (Bartneck, Duenser, Moltchanova, & Zawieska, 2015; Henrich, Heine & Norenzayan, 2010), belief in oneness is probably not as widespread in the United States as it is in certain other parts of the world. For example, across the studies, 13-19% of participants had not thought about the belief previously, and 24-30% were only minimally familiar with it. The topic of oneness is certainly more pervasive in Eastern cultures, where its historical roots extend back thousands of years. Participants who affiliated with Eastern religious traditions, for whom this belief is more common, made
up only 5% or less of each sample. Examining not only whether participants believed in oneness (yes, no) but also “how easy” it was for them to believe in oneness partly helped to navigate this issue, but broader samples should be sought in future research.

Furthermore, given the nonconventional nature of the topic in Western culture, people who do believe in oneness may be different in other ways that were not measured and accounted for in this initial investigation. For instance, people who have been exposed to the idea of oneness might (1) hold this belief alongside explicit views of how people should treat one another and the natural world (e.g., nonmainstream, “hippie” attitudes), (2) have experience with philosophical or spiritual traditions that espouse oneness, or (3) have greater exposure to other cultures (through travel or study) in which the belief is more prevalent and, thus, have a broader, more inclusive perspective toward other people. People who fall in these categories may be more likely to endorse some of the variables studied here such as compassion, inclusivity of concern for others, and ecological concern. Of course, all beliefs are naturally confounded with other beliefs and worldviews, which is why an effort was made to induce the belief in Study 5. But, for now, all we know is that a belief in oneness relates to a number of relevant beliefs, attitudes, and experiences, though the precise nature of those relationships is unclear.

Another limitation is the exclusive use of self-report measures. Although useful for an initial investigation, self-report measures may be problematic for the questions
explored in the present research in at least two ways. First, given that many of the outcomes explored in the present studies might be considered socially desirable (e.g., empathy, compassion, environmental attitudes) or undesirable (e.g., selfishness), these measures may be contaminated by social desirability response bias, even if the Belief in Oneness Scale itself was not. Second, although endorsement of particular views of humanity, feelings of concern and compassion for others, and ecological concerns (for animals and the environment) are all relevant to understanding the belief in oneness in their own right, ultimately the importance of these measures is in how they correspond to behavior toward other people and the natural world, which is not always strongly correlated with self-reported attitudes.

Finally, the failure of the experimental study to strongly affect participants’ beliefs in oneness compromised efforts to study the causal effects of the belief. As noted, many participants did not agree with the passages that described and justified the three oneness beliefs, and the effectiveness of the manipulation obviously depended on their agreement with the passage they read. Any attempt to introduce a worldview that may be at odds with people’s existing views may be met with indifference or resistance, and that problem may be exacerbated in the case of belief in oneness, which some may consider to be an esoteric, new age, or flaky idea. Furthermore, the effectiveness of prompting participants to think about or adopt a perspective by reading a description may rely on careful processing of the content. The sample was obtained through
Amazon’s Mechanical Turk, a less controlled setting in which many participants may skim text quickly rather than thoughtfully. For such a novel and unusual belief (for Western samples), a more extensive approach to conveying the idea, carried out in a controlled laboratory setting, might be necessary. The limitations of the manipulation in Study 5 made drawing conclusions about overall effectiveness and about differences between the three beliefs in oneness difficult.

### 7.6 Directions for Future Research

An obvious next step for future research is to examine some of the relationships between belief in oneness and behavior—in the lab and the real world—that were measured by self-report in these studies. For instance, a lab study could employ the social distance paradigm in which participants are told who they will be interacting with (e.g., a close/similar target vs. distant/dissimilar target) and asked to help set up chairs for the conversation, in which the distance between the chairs is used as a measure of social distance (Goff, Steele, & Davies, 2008). Belief in oneness, whether measured or manipulated, should be inversely related to distance. Other behavioral indicators of closeness or connection—such as eye contact, body position, time spent talking, and indications of social ease—could likewise be examined.

By obtaining a broader sample of religious affiliations (including non-affiliation), new questions about how people conceptualize oneness and the role that belief in oneness plays in people’s lives may emerge. For instance, people may think about the
oneness of everything differently depending on their other beliefs and worldviews.

Given the wide variety of responses that participants provided in response to the question of what the “one thing” is, people clearly think about how everything is one in very different ways. For example, people who believe in God may believe that everything is one because everything is part of God or is all God’s creation, whereas people who view oneness from the perspective of quantum physics may think about oneness in terms of a unified quantum field. Whether different conceptualizations of oneness have different psychological and interpersonal implications deserves attention.

Similarly, how people conceptualize oneness from an Eastern perspective versus a Western perspective should be explored. At this point in history, people from Eastern cultures are more likely to have been exposed to the idea of oneness early in life, whereas people from Western cultures may be more likely to be exposed to the idea for the first time in adolescence or adulthood. One question to be explored is whether (and how) the psychological and interpersonal implications of believing in oneness differ based on whether people grew up with the idea as part of their worldview or later adopted the belief. On the one hand, a long-standing belief in oneness might be more engrained in people’s lives. On the other hand, learning about and consciously adopting the belief later in life may reflect a paradigm shift in worldviews and freshly influence how people live. A related question is whether people are conscious of the connection between their belief in oneness and the interpersonal and ecological implications of the
belief. Do people consciously and explicitly include a wider variety of people in their circle of concern because they believe that everything or all of humanity is one?

In the samples used in the present studies, only 6-10% of people responded with the highest rating on the Belief in Oneness of Everything Scale. Samples consisting of people with stronger beliefs in oneness should be obtained to examine whether they conceptualize oneness differently, whether and how they live by the belief, and how they might be different from people who casually endorse a belief in oneness. I currently have research underway that is sampling from social media groups that attract people who are particularly likely to believe in – and be personally invested in – oneness.

The present research focused primarily on people’s conceptual belief in oneness, with only a cursory exploration of how those beliefs relate to experiences of oneness and transcendent or spiritual experiences. The interplay of people’s conceptual belief in oneness and the experiences they have – as an antecedent and/or consequence of their belief in oneness – is a fruitful avenue for further research. In addition to examining full-blown experiences of perceiving the oneness of everything (as is found in mystical experiences; Hood, 1975, 2016), research should explore how believing in oneness might bolster the benefits of other experiences or activities that sometimes involve a belief in oneness, such as meditation and yoga. Longitudinal designs and experience sampling methods will be needed to explore naturally occurring beliefs and experiences, as well as changes in people’s personality, self-views, behavior, and experiences that may occur
after they are taught about oneness or have an experience in which they feel everything to be one.

Finally, future research should explore possible downsides of believing in the oneness of everything, living things, and humanity. The present research emphasized the positive implications for others and the environment, but those implications included greater distress in response to the suffering of others. People who believe in oneness could become depressed or cynical about the state of the world, how people treat one another (e.g., violence, racism, exclusion), and the destruction of the environment. They might feel the burden of responsibility to make the world a better place or think they are never doing enough. Another possibility is that, when combined with certain other beliefs, believing in oneness could make people less concerned about their own or others’ welfare. For example, if everything is one, people might reason that it doesn’t matter whether they or others are dead or alive because, either way, they are still an inseparable part of the one fundamental thing.

7.7 Conclusion

Despite the fact that people have believed in oneness for thousands of years, empirical investigations into the belief are virtually non-existent. The absence of this topic from research is likely a reflection of the zeitgeist of Western culture, in which the belief has been regarded as an esoteric or fringe viewpoint. To the extent that social psychological research is, in part, descriptive of the times (Gergen, 1996), studying
people’s beliefs in oneness might be novel only because of how recently Eastern ideas have filtered into Western society. Only recently have such formerly unfamiliar ideas become more mainstream via the importation of Eastern spiritual and religious traditions; secular adoption of meditation, mindfulness, and yogic practices; the so-called new age movement; and growing interest in these concepts among behavioral researchers and psychological practitioners.

As the various branches of science increasingly provide people with empirically-based knowledge about what “being human” entails, and as people increasingly integrate knowledge from science with their subjective experiences of the world, people’s views of the world and themselves will likely change, both individually and collectively. The belief in oneness, whether true or not, may be one such view with important implications and is worthy of further investigation. The present studies have laid a foundation for future research by creating scales to measure people’s beliefs in oneness and providing initial evidence that believing in oneness is associated with feeling greater connection and concern for people and the environment. Of course, the belief in oneness is not a panacea for the world’s social and environmental problems. However, believing in oneness may be one small piece of a “new manner of thinking” that helps to save us from ourselves.
Appendix A

8.1 Study 2 – Values measure

To what extent do you live by the following principles and values? That is, to what degree do these principles and values guide your decisions and behavior?

1 = Not at all; this principle or value is not important to me
5 = Extremely; this is one of my most important principles or values

Achievement: Being personally successful by demonstrating my competence according to social standards

Benevolence: Preserving and enhancing the welfare of people with whom I am in frequent personal contact

Conformity: Restraining any actions, inclinations, and impulses that might upset or harm others and violate social expectations or norms

Hedonism: Seeking pleasure and sensuous gratification for myself

Oneness: Believing that everything that exists is ultimately part of the same fundamental thing

Power: Having social status and prestige, controlling other people and resources

Security: Safety, harmony, and stability of society, relationships, and myself

Self-direction: Being able to take independent thought and action—choosing, creating, exploring

Stimulation: Excitement, novelty, and challenge in life

Tradition: Having respect, commitment, and acceptance for the customs and ideas that my culture or religion provides

Universalism: Understanding, appreciating, tolerating, and protecting the welfare of all people and nature
Appendix B

9.1 Study 4 - BIO Scale items for all living things and all of humanity

Below are a number of statements. Whether or not you believe in the idea of oneness, for each statement, indicate how easy or difficult it is for you to believe that each statement is true.

1 = Very difficult for me to believe this is true
5 = Very easy for me to believe this is true

9.1.1 Belief in Oneness of Living Things

1. Beyond surface appearances, all living things are fundamentally one.
2. Although many seemingly separate forms of life exist, they all are part of the same whole.
3. At the most basic level of reality, all living things are one.
4. The separation among living things on earth is an illusion; in reality, all lifeforms are one.
5. All living things are composed of the same basic substance, whether one thinks of it as spirit, consciousness, physical matter, quantum processes, or whatever.
6. The same basic essence permeates all living things.

9.1.2 Belief in Oneness of Humanity

1. Beyond surface appearances, all of humanity is fundamentally one.
2. Although many seemingly separate people exist, everyone is part of the same whole.
3. At the most basic level of reality, all of humanity is one.
4. The separation among individual people is an illusion; in reality, all of humanity is one.
5. Every person is composed of the same basic substance, whether one thinks of it as spirit, consciousness, physical matter, quantum processes, or whatever.
6. The same basic essence permeates every person.
9.2 *Distress in response to the suffering of others and harm to the natural world*

Many things happen in our lives and around the world that upset people to varying degrees. Below is a list of events that may or may not upset you.

How much emotional distress would you feel personally in response to each of the following situations?

0 = none; 1 = a little; 2 = (blank); 3 = a moderate amount; 4 = (blank); 5 = a great deal

- Severe weather damages several of your neighbors’ homes
- A school shooting occurs at a local community college, with multiple deaths and injuries
- A friend must have surgery to fix a medical condition

- Rising sea levels in Bangladesh leads to homelessness for millions of people
- Millions of people around the world lack access to clean drinking water
- Millions of children lack access to education

- Coral reefs that support marine life are being destroyed
- Current rates of deforestation lead to the world’s rain forests vanishing in a hundred years
- The air, water, and soil are being excessively polluted
- Animal species becoming extinct
- Animal poaching (e.g., animals being killed for their fur, ivory, etc.)
Appendix C

10.1 Passages for Study 5 Experimental Manipulation

10.1.1 Passage for Belief in Oneness of Everything

Instructions:
The following passage describes a belief that some people hold about the world. You may or may not be familiar with the ideas presented in the passage, and you may or may not agree with the belief presented, but please read it carefully and think about the ideas that are presented. We are interested in how different people feel about this belief.

Intro
People hold many different beliefs about the nature of the world. One belief that is held by people in many cultures (including the United States) -- is what we might call the “unity of everything belief.” The unity of everything belief is the belief that everything in the universe is fundamentally one. In other words, despite the fact that we perceive individual things to be separate, everything is part of a unified whole. This belief says that, at a deeper level, there is oneness among all things.

People may believe in the unity of everything for scientific, religious, or philosophical reasons.

Science
Scientists have identified processes in quantum physics that support the unity of everything belief. Whereas the world was once conceptualized in terms of separate atoms or particles, new perspectives based on quantum mechanics view the universe as a single unified field, characterized by unity and interrelation.

Religious and Spiritual Traditions
Although people from different religious backgrounds (including atheists) differ in their beliefs about the nature of the world, many have a concept that refers to “all that is.” They may think about it as the absolute, God, the Tao, Brahman, cosmic consciousness, or many other labels that represent a “whole” that encompasses many deeply interconnected “parts.” The one whole implies oneness or unity of all things, and people from many different perspectives believe that everything exists together in unity.

Philosophy
Some philosophical perspectives assert that all things do not exist in isolation but are deeply interconnected with everything else. Some posit that the “ultimate reality” of the universe is all of one kind of “substance,” which is neither all physical nor all mental. Philosophical beliefs about the “non-dual” nature of the world capture the idea that all of the diverse things that exist are ultimately manifestations of one underlying whole.

So, although their beliefs may be based on different considerations, people who believe in the unity of everything believe that on a deep level, all of the separate things that we perceive share the same essence or fundamental quality with everything that exists. Some people compare the “parts” of the world to waves of an ocean – just as the waves are all part of one ocean, all of the things in the world are fundamentally one.

10.1.2 Passage for Belief in Oneness of All Living Things

Instructions:
The following passage describes a belief that some people hold about the world. You may or may not be familiar with the ideas presented in the passage, and you may or may not agree with the belief presented, but please read it carefully and think about the ideas that are presented. We are interested in how different people feel about this belief.

Intro
People hold many different beliefs about the nature of living things, such as plants and animals. One belief that is held by people in many cultures (including the United States) -- is what we might call the “unity of life belief.” The unity of life belief is the belief that all living beings are fundamentally one. In other words, despite the fact that we perceive individual plants and animals to be separate, all living things are part of a unified whole. This belief says that, at a deeper level, there is oneness among all of life.

People may believe in the unity of living things for scientific, religious, or philosophical reasons.

Science
Scientists have identified common biological and cellular processes that support the unity of life belief. Although many different forms of life exist, all living organisms -- including plants, animals, fungi, protists, archaea, and bacteria -- have common bio-
chemical underpinnings. They share characteristics of all life by growing, reproducing, and adapting to their environment.

**Religious and Spiritual Traditions**
Although people from different religious backgrounds (including atheists) differ in their beliefs about the nature of the world, many recognize the deep interconnectedness of all living things, all being part of the same system, the same whole. People from many different perspectives believe that all the animals, plants, and other forms of life exist together in unity.

**Philosophical**
Some philosophical perspectives assert that living organisms do not live in isolation but are deeply interconnected with other organisms and their surroundings as part of the same ecosystem. Philosophical beliefs about the “non-dual” nature of the world capture the idea that all of the diverse living things that exist are ultimately manifestations of one underlying whole.

So, although their beliefs may be based on different considerations, people who believe in the unity of life believe that on a deep level, all plants and animals and other forms of life share the same essence or fundamental quality with all of life. Some people compare the forms of life to waves on an ocean – just as the waves are all part of one ocean, all living things are fundamentally one.

**10.1.3 Passage for Belief in Oneness of Humanity**

**Instructions:**
The following passage describes a belief that some people hold about the world. You may or may not be familiar with the ideas presented in the passage, and you may or may not agree with the belief presented, but please read it carefully and think about the ideas that are presented. We are interested in how different people feel about this belief.

**Intro**
People hold many different beliefs about the nature of human beings. One belief that is held by people in many cultures (including the United States) -- is what we might call the "unity of humanity belief." The unity of humanity belief is the belief that all human beings are fundamentally one. In other words, despite the fact that we perceive
individual people to be separate, all human beings are part of a unified whole. This belief says that, at a deeper level, there is oneness among all of humanity.

People may believe in the unity of humanity for scientific, religious, or philosophical reasons.

Science
Scientists have identified common biological underpinnings of human beings that support the unity of humanity belief. Although each person is unique, each has the same general bodily structure that operates according to the same biological processes. Each person is genetically 99.5% identical to everybody else, and every human experiences the same basic, universal motivations and emotions.

Religious and Spiritual Traditions
Although people from different religious backgrounds (including atheists) differ in their beliefs about the nature of the world, many recognize unity among humanity. Religious texts refer to this unity; for example, “Human beings all are as head, arms, trunk, and legs unto one another.” Many metaphors refer to one big human family and phrases such as “one world, one people” are conveyed by people from many different perspectives who believe that all humanity exists together in unity.

Philosophical
Some philosophical perspectives assert that people do not live in isolation but are deeply interconnected with the presence and actions of others, living as part of one human community. Philosophical beliefs about the “non-dual” nature of the world capture the idea that all of the diverse individual people who exist are ultimately manifestations of one underlying whole.

So, although their beliefs may be based on different considerations, people who believe in the unity of humanity believe that on a deep level, all people share the same essence or fundamental quality with all of humanity. Some people compare individual people to waves on an ocean – just as the waves are all part of one ocean, all people are fundamentally one.
10.1.4 Passage for Art Control Condition

Instructions:
The following passage describes a belief that some people hold about the world. You may or may not be familiar with the ideas presented in the passage, and you may or may not agree with the belief presented, but please read it carefully and think about the ideas that are presented. We are interested in how different people feel about this belief.

Intro
People hold many different beliefs about the nature of art. One belief that can be found across cultures (including the United States) is that art is an important, and perhaps essential, part of human experience. People may believe that art is important for various reasons, but it is a long-standing, widespread belief.

People may believe that art is important for scientific, religious, or philosophical reasons.

Science
Scientists have identified that both viewing and creating art can be beneficial to people’s experience and well-being. Art can be used to express emotion and convey particular feelings with images instead of words, and both viewing and creating art has been found to reduce stress and other negative emotions.

Religion
Although people from different religious backgrounds (including atheists) differ in their beliefs about the nature of the world, many recognize the importance of art. Art has been used in religion for thousands of years and almost every religion makes use of art. Some religious ideas are best conveyed symbolically through art. Art plays a key role in conveying important ideas, representing events, and enhancing celebrations and ceremonies.

Philosophy
Philosophers have addressed art in the broader realm of aesthetic perception and judgment, and the role it plays in communicating with each other and relating to the world. Many forms of art can be used to provide information, communicate ideas, evoke specific emotions, and shape what we pay attention to and how we view the world.
Art is extremely prevalent in most cultures, in many different forms, such as architecture, sculptures, paintings, and performances, such as dance or theater. Art has been found across time, from ancient cave paintings to modern art, graphics, and logos. The widespread nature of art suggests it is an indispensable part of human experience.
References


Eilam, E. & Trop, T. (2012). Environmental attitudes and environmental behaviour – Which is the horse and which is the cart? *Sustainability, 4*, 2210-2246.


Spinoza, B. (1677). *Ethics*.


Biography

Kate Jean Diebels was born in Kirkland, WA on May 3, 1988, and grew up in Juneau, Alaska. She attended Western Washington University in Bellingham, WA, and received a Bachelor of Arts degree in Psychology in 2010. Kate earned her Master's degree in Social Psychology from Duke University in September 2014. Her publications from Duke include:


