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The psychological impacts of being environmentally active

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Abstract

There are many psychological impacts that come with being environmentally active. The impacts that people tend to focus more on recently are the negative impacts, such as eco-anxiety or activist burnout. Much less attention is given to the potential positive impacts associated with being environmentally active. Thus, this research aims to look at whether there are positive psychological impacts of being environmentally active, and if there are, what specifically about being environmentally active creates those positive impacts. This is important because, if there are positive impacts of being environmentally active, they could be used to motivate people to become more environmentally active, as well as to prevent or mitigate activism burnout.

For this study, I conducted 19 in-depth interviews and collected 203 surveys over a four week period. I interviewed both dedicated environmental activists, as well as random survey respondents. The results of these interviews and surveys suggested that the psychological impacts of being environmentally active are primarily positive. Factors of being environmentally active that might influence these positive impacts are connection to and more time spent in nature, healthier diet, supportive community, and feelings of meaning and purpose in one's life. The results also suggest that being environmentally active could possibly mitigate the negative psychological impacts that come with being environmentally aware, and that the positive aspects of being environmentally active may be more motivating for people than the negative aspects. Lastly, in terms of burnout, it appears as though activists combat burnout by creating more balance in their lives between their activism work and self-care. However, the results also suggest that there may be ways to incorporate self-care into activism work so that they are no longer separate entities. Thus, making activists more aware of the positive psychological impacts of being environmentally active could potentially help them find ways to practice self-care within their activism work.

Keywords:

Environmental action, positive psychological impacts, connection, burnout, motivation

| Table of Contents | Page Number |
|--|--------------------|
| Abstract | i |
| Table of Contents | ii |
| Acknowledgements | iv |
| Tables and Figures | v |
| 1.0 Introduction | 1 |
| 1.1 Sustainability | 1 |
| 1.2 Study question, goals, and importance | 1 |
| 1.3 Negative impacts: Eco-anxiety and burnout | 2 |
| 1.4 Types and levels of environmental action | 3 |
| 1.5 Potential positive psychological impacts | 5 |
| 1.5.1 Connection to nature | 5 |
| 1.5.2 Diet | 5 |
| 1.5.3 Community | 6 |
| 1.5.4 Purpose in life | 6 |
| 2.0 Methods | 8 |
| 2.1 Location | 8 |
| 2.2 Ethics | 8 |
| 2.3 Interviews | 8 |
| 2.3.1 Interview participants | 8 |
| 2.3.2 Conducting interviews | 9 |
| 2.3.3 Data analysis | 9 |
| 2.4 Surveys | 10 |
| 2.4.1 Population | 10 |
| 2.4.2 Collecting the surveys | 10 |
| 2.4.3 Data analysis | 11 |
| 2.5 Limitations and shortcomings | 11 |
| 3.0 Results | 13 |
| 3.1 Surveys | 13 |
| 3.2 Interviews | 20 |
| 4.0 Discussion | 24 |
| 4.1 Surveys | 24 |
| 4.1.1 Positive impacts on life satisfaction | 24 |
| 4.1.1.1 Time in nature | 24 |
| 4.1.1.2 Diet | 24 |
| 4.1.1.3 Community | 25 |
| 4.1.1.4 Purpose in life | 25 |
| 4.2 Interviews | 26 |
| 4.2.1 Awareness versus action | 26 |
| 4.2.2 Primarily positive psychological impacts | 26 |
| 4.2.2.1 Connection | 27 |
| 4.2.2.1.1 Connection to nature | 27 |
| 4.2.2.1.2 Connection to others | 28 |
| 4.2.2.1.3 Connection to self | 29 |
| 4.2.3 Negative psychological impacts | 30 |
| 4.2.3.1 Burnout | 30 |
| 4.2.3.1.1 Solutions | 31 |
| 4.2.4 Motivations | 32 |
| 5.0 Conclusion | 33 |

| | |
|---|-----------|
| 5.1 Relation to study goal and importance | 33 |
| 5.2 Recommendations for future management | 33 |
| 5.3 Recommendations for future research | 34 |
| 6.0 References | 35 |
| 7.0 Appendices | 38 |
| Appendix A: Interview Guide | 38 |
| Appendix B: Survey | 40 |
| Appendix C: Interview Consent Form | 42 |
| Appendix D: Interview Schedule | 43 |
| Appendix E: Facebook Groups | 46 |

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| Tables and Figures | Page Number |
|--|--------------------|
| Figure 1A. Level of environmental activity's influence on life satisfaction. | 13 |
| Figure 1B. The effect that environmental activity has on life satisfaction. | 14 |
| Figure 2. Level of environmental action compared to number of hours, on average, spent outside per day. | 15 |
| Figure 3. Level of life satisfaction compared to number of hours spent outside per day. | 16 |
| Figure 4. Frequency of buying and eating local and organic foods compared to level of environmental action | 17 |
| Figure 5. Frequency of meat consumption in one week compared to level of environmental action. | 18 |
| Figure 6. Frequency of feeling like an important part of one's community compared to level of environmental action. | 19 |
| Figure 7. Frequency of feeling like the activities one does are making some difference in the world compared to level of environmental action. | 20 |
| Table 1. The psychological impacts of being environmentally active reported by interview participants. | 21 |
| Table 2. Interview participant's main motivations for continuing to be environmentally active. | 22 |
| Table 3. Frequency of interview participants that have experienced burnout related to the environmental action they engage in. | 23 |

1.0 Introduction

1.1 Sustainability

At its simplest, sustainability can be defined by an entities capacity to continue on or persevere over time. However, in terms of environmental action, sustainability means much more. The article, *Assessing Sustainable Behavior and its Correlates: A Measure of Pro-Ecological, Frugal, Altruistic and Equitable Actions*, states that sustainability “incorporates both the satisfaction of human needs and the need of conserving the natural environment” (Tapia-Fonllem, Corral-Verdugo, Fraijo-Sing & Duron-Ramos, 2013, p. 711). Thus, by incorporating these two definitions together, sustainability comes to mean protecting the planet and everything living within the planet by acting in ways that contribute to the maintenance of a stable and healthy environment and society, which is exactly what those who are environmentally active are trying to do.

1.2 Study question, goals, and importance

The study question for my research project is: Does being environmentally active have positive psychological impacts? If so, what specifically about being environmentally active causes those positive psychological impacts? This study is important because if there are positive psychological impacts associated with being environmentally active, then people might be more motivated to become more environmentally active and live more sustainably. There is more focus currently on the negative psychological impacts of being environmentally active, or at least of being aware of the environmental degradation that is occurring, such as eco-anxiety and burnout (Edwards, 2008 para. 1). However, not much research has been conducted on the flip side of this to see how being environmentally aware and active might be beneficial to psychological well-being.

With this study, I aim to look at the positive side of things in order to, hopefully, create more incentive for people to practice sustainability and engage in environmental action. The results of this study will ideally be used to reach people that are interested in becoming engaged in environmental action, but have not yet found the motivation to fully commit to it. In an analysis of Joanna Macy’s *Work That Reconnects*, Mark Hathway discusses the importance of using “awe, gratitude, and love to motivate action” (Hathway, 2017, p. 301). He shows that using fear tactics to incite people to change their behaviors, specifically in regard to environmental issues, only ends up disempowering people and can push them into denial and inaction (Hathway, 2017, p. 300). Thus, emphasizing positive psychological impacts could be a much more effective way to motivate environmental action.

Further building on this idea presented by Hathway that positivity is important in

inspiring action, past research has shown that happiness can be used to motivate people as well (Haase, Poulin, & Heckhausen, 2012, p. 1093). In their study, Claudia Haase, Micheal Poulin, and Jutta Heckhausen saw that when people experience positive emotional states, they are more motivated to put time and effort into achieving their goals. Feeling positive emotions makes a person feel as though they are more in control, thus leading them to take productive actions (2012, p. 1093). Therefore, promoting any positive psychological effects that could come with being environmentally active has the potential to motivate people to become more involved and engaged.

Using the positive psychological impacts of being environmentally active to motivate people to become more environmentally active could be done by using community-based social marketing strategies outlined by Doug McKenzie-Mohr in his book, *Fostering Sustainable Behavior: An Introduction to Community-Based Social Marketing*. The book outlines how to use the barriers and benefits of desired behaviors and undesired behaviors to bring about behavioral change. In order to encourage a desired behavior, the benefits of the desired behavior must be increased (2011, p. 42). Identifying the positive psychological impacts of being environmentally active could, ideally, increase the benefits of becoming more environmentally active, which is the desired behavior. Thus, this research could potentially contribute to a community-based social marketing strategy that aims to change people's behaviors to become more environmentally active.

1.3 Negative impacts: Eco-anxiety and burnout

There are many psychological effects that come with being an environmentally active and aware individual. One common effect of being environmentally aware is 'eco-anxiety' (Pihkala, 2018, p. 546). This term has been appearing more in the media lately and is used to describe the anxiety that comes with the awareness of the environmental degradation that is occurring and the concern for the future of the planet (Edwards, 2008, para. 1)(Pihkala, 2018, p. 546). Recently, a growing amount of attention is being given to this negative psychological impact and how we can address it (Pihkala, 2018, p. 546). Some people have reported that taking environmental action can actually be helpful in managing eco-anxiety (Allan, 2019, p. 2). People report that this is due to the fact that being active provides a supportive, like-minded community, makes them feel empowered, and gives them hope (Allan, 2019, p. 2).

However, being overly active can lead to negative impacts as well. Dedicated environmental activists often experience burnout due to the mental, emotional, and sometimes physical stress that comes with activism work (Shields, 1991, p. 119 – 129). The symptoms of burnout include chronic fatigue, disrupted sleep patterns, personality changes,

depression, anxiety, and more (Shields, 1991, p. 120). Burnout can be caused by a multitude of factors. Some of the factors that Katrina Shields identifies in her book, *In the Tiger's Mouth*, are: one's motives and sense of identity being too tied to the work one is doing, overexposure to and obsession with the issues at hand, not releasing or acknowledging one's painful or hopeless feelings, denying one's own needs in favor of continuing work, having no disconnect between work and one's everyday life, not taking time off, and the fear of criticism and not meeting other's expectations (1991, p. 121 – 128). I am hoping that the research I am conducting could potentially help in preventing burnout, which is such a prominent negative impact of being environmentally active. By identifying the factors that contribute to the potential positive psychological impacts of being environmentally active, activists could focus on those positive aspects of their work as a way to prevent or lessen the effects of burnout.

Thus, this research aims to shed more light on what the potential positive impacts are of being environmentally active in hopes that this can be used to motivate people to become more environmentally active, as well as counter the negative psychological effects of being environmentally aware and active, such as eco-anxiety and burnout.

1.4 Types and levels of environmental action

Environmental action and activity can take on many forms and be practiced in a variety of ways. Thus, it is important to define what exactly is meant by 'being environmentally active' in this study. In the paper, *The environmental action scale: Development and psychometric evaluation*, Susan Alisat and Manuel Riemer define environmental actions as, "intentional and conscious civic behaviors that are focused on systemic causes of environmental problems and the promotion of environmental sustainability through collective efforts" (2015, p. 14). However, this definition does not take into account personal, pro-environmental behaviors, which Anja Kollmuss and Julian Agyeman define as "behavior that consciously seeks to minimize the negative impact of one's actions on the natural and built world (e.g. minimize resource and energy consumption, use of non-toxic substances, reduce waste production)" (2002, p. 240). In this research project, environmental action is defined using a combination of these two ideas in which environmental activity is seen as any type of action or behavior, either personal, communal, or political, that promotes sustainability, actively works to reduce negative impacts on the environment, and aims to mitigate, and eventually reverse, the current environmental degradation that is occurring.

There are many facets in which an individual can be environmentally active in their life. For this study, I have identified three key areas of environmental activism that one can partake in: personal action, communal action, and political action. These three categories stem from an idea that Bill Moyers presents in his book *Doing Democracy*, which identifies four roles of activists (2001, p. 21). These four roles are the citizen, the rebel, the social change agent, and the reformer (Moyer, 2001, p. 21). Each of these roles is important and serves a different purpose. As Moyer explains, the citizen acts responsibly within society and shows that ordinary people act for and support social change. The rebel takes dramatic action in order to facilitate change. The social change agent brings people into a movement and promotes paradigm shifts. Lastly, the reformer works to create new policies and laws that will create and sustain change (2001, p. 22-27). I found that the overarching themes behind each of these roles fell within the categories of personal, communal, and political action, which are all vital areas of environmental action needed to incite real change. Thus, in this study, these three areas will be used to delineate types of environmental action that people take. Personal actions might include, but are not limited to, recycling, composting, buying second-hand clothing, using renewable energy sources, or shopping local. Communal actions might include, but are not limited to, working or volunteering for environmental organizations, joining a community garden, becoming part of a community-supported agriculture system, planting trees in community parks, or participating in beach or park clean-up events. Political actions might include, but are not limited to, campaigning, lobbying, calling or writing to government officials, protesting, or running for a governmental position.

Similarly to types of environmental action, levels of engagement in environmental activity vary as well. Sven Sohr identifies three degrees of activist intensity in his paper, *Eco-Activism and Well-Being: Between Flow and Burnout* (2001, p. 203). Sohr states that “*first degree* eco-activists demonstrate an interest in environmental protection in their households (recycling etc.); *second degree* eco-activists join together for projects (e.g., in environmental groups); and *third degree* eco-activists adopt the issue of environmental protection as a life goal” (2001, p. 203-204). These degrees of activism outlined by Sohr have informed three of the five categories that will be used in this research to identify an individual’s level of environmental activity. First degree eco-activists correspond to the category that I have deemed ‘active’, second degree eco-activists describe the category that I have deemed ‘quite active’, and, finally, third degree eco-activists define the category that I have deemed ‘very active’. However, in addition to these three categories, I have also included the categories of ‘not active’ and ‘somewhat active’. ‘Not active’ is used to describe individuals who take no

actions in their lives towards sustainability or environmental protection. ‘Somewhat active’ describes individuals who take a few personal actions to reduce their environmental impact, but are not dedicated to or invested in these tasks and issues. Thus, ‘not active’, ‘somewhat active’, ‘active’, ‘quite active’, and ‘very active’, will be the categories used in this research to determine an individual’s level of environmental activity.

These definitions of types, avenues, and levels of environmental activity will be used in this study to analyze the potential positive psychological impacts of being environmentally active.

1.5 Potential positive psychological impacts

There have been research studies conducted in the past that have analyzed the potential positive psychological impacts of being environmentally active. These studies have shown that being environmentally active and acting sustainably can potentially lead to greater happiness (Tapia-Fonllem, Corral-Verdugo, Fraijo-Sing & Duron-Ramos, 2013, p. 715)(Brown & Kasser, 2005). A study conducted on happiness and sustainable behaviors found that people who engage in sustainable behaviors self-report higher levels of happiness (Tapia-Fonllem et al., 2013, p. 715 & 719). Another study also showed that subjective well-being and ecologically responsible behavior were positively correlated, meaning that, within this particular research population, happier people were living more sustainable lifestyles (Brown & Kasser, 2005). However, the causes of this correlation between happiness and acting in environmentally conscious ways was not examined in either of these studies. Thus, there could be a multitude of factors that cause these positive psychological effects.

1.5.1 Connection to nature

One of the contributing factors may be the connection a person develops with nature through acting sustainably and being environmentally minded. Research has shown that activity in nature leads to improved self-esteem and mood (Barton & Pretty, 2010, p. 3947), and that people’s sense of their own connection to nature might contribute to well-being (Nisbet, Zelenski, & Murphy, 2010, p. 304). A positive correlation has been seen between nature-relatedness and well-being (Nisbet et al., 2010, p. 310). Thus, this could contribute to the positive psychological impacts that being environmentally active might have.

1.5.3 Diet

Diet is a second factor of being environmentally active that could have positive psychological effects. Plant-based diets are increasing in popularity as a good, sustainable nutrition option (Kim, Caulfield, & Rebholz, 2018, p. 624). Plant-based diets focus on consuming more food originating from plants and less animal products (Kim et al., 2018, p.

624). Studies have shown that this type of diet has many associated health benefits, such as lower risk of type 2 diabetes, obesity, and hypertension (Kim et al., 2018, p. 624). Kim, Caulfield, and Rebholz's study on US adults has also shown that by eating a healthful plant-based diet, one can lower their risk of all-cause mortality (2018, p. 629). Also, people who eat more fruits and vegetables have lower incidences of mental disorders and are more likely to have "optimal mental states, such as greater happiness, positive mood, life satisfaction, and... feelings of meaning, purpose, and fulfillment in life" (Brookie, Best, & Conner, 2018, p. 2).

Furthermore, in the article *Organic Agriculture in the Twenty-First Century*, John Reganold and Jonathan Wachter discuss the health benefits of eating organic foods (2016). In their paper, Reganold and Wachter state that "organic foods have significantly less to no synthetic pesticide residues compared with conventionally produced foods," (2016, p. 2). The paper also reported that there is some evidence that organic foods are more nutritious (Reganold & Wachter, 2016, p. 3). Thus, there are both positive health benefits and positive psychological benefits associated with eating a more sustainable plant-based diet, as well as eating organic foods.

1.5.2 Community

Another factor that could contribute to the positive psychological impacts is the community that one becomes a part of due to the environmental activities that one engages in. A study conducted by Swantje Eigner showed that, environmental activist's well-being is significantly influenced by the environmental groups that they are involved in (2001, p.192). This is due to the support that is provided by being a part of these groups and the opportunity to be around like-minded individuals (Eigner, 2001, p. 192). As this research shows, being involved in environmental groups can bring people together as a part of a larger community and provide a space for social bonds to be made. Thus, the community aspect of being environmentally active is a potential source of positive psychological impacts that come from environmental work and living sustainably.

1.5.4 Purpose in life

Lastly, engaging in environmental activities and sustainable practices could cause people to feel that they have a greater purpose in life, and thus lead to greater life and self-satisfaction. In *The Relationship Between "Protecting the Environment" as a Dominant Life Goal and Subjective Well-Being*, Swantje Eigner showed that environmental engagement is associated with well-being in part due to the feelings it generates that one has a meaning in life and is being effective (2001, p. 197). In another study conducted by Sven Sohr, it was

seen that environmental activists felt a strong sense of empowerment from their work, which contributed to their overall happiness and well-being (2001, p. 209-210). In this study, all of the environmental activists participating showed above average mental health scores and tended to be happier more often than the average person (Sohr, 2001, p. 212). Therefore, being environmentally active can lead to a greater sense of life purpose and empowerment that could contribute to better mental health.

Overall, as well as being seen to have some negative psychological impacts, such as eco-anxiety and burnout, it has been shown that being environmentally active has some positive psychological impacts as well. However, the root causes of those impacts still remains in question. I have identified four potential contributing factors, which are connection to nature, diet, community and life purpose. Past research has shown that there could be correlations between these areas and the positive psychological effects of being environmentally active. Thus, in this study, I aim to build upon this research and further explore the potential positive psychological impacts of being environmentally active and the root causes underlying those impacts.

2.0 Methods

2.1 Location

I primarily conducted this research in the Byron Shire area. However, some of my interview participants and survey respondents were from the greater New South Wales area. I chose the Byron Shire due to my familiarity to the area, many of my advisor's contacts that I planned to interview living in the area, and the focus that the Byron Shire is known to have on the environment and environmental action. I did not limit my research solely to this area, however, in order to try and obtain a data set that was more reflective of the general population. My research question does not depend on place, but rather level of environmental activity and the influence that has on one's psychological state, regardless of where the person is located.

2.2 Ethics

Before conducting my research, I first gained ethics approval from the Local Review Board (LRB) through an application process. While conducting my research, I continued to take measures to ensure that my research remained ethical in concern to all participants. I created an interview consent form with which I gained written consent from all of my interview participants (see Appendix C: Interview Consent Form). This form outlined the study goal, interview process, risks and benefits of participating in an interview, and the confidentiality of the interview participant. I received verbal permission from each interview participant to record the interview and asked at the end of the interview the way in which they would like to be referred to in my paper or if they would like to remain anonymous. For survey collection, I included a short paragraph at the beginning of my survey outlining the study, how the information will be used, and confidentiality (see Appendix B: Survey). Each survey respondent was required to provide their initials as a form of agreement to participate in the study before they were able to respond to the survey. No other ethical issues arose while conducting my study.

2.3 Interviews

One of my main sources of data for this project was interviews. With these interviews, I collected qualitative data that provided insight into people's thoughts, feelings, and ideas regarding the psychological impacts of being environmentally active. See Appendix A: Interview Guide for the full outline of the interview questions asked.

2.3.1 Interview participants

For my research, I mostly interviewed committed environmental activists. I found people to interview through the contacts that my advisor, Katrina Shields, provided and other friends and colleagues of those original contacts. I also contacted environmental activists who had presented to our Sustainability and Environmental Action Seminar class earlier in the semester to interview them as well. Along with these activists, I also interviewed people who responded to my survey. Many survey respondents provided their email addresses or phone numbers in their surveys in order to be contacted later for a follow-up interview. I interviewed twelve environmental activists and seven survey respondents for a total of nineteen interviews (see Appendix D: Interview Schedule).

I decided to interview environmental activists specifically because they have dedicated their lives to being environmentally active. Thus, they most likely are strongly impacted by the environmental work that they do and feel strong psychological impacts of being environmentally active. The people that I interviewed from survey responses were not necessarily dedicated environmental activists. This helped to create a more random sampling of individuals to include in my study with a many different types of experiences with environmental action.

2.3.2 *Conducting interviews*

I conducted interviews over a span of three weeks, starting Monday, November 11th to Friday, November 30th. These interviews were conducted in various ways, either by phone, through Zoom video calling, through Facebook video and audio calling, or in-person. These interviews lasted between 20 minutes to one hour. In order to record data, I took notes on my computer throughout the interviews. I also recorded the interviews on my phone or computer using Voice Memos. Thus, I was able to go back and re-listen to the interviews after they ended.

I chose to conduct interviews for my study because it allowed me to gain more insight into people's thoughts and feelings on my study topic. Interviews made it so that I could go more in-depth and explore various areas of my topic. I was able to discover new things regarding the psychological impacts of being environmentally active that I had not previously thought of because the interviews could go in any direction the subject chose. Furthermore, my study topic can be a sensitive subject for some people to talk about, due to the discussion of personal psychological experiences. Thus, it was helpful to establish a relationship with the person I was interviewing and have an open conversation that they felt comfortable in, which could not be accomplished in a survey.

2.3.3 *Data analysis*

In order to analyze the data collected from interviews, I searched for patterns and themes among my various interviews. I went back and re-listened to each interview the day after the interview was originally conducted. While listening back to the interview, I wrote down any quotes that seemed important or significant for each question asked. I then compared the interview to past interviews I had analyzed to see if there were any reoccurring themes or patterns to take note of. Once I had finished conducting interviews and analyzing each one in this manor, I went back and looked at all my interviews at once, comparing answers across each question asked. By doing this, I was able to identify the major similarities and differences among my interview responses, as well as pick out the most common responses or ideas brought up. I then organized my interview analysis into categories and sub-categories, each relating to a different aspect of psychological impacts that come with being environmentally active. Within these categories, I picked out quotes that were relevant to the category to include in the results or discussion section of this paper.

2.4 *Surveys*

Along with interviews, surveys were my other main form of data collection. Survey's provided mostly quantitative data that demonstrated the sampling populations engagement in environmental action, life satisfaction, and how these two might be related through various factors. See Appendix B: Survey for a full copy of the survey that all respondents took.

2.4.1 *Population*

For this study, I attempted to sample the general Australian population, with a focus on people who live in the Byron Shire area. I chose the Byron Shire area because it is known as quite an environmentally aware and active community. However, not everyone in the Byron Shire fulfills this stereotype. Thus, I thought it would be a good place to find and sample a wide range of people with various environmental experiences, levels of environmental knowledge, and levels of environmental activism.

2.4.2 *Collecting the surveys*

For my research, I collected surveys in two ways: through social media and in-person. I created a Google Form with all of my survey questions and posted the link to 61 Facebook groups (see Appendix E: Facebook Groups). A majority of these groups were based in the Byron Shire area, while others were open to the general Australian public. Posting my survey to Facebook allowed me to reach a much wider range of people from different places around the Byron Shire area and Australia as a whole. It also allowed me to get more responses, which led to a larger sample size.

Along with collecting survey responses through Facebook, I also collected surveys in-person by approaching random people in Brunswick Heads, Mullumbimby, and New Brighton with my survey, which they then filled out on Google Forms using my computer. I collected surveys on multiple different days and at various times of the day between Thursday, November 7th and Friday, November 15th around Brunswick Heads. I approached people who were sitting in the park, by the river, and at cafes and restaurants around town, as well as shop owners in the area. I also collected surveys in-person at the Mullumbimby Show from 3:30 pm to 6:30 pm on Saturday, November 9th, at the New Brighton Farmers Market from 9:00 am to 11:00 am on Tuesday, November 19th, and at the Mullumbimby Farmers Market from 9:00 am to 11:00 am on Friday, November 22nd. Through these two means of survey collection, I attempted to get as random of a sample population as possible.

2.4.3 *Data analysis*

To analyze my survey data, I used Google Forms, Google Sheets, and Excel. My survey was conducted through Google Forms, so the responses I received were all stored and organized through Google Forms. Google Forms also connects these responses to a Google Sheets form, which creates a spreadsheet of the data. I copied this spreadsheet into an Excel file, where I was able to manually calculate percentages, means, medians, and modes. I used Excel to create graphs and tables of the results. In order to quantify a respondent's level of environmental action for my analysis, I took an average of each respondent's levels of environmental action that they reported for three different categories. Each respondent reported how active they are in terms of personal actions, communal actions, and political actions. I averaged the three numbers they reported for these categories and used the new average as the respondent's overall level of environmental action.

2.5 *Limitations and shortcomings*

Throughout the research process, I faced limitations in the people that I was able to reach and obtain responses from with my survey and with interviews. By collecting surveys at certain locations, such as farmers markets, I was only able to target a certain group of people in the area that elected to go to the farmers market. Thus, my sample population was not reflective of the population of that area. Also, with my online surveys, I seemed to collect a lot more responses from some Facebook groups than others. Thus, I had many responses from distinct groups of people with similar interests and few responses from other groups that I tried to reach. It was a self-selecting group of people that responded to the survey through Facebook, not one that was entirely random. Due to the self-selecting nature of respondents, I received a large majority of my responses from females. 69.5 percent of the respondents were

female. My interviews were also mostly with females. 84.3 percent of my interview participants were female. This could have affected the results of my study due to the fact that this sample is not reflective of the demographics of the general population.

I also faced limitations due to time of how many people I was able to interview and survey responses I was able to collect. By the end of the final week of data collection, I still had many survey respondents contacting me to set up interviews for later weeks. I was unable to interview these people due to the time period my research had to be conducted in. I still had people responding to my survey at the end of the final week as well. I eventually had to cut these responses off so that I could analyze my data set as a whole and not continue to add to it during analysis. I collected sixteen more responses to my survey after I had already started to analyze the data that I was unable to include.

One shortcoming of this research is the subjectivity that inherently comes with the analysis of qualitative data. Although I attempted to remain as objective as I possibly could throughout the research process, I still made the final decisions on what questions to include in my surveys and interviews and which specific themes from interviews and surveys to include in my results. While analyzing survey and interview data, I had to choose certain patterns to discuss and present and narrow down my findings to a few overarching, central themes. Although this certainly makes the data easier to present and focuses it on what is important, I was the one who got to choose what I thought was most important to include and what wasn't. Thus, my subjectivity came into play while analyzing the data and deciding what to present in my paper.

3.0 Results

3.1 Surveys

Figure 1A shows that, from the 203 surveys collected, 66 percent of the respondents indicated that their level of environmental action influences how satisfied they feel with their life right now. Furthermore, Figure 1B shows that 73 percent of the respondents that said that their level of environmental action influences how satisfied they feel with their life right now feel as though that influence is a positive one.

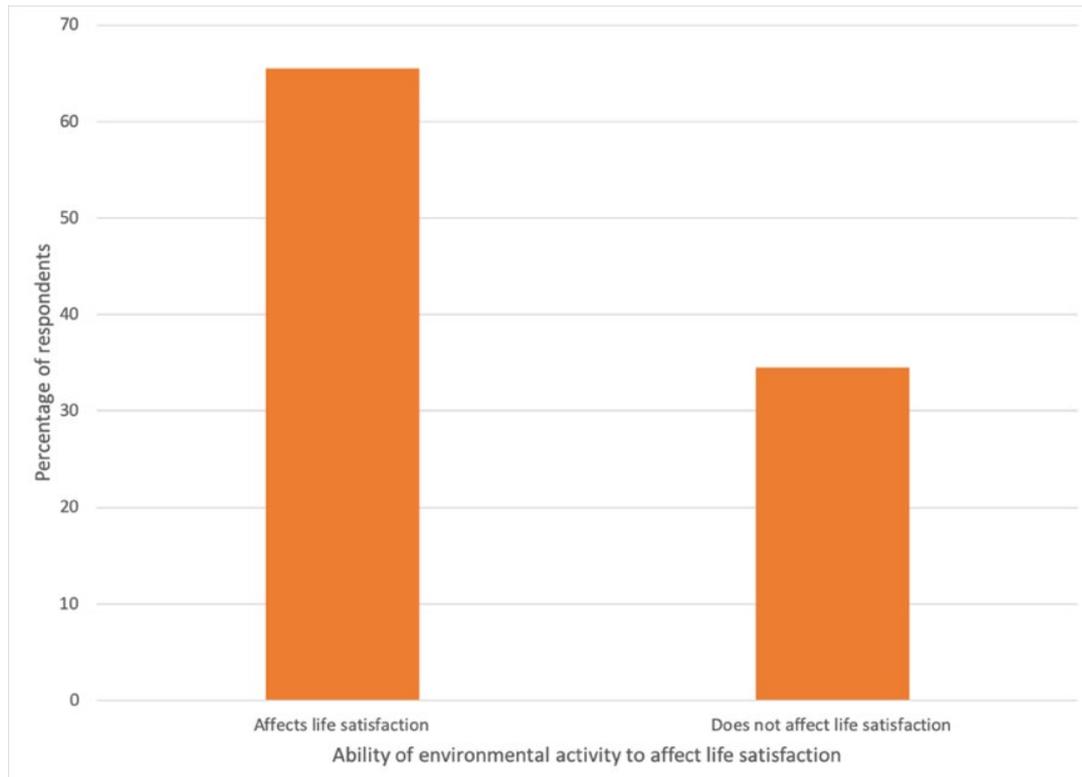


Figure 1A. Level of environmental activity’s influence on life satisfaction. Survey question: “Does your level of environmental activity affect how satisfied you feel with your life right now? If so, in what ways?”

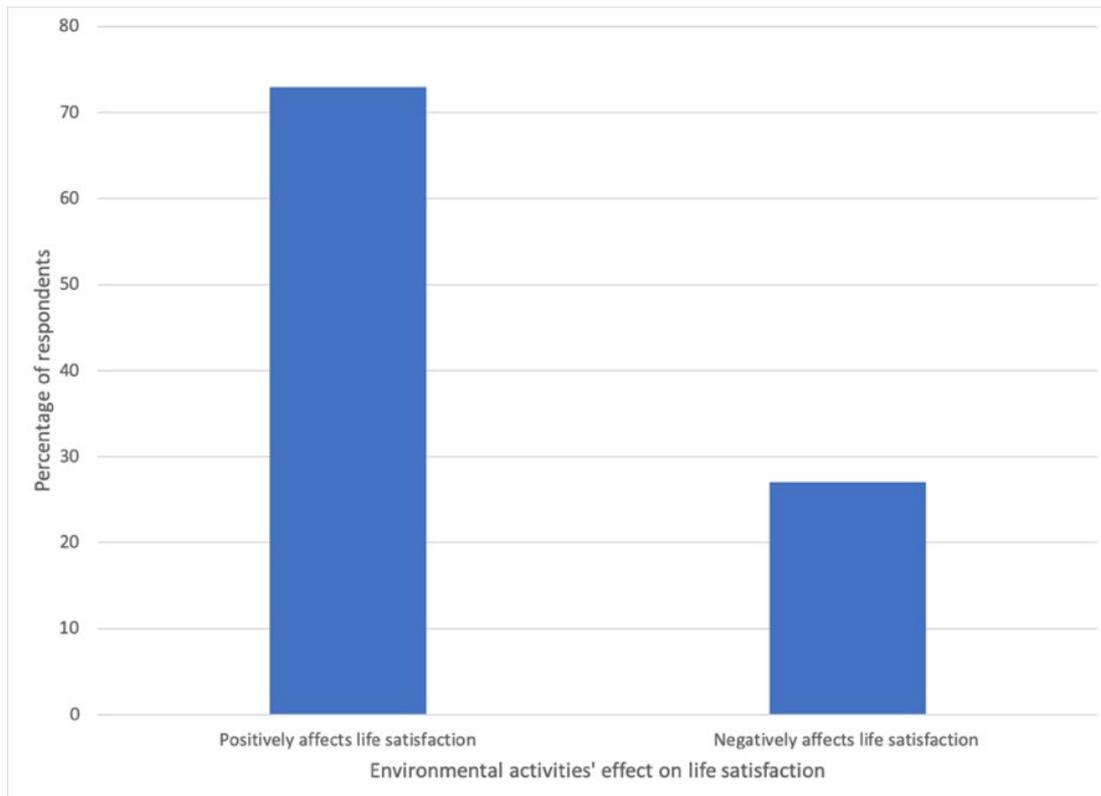


Figure 1B. The effect that environmental activity has on life satisfaction. Survey question: “Does your level of environmental activity affect how satisfied you feel with your life right now? If so, in what ways?”

Figure 2 displays the correlation between level of environmental activity and the average amount of hours a person spends outside in one day. It can be seen that those who are very environmentally active spend, on average, 6.7 hours outside per day. This is 1.4 times more than the next highest amount of hours spent outside per day on average. There is also a positive correlation between the amount of hours, on average, a person spends outdoors per day and a person’s level of environmental activity.

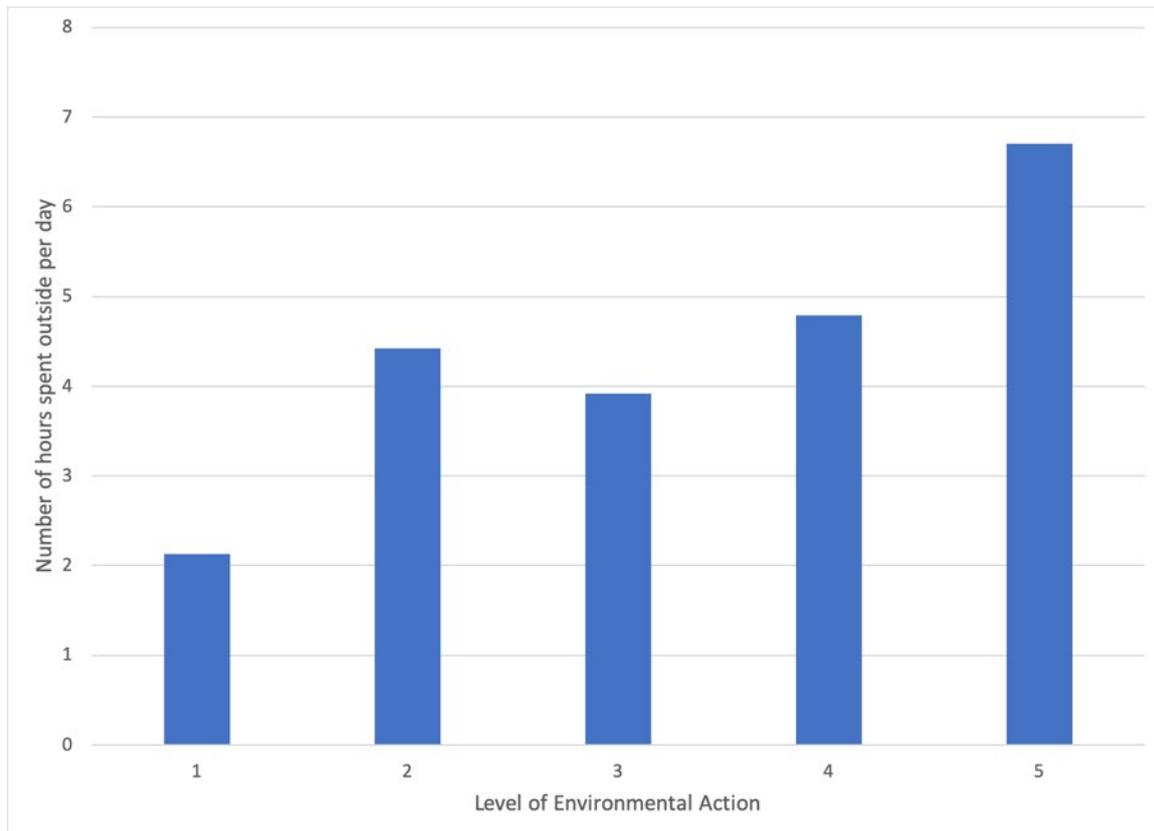


Figure 2. Level of environmental action compared to number of hours, on average, spent outside per day. Survey questions: Average of responses to “On a scale from 1-5, how environmentally active are you in terms of personal actions (i.e. recycling, composting, etc.)?”, “On a scale from 1-5, how environmentally active are you in terms of communal actions (i.e. volunteering for an environmental organization, joining a community garden, etc.)?”, and “On a scale from 1-5, how environmentally active are you in terms of political actions (i.e. lobbying, campaigning, etc.)?” compared to responses to “On average, how much time, in hours, do you spend outdoors in a day?”

It can be seen in Figure 3 that those who spend the most amount of hours, on average, outdoors per day report being the most satisfied with their lives. Those who report feeling very satisfied with their lives spend, on average, 5.2 hours outside per day, while those who are not satisfied with their lives report spending, on average, 1.9 hours outdoors per day. There is a positive correlation between the number of hours, on average, a respondent spends outdoors in a day and a respondents level of life satisfaction.

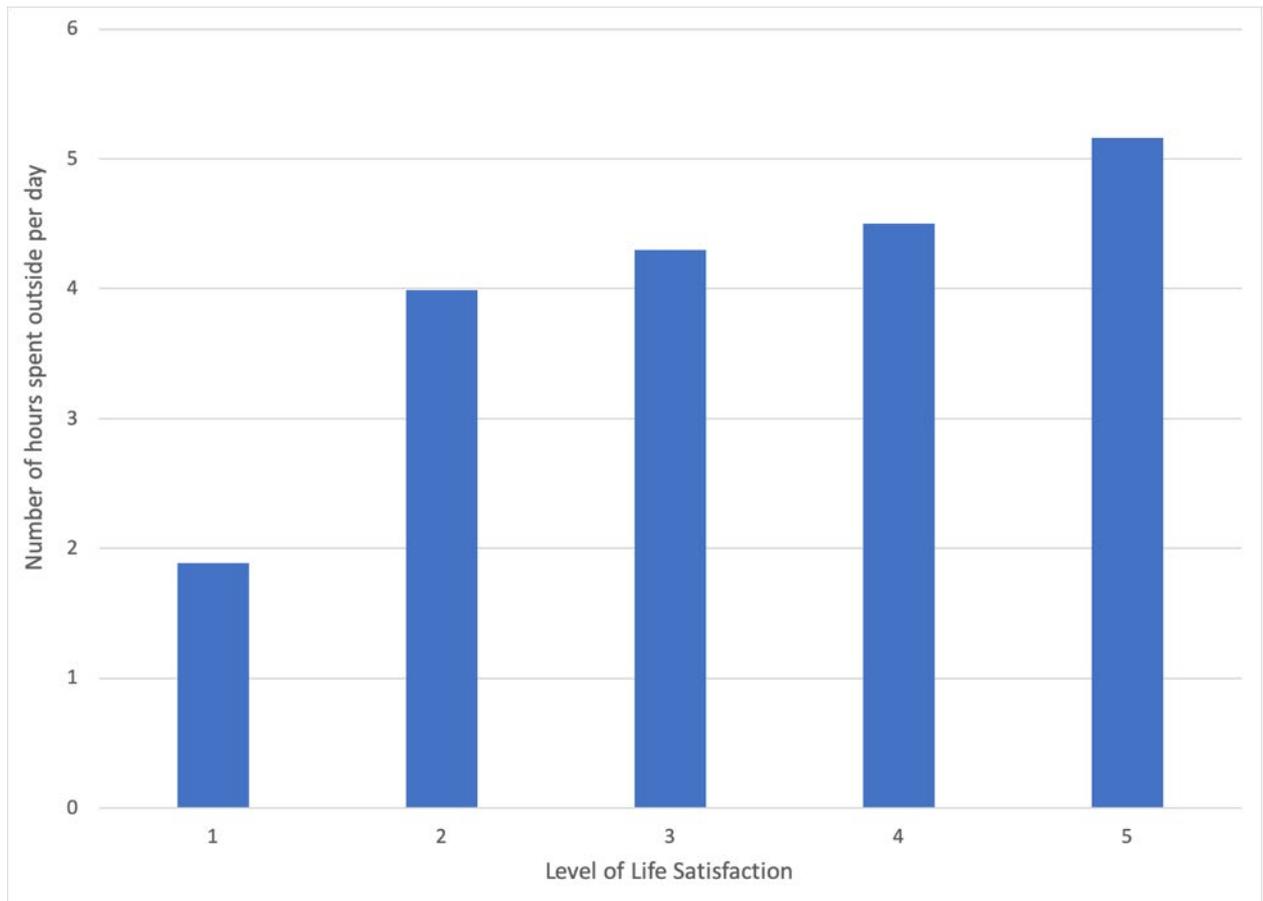


Figure 3. Level of life satisfaction compared to number of hours spent outside per day. Survey questions: “On a scale from 1-5, how satisfied do you feel with your life right now?” compared to “On average, how much time, in hours, do you spend outdoors in a day?”

Figure 4 shows that respondents that are not environmentally active only sometimes, occasionally, or never purchase and eat foods that are local and organic. 63 percent of respondents that are not environmentally active never purchase or eat foods that are local and organic, whereas 47 percent of respondents that report being very environmentally active buy and eat organic and local foods often and 33 percent always eat organic and local foods.

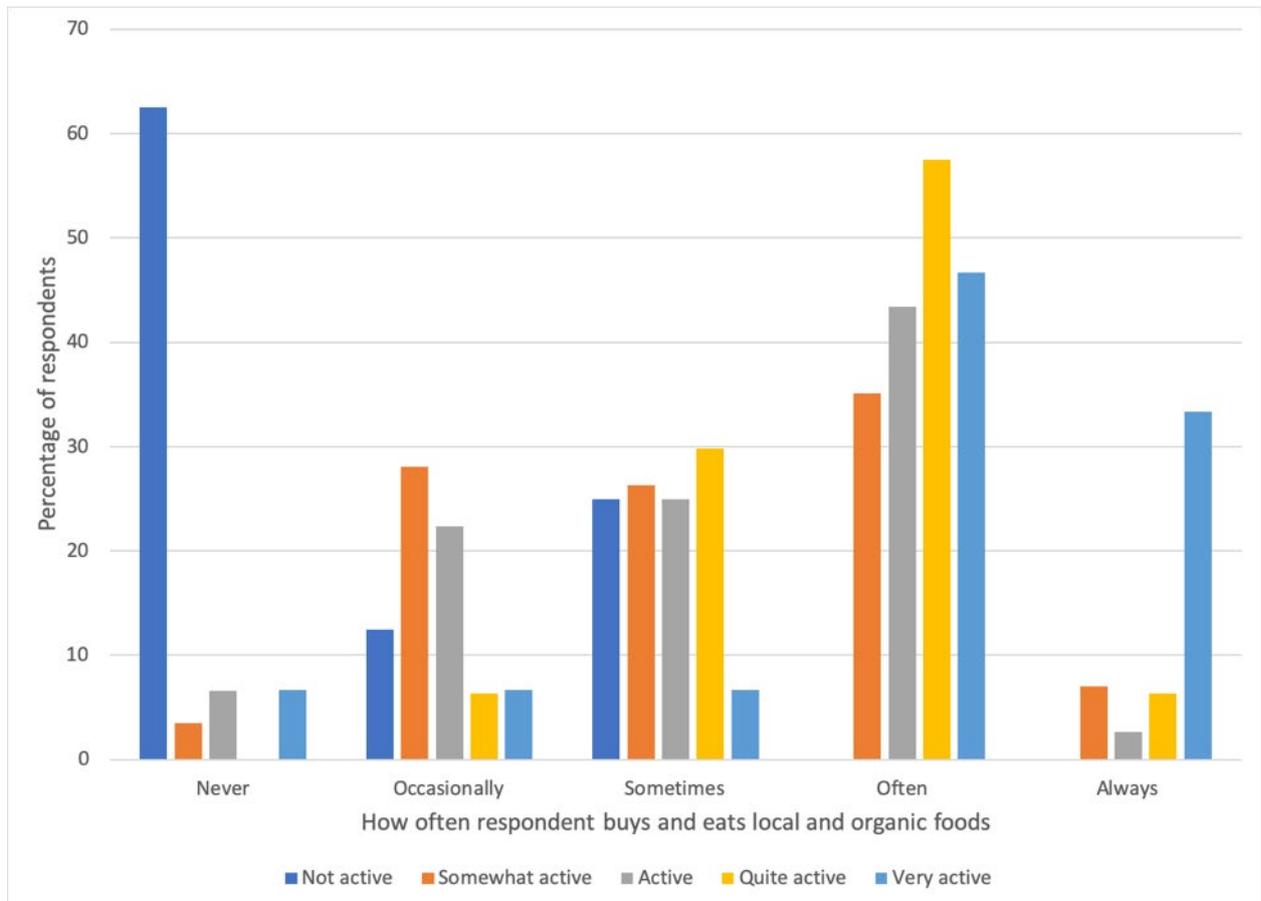


Figure 4. Frequency of buying and eating local and organic foods compared to level of environmental action. Survey questions: Average of responses to “On a scale from 1-5, how environmentally active are you in terms of personal actions (i.e. recycling, composting, etc.)?”, “On a scale from 1-5, how environmentally active are you in terms of communal actions (i.e. volunteering for an environmental organization, joining a community garden, etc.)?”, and “On a scale from 1-5, how environmentally active are you in terms of political actions (i.e. lobbying, campaigning, etc.)?” compared to responses to “How often do you buy and eat local and organic foods?”

As seen in Figure 5, 50 percent of respondents that are not environmentally active consume meat between 5 to 7 days out of the week, whereas only 7 percent of respondents that are very environmentally active consume meat between 5 to 7 days a week. Furthermore, the percentage of respondents that consumed meat 5 to 7 days out of the week decreased as the respondents level of environmental action increased. Those that are very environmentally active also had the highest percentage of respondents that consume no meat throughout the week, which is 27 percent.

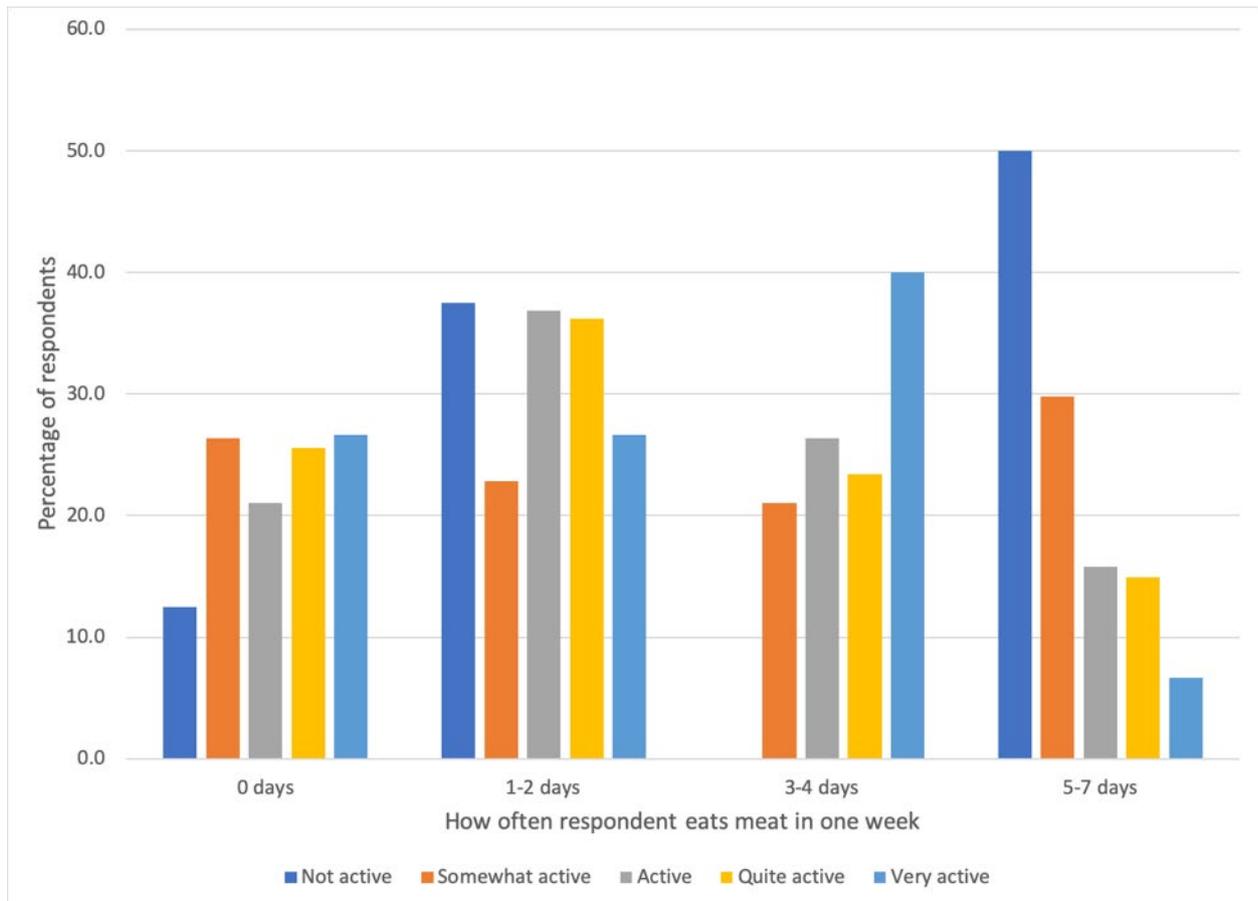


Figure 5. Frequency of meat consumption in one week compared to level of environmental action. Survey questions: Average of responses to “On a scale from 1-5, how environmentally active are you in terms of personal actions (i.e. recycling, composting, etc.)?”, “On a scale from 1-5, how environmentally active are you in terms of communal actions (i.e. volunteering for an environmental organization, joining a community garden, etc.)?”, and “On a scale from 1-5, how environmentally active are you in terms of political actions (i.e. lobbying, campaigning, etc.)?” compared to responses to “How often do you eat meat in a week?”

Figure 6 demonstrates that 50 percent of people that are not environmentally active report that they never feel like an important part of their community. Furthermore, the respondents that are not environmentally active never feel as though they are often or always an important part of their community. On the other hand, those that report being very environmentally active feel that they are sometimes, often, or always an important part of their community, and do not feel that they are never an important part of their community.

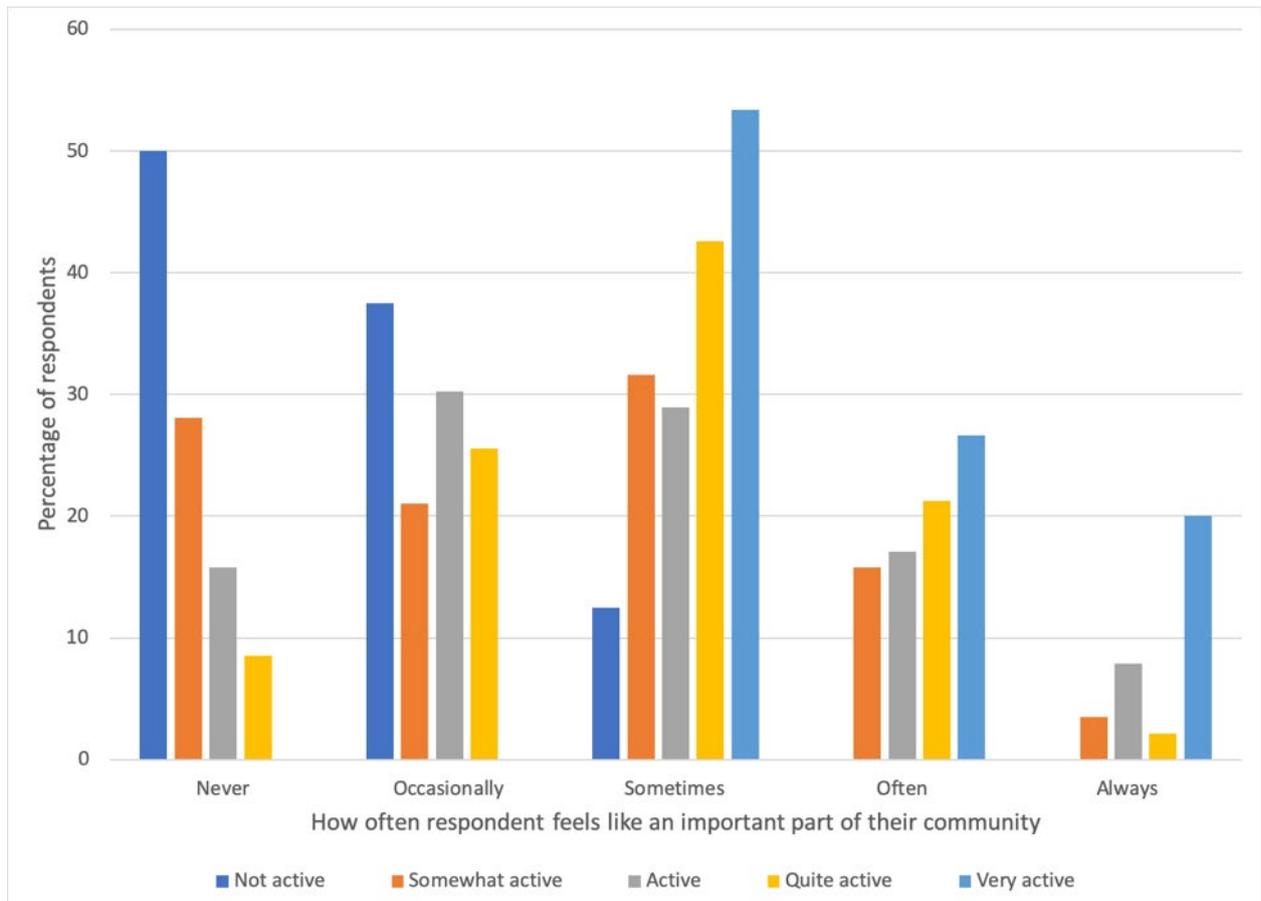


Figure 6. Frequency of feeling like an important part of one’s community compared to level of environmental action. Survey questions: Average of responses to “On a scale from 1-5, how environmentally active are you in terms of personal actions (i.e. recycling, composting, etc.)?”, “On a scale from 1-5, how environmentally active are you in terms of communal actions (i.e. volunteering for an environmental organization, joining a community garden, etc.)?”, and “On a scale from 1-5, how environmentally active are you in terms of political actions (i.e. lobbying, campaigning, etc.)?” compared to responses to “How often do you feel like you are an important part of your community?”

Respondents that reported that they are not environmentally active never feel as though the activities they do often or always make some difference in the world, as is shown in Figure 7. They only feel as though the activities they do never, occasionally or sometimes make some difference in the world. On the contrary, those who reported that they are very environmentally active only feel as though the activities they do sometimes, often, or always make some difference in the world, and never feel as though the activities they do never or occasionally make some difference in the world.

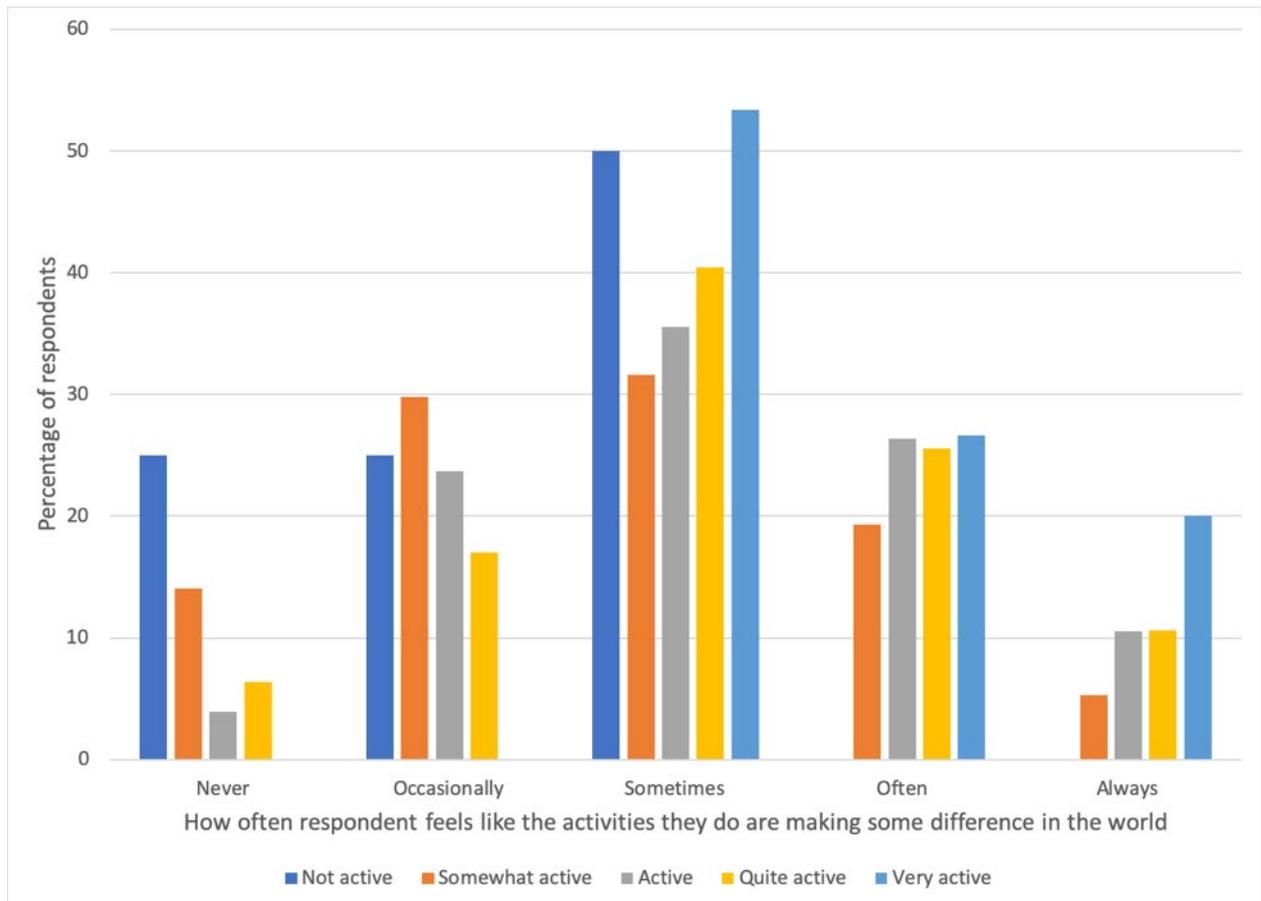


Figure 7. Frequency of feeling like the activities one does are making some difference in the world compared to level of environmental action. Survey questions: Average of responses to “On a scale from 1-5, how environmentally active are you in terms of personal actions (i.e. recycling, composting, etc.)?”, “On a scale from 1-5, how environmentally active are you in terms of communal actions (i.e. volunteering for an environmental organization, joining a community garden, etc.)?”, and “On a scale from 1-5, how environmentally active are you in terms of political actions (i.e. lobbying, campaigning, etc.)?” compared to responses to “How often do you feel like the activities you do are making some difference in the world?”

3.2 Interviews

Table 1 shows that 90 percent of interview participants reported that they feel that being environmentally active has impacted them positively in terms of psychological impacts. Furthermore, none of the participants reported that they feel as though the psychological impacts of being environmentally active are primarily negative.

Table 1. The psychological impacts of being environmentally active reported by interview participants.

| Interview question: “Overall, how has your engagement in environmental action impacted you psychologically? Do you think that these are primarily positive or negative impacts?” | Percentage of interview participants |
|--|--------------------------------------|
| Primarily positive impacts | 90% |
| Equally positive and negative impacts | 10% |
| Primarily negative impacts | 0% |

In Table 2, it can be seen that the most commonly reported motivation for being environmentally active is community, co-workers, friends, and family. The least common motive reported by interview participants is seeing or having success within environmental work.

Table 2. Interview participant’s main motivations for continuing to be environmentally active.

| Interview question: “What motivates you to continue being environmentally active?” | Number of times mentioned | Quotes |
|---|---------------------------|---|
| Community, co-workers, friends, and family | 11 | <i>“I often find it motivating to work with other people who have good hearts, people who are also motivated by the public interest...That keeps me going, keeps me buoyant,”</i> (Whelan, 2019, pers. comm.) |
| Awareness of environmental issues | 7 | <i>“All the reports lately about climate change and how bad the future is going to be. How much more we need to do...so we don’t let the climate be destroyed. I think that’s one of my biggest motivators,”</i> (Hodgson-Kratky, 2019, pers. comm.). |
| Connection with nature | 5 | <i>“Everything that we rely on comes from nature so I think having a connection to it makes that a lot clearer when you can see it first hand and you have that connection you realize we need to protect it,”</i> (Thatcher, 2019, pers. comm.). |
| Aligning lifestyle with values | 4 | <i>“I want to know that I’ve lived my life in a way that’s in accordance with my values,”</i> (Anonymous participant #2, 2019, pers. comm.). |
| Seeing or having success | 3 | <i>“The most motivating thing is the success of making quite specific change,”</i> (Whelan, 2019, pers. comm.). |

Table 3 displays the frequency of burnout experiences among all interview participants. Overall, 68 percent of all interview participants have experienced burnout at some point in relation to their environmental action. Additionally, 21 percent of interview participants reported that they have experienced burnout symptoms, such as exhaustion or overwhelm, even though they did not fully burnout.

Table 3. Frequency of interview participants that have experienced burnout related to the environmental action they engage in.

| Interview question: “Have you ever experienced burnout that has been related to the environmental action you engage in?” | Percentage of interview participants |
|--|--------------------------------------|
| Have experienced burnout | 68% |
| Have felt exhaustion or overwhelm but not to the point of full burnout | 21% |
| Have not experienced burnout | 11% |

4.0 Discussion

4.1 Surveys

The results from the survey data collected suggest that there is a correlation between being environmentally active and life satisfaction (see Figure 1A and Figure 1B). This could potentially stem from the results that show that those that are more environmentally active spend, on average, more time outdoors (see Figure 2), buy and eat more local and organic foods (see Figure 4), eat less meat (see Figure 5), feel like they are an important part of their community more often (see Figure 6), and more often feel as though the activities they engage in make some difference in the world (see Figure 7).

4.1.1 Positive impacts on life satisfaction

The survey data suggests not only that a majority of people feel as though their life satisfaction is affected by their level of environmental activity, but also that these affects are primarily positive (see Figure 1A and Figure 1B). This could mean that being environmentally active has the potential to increase one's life satisfaction, which aligns with past studies that have shown that acting sustainably can potentially lead to greater happiness (Tapia-Fonllem, Corral-Verdugo, Fraijo-Sing & Duron-Ramos, 2013, p. 715)(Brown & Kasser, 2005).

4.1.1.1 Time in nature

One factor that might play into the observed correlation between greater life satisfaction and level of environmental activity is that those that are more environmentally active, on average, spend the most time outdoors (see Figure 2). Spending more time outdoors is also correlated with greater life satisfaction (see Figure 3). Therefore, one positive benefit of being environmentally active could be that one spends more time outdoors, which is connected to feeling more satisfied with one's life. These results match the results of another study conducted by Barton and Pretty in which they found that doing activities in nature produces higher levels of self-esteem and improves mood (2010, p. 3947).

4.1.1.2 Diet

The survey results showed that, among the respondents, those that are not environmentally active almost never purchase or eat organic and local foods, while those who are very environmentally active mostly always or often buy and eat organic and local foods (see Figure 4). In addition, those that are not environmentally active consumed meat most often, while those that are very environmentally active consumed meat least often (see Figure 5). This could imply that those who are more environmentally active consume a healthier diet than those who are less or not environmentally active. Past studies have shown that

consuming more organic foods, as well as consuming less meat, has significant mental and physical health benefits, such as lower risk of all-cause mortality, lower incidences of mental disorders, and less exposure to pesticide residues (Kim, Caulfield, & Rebholz, 2018, p. 629)(Brookie, Best, & Conner, 2018, p. 2)(Reganold & Wachter, 2016, p. 2). Thus, the health benefits of eating more organic and local foods and eating less meat could contribute to the positive effect that being environmentally active appears to have on life satisfaction.

4.1.1.3 Community

Another contributing factor that could play into the correlation between being environmentally active and feeling more satisfied with one's life is how often one feels like an important part of their community (see Figure 6). Those that are more environmentally active feel as though they are an important part of their community more often than those who are less environmentally active (see Figure 6). This could suggest that by being more environmentally active, people are more engaged in their community, more involved in community groups or organizations, and feel more connected to their community, which could generate feelings of importance. This could then potentially lead to people feeling more supported by their community as well. In a past study, it was seen that the environmental groups that activists are involved in significantly influence their well-being due to the support that these groups provide the activists (Eigner, 2001, p. 192). These survey results, in tandem with the findings of this past research, suggest that one positive psychological impact of being environmentally active could be the connection to community and feelings of importance and support it provides.

4.1.1.4 Purpose in life

A final outcome identified in the survey data that could factor into the result that being environmentally active has a positive effect on life satisfaction is one's feelings that the activities they do are making some difference in the world. Those that are very environmentally active feel that the activities they do make some difference in the world significantly more often than those who are not environmentally active (see Figure 7). This could indicate that being environmentally active makes people feel as though they are making positive changes in the world, which could potentially lead to feeling as though one has a greater meaning or purpose, as well as a sense of empowerment. Past studies have shown that the feelings of meaning, purpose, and empowerment that come with being environmentally active are associated with well-being (Eigner, 2001, p. 197)(Sohr, 2001, p. 209-210). Thus, if feeling that one is making a difference in the world through their environmental activity

contributes to feelings of meaning, purpose, and empowerment, then this could contribute to a person's overall life satisfaction and well-being.

4.2 Interviews

4.2.1 Awareness versus action

From the interviews that I conducted, I found that participants reported feeling both negative and positive psychological impacts of being environmentally active. However, most people reported that these negative psychological impacts stem from environmental awareness, not environmental action. In her interview, Penelope Donovan, who has been a part of the Lock the Gate and Stop Adani movements, stated, *"It's like two extremes. It's both distressing and empowering. It's distressing in that you're aware of (environmental problems) but if you take some action you feel that you can overcome that distress"* (2019, pers. comm.). Furthermore, a majority of interview participants believed that being environmentally active is the best way to mitigate those negative impacts. Anonymous participant #3 exemplified this when they said, *"I think the fact that there is a need for environmental activism is pretty psychologically damaging... But I think the activism side of it helps to offset that because at least there's a sense of doing something and that mutual support that comes from the community of people that are all committed to that same goal"* (2019, pers. comm.).

Many participants also went so far as to say that if they were not doing the environmental activism work that they were doing, their psychological well-being would suffer greatly. Chris Weeks, a film maker who is involved in various frontline, direct action environmental activist groups, expressed this idea by stating, *"If I don't do this (activism work) and I take time away from it my mental health will suffer,"* (2019, pers. comm.). Sue Lennox, the co-founder of OZ GREEN, reiterated this sentiment by stating, *"I think that if I wasn't doing this, that's when I'd be lost in despair"* (2019, pers. comm.). Thus, overall, it seems that negative psychological impacts stem from environmental awareness, while environmental action is used as a way to alleviate those negative impacts and, in turn, create positive impacts.

4.2.2 Primarily positive psychological impacts

Of all of the participants that I interviewed, 90 percent of them reported that they felt as though the psychological impacts of being environmentally active are primarily positive (see Table 1). Rachel Thatcher, who works in the field of sustainability, demonstrated this by saying, *"There are so many positive things to being environmentally active. You feel good about yourself, you feel good about your community, you feel good about changes that you*

make, and that way of making a positive impact on the environment, and it fosters your connection to the environment. And I think all of that's positive" (2019, pers. comm.). This overwhelming majority of people reporting that being environmentally active has primarily positive psychological impacts suggests that there are significant benefits that come with taking environmental action. The largest contributor to these positive psychological impacts that I identified from the interview responses is connection.

4.2.2.1 Connection

Every participant that I interviewed reported feeling connected to a larger community or community of shared interests, feeling connected to nature, and feeling connected to their own values, sense of purpose, and sense of meaning due to their focus on environmental action. Overall, connection was the biggest theme that appeared and was brought up in every single interview. Bobbi Allan, the co-founder of Mindfulness in Education, summed up the importance of connection by stating, *"It's in the sense that (being environmentally active) connects you to so much that is larger than yourself and your own day to day concerns... it's a sense of being connected to the whole world in a way"* (2019, pers. comm.). Susie Duncan, a coordinator for Hinterland Bush Links Inc., elaborated on that point by saying, *"The more that we interconnect... the more I think that nurtures us and reminds us were like a whole organism. We're not just an individual that hasn't fixed the world yet because no single one of us can, nor should it be that way,"* (2019, pers. comm.). It appears, from many interview participant's responses, that the sense of connection that is fostered through being environmentally active provides people with a strong support system, motivates people, reminds people that they are not alone, reiterates the importance of the work that people are doing, and helps people foster a greater sense of self and self-worth. These positive results that interview participants have reported appear to stem from three areas of connection: connection to nature, connection to others, and connection to self.

4.2.2.1.1 Connection to nature

All interview participants reported that they feel strongly connected to nature. It seems that feeling connected to nature is at the root of many interview respondent's passion for the environment. Therefore, it is one of the main drivers for the work that they do. During her interview, Tracy Adams, an ecologist and networker for environmental activist training workshops, exclaimed, *"It's like I couldn't live without nature. It's a huge motivator for what I do...I feel like I would just shrivel up and die without it...Nature replenishes the spirit"* (2019, pers. comm.). This displays the central place that many interview participants feel nature holds in their lives. Numerous interview respondents reported that they felt as though

being connected to nature played a large part in being environmentally active, and that they could not do the work that they are doing without that connection. As Susie Duncan explains, *“It’s just the wonderment I think. The incredible curiosity and wonderment about how everything (in nature) interrelates with each other. It’s an extraordinarily fulfilling experience in itself and I guess that just drives this strong passion to look after it the best way we can,”* (2019, pers. comm.).

Along with Tracy Adams and Susie Duncan, many other interview respondents expressed that nature nourishes them, is a regenerative force for them, brings them peace, and acts as a place of respite from stress and overwhelm. *“Nature definitely feeds me, it’s definitely a refuge that I’ll go to if I’m feeling down or lost or confronted. It’s definitely a source of comfort for me. So in that way it helps me psychologically,”* proclaimed an anonymous interview participant (Anonymous participant #2, 2019, pers. comm.). Interview respondents appeared to reap major psychological benefits by connecting to nature and cultivating their passion for the environment.

4.2.2.1.2 Connection to others

The connection that interview subject’s felt to their community, co-workers, family, and friends was one of the most commonly discussed topics in terms of positive psychological impacts of being environmentally active and motivations for being environmentally active (see Table 2). Numerous participants reported that they have cultivated strong friendships and support networks through their engagement in environmental action. *“I’m sure the only way I’ve survived doing (environmental activism work) for 15 years and intend to do it for another 15 years is because I’ve got a really solid group of intelligent people working in the same field trying to achieve similar things,”* reported Anonymous participant #1 in their interview (2019, pers. comm.). It seems as though interview participants are bolstered by the people they connect with that have similar environmental views and a similar drive to create change. Interview participants often reported feeling inspired by the people in their community. In his interview, Nick Rose, the executive director of Sustain: The Australian Food Network and a lecturer in the Bachelor of Food Studies and the Masters of Food Systems at William Angliss Institute stated, *“The people that I’ve met along the way have been amazing inspirational leaders and people I look up to. So there is that really positive aspect of it,”* (2019, pers. comm.).

The connections that interview participants cultivated with others seemed to be largely fostered by a sense of like-mindedness, shared purpose, shared vision, shared values and shared passion. *“There’s a lot of joy in having a shared purpose and vision with others…”*

I am privileged to know and meet and work with so many people that are just really real and solid and have a clear sense of what matters and their values and living according to their values and (they are) not afraid to show who they really are and what they care about,” expressed Tracy Adams (2019, pers. comm.). It appears as though being environmentally active has led people to communities within which they feel comfortable, understood, inspired, and supported. Being environmentally active seems to have brought people a great sense of connection to others and source of social support, which interview respondents have said positively impacts them psychologically.

4.2.2.1.3 Connection to self

Many interview participants reported that being environmentally active contributes to feelings of meaning and purpose they might have in their life, empowers them, fulfills them, and clarifies and roots them in their values. By being environmentally active, various interview participants felt as though they were able to align their lifestyles and actions with their values. *“(A positive impact of being environmentally active is) being able to live the way that my ideals might speak to. It definitely makes you feel more empowered as a person...It’s had a huge impact on my sense of belonging and connection,”* reported Nina Rachel, a member of the TreeSisters, in her interview (2019, pers. comm.). For Nina, living in alignment with her values brought about positive psychological impacts, which other interview participants reported as well.

Another positive psychological impact of being environmentally active reported in all of the interviews conducted was the contribution that being environmentally active has on the feelings of meaning or purpose an interview participant has in their lives. James Whelan, the director and co-founder of The Change Agency, indicated that, from being environmentally active, *“you derive a real sense of meaning, a sense of purpose, a positive sense of yourself and the civilization that you’re part of,”* (2019, pers. comm.). Nick Rose furthered this idea by stating *“I think the fact that I’ve got, at this point, work that...gives me a sense of purpose and meaning is a privilege and it has enormous psychological benefits because I think that all of us at one level or another ... want to feel that our life has some purpose or meaning,”* (2019, pers. comm.). From the interview responses, it seems that being environmentally active might reaffirm people’s sense of importance and self-worth and makes them feel more confident in their place and purpose in the world. Susie Duncan summed this up by stating, *“I think it’s so important to peoples psychological well-being to have a sense of something that makes their heart glow, that makes them feel alive and engaged in humanity and the world as a whole,”* (2019, pers. comm.).

4.2.3 Negative psychological impacts

Although most all of the interview participants reported that being environmentally active has primarily positive psychological impacts, participants also reported negative consequences as well. These include despair, overwhelm, frustration, exhaustion, and depression. Interview participants reported that these negative impacts often lead to burnout.

4.2.3.1 Burnout

A large majority of the participants I interviewed have, at some point in time, experienced burnout related to their environmental activism work (see Table 3). Even if they have not experienced full burnout, participants reported having felt burnout symptoms, such as exhaustion and overwhelm (see Table 3). Some participants reported that they believe that burnout arises as a result of people's intense passion for the work that they are doing. As Anonymous participant #2 put it, *"When your love is so big, when your circle of concern is bigger than your circle of influence, you're bound to burn out. And it's a really common thing in the environmental sense where it's passion driven. Passion is a never ending fire that burns, but it needs to be moderated so it doesn't burn out,"* (2019, pers. comm.). From the reports of the interview participants, it looks as though burnout is largely affected by the emotional connection that people feel to the environmental work they are doing and this emotional component may be a driving force behind burnout. Other participants also reported that they believe burnout occurs due to feelings of ineffectiveness or uselessness, not valuing one's contributions enough, and not having any disconnect from the environmental work one is doing.

It appears as though feeling burnout due to these factors can have very negative effects on a person's sense of self and overall well-being. *"It got really hard to do my job, so that effected my self-esteem and my sense of literally who I was and how I show up in the world and what I am doing in life. Because my environmentalism is so tied to my sense of identity and is my career, I couldn't distinguish one from the other. What had previously been a source of stamina quickly became a massive source of pain,"* proclaimed Anonymous participant #1 (2019, pers. comm.). From interview participant reports, it appears as though burnout is detrimental to a person's mental, and sometimes physical, health. Therefore, it appears as though there are significant negative psychological impacts that come with being environmentally active that those engaging in environmental work must be aware and cognizant of. However, based on interview responses, it seems as though there are many strategies for mitigating and preventing burnout and that these negative psychological impacts are ephemeral and can be reversed.

4.2.3.1.1 Solutions

The biggest theme that emerged in terms of solutions for burnout was balance. A majority of interview participants felt that by being able to balance self-care and activism work, they were able to either fully prevent or successfully alleviate burnout symptoms. Balancing self-care and activism work looked different for each individual. However, common overarching patterns among interview participant's practices of self-care were taking time off, creating separation and boundaries between activism work and personal life, not taking on or feeling the responsibility to solve all or most of the current environmental problems facing the planet, learning to say no and not trying to do more work than is manageable, drawing support from one's community, and reconnecting and finding respite in nature. As Emma Briggs, who worked for Green Peace and now manages social media for many grassroots organizations, stated, *"I try to prioritize self-care now because I've been doing it for a long time and I know that I'm no use if I'm a psychological mess. So I do only what I feel I can do. I don't take all the responsibility for everything on my shoulders because I'm only one person and I just do what I'm able to do,"* (2019, pers. comm.).

Many interview respondents also discussed their view that, for them, their activism work is a form of self-care. *"I believe that I'm the strongest I can be because of my activism. I believe that my self-care is my activism. I believe that were I not to be taking action about those things that I see and feel and fear, then I couldn't possibly be well. I wouldn't be a whole person,"* expressed James Whelan (2019, pers. comm.). Similarly, Nick Rose stated in his interview, *"I get a little bit tired, but I haven't really felt (burnout) and I think that's probably to do with ... the positive psychological benefits of activism as a lifestyle and as a way of being,"* (2019, pers. comm.). Other interview participants expressed that they try to find ways to incorporate self-care into their activism work so that the two do not have to be separate but can work in tandem with each other. Some examples of this were using art and music as a form of activism, having work meetings outside while walking around nature trails, or simply just having fun with the people and community one surrounds themselves with while engaging in activism work.

It appears that if people could learn to or make an effort to practice self-care through their activism work, burnout would become much less likely to occur since there would inherently be a balance struck between self-care and activism.. Thus, educating people on the positive psychological impacts that can come with being environmentally active could potentially provide people with ways in which to engage in environmental work that will be

beneficial to their mental health and self-care practices, and, therefore, could possibly help in preventing or mitigating burnout.

4.2.4 Motivations

The interview participants identified a range of motivators that keep them driven to continue being environmentally active. The most commonly mentioned motivators were community, co-workers, friends, and family, awareness of environmental issues, connection with nature, aligning one's lifestyle with one's values, and seeing or having success (see Table 2). Interestingly, the two most common motivators are also large contributors to the positive psychological impacts of being environmentally active and the negative psychological impacts of being environmentally aware, respectively. A majority of interview participants reported that community, co-workers, friends, and/or family was a motivator, and connection with community, co-workers, friends, and family has also been identified by interview participants to be a positive impact of being environmentally active (see Table 2). Only about one third of participants reported environmental awareness as a motivator, and environmental awareness has been identified by interview participants as something that brings about negative psychological impacts (see Table 2). Furthermore, the rest of the motivators identified were potential contributors to the positive psychological impacts of being environmentally active as well.

This could potentially suggest that the positive aspects of environmentalism motivate people to take action more than the negative aspects. This was seen by Mark Hathway in his paper *Activating Hope in the Midst of Crisis: Emotions, Transformative Learning, and "The Work That Reconnects."* In this paper, Hathway showed that, specifically in terms of environmental problems, using fear tactics to change people's behaviors can lead to disempowerment and inaction and emphasized the importance of using positivity, specifically through love and gratitude, to motivate people to take action (2017, p. 300-301). Thus, there is the potential that educating people on the positive psychological impacts that might come with being environmentally active could effectively motivate them to take action.

5.0 Conclusion

5.1 Relation to study goal and importance

The results of this research seem to suggest that there are significant positive psychological impacts of being environmentally active. The conclusions drawn from the results of the survey and the interview data suggest that those who are environmentally active spend more time outdoors, eat a healthier diet, feel deeply connected to nature, feel connected to, supported by, and like they are an important part of their community, feel that their lifestyle aligns with their values, and feel as though the activities they do are meaningful and purposeful. There appear to also be negative psychological impacts of being environmentally active, as seen in the interview results, such as despair, overwhelm, frustration, exhaustion, and depression. However, both the survey and interview results suggest that the psychological impacts of being environmentally active are primarily positive and suggest that the positive impacts can be used to mitigate the negative impacts.

The results of this study will hopefully be able to be used to motivate people to become more environmentally active, as well as to educate people on how to prevent and mitigate burnout. Since the results suggest that the psychological impacts of being environmentally active are primarily positive, and, furthermore, that being environmentally active may possibly help in alleviating the negative impacts that come with being environmentally aware, it may encourage people to start being or become more environmentally active. This could be especially pertinent for those who are thinking about becoming more environmentally active, but have not fully committed yet.

Furthermore, these results will hopefully also be pertinent to those who are already dedicated environmental activists and are experiencing, recovering from, or trying to prevent burnout. With this research, they might be able to find new ways and adopt new strategies to marry their self-care practices with their activism work. By realizing that there are psychological benefits of being environmentally active and identifying where those benefits come from, activists could potentially focus more on those areas of their work that do bring about positive psychological impacts as a way of practicing self-care through being environmentally active.

5.2 Recommendations for future management

These results can hopefully be used in a community-based social marketing strategy, as outlined by Doug McKenzie-Mohr in his book, *Fostering Sustainable Behavior: An Introduction to Community-Based Social Marketing*, to incite behavior changes in people that lead to them becoming more environmentally active (McKenzie-Mohr, 2011). Recognizing

and pointing out the positive psychological impacts that could come with being environmentally active could increase the benefits of changing one's behavior to become more environmentally active. Not only that, but the result that there appear to be negative psychological impacts that come with being environmentally aware and not active could act as a barrier to the undesirable behavior of continuing to not be environmentally active or to remain at the same level of environmental action. By increasing the benefits that exist for a person to change their behavior to be more environmentally active and increasing the barriers that exist for a person not to change their behaviors to be more environmentally active, a successful community-based social marketing strategy could be formulated and implemented (McKenzie-Mohr, 2011, p. 42). The results of this research could be pertinent and applicable in motivation strategies to create social change towards a more environmentally active society and I strongly recommend that this research be used to inspire others to become more environmentally active through community-based social marketing strategies.

I also recommend that these results are used to help activists prevent and recover from burnout. Hopefully, by making activists aware of the psychological benefits of being environmentally active and what parts of being environmentally active those arise from, activists will be better equipped to incorporate self-care into their work. Also, learning about other strategies that people have used to successfully recover from burnout that are outlined in this research could be helpful for other activists to use.

5.3 Recommendations for future research

In the future, I recommend that further research looks into how engaging in different types of activism could have different psychological impacts. Through this research, I realized the incredibly broad range of types of activism. There are countless ways to be involved in the environmental movement and take environmental action. Due to this variation in types of activism, I think it would be beneficial to look into whether engagement in different types of activism results in different effects on one's psychological well-being. Some types of environmental activism are more involved than others. Some types of activism are physically taxing, while others are mentally draining. Some people are activists on the side due to other obligations they have, such as career or family, while others have dedicated their whole lives to their activism work. By looking at these various groups of activists and the psychological impacts that their activism work has, it could bring about results that are more specific to certain groups of activists. Precise recommendations could then be made to different activists on how to best practice self-care and prevent burnout within the field that they are working in, instead of one large generalization of recommendations for all activists.

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7.0 Appendices

Appendix A: Interview Guide

1. What type of environmental activities do you engage in?
 - a. For example, personal practices, community activities, political actions, or any combination of these.
 - b. Are you satisfied with your environmental work and happy when engaging in these activities?
 - c. What motivates you to continue being environmentally active?
2. Are you part of a larger community or community of shared interests that you feel you can rely on?
 - a. What fosters your connection to the people that are part of this community or these communities?
 - b. How has being environmentally active affected the types of communities you are a part of?
3. Do you feel connected to nature?
 - a. What helps you to foster that connection with nature?
 - b. Is feeling connected to nature an important aspect of being an environmental activist/environmentally active?
4. Does being environmentally active contribute to the feelings of meaning or purpose you might have in your life?
5. How does being environmentally active affect everyday decisions in your life?
 - a. For example, food, electricity use, driving/transport, choosing products, etc.
6. What positive impacts, if any, has being environmentally active had on your life or lifestyle?

7. Overall, how has your engagement in environmental action impacted you psychologically? Do you think that these are primarily positive or negative impacts?
8. If you feel that there are positive psychological impacts of being environmentally active, what about being environmentally active do you think contributes the most to these positive psychological impacts?
9. Have you ever experienced burn out that has been related to the environmental action you engage in?
 - a. If so, how have you overcome this burn out?
10. How do you balance activism work and self-care? How do you practice self-care in your work?
11. How do you maintain hope while engaging in this type of work?
12. Does the focus you have on environmental action influence how satisfied you feel with your life right now?

Appendix B: Survey

The psychological impacts of being environmentally active

The information gained from this survey will be used in a research paper examining the psychological impacts of being environmentally active for an undergraduate study abroad class. The written report will be included in the program library and may possibly be published on the internet. It will also form part of a short oral presentation that I will make to my class. The information you provide will remain completely anonymous.

Please sign below if you agree to participate in this research study.

Subject's initials: _____

On a scale from 1-5, how environmentally active are you in terms of personal actions (i.e. recycling, composting, etc.)?

| | | | | |
|------------|-----------------|--------|--------------|-------------|
| 1 | 2 | 3 | 4 | 5 |
| Not active | Somewhat active | Active | Quite active | Very active |

On a scale from 1-5, how environmentally active are you in terms of communal actions (i.e. volunteering for an environmental organization, joining a community garden, etc.)?

| | | | | |
|------------|-----------------|--------|--------------|-------------|
| 1 | 2 | 3 | 4 | 5 |
| Not active | Somewhat active | Active | Quite active | Very active |

On a scale from 1-5, how environmentally active are you in terms of political actions (i.e. lobbying, campaigning, etc.)?

| | | | | |
|------------|-----------------|--------|--------------|-------------|
| 1 | 2 | 3 | 4 | 5 |
| Not active | Somewhat active | Active | Quite active | Very active |

On a scale from 1-5, how satisfied do you feel with your life right now? Please circle one.

| | | | | |
|---------------|--------------------|-----------|-----------------|----------------|
| 1 | 2 | 3 | 4 | 5 |
| Not satisfied | Somewhat satisfied | Satisfied | Quite satisfied | Very satisfied |

Does your level of environmental activity affect how satisfied you feel with your life right now? If so, in what ways?

On average, how much time, in hours, do you spend outdoors in a day?

In what ways do you connect with nature?

Are you involved in an environmentally active group of people, such as a community garden, intentional living community, etc.? If so, please describe.

How often do you eat meat in a week? Please circle one.

0 days 1-2 days 3-4 days 5-7 days

How often do you buy and eat local and organic foods? Please circle one.

Never Occasionally Sometimes Often Always

How often do you feel like you are an important part of your community? Please circle one.

Never Occasionally Sometimes Often Always

How often do you feel like the activities you do are making some difference in the world?
Please circle one.

Never Occasionally Sometimes Often Always

Any additional comments?

Age: 18-30, 30-40, 40-50, 50-60, 70+

Gender (leave blank if prefer not to say): _____

If you would be willing to be contacted about a follow up interview, please provide your email or phone number below. Thank you!

Appendix C: Interview Consent Form

The psychological impacts of being environmentally active

Qualified investigator: Allie White, agwhite@middlebury.edu, +61421377048

Information:

My name is Allie White and I am an American undergraduate student studying with SIT Study Abroad. As a part of this study abroad program, I am undertaking a research project that is looking at the psychological impacts of being environmentally active. With this study, I hope to gain insight into whether or not there are any positive psychological impacts of being environmentally active, and if so, what factors of being environmentally active contribute to those positive psychological impacts. In order to investigate this, I am conducting interviews and surveys. Participation in this study will involve the following: partaking in a 30 minute in-depth interview in which questions about type and level of engagement in environmental activity and the psychological effects of engaging in environmental action will be asked. The information gained from this interview will be incorporated into a written report that will be submitted for an undergraduate class and will be included in the program library and may possibly be published on the internet. It will also form part of a short oral presentation that I will make to my class. This research might also be used in the future as a part of my senior thesis and published through Middlebury College.

Risks:

There is a possibility of this interview resulting in mental stress since this topic does focus on psychological impacts and general life satisfaction. Some of the interview questions may cause discomfort when answering them, as they are focused on a person's mental states and the contributing factors to those mental states.

Benefits:

Participation in this study may not benefit you directly. However, the knowledge obtained from your participation, and the participation of other volunteers, may help us to better understand how being environmentally active impacts an individual. From this, we are better able to ensure that environmentally active individuals are adequately supported psychologically. If positive psychological impacts are found, this could help to be a motivating factor to influence others to become environmentally active as well.

Confidentiality:

You have the option of either remaining anonymous or of having your contribution to the study acknowledged. If you choose to remain anonymous, the information in the study records will be kept strictly confidential and will be available only to myself. No reference will be made in oral or written reports which could link you to the study.

Participation:

Your participation in this study is voluntary; you may decline to participate. If you decide to participate, you may withdraw from the study at any time. You may also decline to answer any specific question. If you withdraw from the study at any time the information already obtained from you will be destroyed.

Sign below if you agree to participate in this research study.

Subject's signature: _____ **Date:** _____
Researcher's signature: _____ **Date:** _____

Appendix D: Interview Schedule

| Interview Participant | Title | Mode of communication | Date of interview |
|-----------------------|--|-----------------------|----------------------------------|
| Tracy Adams | Ecologist, helps with activist training workshops, networker | Zoom video chat | November 11 th , 2019 |
| Michele | Survey respondent, founding member of the Greens in the Byron Shire | Phone call | November 12 th , 2019 |
| Chris Weeks | Survey respondent, film maker involved in frontline, direct action activist groups | Phone call | November 12 th , 2019 |
| Nick Rose | Executive Director of Sustain: The Australian Food Network and Lecturer in the Bachelor of Food Studies and Masters of Food Systems at William Angliss Institute | Zoom video chat | November 13 th , 2019 |
| Nina Bishop | Member of Australian Conservation Foundation | Phone call | November 13 th , 2019 |
| Susie Duncan | Coordinator, Hinterland Bush Links Inc. | Facebook video chat | November 13 th , 2019 |

| | | | |
|--------------------------|--|---------------------|----------------------------------|
| Anonymous participant #1 | N/A | In-person meeting | November 14 th , 2019 |
| Sue Lennox | Co-founder, OZ GREEN | Facebook video chat | November 14 th , 2019 |
| Dr. James Whelan | Director and Co-founder, The Change Agency | Phone call | November 18 th , 2019 |
| Penelope Donovan | Survey respondent, involved in Lock the Gate movement and Stop Adani movement | Phone call | November 18 th , 2019 |
| Katrina Hodgson-Kratky | Survey respondent, volunteer for a bush care group, works in agriculture research | Phone call | November 19 th , 2019 |
| Bobbi Allan | Co-founder, Mindfulness in Education | In-person meeting | November 22 nd , 2019 |
| Emma Briggs | Survey respondent, worked with Green Peace for 15 years, manages social media press releases for grassroots groups | Phone call | November 25 th , 2019 |
| Anonymous participant #2 | N/A | In-person meeting | November 26 th , 2019 |
| Anonymous participant #3 | N/A | In-person meeting | November 27 th , 2019 |
| Rachel Thatcher | N/A | Phone call | November 27 th , 2019 |
| Nina Rachel | Survey respondent, part of the TreeSisters, did | Phone call | November 28 th , 2019 |

| | | | |
|------------------|---|------------|----------------------------------|
| | wildlife care and forest regeneration work | | |
| Catherine Little | Survey respondent, takes personal environmental actions | Phone call | November 29 th , 2019 |
| Julia Curry | Sustainability and Emissions Reduction Officer, Byron Shire Council | Phone call | November 29 th , 2019 |

Appendix E: Facebook Groups

- Byron Shire Mums
- Byron Bay Community Board
- Ocean Warrior – I am Sea Shepard
- Vegans Byron Shire
- Brunswick Heads Foreshore Protection Group
- Musicians in Byron Bay
- CSG FREE BRUNSWICK HEADS
- Byron Shire Filmmaker Network
- Extinction Rebellion Mullumbimby
- Make Byron Shire 5G Free
- Zero Waste Byron Shire
- Byron Bay Community
- *Byron Shire Mums & Bubs*
- Friends of Mullumimby Community Gardens
- Brunswick Heads Community Page – NSW Australia
- Byron Bay Buy – Sell Community Group
- Mullum buy swap and sell
- Mullumbytes
- BYRON BAY – JOB Search and Offer
- Unconditional Giving and Receiving Byron Bay
- MullumHugs
- Mullum Adventure Club
- Byron Bay Backpackers and Travellers
- Byron Bay Vegans
- North Byron Shire Community
- Dumpster Dive Brisbane
- Ballina Buy, Sell and Community Group
- Byron Bay buy swap sell no rules
- Buy and Sell your unwanted items – Ballina Australia
- Byron Bay Trading Post
- Ballina Online Bargains and Surrounds. Known as BOB.

- Musicians in Lismore/Byron Bay Area
- North Coast NSW Conscious Community. Byron Lismore Nimbin Mullumbimby Uki
- Byron Shire Creative Network
- Bruns, Buy, Sell, Give, Swap
- Byron Community Board Residents Only
- Ocean Shores AUSTRALIA Buy Swap and Sell
- Approachable Vegans in Australia
- Expats in Byron Bay
- Byron Bay Skate Park Community
- Vegans of Australia
- Byron Bay Women's Network ~ MULIEBRITY
- SEQ Vegan Share Accomodation – Brisbane – Gold Coast – Sunshine Coast +
- Online bargains Byron Ballina surrounds
- Community land Northern rivers surrounding
- Free Stuff Brisbane
- Extinction Rebellion Byron Bay
- Extinction Rebellion SEQ Discussion Group
- Byron Bay Hook-Ups
- Brisbane, Buy, Sell, Swap, and Giveaway!
- Veganic Food Growers Australia
- Byron Bay Vegan Gatherings
- Byronesians (& other nearby locals)
- Byron Bay Abodes
- Byron Bay Property to Rent (NSW)
- Northern Rivers Local and Home Based Business Page (no selling)
- Gardening Australia
- ASH – Australian Stock Horses
- Soul-full Traders Northern NSW
- Northern Rivers Buy and Sell
- Self sufficient living Australia