4-26-2020

Where You Are and What You Know: Impact of Location and Education on Individual Engagement with the United Nations Sustainable Development Goals

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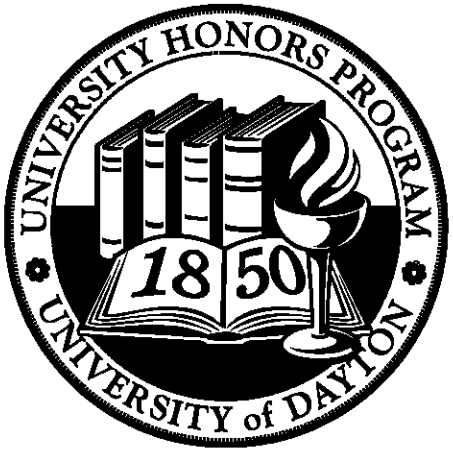

Honors Thesis

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Abstract

The United Nations created the Sustainable Development Goals (SDGs) in 2015 to include 17 goals and 169 targets that foster ongoing environmental, social, and global economic development and aims to accomplish each goal by 2030. There has been considerable enthusiasm in various sectors since the SDGs have been in place; however, there is still a significant amount of work to be done to engage experts and young scholars (the future experts) in the SDGs. According to Salvia, et al., researchers at institutions of higher learning from around the globe found a relation between locality and research, though questions remain concerning the role vocation and locality play in determining one's predilection for a given SDG. This project analyzes individual rankings of the SDGs by comparing responses from college students interested in environmental sciences and academic and field professionals engaged in ecological work or research.

Acknowledgements

I would like to thank the University of Dayton, specifically the Honors Program for funding this project. To Dr. Rebecca Potter and Dr. Ryan McEwan for advising and guiding me through the process of conducting and writing an honors thesis. Dr. Tony Talbot for showing me how to conduct a survey. To the Wetlands and Wildlife Care Center, Huntington Beach, CA; Brukner Nature Center, Troy, OH; Centerville-Washington Park District, Centerville, OH; Agraria, Yellow Springs, OH; the SAP team at the Hanley Sustainability Institute; and everyone else who participated in my survey and research. And last, but not least, my family and friends for supporting me through this journey. Thank you!

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Introduction

In 2015, the United Nations came up with the SDGs - 17 goals that span the social, economic, and environmental pillars of sustainability which address 169 targets with 232 indicators to measure progress. These goals are to be accomplished by 2030 and while there has been considerable progress for each goal around the world, there is still lots to be done in the next 10 years if we want to achieve each goal. According to the 2019 Report, the United States currently ranks 35 out of 162 countries on the 2019 SDG Index and has not achieved any SDG; however, we are making progress (Sachs, Jeffrey, et al. 20, 24). In regards to progress, eight of the goals are moderately increasing though the progress is insufficient to attain the goal, three are on track to achieve the SDG by 2030, two do not have available data, and the last four remain stagnant or are increasing at less than 50% of the required rate (Sachs, Jeffrey, et al., 25). At the top of the index is Denmark, Sweden, Finland, France, and Austria while even countries such as Malta, Belarus, Estonia, and Chile have a higher score on the index than the United States (Sachs, Jeffrey, et al., 20).

Regardless of their index scores, countries and in a more general sense, different geographical regions are prioritizing SDG 13: Climate Action due to the global effects it has. Location plays an important role for professionals and their research engaged in sustainable development. Salvia et al., found that throughout the world SDG 13: Climate Action is being researched the most by researchers and scientists and that there is variation in which SDGs are being studied in different geographical regions i.e. North America, Asia, Oceania, etc. (Salvia, et al., 845). They discovered that global location does impact which SDGs experts were studying in each geographical location.

In my study, I researched whether location within a country, in this case the United States, affects which SDGs people gravitate towards and consider to be most important for sustainable development. I considered whether coastal communities had different priorities regarding the SDGs than land-locked communities, but I also want to know whether one's vocation plays a role in determining the most important SDG for sustainable development. Moreover, do those in the environmental fields favor the environmental SDGs? Is there a difference between the preferences of students in the environmental fields versus practitioners in the environmental fields?

Millennium Development Goals

The Millennium Development Goals (MDGs) preceded the SDGs. In the summer of 1992, 178 countries came together for the United Nations Conference on Environment and Development in Rio de Janeiro, Brazil. It was at this conference that the *Rio Declaration on Environment and Development, and the Statement of Principles for the Sustainable Management of Forests* was born. More commonly known as Agenda 21, this document laid out 27 principles through 39 different chapters meant to serve as a guide for sustainable development around the world. It had three main goals: "improving the living standards of those in need; better manage and protect the ecosystem; and bring about a more prosperous future for all" (Dodds et al., 1). But despite some progress in certain sectors the progress was uneven; most outcomes were still not realized 20 years later, and implementation of the principles remained ineffective and non-universal (Dodds et al., 1, 8). Governments around the world acknowledged the work that still needed to be done in order to live in a sustainable world, and in September 2000

members of the UN came together for the Millennium Summit. It was at this summit that the MDGs were created.

In September of 2000, 149 countries came together and formed the MDGs, a set of eight goals focused on eradicating extreme poverty and hunger while trying to close various gaps of inequalities present throughout the world. The eight MDGs are as follows: (1) Eradicate Extreme Poverty and Hunger, (2) Achieve Universal Primary Education, (3) Promote Gender Equality and Empower Women, (4) Reduce Child Mortality, (5) Improve Maternal Health, (6) Combat HIV/AIDS, Malaria, and Other Diseases, (7) Ensure Environmental Sustainability, and (8) Develop a Global Partnership for Development. One may argue that to get the whole world to prioritize just one of these goals is inconceivable in and of itself, but to get almost all countries to agree on eight separate goals is beyond this world.

In looking at each MDG there is a general focus on the social and economic pillars of sustainability, whereas environmental goals were not articulated. According to the leaders of Rio+20, "Eradicating poverty is the greatest global challenge facing the world [at the turn of the millennium] and an indispensable requirement for sustainable development. In this regard, we are committed to free humanity from poverty and hunger as a matter of urgency" (Sachs, 483). In contrast, only one of the eight goals is environmentally focused as compared to six environmentally focused goals among the Sustainable Development Goals (SDGs) which will be discussed later. The MDGs were successful at achieving the health-related goals (three of the MDGs) specifically because the progress and outcomes could be measured and assessed (Sachs, 492). The other five goals did not progress nearly as much as the health-related ones due to insufficient

funding to achieve each goal. However, regardless of funding, measuring the exact progress of these five MDGs would have been difficult due to the ambiguity of the targets and indicators within each goal (Sachs, 492-493).

Over the next fifteen years following the creation of the MDGs, our world leaders worked towards accomplishing each goal as it was defined. Considerable progress was made both in limiting the negatives and improving the positives within each country that had adopted the MDGs. The number of people living in extreme poverty dropped significantly as did the proportion of undernourished people, while the literacy rate in youth and overall maternal health improved (Nations, 4, 6). Yet, even though immense progress was made, a similar outcome to Agenda 21 came about, in that still a great number of people were still facing poverty, hunger, inequality, and environmental crisis. UN Secretary-General Ban Ki-Moon acknowledged that the progress of the MDGs had been "uneven" and millions of people were being left behind (Nations, 3, 8). As stated in The Millennium Development Report 2015, "The work is not complete, and it must continue in the new development era" (Nations, 4).

Transitioning from the MDGs to the SDGs

The MDGs mainly focused on how vulnerable the poor were and called on "rich countries" to act as donors in order to distribute wealth and resources more evenly throughout the world (Sachs, 484). What the world needed was something that was more universal, more applicable to everyone in the world and not just the poor (Sachs, 484-485). In *The Millennium Development Goals Report 2015,* Secretary-General Ban Ki-Moon calls for there to be more effort in tackling the root causes and for better integration of social, economic, and environmental sectors - or pillars - of sustainable

development. In the 2015 report and even parts of the 2013 report, the seeds of the beginning of the Sustainable Development Goals (SDGs) are present. Essentially, the 193 member-states of the UN took the failures and targets that they did not achieve over the past decade and a half and created individual SDGs for them to continue the work and progress of the MDGs.

With the data gathered from the 2015 MDG report, the world knew where the 149 countries who signed on to the MDGs stood in terms of the achievements and downfalls each country faced in implementing the MDGs. Using this data as evidence and a form of motivation allowed for more focused targets for the SDGs. Each of the SDGs falls under one of the three pillars of sustainability. When analyzing the goals within a given pillar, it is difficult to dismiss the undeniable presence of the other two pillars within that same goal. When you look at the socially focused goals you tend to see their implications on the environment and economy; when you look at the economic pillar you see the effects on people and the environment; and when you look at the environmental pillar you see how it affects the economy and the people who depend on it.

When looking at the MDGs, it is no secret that they focus on the social and economic pillars. In fact, there was so much progress in the way of the social pillar that it allowed for the UN to shift their focus to other issues that plagued the world such as issues with the environment. The global economy saw some improvements with the implementation of the MDGs, but there were still economic issues to be addressed. The 2015 MDG Report states that employment opportunities could not keep up with the growing labor force. Employment-to-population ratio dropped 2% from 1991 to 2015 though the percentage varies in different regions. The International Labour Organization

equates this to more than 204 million people unemployed in 2015 worldwide; that is 53 million more people than in 1991 (Nations, 17). The developing regions of the world experienced a drop of 3.3% while developed regions only saw about 1% decrease in employment-to-population ratios. The largest decline was seen in Eastern and Southern Asia with 6.7% and 4.6%, respectively (Nations, 17). The working middle class, those that live on at least $4 a day, had grown 18% from 1991 to 2015 in developing regions (Nations, 18). Youth were also facing an unemployment rate that was three times higher than that of adults, women were disproportionately affected, and 45% of people across the globe were still working in vulnerable employment (Nations, 17, 19). The number of people living in extreme poverty had declined between 1991 and 2015 by about two-thirds, though progress was uneven across regions. In the working middle class few were covered by social protection systems, here showing that even through considering the economics, social awareness is being drawn upon. Though economic progress had been made globally by 2015, it had not yet reached a level at which all peoples could rely upon. When the MDGs were put into place in 2000, the UN member governments 'agreed that they would "spare no effort to free their fellow men, women and children from the abject and dehumanizing conditions of extreme poverty…"' thereby ensuring that human rights were at the core of the MDGs and later on in the SDGs (Sachs, 232).

Creation of the Sustainable Development Goals

In an effort to better incorporate and devote efforts to the social, economic, and environmental aspects Ban Ki-Moon mentioned, the SDGs were adopted by member-states of the UN in 2015 and are comprised of 17 goals, 169 targets, and 232 indicators as compared to the MDGs which only have eight goals, 21 targets, and 60 indicators. The

SDGs are as follows: (1) No Poverty, (2) Zero Hunger, (3) Good Health and Well-Being, (4) Quality Education, (5) Gender Equality, (6) Clean Water and Sanitation, (7) Affordable and Clean Energy, (8) Decent Work and Economic Growth, (9) Industry, Innovation, and Infrastructure, (10) Reduced Inequalities, (11) Sustainable Cities and Communities, (12) Responsible Consumption and Production, (13) Climate Action, (14) Life Below Water, (15) Life on Land, (16) Peace, Justice, and Strong Institutions, and (17) Partnerships for the Goals.

Setting the MDGs and the SDGs side by side one sees where the MDGs transformed and became the SDGs (Figure 1). It is also possible to see the incorporation of the pillars of sustainability, but there are a few SDGs that are not directly developed from an MDG. Kumar states that the first seven SDGs are an expansion of the MDGs while SDGs 8: Decent Work and Economic Growth; 9: Industry, Innovation, and Infrastructure; and 10: Reduced Inequalities are focused on inclusiveness and the last seven SDGs focus on sustainability (here meaning environmental sustainability) and urbanization (Kumar, Sanjiv, et al.), however, I would argue that all SDGs with the exception of SDGs 10: Reduced Inequalities and 16: Peace, Justice, and Strong Institutions, are an expansion of the MDGs. As depicted in Figure 1, MDG 1: Eradicate Extreme Poverty and Hunger was split into two SDGs and quite possibly a third - No Poverty (1), Zero Hunger (2), and Responsible Consumption and Production (12). MDG 2: Achieve Universal Primary Education transitioned into SDG 4: Quality Education to continue the progress of ensuring primary aged children, both male and female, are in school and staying in school. MDG 3: Promote Gender Equality and Empower Women transformed into SDG 5: Gender Equality while also being present in at least one of the

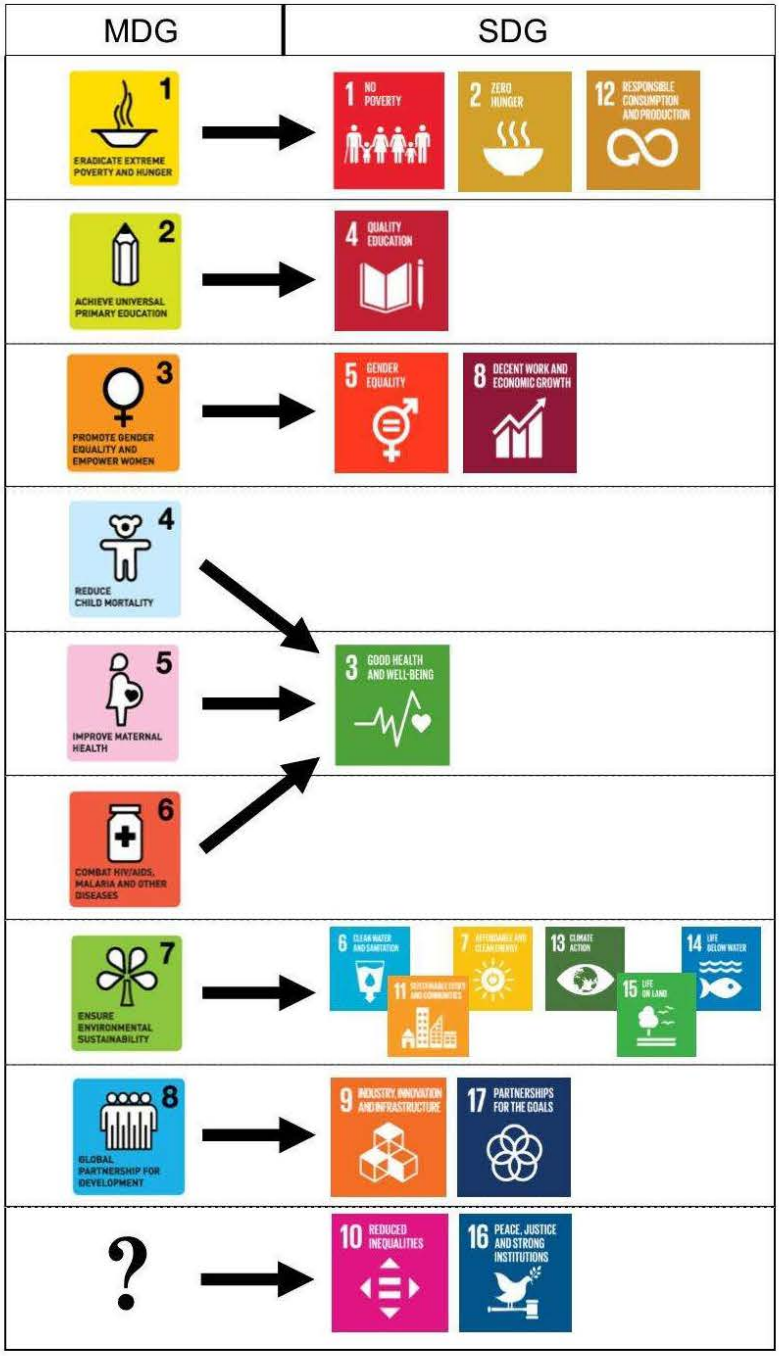

Figure 1: This graphic shows the transition of the Millennium Development Goals (left) to the Sustainable Development Goals (right). Some of the MDGs remained relatively the same, others were consolidated, and MDG 7: Ensure Environmental Sustainability in particular expanded into five separate SDGs with the addition of SDG 11 having originated from one of the targets of MDG 7. The origin of SDGs 10 and 16 are not found within the MDGs. Overall, the new SDGs encompass social, economic, and environmental goals as opposed to the primarily social focus of the MDGs.

targets of SDG 8: Decent Work and Economic Growth. The health MDGs were consolidated into a single SDG. SDG 3: Good Health and Well-Being encapsulates the targets and indicators of reducing child mortality (MDG 4), improving maternal health (MDG 5), and combating HIV/AIDS, malaria, and other diseases (MDG 6).

A Social Focus

The MDGs are heavily focused on the social aspects of sustainability. Out of the eight MDGs, seven of them focus on the social aspects of sustainability with MDG 1: Eradicate Extreme Poverty and Hunger branching into the economic aspect. The environmental pillar takes a back seat within the MDGs since only one MDG is dedicated to environmental sustainability. Though there is an expansion of environmental goals in the SDGs, the same general focus of people found within the MDGs is carried into the SDGs. As mentioned above, SDGs 1-5 (No Poverty, Zero Hunger, Good Health and Well-Being, Quality Education, and Gender Equality, respectively) and parts of 8 and 12 (Decent Work and Economic Growth, and Responsible Consumption and Production, respectively) all fit into the same social realm of MDGs 1-6 (Eradicate Extreme Poverty and Hunger, Achieve Universal Primary Education, Promote Gender Equality and Empower Women, Reduce Child Mortality, Improve Maternal Health, and Combat HIV/AIDS, Malaria, and Other Diseases, respectively). MDG 8 transitioned into SDG 17: Partnerships for the Goals which keeps the same ideas MDG 8 promoted working with our neighbors to meet all of these goals within fifteen years, therefore falling under the social pillar as well. MDG 8 also gave way to SDG 9: Industry, Innovation, and Infrastructure, another socially oriented goal, since the last target for this MDG had

aimed to "make available benefits of new technologies, especially information and communications" which is what SDG 9 also tries to accomplish ("United Nations").

So what about other socially focused SDGs? According to the MDGs and the 2030 Agenda, SDGs 10: Reduced Inequalities and 16: Peace, Justice, and Strong Institutions' genesis came from observations of what was still happening in the world. World leaders recognized that even though there had been progress in driving out poverty and eliminating hunger in many countries, the most vulnerable peoples were still facing inequalities and many were still at risk of being mistreated or even murdered. This is where we get SDG 10 and 16. These goals aim to ensure equal opportunities, eliminate discriminatory laws, and end abuse, exploitation, and trafficking while "promot[ing] the rule of law at the national and international levels and ensure equal access to justice for all' (Assembly, 25). These two goals ultimately fall into the social pillar of sustainability emphasizing Ban Ki-Moon's desire to make the SDGs more inclusive and more to Kumar, et al.'s point of a "new, people-centered, development agenda" (Kumar, Sanjiv, et al.).

Development of Environmental Goals

In viewing the progress of the social MDGs, world leaders recognized a significant gap in the progress and efforts regarding the environment. When forming the SDGs, a new focus was given to the environment to narrow the gaps in progress and to try to distribute more evenly the advancements made in all pillars of sustainability. MDG 7: Ensure Environmental Sustainability is the MDG that has seen the most expansion in the transition from the MDGs to the SDGs. MDG 7 had "too limited a coverage of environmental sustainability issues, and omit[ted] many important topics concerned with

arid and semi-arid, oceanic, mountain, grassland, and arctic ecosystems, among others" (Alcamo, et al., 10). It did not address the driving forces of environmental problems and the targets and indicators were difficult to measure while some were unclear in their definitions (Alcamo, et al., 10). In creating new environmental goals for the SDGs, there needed to be a more holistic approach; there needed to be a link to the other MDGs while also incorporating the social and economic pillars of sustainable development (Alcamo, et al., 10-11).

In 1987, the UN came up with a definition for sustainable development. It is "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (Brundtland Report). This definition was created in the Brundtland Report, more commonly known as *Our Common Future*, and the same definition is still used today, often being used to define sustainability in general. Sustainability is not just about environmentalism, but rather improving environmental AND social and economic aspects of our world. Ideally, the progress made in each of these pillars will help each of the other two pillars. With there being a social justice aspect at the core of the MDGs and SDGs while realizing the detrimental impact the economies of the world tend to have on the environment, priority was given to making more environmentally focused SDGs rather than the other two pillars which were present within the MDGs.

In the UN Environmental Program's Post-2015 Discussion Paper 1, four points were laid out to be considered when trying to embed the environment into the SDGs: (1) new goals and targets might need to pick up the slack of MDG 7, (2) there needs to be a wider range of environmental sustainability topics, including emerging issues; plus, they

need to connect to the other areas of sustainable development i.e. social justice and economic progress, (3) the new goals should address the driving forces of environmental problems rather than the problem itself, and (4) make sure the targets and indicators are measurable (Alcamo, et al. 10-11). Keeping this in mind, member-states of the UN expanded MDG 7 to six environmentally focused SDGs - 6: Clean Water and Sanitation; 7: Affordable and Clean Energy; 11: Sustainable Cities and Communities; 13: Climate Action; 14: Life Below Water; 15: Life on Land - that include aspects of the social and economic realms.

When analyzing the environmental SDGs, four of the six goals - 6: Clean Water and Sanitation; 7: Affordable and Clean Energy; 11: Sustainable Cities and Communities; and 13: Climate Action - focus on the built environment and the driving forces behind issues we see in our natural environment and the other two goals - 14: Life Below Water and 15: Life on Land - focus solely on the natural environment. When considering the gaps left behind from the MDGs it was brought to light that the poor were still being affected. Across the globe, "poor people's livelihoods are more directly tied to natural resources, and as they often live in the most vulnerable areas, they suffer the most from environmental degradation" (Nations, 8). In order to have healthy human beings, we must have a healthy planet whose plants and animals are not poisoned with pesticides and plastic and whose environments we live in are not polluted with harmful gases and toxins. In terms of the environment, "Global emissions of carbon dioxide [had] increased by over 50 per cent since 1990. Addressing the unabated rise in greenhouse gas emissions and the resulting likely impacts of climate change, such as altered ecosystems, weather

extremes and risks to society, remains an urgent, critical challenge for the global community" (Nations, 8).

In order to tackle some of the risks posed to society, SDGs 6, 7, 11, and 13 work towards cleaning up the built environment and making it a more livable place for humans. Goal 6 aims to provide clean drinking water to all, improve sanitation levels where there is little to no sanitation practices, and protect and restore water-related ecosystems. As of 2017, there are still over 701 million people who practice open defecation which can cause serious problems if their waste gets into the drinking water ("Progress of Goal 6 in 2019"). Since most areas in which this practice still occurs do not have piped drinking water or a proper sewage system, the risk for health issues increases. Imagine a place without piped drinking water or plumbing. People in your community practice open defecation and then a rain storm hits and washes the human waste into the nearest creek where most people tend to get their water. Not only does this affect the water and the organisms within the water, but it affects the people who depend on that water and can later cause health issues for the individuals using the polluted creek. Goal 7 aims to provide affordable sustainable energy across the globe by switching from fossil fuels to renewable energy sources such as solar and wind. This shift in energy sources will cut down on greenhouse gas emissions since the energy sector currently produces about 60 percent of greenhouse gases and the change in energy sources will also generate about 10 million jobs by 2030 ("Goal 7: Affordable and Clean Energy"). Therefore, though SDGs 6 and 7 are concerned with cleaning up the environment, they have a social and slight economic focus.

I would also argue that SDG 11 got its start through the environmental goal of the MDGs (MDG 7) though it mainly focuses on infrastructure of cities and what people live in and around. If you look at the first target of SDG 11 it aims to upgrade slums and work on building safe and affordable housing (Assembly, 21). Looking back at MDG 7.D, this target aims to "achieve, by 2020, a significant improvement in the lives of at least 100 million slum dwellers" ("United Nations Millennium Development Goals"). So though SDG 11 has ancestry within the environmental MDG, it was mainly created around the idea of creating more sustainable and livable conditions for all, therefore, taking on more of the built environment aspect rather than the natural environment.

Turning to SDG 13: Climate Action, one might be tempted to automatically place this with goals focused on the natural environment, but when you take a closer look, it takes on more of a societal aspect and therefore considers more of the built environment. Climate change is a readily debated topic in today's world. Given the fact that the earth has a natural warming phenomenon, the debate really comes down to whether humans are enhancing the rate at which the earth warms - a concept I find to be missing from many of the so-called "debates" on climate change. Though climate change itself is about the natural environment, Climate Action looks at the bigger picture. SDG 13 looks not just at climate change, but more so the climate crisis and the driving forces of what is causing the accelerated levels of climate change we have been experiencing. With this, the focus is turned back to humans and how we can mitigate and adapt to our changing climate and what steps we can take to limit our impact on our natural and in turn, built environment.

SDGs 14: Life Below Water and 15: Life on Land are the two environmental SDGs focused on the natural environment. In other words, these two SDGs turn to the

outdoors and that which humans do not always interact with. SDG 14: Life Below Water aims to conserve the water sources here on Earth as well as all organisms that live in the water whether it's a river, lake, ocean, etc. For example, SDG target 14.6 states, "By 2020, prohibit certain forms of fisheries subsidies which contribute to overcapacity and overfishing, eliminate subsidies that contribute to illegal, unreported and unregulated fishing and refrain from introducing new such subsidies, recognizing that appropriate and effective special and differential treatment for developing and least developed countries should be an integral part of the World Trade Organization (WTO) fisheries subsidies negotiation" (Assembly, 24). If we look carefully at this one specific target we see the three pillars of sustainability. The environmental pillar is easily identified since the SDG is focused on the natural environment and with this specific target - fish. The social pillar is addressed here by mentioning that the implementation of this target (14.6) will probably look different in various countries, specifically the developing and least developed countries and that this should be taken into account when the WTO negotiates fisheries subsidies. The pillar that might be hardest to identify within target 14.6 is the economic pillar. Target 14.6 does not blatantly state the effect implementing this target will have on the economy, but there are several populations of people, like those on Lake Malawi, who make their living via fishing. If there are no fish left in the waters, how are these people supposed to make a living and provide for themselves and/or their families? By implementing SDG 14 and thereby target 14.6, countries will inherently ensure people who rely on fishing make a living and still have a job. SDG 15: Life on Land has a similar overall goal in which to protect and conserve terrestrial ecosystems. When reading through the targets for SDG 15 all three pillars of sustainable development are

present though the economic pillar shows through more than the social pillar, opposite of SDG 14. Targets 15.6, 15.9, 15.a, and 15.b all mention finances or the global market in one way or another (Assembly, 25).

Economic SDGs

If you are wondering where the economic focus is amongst all SDGs you only need to look a little closer. Besides two goals - SDG 1: No Poverty and SDG 8: Decent Work and Economic Growth - there are no other SDGs that explicitly mention economics in their title or icon. When looking at the icons of the SDGs it is easy to identify the environmental and socially focused goals, but what about the economic goals? The economic, social, and environmental pillars of sustainability are intertwined and if you were to take a look at the targets of each SDG, like we did with SDG 14 and 15, you would see that economics is mentioned in at least one target per goal whether that relates to "economic resources" (SDG 1), "financial resources" (SDG 2), "scholarships" (SDG 4), or just being "affordable" (SDG 6, 7, 9) to list a few (Assembly, 15, 17-21). According to Sachs, the SDGs were set out to guide the world's economic diplomacy since "the world economy is not only remarkably unequal but also remarkably threatening to Earth itself" (Sachs, 2). This makes a point in saying that we need to better the economy in order to protect the earth and its resources, but what good is the economy if there are no resources to utilize and feed the global market?

The Project

For my project I wanted to know which SDGs professionals and college students interested in or who work in the ecological and environmental fields thought was most important to sustainable development. Salvia, et al. surveyed professors and researchers

worldwide to determine which Sustainable Development Goals were being pursued in each region of the world. They found that the SDGs that were selected were influenced due to challenges present within each region. Overall, SDGs 4, 11, and 13 were preferenced most often with Goal 13 having the most research being done for it throughout the world (Salvia, et al., 846). Out of the 266 participants in the study 37 of them were from North America and these participants researched SDGs 4, 11, 13, and 15 the most with Goal 13 showing the most prominence (41%) followed by Goals 11 (35%), 15 (30%), and 4 (27%) (Salvia, et al., 844). Through their analysis of the other regions, Salvia, et al. found that there is a correlation between location, specifically what challenges and problems are present among the countries in a given region, and the areas of interests shown through the regions' experts' research. This led me to question whether the same was true within regions of the United States. What do practitioners say are the most important SDGs? What do college students say are the most important SDGs?

Having grown up in the greater Los Angeles area, environmental practices such as recycling, composting, and being mindful of water and energy usage is second nature, but when I came to Ohio for college this was not the case for many people. While sitting in an engineering course focused on the sustainability and economics of systems, the issue of recycling came up in discussion. There were a total of six students, including myself, in this class and half of us were from states that have redemption values on plastic bottles and aluminum cans. You can return these bottles and cans to certain grocery stores or recycling stations and get money in return. The amount of money you receive is determined based on what types of recyclables you return, as well as the size of the

recyclables ("Beverage Container Recycling"). The other three students in the class and the professor who were from Ohio and the Midwest had no idea what we were talking about. This got me thinking, why is there such a difference in recycling practices in different states? Is it solely a location difference or is it something more? Do cultural habits within specific states and specific cities influence environmental practices such as recycling?

Los Angeles v. Dayton

I then began to look at the two locations I have lived in - Los Angeles, California and Dayton, Ohio. Both are very different cities, with Los Angeles being a huge metropolitan hub of about four million people and Dayton a more modest city in comparison with only about 140,600 people ("U.S. Census Bureau"). In comparing the two further, Los Angeles, or rather LA County, is a coastal community with the Pacific Ocean just west of where the land stops. Dayton, on the other hand, is a landlocked community with no large body of water on any given side, but it does have the Great Miami River running straight through the city. Both have diversity within their populations and both face issues within their societies such as the large homeless population in Los Angeles and rising tensions due to immigrant communities while Dayton has a food desert on the west side of the city. A food desert is a place where people typically of low socio-economic status reside and who live more than a mile away from a supermarket making it a constant struggle to put fresh food on the table (Sweigart). I came to realize that though diversity is present between the two communities, each of them face different challenges regarding the societal structure put in place many years ago. When I compared the difference of the two cities in terms of

environmental practices and society it occurred to me that their local governments and citizens might prioritize which issues they address. This led me to my project. Does one's location affect which SDG(s) they think is most critical to sustainable development? Does one's vocation impact which SDG(s) they select as most crucial? Is there a difference in the ranking of social justice, economic progress, and environmental protection in Los Angeles and Dayton and does this match the SDG selection? To simplify the study, I decided to focus on groups in Dayton and LA made up of college students and professionals that have an interest or are involved with ecological and environmental work.

Given that both the students and professionals are interested in the environment, one might assume they would favor the environmental SDGs over the social and economic, but is this really the case? I hypothesized that the group from Los Angeles, both college and professionals, would favor the environmental goals followed by social then economic goals due to the fact that it sits right next to the Pacific Ocean and the human impact on the environment is easily seen, for example, at beaches. Social goals fell second due to the diversity of peoples that live within Los Angeles and today's political climate. As of 2017, there were 220 languages spoken in LA alone and 44% of residents speak a language other than English at home (Dolan). The economic goals were hypothesized as last due to people's proximity to the ocean and interactions with many different types of people on a daily basis taking priority. As for the other focus group, Daytonians were hypothesized to favor the social goals followed by the economic and environmental goals due to the social stratification present in the city of Dayton. Though a river does run through the city and an aquifer sits below it, the Dayton group was

thought to have chosen environmental goals as last because most people do not consider their waste or daily activities to influence the river or aquifer. That being said, more people are becoming aware of the impact the Great Miami River has on the city and its people and what this means for social justice in Dayton.

Methods

I then came up with a sixteen-question survey that asks several questions on one's previous knowledge of the SDGs, which SDG(s) they think is most critical to sustainable development, how they might rank the pillars of sustainability, and lastly, how close they live to a large body of water, forested area, or a nature reserve, state park, or national park. I initially was only going to send the survey to people who are interested or involved with the environment, but then decided to have a presentation prior to the survey to give a brief overview of what the SDGs are and how they came about. The idea for the presentation stemmed from a conversation I had with a wildlife technician who I thought being in the environmental field would have known about the SDGs, but they did not. I had to take a step back and realize that maybe not everyone I had planned to survey knew what an SDG even was. The presentation itself was a total of about 20 minutes long. In order to get an understanding of what people already knew I had participants take the first part of the survey after the introduction which included demographic information and six questions asking about their general knowledge regarding the SDGs. I then went through the presentation detailing what sustainable development is, what the pillars of sustainability are and what they mean, and how the SDGs came about. Next, I went through each of the seventeen SDGs in brief detail describing about one to three targets and the reason for why that goal existed. The presentation concluded with the five P's -

people, planet, prosperity, peace, and partnership - as an emphasis to show that though the goals while individually are unique, work together to create a framework for sustainable development of all things ("Pathway to Sustainable Health"). After viewing the presentation, participants would then finish the rest of the survey which included four questions about the SDGs and sustainable development, four questions about location and proximity to large bodies of water and forested areas, and two additional questions about their involvement with environment or sustainability work and whether they think their location and involvement influenced which SDGs they selected as most important to sustainable development.

Results

The data showed that regardless of where you live, Dayton or Los Angeles, the majority of people favored environmental and social goals over economic goals (Figure 2). This shifted the way I had originally thought about what the data would show. Though the California sample was small, their data still showed the environmental protection pillar was viewed as most critical to sustainable development (Table 1.1). In analyzing the number of selections per pillar for most critical to sustainable development, the social justice pillar falls second followed by economic growth as third. However, when looking at which pillar was selected as second or tied for second, the environmental pillar remains the pillar with the highest number of selections and economic growth remains as third and least selected. The same is seen with the data gathered from Ohio though it shows that even when looking at which pillar of sustainable development was chosen as second or tied for second, the pillar of social justice was selected and economic growth was chosen as third most important to sustainable development (Table 1.2).

When choosing the top five SDGs the Ohio group selected the most important as 13: Climate Action, 6: Clean Water and Sanitation, and 4: Quality Education tied with 12: Responsible Consumption and Production. The California group selected SDG 13: Climate Action as most important, followed by a tie for second between SDGs 6, 10: Reduced Inequalities, and "ALL", while SDG 17: Partnerships for the Goals ranked as third most important (Table 2.1). Of the top five SDGs, the SDG thought to be most important to sustainable development was then selected. The Ohio group chose SDG 13 followed by SDGs 4 and 12, respectively. The California group chose SDG 6 as the most important SDG out of the top five, followed by a tie between SDGs 16: Peace, Justice and Strong Institutions and 17. The third most selected SDG resulted in a tie between SDG 5: Gender Equality and 13 while 10% indicated no answer (Table 2.2).

California	1st	1st/tied 1st	2nd	2nd/tied 2nd	3rd
Economic	1	1	1	1	5
Environment	3	5	3	3	0
Social	2	4	1	2	2

Table 1.1 Participants who identified California as their place of residence selected the environmental protection pillar as most critical to sustainable development followed by social justice and economic progress though the environmental pillar is selected as second most important when looking at the actual placements of each pillar per selection. Three participants said all pillars are equally important.

Ohio	1st	1st/tied 1st	2nd	2nd/tied 2nd	3rd
Economic	7	8	8	15	42
Environment	36	47	13	13	5
Social	10	22	25	32	11

Table 1.2 Participants who identified Ohio as their place of residence selected the environmental protection pillar as most critical to sustainable development followed by social justice and economic progress. Seven participants said all pillars are equally important.

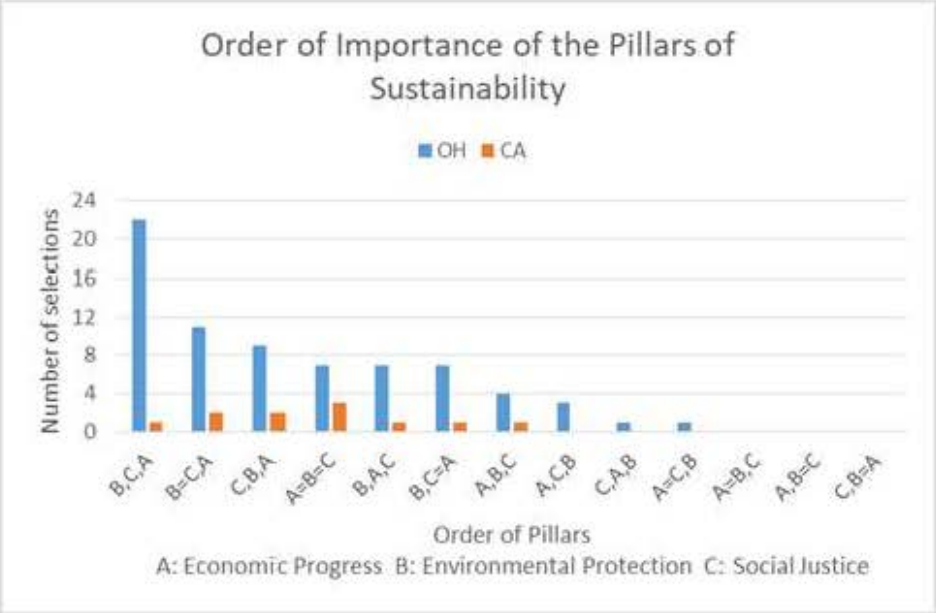

Figure 2: Participants from Southern California and Ohio ranked the pillars of sustainability from most to least important. They could rank them as "all equal" seen here as A=B=C. A represents Economic Progress, B represents Environmental Protection, and C represents Social Justice.

Locality	SDG		
	1st	2nd	3rd
CA	13	6,10,ALL	17
OH	13	6	4,12
Both	13	6	4,12

Table 2.1 (left): Participants were asked to rank their top five SDGs. They could mark "All are equally important" represented here by "ALL". The top three most selected SDGs are shown here. The California group selected SDG 13 the most, followed by a tie between SDGs 6: Clean Water and Sanitation, 10: Reduced Inequalities, and ALL. SDG 17: Partnerships for the Goals had the next highest number of selections thus being placed as third. The Ohio group favored SDG 13: Climate Action, SDG 6, and lastly, a tie between SDG 4: Quality Education and SDG 12: Responsible Consumption and Production. Combining both datasets resulted in an overall ranking of SDG 13, 6, and a tie between SDG 4 and 12.

Locality	SDG		
	1st	2nd	3rd
CA	6	16,17	5,13,NA
OH	13	4	12
Both	13	4	12

Table 2.2 (left): Participants were asked to select the most critical SDG to sustainable development. They could say "All are equally important" represented by the word "ALL". The top three most selected SDGs are shown here. The California group selected SDG 6: Clean Water and Sanitation the most followed by a tie between SDGs 16: Peace, Justice and Sanitation and 17: Partnerships for the Goals. The 3rd most selected SDG is a tie between 5: Gender Equality and 13: Climate Action while one person did not indicate an SDG (NA). The Ohio group chose SDG 13 as the most important SDG for sustainable development followed by SDGs 4: Quality Education and 12: Responsible Consumption and Production respectively. To consider all practitioners and college students, the two datasets were combined which resulted in SDGs 13: Climate Action, 4: Quality Education, and 12: Responsible Consumption and Production being chosen the most often.

If we look at participants' proximity to large bodies of water, forested areas, or state and national parks and nature reserves we get a similar outcome. Regardless of the top five or the top most critical SDG to sustainable development, SDG 13: Climate Action, still holds as most important to sustainable development for those who are within 15 miles of a body of water, forest, or park. Of the top five, the SDG deemed the second most important to sustainable development resulted in a tie between SDGs 4: Quality Education, 6: Clean Water and Sanitation, and 12: Responsible Consumption and Production while SDG 16: Peace, Justice, and Strong Institutions came in third (Table 3). The number of selections from people who live farther than fifteen miles away from a body of water, forest, or park were deemed insignificant because the majority of participants indicated they lived within 15 miles of one of the listed geographic features.

		Rank top 5 SDGs			Top SDG		
		1st	2nd	3rd	1st	2nd	3rd
<5 miles	Water	13	6	4	13	6	4,16
	Forest	13	6	12	13	4	16
	Parks	13	6,12	7	4	6,12	3,13,16
		13	6	?	13	6	16
5-15 miles	Water	6	4, 10,12	7,13	13	4	12
	Forest	6	13	14	13	4,6,12	1,9
	Parks	13	6	4	13	12	4,16
		6	?	?	13	4,12	?
both		13	6	4,7	13	4,6,12	16

Table 3: Participants ranked their top five SDGs and then selected the top most important SDG to sustainable development from among the top five. Each time they were able to select "All are equally important". This is based on how close people live to bodies of water such as rivers, lakes, or oceans; large forested areas; and national or state parks, or nature reserves. Four distances were available to select: (a) very close [<5 miles], (b) relatively close [5-15 miles], (c) some distance away [15-25 miles away], and (d) far away [25+ miles]. Regardless of distance, SDG 13: Climate Action comes out as most important both in selecting the top five most important SDGs to sustainable development as well as the top most important SDG to sustainable development. SDGs 4: Quality Education, SDG 6: Clean Water and Sanitation, and SDG 12: Responsible Consumption and Production are still present.

Vocation in this project is defined by age and years of completed education combined. A student is identified as someone between the ages of 18-24 with less than or equal to 6 years of completed college education. Practitioners are anyone 25 years old. Years of completed college vary for practitioners as some indicated zero or did not indicate their level of completed college years in the survey. Students, who account for thirty percent of all responses, indicated the following SDG out of the top five most selected as most important to sustainable development: SDG 12: Responsible Consumption and Production and 13: Climate Action, 4: Quality Education and 16: Peace, Justice, and Strong Institutions, and 6: Clean Water and Sanitation and 17: Partnerships for the Goals (Table 4.1). Practitioners indicated SDGs 13, 4, and 6, respectively (Table 4.1). When comparing which top five SDGs most important for sustainable development there is a slight variation among the student responses. Among students SDGs 13, 10, and 6 are the top three most important SDGs within the top five, whereas practitioners keep to the trend that has been seen with SDGs 13, 6, and 4 being the top three most important SDGs to sustainable development (Table 4.2).

Looking at the pillars of sustainability, there is a slight difference between students and practitioners of the environmental fields. Both consider Environmental Protection as the most important pillar for sustainable development while Economic Progress is viewed as least important, but students consider each pillar equally important before they consider Social Justice to be more important than Environmental Protection and Economic Progress (Figure 3). Overall, both students and practitioners thought Environmental Protection then Social Justice and finally Economic Progress was the

order of importance for the pillars of sustainability as they pertain to sustainable development (Tables 5.1 and 5.2).

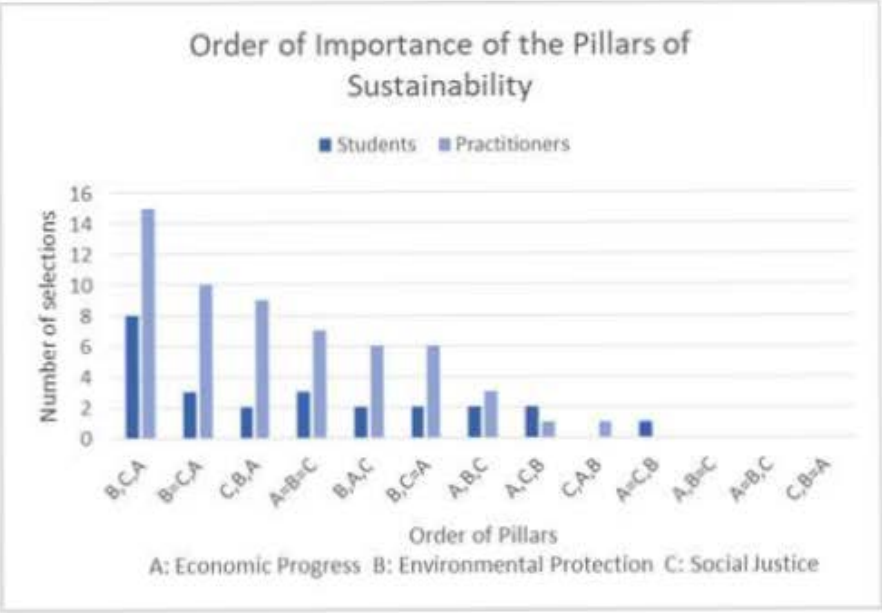

Figure 3: Participants ranked the pillars of sustainability from most to least important, here broken down by students and practitioners. They could rank them as "all equal" seen here as A=B=C. A represents Economic Progress, B represents Environmental Protection, and C represents Social Justice. There is a slight difference between which pillars have priority when students are compared to practitioners.

SDG	Students	Practitioners
1	1	1
2	0	0
3	1	3
4	3	8
5	1	0
6	2	6
7	1	1
8	0	0
9	0	3
10	0	3
11	0	1
12	5	4
13	5	15
14	1	1
15	0	1
16	3	5
17	2	3
ALL	0	1
NA	0	2

Table 4.1 (left): The most important SDG was selected from among the top five previously selected SDGs. The same top SDGs were selected by students (18-24 years of age with less than or equal to six years of completed college) and practitioners (age 25+) in Ohio and California. **Table 4.2 (right):** Slight variation in the top five SDGs selection is seen here between students and practitioners. Students selected SDG 10: Reduced Inequalities as the second most important SDG to sustainable development when selecting their top five SDGs most critical to sustainable development.

SDG	Students	Practitioners
1	5	13
2	2	16
3	5	11
4	7	20
5	1	11
6	10	27
7	7	16
8	3	5
9	0	5
10	11	15
11	6	11
12	8	19
13	13	29
14	3	6
15	2	9
16	8	15
17	5	8
ALL	6	6
NA	0	0

STUDENTS	1st	1st/tied 1st	2nd	2nd/tied 2nd	3rd
Economic	4	5	2	4	13
Environmental	12	15	4	4	3
Social	2	6	10	12	4

Table 5.1 (above): Students ranked the pillars of sustainability resulting with Environmental Protection showing the most importance to achieving sustainable development followed by Social Justice then Economic Progress. Table 5.2 (below): Practitioners ranked the pillars of sustainability resulting with Environmental Protection showing the most importance to achieving sustainable development followed by Social Justice then Economic Progress.

PRACTITIONERS	1st	1st/tied 1st	2nd	2nd/tied 2nd	3rd
Economic	4	4	7	13	34
Environmental	27	37	12	12	2
Social	10	20	16	22	9

Discussion

Location was analyzed in two different ways, the first being state locations and the second being proximity to natural features. All responses in which Ohio was indicated as the place of residence (81%) were included in the data analysis and all responses in which California was indicated as the place of residence (11%) were included since they span both the Los Angeles and Orange County counties of Southern California. California only counted for a small portion of responses because I was based in Dayton, OH for the majority of the duration of this project and finding groups in Southern California that would allow me to present and survey them was difficult. As part of the demographic section, I asked participants to indicate their current place of residence and their hometown. The place of residence is defined in this project as the current city in which the participant lives whereas hometown is where participants spent most of their childhood. There were twelve states in which participants claimed their hometown to be versus six states for place of residence. For simplicity's sake, I analyzed location based off of the place of residence rather than hometowns. I received a total of 89 responses and

based on their place of residence, only 10 were from California and 73 were from Ohio which made up our two datasets. Four participants listed their place of residence as either Illinois, Kentucky, Massachusetts, or North Dakota while two others did not write down their place of residence; these six were ruled as outliers. Only the data from California and Ohio were used since those were the two focal locations for this project and they made up approximately 92% of all responses.

Another way location was analyzed through the survey was by participants' proximity to large bodies of water (rivers, lakes, oceans, etc.), large forested areas, and reservations, state, or national parks. The responses to these natural features questions may not portray exact ranges of distance since most people do not typically know how close they are to each feature off the top of their head. They have estimates as to how close they are to each natural feature, but not exact distances. Either way, ranges were given on the survey to indicate one's approximate distance from each natural feature. Each set of responses to the natural features questions were then broken down and divided up based on the pre-selected ranges (a) very close [<5 miles], (b) relatively close [5-15 miles], (c) some distance away [15-25 miles], and (d) far away [25+ miles]. The selection of SDGs were separated into each of their respective ranges per feature and totaled. Most responses were within the "very close" and "relatively close" ranges and so these were used for the main part of the data analysis regarding proximity to natural features.

So does location impact which SDGs people in the environmental fields consider most important? Yes and no. When asked if one's location and vocation affected which SDGs they selected 70% of participants said yes while 26.5% said no. Three people did

not provide an answer to the question. Based on the responses I received, everyone identified SDG 13: Climate Action regardless of location - state or proximity to natural features - as the SDG most critical to sustainable development whether by selecting the top five most critical SDGs or selecting the most critical SDG from among the top five. However, there is a difference between the California and Ohio datasets regarding which SDGs were selected as the top five most critical for sustainable development as well as the top SDG most critical to sustainable development among the top five. The California dataset selected, in no particular order, SDGs 5: Gender Equality, 6: Clean Water and Sanitation, 10: Reduced Inequalities, 13: Climate Action, 16: Peace, Justice, and Strong Institutions, 17: Partnerships for the Goals, and ALL (Tables 2.1 and 2.2). The Ohio dataset selected, in no particular order, SDGs 4: Quality Education, 6, 12: Responsible Consumption and Production, and 13 (Tables 2.1 and 2.2). More repetition of the same selection of SDGs is seen with the Ohio dataset because it was a larger group whereas the California dataset was small, and had there been more responses from California, there may have been a different outcome. Though given California's progressive tendencies the likelihood that environmentalists in California would favor similar SDGs is high. That being said, both datasets favor SDGs focused on the built environment (SDGs 6 and 13) and social aspects (SDGs 4, 5, 10, 12, 16, and 17) indicating that even though the environmentalists in both states favor environmental goals, the environmental goals they selected still revolve around the human component and how the environment affects people and vice versa.

In regards to living near natural features such as rivers, lakes, forests, or parks, there is not much difference in which SDGs were selected as most important to

sustainable development. Again, SDG 13: Climate Action was chosen as most critical to sustainable development. The SDG that was selected as second most important might change or there might be a tie, but the same SDGs - 4: Quality Education, 6: Clean Water and Sanitation, and 12: Responsible Consumption and Production - still appear among the top selected SDGs most critical to sustainable development (Table 3). SDGs 7: Affordable and Clean Energy and 16: Peace, Justice, and Strong Institutions also make an appearance in the natural features data though not chosen as often, but it still keeps in line with the focus of the previously selected SDGs of the built environment (SDG 7) and socially focused goals (SDG 16).

Vocation is indicated by which group or organization participants belonged to as well as a combination of age and completed college education. I purposefully presented and surveyed those involved in environmental organizations to determine whether those involved with environmental organizations favored environmental SDGs or others as most important for sustainable development. The groups are based on whether the participant is a student or practitioner. A student is anyone 18-24 years old with less than or equal to six years of complete college education while practitioners are anyone 25 years or older with any level of completed college education.

As far as vocation goes, vocation does have some impact on which SDGs are viewed as the most important for sustainable development. The vocation data reveals that there is a slight variation of SDGs between students and practitioners when they selected their top five SDGs most critical to sustainable development. Again, SDG 13: Climate Action proves most important to sustainable development among students and practitioners. However, students selected SDG 10: Reduced Inequalities before selecting

SDG 6: Clean Water and Sanitation (Table 4.2). Since most students were from Ohio and the University of Dayton, Dayton, OH which emphasizes working for "the common good", it is no surprise that a socially focused goal (SDG 10) ranked higher in importance than an environmental goal (SDG 6). We see a similar impact when students selected the top SDG from the top five they had already selected. Because there is more priority of the social goals among students, more socially focused goals appeared among those selected as the top SDG most critical to sustainable development (Table 4.1). Practitioners kept to the same trend that was seen in the natural features data with SDG 13 as most important followed by SDGs 6 and 4, respectively (Table 4.2). SDGs 4 and 6 switched places in order of importance when practitioners selected which singular SDG of their top five is most critical to sustainable development (Table 4.1).

Overall, my data shows different SDGs are being focused on than the data Salvia, et al. found regarding North America. Salvia, et al. found SDG 13: Climate Action was studied the most throughout the world among practitioners, but in North America SDGs 13, 11: Responsible Cities and Communities, 15: Life on Land, and 4: Quality Education were the top most researched SDGs (Salvia, et al., 844). My data shows that SDGs 13, 4, 6: Clean Water and Sanitation, and 12: Responsible Consumption and Production were the SDGs most selected while 13 held onto the number one spot. However, my question and Salvia, et al.'s questions were different in that they looked at which SDGs were being researched and studied by practitioners while I looked at which SDGs people considered to be most important for sustainable development.

In regards to the pillars of sustainability it seems as if location does not affect which pillar takes precedence over the others. The Ohio dataset clearly shows the

environmental pillar as most important followed by the social and economic pillars, respectively. The California dataset shows the same order of pillars, but due to the small amount of responses is not truly comprehensive of what environmentalists in Southern California view as the most important pillar of sustainability. Looking at the SDGs with high frequency between the two datasets, the environmental and social pillars are present which match the results regarding the pillars of sustainability. Given that 30% of all responses came from students and 81% came from Ohio, it is not a surprise that SDGs 4: Quality Education, 6: Clean Water and Sanitation, and 12: Responsible Consumption and Production have a high presence among the Ohio dataset since there is an emphasis at the University of Dayton to work for the common good. Also, since all responses came from people who work or volunteer as part of an environmental organization, the presence of environmental SDGs was expected, however, SDGs 13: Climate Action and 6 while they are environmental goals, focus on the built environment incorporating a more human aspect to the environment. This leads me to believe that even though environmental goals were chosen, people still gravitate towards wanting to create a cleaner, more just world for people, not necessarily for the betterment of the environment itself. Had SDGs 14: Life Below Water and 15: Life on Land appeared with higher selection rates, then I could argue that environmentalists favor goals that focus on the natural environment and want to create a cleaner, more just world for the betterment of the environment, but this was not the case.

Vocation on the other hand does have some influence on which pillar of sustainability is viewed as most important. Both students and practitioners considered the environmental pillar most important followed by the social then the economic pillar

keeping in line with what the location data showed. However, there is slight variation in which order of pillars was selected the most, for example, students considered all pillars to be equally important before they considered social justice to hold more precedence than environmental protection and economic progress (Figure 3). Students also consider that environmental protection and social justice hold equal importance over economic progress to be equally important as all pillars are equally important, whereas practitioners selected environmental protection and social justice to hold equal importance over economic progress before they selected social justice to be most important over the other two pillars *and* all pillars are equally important (Figure 3). Overall, both students and practitioners favor environmental protection the most followed by social justice and lastly, economic progress.

Conclusion

Overall, the environmental and social SDGs were selected as well as the environmental protection pillar as those most critical to sustainable development. Location has a small effect on which SDGs and pillar are viewed as most important while vocation has an effect on which SDGs are selected though the effect on pillar importance is small. This does not mean that students and practitioners in the environmental field do not see economics as unimportant, but rather that the environmental and social sectors need more attention. Sachs considers the world economy to be "remarkably unequal but also remarkably threatening to Earth itself" and while those in the environmental fields may acknowledge this, they have chosen to focus on goals related to the built environment in addition to socially focused goals (Sachs, 2). Instead of looking at the world economy and trying to fix the world's problems economically, people have turned

to the sources of impact i.e. those who are not being treated equally and the earth itself to determine what the problems facing them truly are in the sense of inequalities, poverty, hunger, deforestation, ocean acidification, war, human rights violations, and much more. My data shows that environmentalists, whether a student or practitioner, gravitate towards SDGs that draw on more of a human component while addressing the environment. This leads me to believe that these environmentalists and perhaps all who favor the SDGs focused on the built environment want to improve the condition of the natural environment so that they themselves could live better lives as humans. Theoretically, this is what sustainable development is trying to achieve - a better world today that can sustain human populations with Earth's current resources while ensuring there are enough resources for future human populations to utilize.

The data revealed that economics was not a priority among the environmentalists in the California or Ohio datasets or among students and practitioners, but in order to achieve the targets of the SDGs each dataset and group selected requires economic input. The SDGs fall short by way of addressing the importance of economic reform. In order to completely support the protection of the environment and creation of a more equal society, the economy has to adjust. In other terms, most everyone has to choose more equitable and environmentally friendly products and businesses to invest in. This will be more expensive upfront, but eventually the economy will work itself out to where the products its consumers are buying will become the less expensive option and will have no other choice but to switch its investments to more socially equitable and eco-friendly products. "Unless we combine economic growth with social inclusion and environmental

sustainability, the economic gains are likely to be short-lived, as they will be followed by social instability and a rising frequency of environmental catastrophes" (Sachs, 27).

Overall, one's location does not really affect which SDGs an individual thinks most critical to sustainable development. On the other hand, vocation does influence which SDGs an individual thinks most critical to sustainable development. All environmentalists agree that SDGs 13: Climate Action and 6: Clean Water and Sanitation need to be addressed while maintaining a social focus made clear by the commonality of SDGs 4: Quality Education and 12: Responsible Consumption and Production being selected. Surprisingly, environmentalists in both the Ohio and California datasets have a social awareness when it comes to the environment and how we as humans impact the environment which is why we see a social-environmental nexus present among the SDG and pillar data. The same can be said of students and practitioners, but the difference here lies within the selection of SDGs. Interestingly enough, students - given they are all trying to achieve a career in the environmental field and almost all of them attend the University of Dayton - decide to focus on social justice issues while economic stratification is clearly present within the city of Dayton. Why the data did not show more preference for the economic goals and pillar remains in question. Perhaps the students preference SDG 13 in a social justice light by recognizing the societal impacts of the climate crisis, while practitioners preference SDG 13 in an environmental light by recognizing the direct impact the climate crisis has on the different ecosystems of the world and how that in turn affects people.

This all leads me to question how people define the term sustainability since there is such a high prevalence of social SDGs in the data. Moving forward, it would be

interesting to see whether the other environmental SDGs, both built (SDGs 7: Affordable and Clean Energy and 11: Sustainable Cities and Communities) and natural environment (SDGs 14: Life Below Water and 15: Life on Land), show more prevalence in other states or areas as well as examining which SDGs specific communities are actively engaging with via projects and other initiatives. More research can be done to see if SDG 13 holds the same importance to those not in the environmental fields and which SDGs other fields are focusing on. Is it enough for different fields to focus on different SDGs to achieve the targets by 2030? Or does everyone need to work on every SDG in order to accomplish all targets by 2030?

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