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CLIMATE CHANGE AND SOCIAL JUSTICE IN CP: A THEMATIC ANALYSIS

By

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Abstract

Climate change is a significant problem facing today's world. Overwhelming evidence suggests that climate change will substantially increase over the next several decades. The adverse effects of climate change are known to be unevenly distributed among vulnerable and marginalized populations, primarily due to systems of inequity. Although CP has a strong history of working to eradicate inequity, climate change has not been included in the broader discourse on social justice within the field. Thus, little is known about how climate change is viewed by counseling psychologists and how it could be addressed by the field. Thematic analysis is used and resulted in six unique themes that are discussed. Implications for the field include (a) call to address climate change, (b) a proposed three stage model to aid in integrating climate change into CP, and, (c) a call to address systems of power and inequity within the field of CP.

Key words: climate change, CP, social justice.

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Chapter 1

Climate Change, Social Justice, and CP:

A Qualitative Analysis

Climate change is an insidious problem facing humanity (Crimmins et al., 2016; Pachauri & Meyer, 2014). Climate change is no longer only a problem for the future, it is now widely accepted as being "here" and "now," and the adverse effects of climate change are projected to substantially increase over the next couple of decades (IPCC, 2018). In fact, not only do more and more Americans view climate change as a problem, over 50% of Americans report currently experiencing some form of adverse impact as a result of climate change (Gallop, 2018). Unfortunately, the adverse outcomes of climate change have been found to most likely occur within communities who are either vulnerable to its effects (e.g., children and older adults) or communities who experience marginalization due to systemic forms of oppression (e.g., Black Americans; Crimmins et al., 2016; Pachauri & Meyer, 2014). As such, the effects of climate change are a current problem that would likely benefit from social justice intervention.

Social justice has been an essential component of CP's (CP's) core values (Gelso et al., 2014; Packard, 2009; Scheel et al., 2018) throughout the field's history (Deblaere et al., 2019; Gelso et al., 2014; Kim, 2019) and which has resulted in a wide variety of social justice initiatives (Fouad, 2006). Despite the strong commitments to social justice within the field of CP, little is known about what counseling psychologists think about climate change and how CP may address the adverse effects of climate change from within the field.

This study offers a glimpse at how climate change, social justice, and CP fit together. Using an exploratory thematic analysis (TA; Braun & Clarke, 2006), interviews with counseling psychologists were conducted regarding their experiences relating to climate change, social

justice, and CP. Before describing the present study, an overview on the guiding research on climate change and social justice in CP is provided.

Climate Change

Climate change is a significant problem in today's world. Three leading reports on climate change are the United States Global Change Research Program (USGCRP; Crimmins et al., 2016), Intergovernmental Panel on Climate Change (IPCC; Pachauri & Meyer, 2014), and American Psychological Association in collaboration with Eco-America (APA; Clayton et al., 2017). Together, they provide an exhaustive collection of research that demonstrate how vulnerable and marginalized communities are at a greater risk to negative effects of climate change. Across the three reports, the adverse outcomes of climate change were found to primarily occur along three main pathways: (a) physical impacts, (b) psychological impacts and (c) community health. Within each pathway, the adverse impacts of climate change were most often direct (i.e., related to a specific climate event with acute but often significant impact) or indirect (i.e., not related to a specific climate event with chronic, slow-building, and varying degrees of impact). In the following sections, an overview of the major themes that emerged from these reports is provided.

Adverse Health Outcomes

The adverse health impacts of climate change were found to primarily follow three pathways: (a) physical, (b) psychological, and (c) community. Despite the fact that vulnerable and marginalized communities are at a greater risk to these adverse outcomes (Clayton et al., 2017; Crimmins et al., 2016; Pachauri & Meyer, 2014), it is important to recognize that any person may experience an adverse impact from climate change. Before reviewing several of the

specific ways that marginalized and vulnerable communities are impacted by climate change, a broad overview of these pathways is given.

Physical Health

The pathways that climate change impact physical health are both direct (e.g., extreme weather events) and indirect (e.g., reduced air and water quality). Direct adverse physical health outcomes of climate change include events such as death and injury (Alderman et al., 2012), infectious disease (Perera, 2012), and disruption to health care systems during and immediately following an extreme weather event (Alderman et al., 2012). Indirect adverse physical outcomes of climate change are more slow-moving and often involved the break-down of systems and include events such as respiratory illness (Fann et al., 2016), disruption to fetal and childhood development (Perera, 2012), and reduced nutrition and food quality (Ziska et al., 2016).

Psychological Health

The pathways that climate change impact psychological health are also direct and indirect. The direct impacts of climate change are often related to extreme weather events and often include impacts such as psychological symptoms (e.g., anxiety, depression, acute stress, and post-traumatic stress disorder; Ali et al., 2017; Brown et al., 2017). However, direct impacts also include more broad psychological disturbances such as reduced well-being, grief and loss, and shock (Clayton et al., 2017). The indirect adverse psychological health outcomes of climate change were not associated with specific weather events but more broadly related to the interaction between psychological health and climate change. For example, even being exposed to climate change on social media was found to reduce well-being and was often associated with increased negative affect such as stress, anxiety, and depression (Crimmins et al., 2016), whereas general knowledge of climate change can lead to experiences such as helplessness, despair, fear,

and resignation (Moser, 2013). Furthermore, research has found that increasing ambient air temperature is associated with an increased rate of aggression (Anderson et al., 2012), mental health emergencies, and suicide (Lee, 2006), and is likely to exacerbate preexisting mental health conditions (e.g., bipolar).

Community Health

The pathways that climate change impact community health are primarily indirect. The most commonly identified pathway was the breakdown of social infrastructure (Clayton et al., 2017) which results in unstable conditions that create adverse outcome such as forced migration (Kelley et al., 2015). Additionally, social instability caused by climate change was seen to include experiences such as increased intragroup and intergroup aggression and hostility (Clayton et al., 2017).

Vulnerable and Marginalized Communities

The adverse health outcomes of climate change occur primarily through the pathways of physical health, psychological health, and community health. Although any one person may experience these adverse health outcomes of climate change, they are more likely to impact those individuals who experience vulnerability (i.e., susceptibility) or marginalization (i.e., systemic oppression) (Clayton et al, 2017; Crimmins et al., 2016; Pachauri & Meyer, 2014). In this study, vulnerable populations refer to individuals who are likely to experience adverse outcomes of climate change due to a specific factor such as susceptibility to illness or job-related exposure whereas marginalized populations are considered those who experience inequity primarily due to systemic forms of oppression. Although groups are separated in this paper, it is important to note that individuals may be within both categories. For the sake of clarity, I categorize groups based on which group membership is discussed the most in the literature.

Vulnerable Populations

Between the USGCRP (Crimmins et al., 2016), IPCC (Pachauri & Meyer, 2014), and APA (Clayton et al., 2017) reports vulnerability factors were related to (a) geographic location, (b) vocation, (c) age, (d) disability status, (e) preexisting physical health condition, and (f) pregnancy status. Of those, geographic location, age, and preexisting physical health conditions were the most commonly discussed. Vulnerability due to geographic location was primarily associated with increased risk of extreme weather events, such as flooding, and represented the fact that anyone within a risk-prone area had a greater vulnerability to adverse effects of climate change. For example, the breakdown of health infrastructure during extreme weather events (Alderman et al., 2012) could impact anyone within that geographic region. Vulnerability due to age was primarily discussed in the context of children and older adults. Whereas children were vulnerable to societal infrastructure breakdown (e.g., school closings) older adults were primarily vulnerable due to physical susceptibility to heat and disease (Clayton et al., 2017). Finally, vulnerability due to preexisting physical health conditions was primarily related to an increase in susceptibility to changes in the natural environment. For example, individuals with preexisting cardiovascular conditions are at a greater risk of death during heat-related events and individuals who have preexisting pulmonary conditions are more likely to have flareups during poor air conditions (Crimmins et al., 2016).

Marginalized Populations

Between the USGCRP (Crimmins et al., 2016), IPCC (Pachauri & Meyer, 2014), and APA (Clayton et al., 2017) reports, marginalization factors were primarily related to (a) race, (b) socio-economics (SES), (c) sex, (d) preexisting mental health conditions, (e) indigenous peoples, (f) immigration status, and (g) language proficiency. Race, SES, and Indigenous identity were

among the most discussed within the literature and all were linked to a greater likelihood to living in areas prone to the adverse effects of climate change (e.g., flood plains) and having fewer resources to allow for climate change adaptation. While fewer resources may moderate an individual's location in a risk-prone area, it does not fully account for the relationship. For example, even with access to resources and less proximity to climate change prone areas, Black Americans are still likely to experience adverse outcomes of climate change (Crimmins et al., 2016). Indigenous communities were primarily found to be impacted due to their connection to land. For instance, one indigenous community experienced reduced psychological well-being as a result of living through the changes to their regional habitat (Tam et al., 2013). As a result, their economic self-sufficiency suffered and made it difficult to adapt to those changes which resulted in a type of forced migration.

Both vulnerable and marginalized communities are more likely to experience greater adverse health outcomes as a result of changes to the climate (Clayton et al., 2017; Crimmins et al., 2016; Pachauri & Meyer, 2014). While vulnerability may be related to specific individual factors, marginalization is certainly related to the experience of inequity that is maintained by systems of power and oppression. Similarly, climate change is generally thought to be created and sustained through human behaviors that are maintained by larger systems of power, such as consumption (i.e., capitalism; Rosas et al., 2015; Swim et al., 2011). Therefore, addressing the root cause of climate change and the root cause of marginalization are one and the same: addressing systems of power and oppression.

Social Justice in CP

Social justice—addressing systems of power and oppression—is a defining feature of the field of CP and has been present since the beginning of the field (Fouad, 2006; Gelso et al.,

2014). To better understand the relationship between climate change, social justice, and CP, three areas of research are discussed. Those include: (a) the history of social justice, (b) current status of social justice, and, (c) future directions in social justice.

A Field Built on Social Justice

Social justice is one of the defining features of the field of CP (Gelso et al., 2014). Throughout the history of the field, an emphasis on social justice had led counseling psychologists to engage in a wide variety of activities (Fouad, 2006) that utilize the field's primary areas of intervention (i.e., prevention, remediation, education; Gelso et al., 2014) with individuals, communities, and larger systems.

Overtime, social justice has moved from an ill-defined position on the fringe of the field (Toporek & McNally, 2006; Toporek & Williams, 2006) to a position of clearly demarcated prominence. This is exemplified by the explicit naming of social justice as a leading core value of the field (Gelso et al., 2014; Packard, 2009; Scheel et al., 2018). Specifically naming the value of social justice as a prominent and guiding feature of CP appears to have given room for recent expansion of social justice into training programs, activities, and has given a strong foundation for expanding beyond historical social justice frameworks within the field.

For example, one of the ways that counseling psychologists have enacted social justice is through their work in responding to large scale disasters. Looking at this research provides a context for one unique way that counseling psychologists have utilized a social justice framework to work toward an area closely related to climate change. Generally speaking, counseling psychologists are well-suited for this type of work because of their training in remediation and prevention within diverse communities (Spokane et al., 2011). Bowman and Roysicar (2011) found that counseling psychologists who engaged in disaster response were

rated as possessing flexibility, cultural openness, interpersonal skills, and compassion for others. However, a review of the research on large-scale disaster response in CP finds that the majority of intervention is remediate in nature. A point which is articulated by Jacobs and colleagues (2011). Even within disaster response, there have been calls to move beyond the remediate intervention toward a more systemic framework of intervention (Jacobs et al., 2011; Parham, 2011).

Current themes in Social Justice

The current state of affair of social justice in the field of CP has both promise and challenges. A promising development is the explicit and routine inclusion of social justice into systemic levels of the field. For instance, one of the ways this has become evident is in the newly released "Model Training Program" (MTP; Scheel et al., 2018). While social justice has been a strong component of training in the past (Gelso et al., 2014), the recent MTP places social justice as a prominent feature of training (Scheel et al., 2018). For example, this new MTP positions social justice as a guiding principle (i.e., core value) and a pillar that supports clinical training, education, and research. As a result, it appears likely that programs who adopt this new MTP are likely to have a strong commitment to social justice and counseling psychologists from within those programs will have a stronger desire and ability to enact social justice.

Despite the explicit inclusion of social justice in the field, there is growing consensus among scholars that social justice advocacy is all but devoid of truly addressing systemic barriers (Olle, 2018; Spanierman & Smith, 2017; Sue, 2017) representing one of the major challenges facing social justice in CP right now. For instance, Kozan and Blustein (2018) found that counseling psychologists are motivated and committed toward social justice work but run into systemic barriers that impede their ability to be successful social justice advocates.

There is growing evidence to support the hypothesis that CP is beginning to identity and address the role that power and privilege play in the field. Recently, the role that "white hegemony" (i.e., institutionalization of white values) plays in counseling has been discussed (Spanierman & Smith, 2017; Sue, 2017) and suggests that CP is beginning to make the transition from what Israel (2012) described as an historical emphasis of doing social justice within communities of need while avoiding the difficult work of doing social justice within the field, itself. Furthermore, recent social justice conceptualization has begun to explore the question of whether or not social justice can be done from within systems of power that have an inherent motivation to maintain the status quo (Olle, 2018).

New Directions in Social Justice

Several new directions for social justice have emerged from within the research and appear to take CP down different paths. Recently, Kim's (2019) reported findings regarding the future directions of social justice in CP. This research utilized social justice leaders in the field of CP. Interestingly, the findings of this study did not demonstrate a commitment to addressing systemic power and privilege as a highly projected area of social justice (power, privilege, and oppression was ranked 20th on potentially upcoming areas of social justice). Kim's (2019) findings appear to suggest that the future directions of social justice in CP may continue to be oriented toward doing social justice within communities to the exclusion of addressing the role that power and privilege play in the field.

However, other publications on social justice in CP suggest that an orientation inward (i.e., looking at ourselves) is a likely direction. For example, DeBlaere and colleagues (2019) propose that counseling psychologists engage in a transformative process of social justice through the use of a community readiness assessment. The use of such an assessment would

likely provide extensive data about the ways in which counseling psychologists need to grow, learn, and apply procedural steps to become better social justice advocates. However, although this is likely be greatly beneficial, it may not go far enough to address the role that power and privilege plan in the field.

Another emerging area of social justice research in CP is the question of whether social justice advocacy can be taught and implemented from within systems that perpetuate inequity, which suggest a significant paradigm shift is likely in the future. More recently, this question has been raised by prominent scholars in CP who have drawn attention to the ways in which CP maintains white hegemony (Spanierman & Smith, 2017) and have argued that these systems need to be corrected (Sue, 2017).

From within this debate, a new (to us) paradigm has emerged in CP. Using the framework of critical psychology, Olle (2018) argues that social justice advocacy cannot truly create change when it is housed within systems of power. Olle argues that traditional social justice advocacy is actually dependent on systems of power creating change, and as a result, will be ineffective and inherently attempt to maintain systems of power. Through the use of a critical paradigm, counseling psychologists may be able to complete social justice interventions that are action oriented and able to circumnavigate systems of power.

Given the fact that addressing climate change will require significant systemic level change, these future directions may have implications for counseling psychologists who hope to address social justice issues not yet included in the field, such as climate change. For instance, if the field maintains course, as projected by Kim (2019), there might not be an effective framework for addressing climate change from within the field. However, if the field moves

toward integrating a critical paradigm, as advocated for by Olle (2018), the ability to engage in climate change as a counseling psychologist would likely be easier.

Present Study

As discussed, the link between social justice and climate change is clear. However, despite CP's social justice identity, values, and commitments, little is known about what counseling psychologists think about climate change and how addressing the impacts of climate change would fit into the broader picture of the field. Given the fact that the impact of climate change is projected to get substantially worse within our lifetime (Roy, 2018), it seems essential to better understand this. As such, an exploratory thematic analysis is used to better understand how counseling psychologists think about climate change and how the impact of climate change may be addressed within the field of CP.

Method

Due to the exploratory nature of this study, a qualitative methodology was used. Since this study was not grounded in epistemological beliefs (i.e., specific guiding theory), the use of Thematic Analysis (TA; Braun & Clarke, 2006) was appropriate and appeared best suited to provide a rigorous yet flexible approach the study. Data collection included the use of a brief demographic form, consent for research, and the interview. All interviews were conducted by the primary researcher using either Zoom, Skype, or Google Voice and lasted ranging between 43-60 minutes. One interview was not able to be included in the study due to the video being corrupted and as a result, unable to be transcribed. The primary researcher used semi-structured interview questions (see Appendix A) that emerged from a review of the literature. Interviews were recorded and transcribed with the use of assisted technology and reviews for accuracy.

Participants

Nine counseling psychologists were recruited using random and snow-ball sampling techniques and were primarily drawn from list-serv posting and individual recruit emails sent to CP training directors. Participants were required to have graduated from a CP doctoral program or be a current doctoral student in CP. Due to the exploratory and broad nature of this study, no other selection criteria were utilized. Interviews were gathered per Braun and Clarke's (2012) standard in which nine participants represents an adequate sample size for a study of this nature.

Demographic information gathered included: gender, age, ethnicity, degree held, educational status, and type of employment. The demographic information form was completed on Qualtrics and did not have forced-choice categories. Rather, participants were able to self-identity the majority of demographic variables. The majority of participants identified as female *(n* = 8) as compared to male *(n* = 2) and all identified as cisgender. Participants ranged in age between 26 and 73 with an average age of 36.6. Participants self-identified their ethnicity as "Latina" *(n* = 1), "Middle Eastern" *(n* = 1) and "White, Caucasian, and/or European" *(n* = 8).

At the time of interviews, the majority of participants held a doctoral degree in CP. Those holding doctoral degrees were evenly split between PsyD *(n* = 3) and PhD *(n* = 3). Of those holding doctoral degrees, a minority focused on teaching and research as their primary career *(n* = 2) and included one individual who self-identified as "retired." The remainder of participants holding doctoral degrees self-identified as having a primary career focus on clinical work *(n* = 4) and included careers in inpatient mental health (*n* = 1), outpatient college counseling *(n* = 1), community mental health *(n* = 1), and private practice *(n* = 1).

Several participants were current students in PsyD *(n* = 1) and PhD *(n* = 3) CP doctoral programs and included a "2nd year," "3rd year," and "doctoral intern." The majority of doctoral

students in this study held a master's degree *(n* = 3) as compared to a bachelor's degree *(n* = 1) as their highest degree. The highest degree of current doctoral students included: "Masters of Clinical Mental Health Counseling" *(n* = 1), "Masters of Counseling and Education" *(n* = 1), "Masters of Arts" (unspecified, *n* = 1), and "Bachelors of Arts" (unspecified, *n* = 1).

Procedure

Prior to recruitment and data collection, the study was approved by the institutional review board. Once approved, recruitment began. The lead researcher posted a recruitment notice on Div17 (The Society for CP) list-serv, in addition to sending recruitment emails to training directors of CP graduate programs. As a participant responded, the primary researcher scheduled an interview time and provided the demographic information form and consent for research. All interviews were completed using video and/or phone conferencing that allowed for recordings. Eight interviews were completed using Zoom, one with Skype, and one with Google Voice. One participant's interview was not included in the analysis due to a corrupted data file. Participants were given the option to select the platform for interviewing depending on preferences and/or technology availability. After each interview was completed, the interview was transcribed using assisted technology, reviewed for accuracy, and cleaned of personally identifying information.

Trustworthiness

Morrow (2005) suggests that qualitative researchers use a process of reflexivity in order to establish trustworthiness in their study. As such a brief overview of the lead researcher is provided: He is a white, cisgender, heterosexual, able bodied male completing a PsyD in CP. He completed a bachelor's in "peace, justice, and conflict studies" and a master's in "clinical mental health counseling." He grew up in a rural southern state and has primarily lived in rural areas or

"small cities." The researcher grew up in the Mennonite church and draws a commitment to social justice advocacy from this faith in addition to the training in counseling and CP. He approached this research from within this framework and has strongly held beliefs and values regarding climate change and the role that CP could play in addressing it.

Another way that trustworthiness was established was through the use of an external audit. Through the use of an external audit, the data analysis and interpretation of results was able to be reviewed for adherence to the TA protocol and closeness to participant data. The external auditor in this study was the secondary researcher and doctoral advisor.

Data Analysis

Data analysis was completed using single-coder thematic analysis (Braun & Clarke, 2006). In line with published research using a single-coder TA (Sant & Milton, 2015), the researcher utilized reflexivity (i.e., making clear values and/or assumptions) and an auditing process (described below) to ensure the core tenants of trustworthiness and rigor in qualitative analysis (Morrow, 2007; Yeh & Inmann, 2007).

The analysis was approached from a theoretical position (i.e., climate change is real and CP should and could do something about it). Code and theme development were conducted using a primarily "latent" approach (i.e., below the surface meaning), although "semantic" codes (i.e., surface meaning) were also included, as recommended by Braun and Clarke (2006). The analysis utilized the six stages of TA and included: (1) become familiar with the data corpus, (2) generate codes, (3) generate initial themes, (4) review themes, (5) name themes, and (6) generate the report.

In stage one, the primary researcher became familiar with the data corpus by reviewing transcriptions for accuracy and reading and re-reading the data corpus in its entirety. During this,

initial thoughts were jotted down. In the second stage, initial codes were generated. Per Braun and Clarke's (2006) recommendation, codes were considered flexible, resulting in some initial codes changing to reflect later, more comprehensive codes. The transcript was not coded line-by-line but was rather done in response to something that felt meaningful in regard to the study. Following the creation of codes, the data corpus was sent to the auditor for review and recommendations were included. In the next stage, initial themes were developed and represented a "clustering" of codes from the previous step. Then, themes were reviewed using Braun & Clarke's (2012) guidelines and an initial thematic map was created. Following this, a second audit was completed and feedback incorporated. In the next stage, themes were finalized and named which resulted in a final thematic map (Figure 7). Finally, a thematic report was created and culminated in the subsequent discussion of findings.

Results

The use of a single-coder thematic analysis (Braun & Clarke, 2006) resulted in the identification of six unique themes: (a) dissonance, (b) professional dilemmas, (c) resistance, (d) CP's role, (e) negative affect, and, (f) privilege. The majority of themes contained a set of sub-themes that represent specific clustering of codes. All themes contained 100% of participant narratives and contribution to sub-themes varied. An overview of each theme is provided below.

Dissonance

"Dissonance" emerged as a theme and included data from 100% of participants (n =9). The word "dissonance" is used to represent the underlying lived experience of incongruence between participants' personal and professional identities, roles, and values. This theme is represented by three sub-themes: (1) personal v. professional (66%), (2) advocate v. therapist (77%), and (3) stated v. lived (66%).

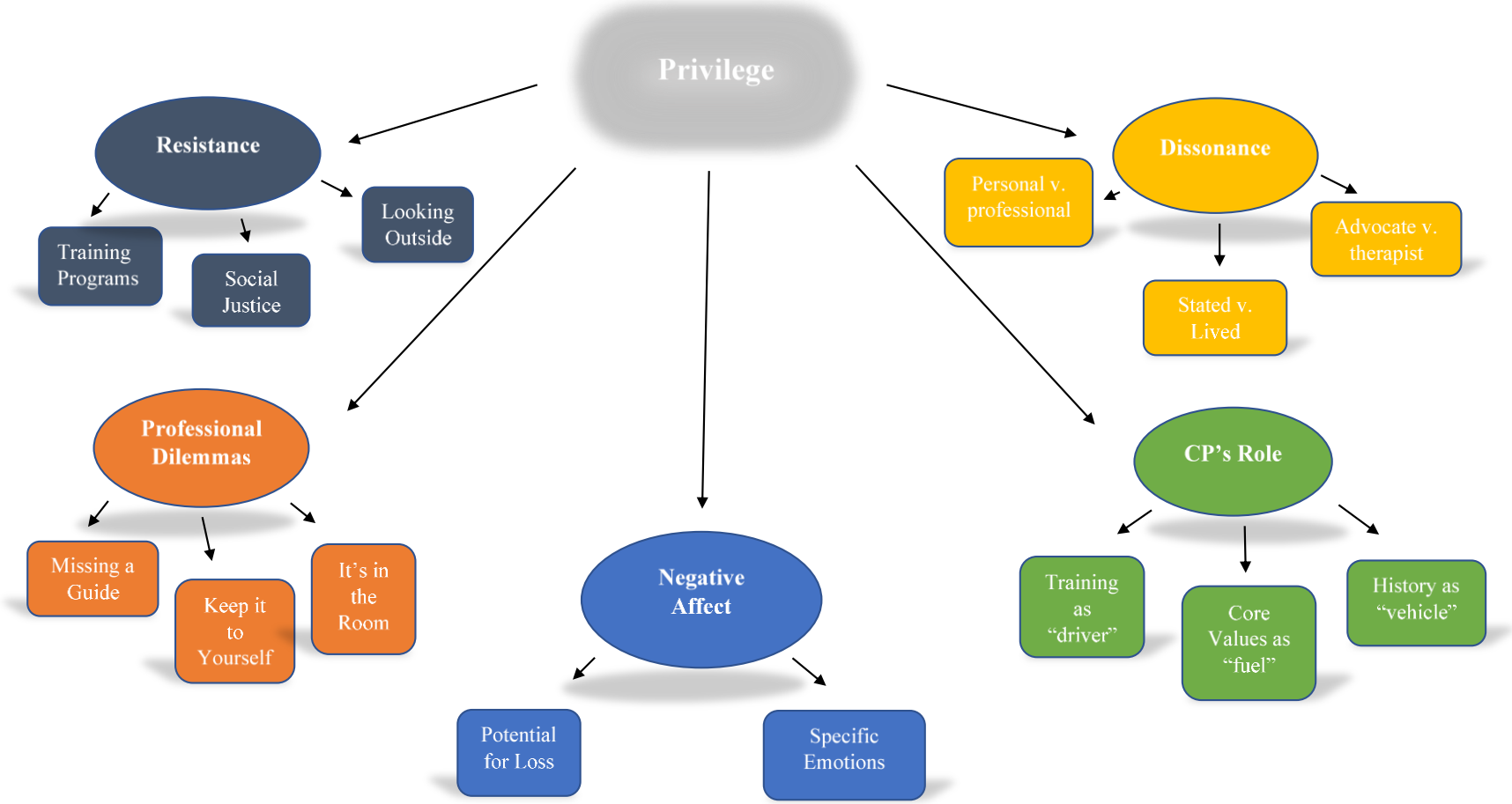

Figure 1. The final thematic map. This map shows the re-evaluation and adjustment of themes in step 5. Six themes emerged in the final thematic map and demonstrated heterogeneity and providing meaningful implications for the broader scope of this study. CPs Role stands for "CP's role ."

One of the main findings in this theme was in participants' experience of dissonance between their personal and professional identity and values. This finding emerged as participants explored some of the difficulties in engaging in social justice advocacy. For example, participants felt that their role as a parent often precluded them from being able to engage in the multiple identities of a counseling psychologist (i.e., advocate, therapist, researcher). Some participants viewed themselves as being able to engage in things like advocacy in the future, while others just noted that they just don't have time to do both. Participants also spoke about a sense of dissonance between the personal and professional values. For example, one participant described a sense of incongruence between her wanting to call people out for behaviors that support climate change and her need to be non-judgmental as a counseling psychologist.

> We're sort of supposed to be like, "Nemesis." I don't think any of us are the blank slate, right? But we're sort of supposed to be these like, benevolent, or just recipient of other people's problems and concerns. and not judge people and climate change is a little judgy. Like, I'm a little judgy of people's behavior, you know, that contribute to climate change, and people's armchair activism and people's apathy, and that is not so compatible. So, I don't I don't know that our field does a good job teaching us how to reconcile that. (P8)

A second finding that emerged in this theme was participants' experience of dissonance between their professional roles of advocate and therapist. This finding emerged in several ways. First, there was a semantic recognition that the role of advocate and therapist are very different and often have conflicting goals. Second, participant narratives revealed a sense that their role as a therapist required them to be value-free whereas their role as an advocate required them to be

value-laden. This primarily presented in participants discussion of the real-world impacts of creating systemic level change. For example, one participant said,

> But, I asked the people in [my community] about that, and they're saying, you know, we we've only been trained to be miners, and, you know, what are we going to do? and our families are going to starve, and in fact, it's really a day to day truth as far as they're concerned. (P6)

A final finding within this theme was found in participants' expression that the stated values of themselves and others did not often match the day-to-day lived values of social justice. When discussing her approach to addressing climate change, one participant expressed a sense of frustration that her lived values do not match her expressed values, stating, "and like I'm the person that's saying like 'I care about social justice,' and I don't do anything" (P5). This same sentiment was shared among other participants and was also reflected in participants recognition that others stated and lived values do not match. For example, another participant stated, "But, I think it adds to my frustration when I watch other people and a lot of this like armchair activism type stuff" (P8).

Professional Dilemmas

"Professional dilemmas" emerged as a theme, representing 100% of participants *(n* = 9). The term "professional dilemmas" is used to represent these participants' experience of professional dilemmas that occurred as a result of trying to include climate change into participants' professional experiences. This theme includes three sub-themes: (1) missing a guide (77%), (2) keep it to yourself (55%), and (3) it's in the room (66%).

The first main finding within this theme was found in participants' expression of being stuck in knowing how to integrate their knowledge of climate change into their professional

careers. Generally, participants shared the experience that climate change has not been a prominent component of their professional lives. For example, one of the participants who was in a faculty role stated, “It's not something I bring up really in the classroom…it doesn't show up in my research…there's no professional task that I engage in that's directly related to climate change issues” (P1). A more latent component of this finding was found in participant narratives and revealed a sense of being lost in knowing where to start to include climate change into their professional lives. One participant remembered feeling lost talking about climate change with her supervisor. As a result, participants appeared to develop a shared sense that their specific career focus is not the best suited to address the adverse effects of climate change as compared to others. For example, several participants in a clinical role had comments similar to this participant: “I think because right now what I'm doing professionally, it doesn't apply as much…” (P3). Conversely, two participants who are not in a direct therapy role described that climate change would likely be better addressed through clinical interventions. This finding suggests that participants would benefit from guidance in how to address climate change within their professional roles.

A second finding within this theme was found in participants’ experience of feeling the need to keep climate change to themselves. Participants felt that exhibiting behaviors that are intended to mitigate climate change and its adverse effects would likely result in negative impacts to their interpersonal relationships and could also negatively impact their professional careers. The impact to interpersonal relationships was seen in participants’ worry that climate change would push others away and/or would cause a negative evaluation of themselves. For instance, one participant shared, “...But I’m always afraid of, I don’t know, sounding self-righteous or annoying or what-have-you” (P1). Participants also discussed an array of potential

professional impacts including poor evaluations from supervisors and students or general worry that discussing climate change could hurt professional relationships such as with colleagues or clients.

The last finding to emerge from this theme was in participants recognition that the negative effects of climate change are already impacting professional responsibilities. This finding was represented in participants' explicit linking of the negative outcomes of climate change with a specific client and in their recognition that marginalized populations are significantly impacted by climate change. Many participants either recalled specific examples of how climate change impacted one of their clients or make a connection between a presenting concern and changes to climate. For example, one participant shared that "[The] families I work with are from very low income…you do see the effects there, you know? Kids who don't have coats…one pair of socks…you do see it affecting them in that way" (P2). This finding also demonstrated a strong recognition that the impact of climate change is already occurring in marginalized communities. For instance, a participant described the following:

> I think, for example, the really long, rainy winter that we had…I think that affected a lot of people and a lot of people's depression levels. Especially people who have a more seasonable aspect to their depression. …. A lot of the patients that I see, their leisure time and their hunting… another way of supplementing their income is through hunting and fishing, things like that. I think changes there could affect them. I don't think I've had anybody mention that specifically, you know what I mean? Like, "oh, you know, the weather's changing." But, um, but I do think it does. (P4)

Resistance

"Resistance" emerged as a theme and represented 100% of participants (*n* = 9). The term "resistance" is used to represent these counseling psychologist's experience of resistance to engaging in climate change advocacy within their training programs and the broader social justice lens of the field. This theme contains three sub-themes: (1) training programs, (2) social justice (66%), and (3) looking outside (44%).

The first major finding in this theme was in the experience of resistance to including climate change within training programs. As a component of resistance, participants generally felt compelled to "conform" to the expectations of the training program. For example, a current doctoral student described feeling that her advocacy efforts were often not considered, stating, "I can only run this so far up the ladder" (P7). When discussing how to engage in addressing climate change and its adverse outcomes from a programmatic stand-point, one participant joked,

> But we are a social justice-oriented program, yet we still have the internal stuff, you know, so… [laughing]
>
> (Interviewer) The internal stuff being?
>
> The program. So, it's kind of like they want you to be advocating a social justice just not towards their program, right? So, don't, don't look at them. Just look at everything else.
>
> (Interviewer) Yeah, we're good, but…
>
> Yeah, we're good. Everyone else sucks, but we're perfect. [laughing]. (P2)

In addition to feeling a need to conform to training programs, participants also described feeling that generational differences existed in the ways that climate change is discussed. While this was certainly true for current doctoral students, early career psychologists (ECPs) also shared this feeling. For instance, one participant described generational differences in the way

that programmatic functions occurred and expressed a sense that those in older generations help the majority of the authority. Perceptions also included the sense that climate change is just not that important which seemed to impact the drive to address climate change from within the framework of CP.

The second major finding in this theme was a sense of resistance to including climate change within the social justice framework of the field. Some of the barriers experienced by participants included (a) social justice is often exclusively focused in certain areas, and, (b) social justice doesn't include politics. Participants shared the impression that social justice has been focused on certain areas. For example, one participant stated, "It seems like [climate change] has not historically been one of our, sort of, hot topics in CP. ….The top three ones are related to gender, race and ethnicity, and sexual orientation" (P1). Another participant shared this perception, who stated, "Those initiatives can be really focused on a single issue like poverty, or race, or prevention of sexual violence" (P7). Furthermore, participants felt that social justice in CP does not allow for areas of concern that are "too" political.

The final major finding in this theme was found in participants' need to look outside of CP for helpful information on climate change and additional training opportunities in social justice. In this finding, participants discussed a need to look for information about climate change outside of the field of psychology, often utilizing major news sources. Since participants are utilizing these sources, there seems to be higher likelihood that the quality and accuracy of their information may vary, and the information would not be housed within a CP framework. Participants also spoke about needing to look outside of CP for additional training such as intensive training on hands-on social justice interventions.

CP's Role

"CP's role" emerged as a theme and represented 100% of participants (*n* = 9). The phrase "CP's role" is used to represent participants' shared vision of the ways in which CP could address the impacts of climate change as a field. This theme as three sub-themes include: (1) history as map (66%), (2) core values as compass (55%) and (3) training as tool (55%).

The first major finding in this theme was that the strong social justice history in the field of CP provides a foundation from which counseling psychologists could address the adverse effects of climate change. Participants primarily spoke about the role that CP has played in career counseling and in social justice. Several participants shared the sense that career counseling was one of the historical roots that would lend itself well to addressing climate change. For example, one participant stated,

> Our field doesn't have as much of a career focus as it used to …. There is a there is a you know, really solid, you know, base of knowledge and literature that CP is coming from with career issues. And the, you know, the intertwining of career issues as, as it applies to other cultural issues …. I mean, you can imagine, you know, relocation is going to be one of the big impacts whether it's away from a coastal community, or there's a weather disaster that, you know, forces people to move to a different part of the state or the country. So, you know, handling that career transition definitely comes back to one of our specialty areas. (P3)

Participants also described CP's role in social justice as part of the foundation that could allow the field to address the effects of climate change. Participants described the role that CP has played in advocating for social justice within the broader field of psychology and generally shared the sense that working toward novel areas of social justice is "what we do." For example,

a participant stated, “Just looking at the history of how the APA and our field has advocated and changed the way people view marginalized group and mental illness. That is part of what we do - normalizing things. (P2)

The second major finding in this theme was in participants’ expression that the core values of the field should energize CP in addressing the effects of climate change. Overall, participants shared a sense that the core values of the field provide a sense of responsibility toward mitigating the impact of climate change. For instance, a participant stated,

> I mean, I would say probably one of the bigger roles, at least within APA, if I were to be speaking with division wise, just because CP did push and put a lot of intention behind what the philosophy in beliefs and values are in CP specifically. (P5)

The final major finding in this theme was that the specific training in CP lends itself well to addressing climate change as a field. Participants described this as being true in two ways. First, the existing roles were thought to provide a strong pathway for addressing the negative impact of climate change. Participants identified the training in remediation, prevention, development and education. Additionally, participants described the importance of the training in advocacy and multiculturalism. This is best captured by one participant, who stated,

> As far as like skills that you can use to address climate change…I mean, I think everything you learned in [your] program. I mean, your public speaking skills, your research skills, your skills you learn in working in communicating with people, you know? All of those skills. I mean, we're perfectly suited as counseling psychologists to advocate for any kind of social justice need. (P9)

Participants also spoke about counseling psychologists’ ability to build and use relationships as a strong existing feature that would aid in addressing the impact of climate

change. Participants shared the expression that the relationship was a strong avenue for addressing creating change. For instance, one participant stated, “I think that our field teaches a lot of like the humility…or at least like non-ego-centeredness…like not being egocentric, thinking about systems and the impact of people on each other” (P8). Another shared this sentiment, stating, “empathy is a great skill and…it is something that you fine tune and learn more through a program. So, yeah, the therapeutic relationship really matters” (P2).

Negative affect

“Negative affect” emerged as a theme representing 100% of participants (*n* = 9). This theme represents participants’ experience of mental health and wellness. This theme is represented by two sub-themes: (1) potential for loss (55%) and (2) specific emotions (100%).

The first major theme from this report was found in participant narratives of potential for loss due to the impact of climate change. The finding of potential loss was related primarily to the future and relationship to the natural world (i.e., solastalgia). First, the sense of loss was found in participants’ descriptions that climate change has caused a loss regarding their family planning. For example, a participant stated,

> I became a new mom pretty recently – 10 months ago – and I think about how I don’t think my child will spend as much time outdoors as I had growing up, and I also have some guilt about bringing another human being into this world to further impact the climate in potentially negative ways. I think about that for a future potential second child as well. (P1)

Another participant described a sense of loss related to not being able to teach their newborn the same patterns of plant growth in the spring:

> I think that the increasing level of change makes it kind of a more persistent anxiety or a persistent feeling. And then…I just had a baby. …. I have a son who's 17, and so I was able to do a lot of those things with him. And so, my second son, I think, huh, "I wonder when I'm teaching him those things how much I'll be able to really teach him the same predictable patterns." (P4)

The second major finding in this theme in the shared experience of specific negative emotion as a result of changes to the climate. This was found in participants' experience of specific negative emotions following direct or indirect outcomes of climate change. Participants shared an acknowledgement that climate change is real and it's happening. This general sense of awareness seemed to result in negative emotional experiences. The most common expressed forms of emotion were hopelessness, powerlessness, shame, and guilt. For example, one participant stated, "I'm concerned about climate change. I am not particularly hopeful. I don't know if you say it means that I'm realistic, skeptical, or cynical…So, I feel a little hopeless about it" (P6).

Privilege

Finally, "privilege" emerged as the final theme and was represented by 100% of participants (n = 9). The term "privilege" is used to acknowledge a shared sense of distance between participants and the negative impact of climate change. No sub-themes were identified for this theme.

The major finding of privilege was seen to permeate all aspects of this study. However, privilege was primarily recognized in the distance that it created between participant and experience. Privilege was seen to "moderate" the relationship between participant and each theme described above. For example, one participant discussed a sense of feeling lucky to live

far from the more significant impacts of climate change. They stated, “You know…so far we've been fortunate to be in a part of the country that maybe isn't going to see as many of the effects today” (P3), describing their relationship to climate change in terms of physical distance. Another participant described their relationship to climate change on a different continuum – time – stating, “So yeah, generally I think that it's a huge pressing issue. It’s the future of everyone” (P2), suggesting a sense that climate change is oriented in the future, away from our current day and age.

Participants also recognized that they held privilege. For example, several participants explicitly named a level of privilege. One stated, “Even as bad as things get in my lifetime…my husband and I will probably always have the means to not be so impacted that our life is devastated” (P8). Another participant more explicitly recognized the role of privilege in helping them avoid negative feelings, stating, “I think that part of me has a privilege to be able to avoid some of that. Because it, it does cause a lot of negative affect” (P2).

Discussion

The six themes that emerged from this study include: (a) dissonance, (b) professional dilemmas, (c) resistance, (d) CP’s role, (e) negative affect, and, (f) privilege. In this section, the results will be discussed in the broader context of the existing literature. In this section, the broader implications for the field of CP are also discussed.

Implications for the Field

Together**,** the findings of this study point to several broader implications about climate change, social justice, and CP. They weave the following narrative: Climate change is here, and now, and is impacting CPs in their personal and professional lives, causing negative affect. CPs are highly motivated for social justice advocacy, including areas related to climate change, and

view the history, values, and training experiences in CP as part of the path forward. However, CPs feel stuck in their ability to mitigate the impacts of climate change and their attempts to do so appear to reveal larger concerns around social justice advocacy and privilege within CP.

Two main recommendations emerge from the findings of this study. The first, is a call to action to address the negative impact of climate change as a field. The second, is a reiteration of previous calls to confront the role that privilege, and specifically the maintenance of dominant cultural norms, plays in CP (Cross & Reinhart, 2017; Isarel, 2011; Mollen et al., 2012; Spanierman & Smith, 2017; Sue, 2017).

We Need to Address Climate Change

The first broader implication of this study is found in the need to address climate change as a profession. The adverse outcomes of climate change are here and they are happening now. More than half of the U.S. population is already experiencing the negative impact of climate change (Gallop, 2018) and there is strong research evidence that those individuals are likely within vulnerable or marginalized groups (Clayton et al., 2017; Crimmins et al., 2016; Paucharui & Meyer, 2014). This study found that climate change is already impacting the professional experiences of CPs, they feel motivated to address it, but have a lack of guidance in doing so. As such, it is essential to create and framework to allow CPs to see, conceptualize, and begin to mitigate the impact of climate change. Below, a brief review of existing recommendations and initial frameworks for addressing the negative impact of climate change from within a psychological lens is provided. Following this, a 3-step model for addressing the impact of climate change within the framework of CP is proposed and discussed.

Existing Recommendations for Addressing Climate Change. Recommendations for addressing the negative impact of climate change from a psychological framework are found

throughout the literature (See Clayton et al., 2017; Davenport, 2017; Stern, 2011) and can be surmised into three broad principles: (a) changing individual behaviors to decrease the severity of climate change, itself, (b) providing psychological intervention to remediate the adverse health outcomes of climate change, and (c) advocating for systemic change to stop the structures that maintain climate change. Considering CP's role in prevention, remediation, and education (Gelso et al., 2014) and the fields strong commitment to training in social justice advocacy (DeBlaere et al., 2019), it appears that CPs are already well-suited to work within the three broad principles above.

***Behavior change*.** Changing anthropogenic processes (i.e., human behaviors) is one of the main avenues for psychological intervention found within research. For example, Stern (2011) provides a comprehensive overview of the relationship between psychological factors (e.g., consumption) and climate change and argues that psychologists can intervene through helping individuals, groups, and systems change the psychological behaviors that maintain systems. Other authors (see Gifford, 2011) have discussed the role that psychological defenses (e.g., denial) play in maintaining systems that create climate change which suggests that psychologists can work to change maladaptive defensive structures into more adaptive defenses that allow individuals to better engage in climate change mitigation. Although CPs are certainly well versed in engaging in behavioral change, the field also brings something unique to this pursuit.

As emerged from this study, the relational component of CP was discussed as a primary area of training that would lend itself well to addressing behaviors that maintain climate change. Within this finding, the relationship was discussed in terms of its humanistic foundation (i.e., non-judgmental and culturally attuned). Given the fact that climate change is politically

polarizing (Gallop, 2018), and people tend to become tribalistic (Haidt, 2020), it appears this relational emphasis found in CP will actually lend itself well in addressing behaviors that maintain climate change.

***Remediation*.** A second area of intervention is in remediation of already occurring outcomes of climate change (i.e., trauma from experiencing a hurricane). CPs have a strong foundation in remediation, prevention, and education (Gelso et al., 2014) which give them a unique skill-sets that would allow them to mitigate the negative outcomes of climate change across the domains of physical, psychological, and community health. For instance, the psychological impact of climate change could be addressed through the pathway of assessment and treatment of distress using evidence-based interventions. Additionally, the community impact of climate change could be addressed through avenues such as community consultation, intervention, and planning. Although limited research exists on behavioral health interventions to remediate the adverse impact of climate change on physical health, there is a growing acknowledgement that CPs are trained to provide interventions within the domain of physical health. For instance, the MTP (Scheel et al., 2018) positions CPs role in physical health care as one of the emerging domains within the field. As such, CPs working within integrated health systems may be able to uniquely address the negative physical health impact of climate change through the use of behavioral health interventions, collaboration, and consultation. Furthermore, CPs have unique training in prevention and strength-based, culturally competent interventions (Gelso et al., 2014). These will likely allow a CP to move beyond a remediation role and begin to work to promote resilience through an individual or communities' own mechanisms for healing.

***Advocacy*.** Finally, advocacy is another avenue for addressing climate change that is discussed within the literature. CP has strong history of social justice advocacy (DeBlaere et al.,

2019 Gelso et al., 2014; Kim, 2019) that has resulted in a wide variety of systemic level interventions (Fouad, 2006; Kozan & Blustein, 2018). Addressing the root causes that create and maintain climate change will require addressing larger systems. Thankfully, the role of advocate is a skill set that CPs already bring to the table. CPs training in advocacy may allow them to easily navigate systems, and their relational emphasis will likely aid in building strong relationships that result in addressing both the root causes and the adverse impact of climate change.

Climate change primarily impacts peoples' physical, psychological, and community health. CPs have strong training in remediation-prevention-education (Gelso et al., 2014), social justice advocacy (DeBlaere et al., 2019 Gelso et al., 2014; Kim, 2019), and have emerging competencies in integrative health (Scheel et al., 2018). These appear to set the field up well for addressing each of these domains. Additionally, guiding principles and values of strength-based care, cultural responsiveness, and relational attunement provide ways that CPs can likely add their own "flavor." However, growing research suggests that systems of power are unlikely to willingly move toward meaningful change (Olle, 2018), a sentiment which was shared in this studies finding regarding negative affect and moral injury. As a result, it appears that CPs would benefit from another avenue of intervention beyond those discussed above.

A Proposed Three-Stage Model for Climate Change Intervention in CP. Building on the recommendations discussed above, a three-stage model for addressing the impact of climate change is proposed (see Figure 2). This model is theoretically constructed and may provide a foundation for future scholarship, and offers an initial conceptualization for clinical and systemic level intervention.

The theoretical framework for this model is based on the literature reviewed above in combination with the findings of this study (as described above). Three main theoretical foundations guide this model. First, it relies on the evidence that adverse climate change events impact individuals along multiple but predictable paths (i.e., physical, psychological, and community; Clayton et al., 2017; Crimmins et al., 2016; Puchauri & Myer, 2014). Second, it integrates the core values (Gelso et al., 2014; Packard, 2009; Scheel et al., 2018), social justice history (DeBlaere et al., 2019; Kim, 2019) and direction for training in CP (Scheel et al., 2018) to argue that CPs can provide interventions that are both direct (e.g., psychotherapy) and indirect (e.g., advocacy). Finally, it pulls from the discussion on the challenges in social justice advocacy (Helms, 2017; Kozan & Blustein, 2018; Spanierman & Smith, 2017; Sue, 2017) and uses Olle's (2018) recommendation for the use of a critical paradigm that allows CPs to use non-system dependent interventions. In theory, CPs can move between levels of this model to work toward mitigating the negative impact of climate change. When they get 'stuck' in one area, they can utilize interventions from another level. This way, they are continuing to engage their core moral and ethical beliefs and may experience psychological benefits, as a result. The three-stage model is presented below (Figure 1).

Since no guidelines or frameworks exist for addressing the impact of climate change from within the unique perspective of CP, this proposed 3-step model may serve as an initial framework for CPs who want to address the impact of climate change within their professional and personal life. In the first stage, the negative impact of climate change on health can be intervened on using direct interventions such as building prevention programs and providing psychotherapy. In the second stage, system-dependent advocacy, CPs could address the impact of climate change through promoting systemic level change. In the third stage, non-system

dependent systemic level interventions may be used to address the impact of climate change through actions that do not require support from larger systems of power.

By way of Olle (2018), using Ahmed's (2012) metaphor of change agents as "institutional plumbers," CPs can shift between stages of intervention in this model. For instance, if system-dependent advocacy is not effective in effectively mitigating the impact of change in stage two, a CP may focus on applying a more radical form of change in stage 3 that is not dependent on support from a system of power, which in turn may allow them to continue engaging in addressing the negative impact of climate change. This model also hypothetically proposes that interventions in stage one and two have the potential to be less congruent with CPs personally held values, as suggested from this study, and may result in negative affect that could lead a CP to disengage from the role of social change agent. In contract, this model hypothesizes that using interventions from stage three may allow a CP to experience significantly greater congruence between strongly held moral and ethical beliefs and their day-to-day professional behaviors, resulting in psychological benefit. Finally, this model may also serve as a framework for further researcher, discussion, education, and general discourse around climate change in the CP literature.

We Need to Address (our) Power, Privilege, and Inequity

It is widely accepted that climate change is maintained by larger systemic forces (e.g., capitalism; Crimmins et al., 2016). Woven throughout these forces is the experience of privilege and power. If and when CP shifts toward addressing the impact of climate change it will be essential to remember Israel's (2011) call-to-action in looking beyond oppression and toward privilege. Leading reports in climate change research suggests that equity within the adverse outcomes of climate change will not be achieved without also addressing the systems that create

the inequity in the first place (Clayton et al., 2017; Crimmins et al., 2016; Pachauri & Myer, 2014). Therefore, the social justice advocate role in addressing climate change should include a commitment to addressing oppression and a commitment to routing out and ameliorating the ways in which privilege maintains systems of inequity both within broader systems and within CP.

As Israel (2012) points out, CP is great at enacting the social justice advocate role to address oppression within other communities but falls short in doing the harder work of looking in the mirror. This essence is shared by Heesacker (2018) who described CP as shying away from politically charged topics, and taken together, suggests a resistance to a deeper issue. Recent scholars in CP including Sue (2017) and Cross and Reinhardt (2017) have begun to shine a light on just such an issue: adherence to dominant cultural norms and values (i.e., white, cisgender, heterosexual, male) or "white homogeneity" (Spanierman & Smith, 2017).

White homogeneity in CP may likely play a role in some of the findings of this study and suggests that working on privilege is an essential step in becoming effective social justice advocates for climate change. For instance, participants broadly spoke about having dissonance between their personal and professional lives and values. Under the surface, narratives revealed a strong sense of "who I am as a person is not congruent with the expectations of CP" and was primarily described in the conflict between advocate and therapist. It may be that the internalized values of the therapist are more representative of whiteness, than therapist, as it continues to permeate the structures of CP (Sue, 2017). Climate change is a truly daunting concern that will require novel and difficult individual and systemic level changes. If CP is to join, it must heed the call of these prominent scholars and begin the process of looking inside.

Limitations

Several limitations exist in this study. First, the use of a qualitative method allowed for a rich and detailed description of these counseling psychologists experience. However, the overall generalizability of the study should be considered. Each of these participants has their own subjective experiences, and thus, their experiences are likely not be representative of every CP in the field. Further, although the demographic representation of this field generally match with recent CP surveys (Lichtenberg et al., 2018), 77% of the sample identified as white. Given the fact that the experience of white Americans differs compared to others, and the role that white hegemony is thought to play in the field (Spanierman & Smith, 2017), this also calls into question the generalizability of this study. This is also important to consider, as race is one of the leading factors of marginalization in climate change (Clayton et al., 2017; Crimmins et al., 2016; Pachauri & Meyer, 2014), which suggest that the experiences of these participants may not be representative of CPs who do not identify as white.

Physical	Psychological	Community
Chronic heart & lung disease *Heat stroke* *Asthma*	*Depression & anxiety* *Post-traumatic stress* *Loss of identity*	*Loss of cohesion* *Disrupted sense of belonging* *Community instability*
	Level 1 ***Direct interventions*** *(remediation-prevention-education)*	
Provide behavioral health interventions *Research cultural healing practices that promote health* *Research cultural factors that improve treatment*	*Provide psychotherapy* *Teach the impacts of climate change to students* *Create a framework for intervening in climate change*	*Provide consultation to local companies* *Give a violence reduction training at a school* *Hold a consultation group for community providers*
	Level 2 ***System reliant interventions*** *(advocacy)*	
Meeting with a CMO to request climate change related events be assessed in physicals and medical examinations *Requesting that behavioral health interventions for climate change be covered by Medicaid*	*Asking congress to approve coverage of long-term mental health impacts of climate change* *Seeking the inclusion of climate related negative affect in the DSM*	*Requesting a school system include funding for more afterschool programs to increase cohesion* *Asking a local town counsel to approve funding for climate change resilience building programs*
	Level 3 ***Non-system reliant interventions*** *(direct-action systemic intervention)*	
Refer patients to cultural healers that can promote resilience, coping, and culturally sensitive methods of healing	*Leave profit-based organizations and provide services through alternative systems. e.g.., bartering*	*Redistribute personal wealth to support local businesses and companies that promote community well-being*

Figure 2. Three proposed levels of potential intervention for CPs to utilize when engaging in climate change work in their professional lives. Level one represents typical remediation interventions, level two represents typical advocacy interventions, and level three represented non-typical, radical, direct-action interventions. Each subsequent level may allow the CP to become more congruent with their personally held moral and value systems.

Although this study provides an emerging foundation for addressing the impact of climate change as counseling psychologists, a general limitation exists in the lack of previous research and conceptual frameworks. For instance, while the existing literature on climate change and social justice in climate change was used to create a provisional framework for CPs to use in addressing the impact of climate change, it is important to recognize that the field of CP does not have a comprehensive framework for how to engage in social justice advocacy (DeBleare et al., 2019; Olle, 2018). This model is not intended to fill this gap. While this model provides an initial framework in how to address the impact of climate change, this model is theoretical and is not grounded in specific evidence-based interventions within the three stages. As such, any use of this model should be tentative and represent a launching point for CPs to begin to see, conceptualize, and intervene in climate change.

Future Directions

Given the fact that climate change has not been explicitly included in CP, more attention should likely be given to the ways in which it can be included. Specifically, the integration of climate change research into training programs should be considered. Furthermore, as the model proposed in this study is theoretically derived, it would be beneficial for future theoretical and applied research to explore and test this model. For example, does this model actually help CPs move from feeling stuck to addressing the impact of climate change? Does the addition of the non-system dependent interventions allow CPs to avoid negative affect? What is the psychological impact of working within a critical paradigm? What types of evidence-based interventions could be utilized within each stage? Finally, since this is the first study on climate change and CP, additional studies should be done in order to validate these findings. Qualitative study of CPs who have a racial identity other than White would shed light on any differences

within the field, itself. Additionally, large quantitative study could shed light on thoughts, perceptions, and feelings toward addressing climate change as a profession.

Conclusion

The purpose of this study was to better understand the relationship between climate change, social justice, and CP. Thematic analysis (Braun & Clarke, 2006) was used to analyze nine interviews and resulted in six unique themes: (1) dissonance, (2) professional dilemmas, (3) resistance, (4) CPs role, (5) negative affect, and, (6) privilege. This study finds that climate change is currently impacting CPs personal and professional lives in the form of identity and value incongruence; professional dilemmas related to climate change; and negative affect. Participants had a strong social justice commitment and felt that the impact of climate change could be addressed within existing structures of CP. Overall, the results of this study find that CP is potentially well suited to address the social justice dilemmas within climate change but lacks a model. This chapter ended with a presentation of two calls-to-action: (1) we need to address the adverse impact of climate change, and, (2) we need to address the role that power and privilege play in CP. Additionally, a theoretical three-stage model to allow CPs to better see, conceptualize, and implement interventions to address the impact of climate change was presented. Taken together, this study provides a foundation for the integration of climate change into CP. It provides a foundation for future scholarship, clinical practice, and systemic level interventions aimed at climate change.

References

Adeola, F. & Picou, J. (2014). Social Capital and the mental health impacts of hurricane Katrina: assessing long-term patterns of psychosocial distress. *International Journal of Mass Emergencies & Disasters, 32*(1), 121-156. https://dx.doi.org/10.1186%2Fs12888-018-1863-z

Albrecht, G., Sartore, G., Connor, L., Higginbotham, N., Freeman, S., Kelly, B., Stain, H., Tonna, A., & Pollard G. (2007) Solastalgia: the distress caused by environmental change, *Australasian Psychiatry, 15*(1), 95-98. DOI: 10.1080/10398560701701288

Alderman, K., Turner, L. R., & Tong, S. (2012). Floods and human health: A systematic review. *Environment International, 47*, 37–47. https://doi.org/10.1016/j.envint.2012.06.003

Alcock, I., White, M. P., Wheeler, B. W., Fleming, L. E., & Depledge, M. H. (2014). Longitudinal effects on mental health of moving to greener and less green urban areas. *Environmental Science & Technology, 48*, 1247–1255. https://doi.org/10.1021/es403688w

Ali, J., Farrell, A., Alexander, A., Forde, D., Stockton, M., & Ward, K. (2017). Race differences in depression vulnerability following hurricane Katrina. *Psychological Trauma: Research, Practice, and Policy, 9*(3), 317-324. https://psycnet.apa.org/doi/10.1037/tra0000217

American Psychological Association (2011). Resolution on affirming psychologists' role in addressing global climate change. Retrieved from: http://www.apa.org

Anderson, C. A. (2012). Climate change and violence. In D. Christie (Ed.), The encyclopedia of peace psychology. Hoboken, NJ: Wiley-Blackwell.

Azuma, K., Ideka, K., Kagi, N., Yanagi, U., Hasegawa, K., Osawa, H. (2014). Effects of water-damaged homes after flooding: health status of the residents and the environmental risk

factors. *International Journal of Environmental Health Research, 24*(2), 158-175. https://doi.org/10.1080/09603123.2013.800964

Beard, C. B., Eisen, R. J., Barker, C. M., Garofalo, J. F., Hahn, M., Hayden, M., . . . Schramm, P. J. (2016). Vector-borne diseases. In: The impacts of climate change on human health in the United States: A scientific assessment (pp. 129–156). Washington, D.C.: U.S. Global Change Research Program.

Beer, A., Spanierman, L., Greene, J., & Todd, N. (2012). CP trainees' perceptions of training and commitments to social justice. *The Journal of Counseling Psychology, 59*(1), 120-133. https://psycnet.apa.org/doi/10.1037/a0026325

Bell, J. E., Herring, S. C., Jantarasami, L., Adrianopoli, C., Benedict, K., Conlon, K., . . . Schreck, C. J. (2016). Impacts of extreme events on human health. In: The impacts of climate change on human health in the United States: A scientific assessment (pp. 99–128). Washington, D.C.: U.S. Global Change Research Program.

Bowman, S., & Roysicar, G. (2011). Training and practice in trauma, catastrophes, and disaster counseling. *The Counseling Psychologist, 39*(8), 1160-1181. https://doi.org/10.1177%2F0011000010397934

Borenstein, (2018). 'Unprecedented changes' must be made to stop catastrophic change, UN report says. Retrieved from: http://pbs.org

Braun, V. & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*, 77-101. http://dx.doi.org/10.1191/1478088706qp063oa

Braun., V. & Clarke, V. (2012). Thematic Analysis. In H. Cooper (Ed.), APA handbook of research methods in psychology: Vol. 2: Research designs (pp. 57-71). http://dx.doi.org/10.1037/13620-004

Brenen, M. & Saad, L. (2018). Global warming concerns steady despite some partisan shifts. Retrieved from: www.gallup.com

Brown, T. H., Mellman, T. A., Alfano, C. A., & Weems, C. F. (2011). Sleep fears, sleep disturbance, and PTSD symptoms in minority youth exposed to Hurricane Katrina. *Journal of Traumatic Stress*, *24*(5), 575–580. https://doi-org.lib-proxy.radford.edu/10.1002/jts.20680

Burke, M., Gonzalaz, F., Baylis, P., Heft-Neal, S., Baysan, C., Basu, S. & Hsiang, S. (2018). Higher temperatures increase suicide rates in the United States and Mexico. *Nature Climate Change, 8*, 723-729. https://doi.org/10.1038/s41558-018-0222-x

Buki, L. (2014). The relevance of CP in addressing major social issues. *The Counseling Psychologist, 42*(1), 6-12. https://doi.org/10.1177%2F0011000013516369

Clark, H., Murdock, N. L., & Koetting, K. (2009). Predicting Burnout and Career Choice Satisfaction in Counseling Psychology Graduate Students. *The Counseling Psychologist, 37*(4), 580–606. https://doi.org/10.1177/0011000008319985

Clayton, S., Manning, C. M., & Hodge C. (2014). Beyond storms & droughts: The psychological impacts of climate change. Washington, DC: American Psychological Association and ecoAmerica.

Clayton, S., Manning, C. M., Krygsman, K., & Speiser, M. (2017). Mental Health and Our Changing Climate: Impacts, Implications, and Guidance. Washington, D.C.: American Psychological Association and ecoAmerica.

Creswell, J. (2009). Research design: Qualitative, Quantitative, and Mixed Methods approaches. Thousand Oaks, CA: Sage Publications.

Crimmins, A., J. Balbus, J., Gamble, J., Beard, C., Bell, J. … et al. (Eds.). (2016). The Impacts of Climate Change on Human Health in the United States: A Scientific Assessment. Washington D.C: U.S. Global Change Research Program. http://dx.doi.org/10.7930/J0R49NQX

Cross, W. & Reinhardt, J. (2017). Whiteness and serendipity. *The Counseling Psychologist, 45*(5), 696-705. https://doi.org/10.1177%2F0011000017719551

DeBlaere, C., Singh, A. A., Wilcox, M. M., Cokley, K. O., Delgado-Romero, E. A., Scalise, D. A., & Shawahin, L. (2019). Social Justice in CP: Then, Now, and Looking Forward. *Counseling Psychologist, 47*(6), 938–962. https://doi-org.lib-proxy.radford.edu/10.1177/0011000019893283

Dodgen, D., Donato, D., Kelly, N., La Greca, A., Morganstein, J., … et al., (2016) Ch. 8: Mental Health and Well-Being. The Impacts of Climate Change on Human Health in the United States: A Scientific Assessment. Washington D.C.: U.S. Global Change Research Program, Washington, 217–246. http://dx.doi. org/10.7930/J0TX3C9H

Doherty, T. & Clayton, S. (2011). The psychological impacts of global climate change. *The American Psychologist, 66*(4), 265-276. https://psycnet.apa.org/doi/10.1037/a0023141

Fann, N., Brennan, T., Dolwick, P., Gamble, J. L., Ilacqua, V., Kolb, L., . . . Ziska, L. (2016). Air quality impacts. The impacts of climate change on human health in the United States: A scientific assessment (p. 76). Washington, D.C.: U.S. Global Change Research Program.

Flores, M. P., De La Rue, L., Neville, H. A., Santiago, S., Rakemayahu, K., Garite, R., … Ginsburg, R. (2014). Developing social justice competencies: A consultation training approach. *Counseling Psychologist*, *42*(7), 998–1020. https://doi.org/10.1177%2F0011000014548900

Fouad, N., Gerstein, L., & Toporek, R. (2006). Social justice and CP in context in Toporek, R., Gerstein, L., Fouad, N., Roysicar, G., & Israel, T. (Eds.) The handbook for social justice in counselling psychology: leadership, vision, and action (p. 1-23). Washington, D.C.: American Psychological Association.

Funk, C. & Kennedy, B. (2020). How Americans see climate change and environmentalism is 7 graphs. Retrieved from: Pewresearch.org

Gelso, Nut Williams, & Fretz (2014). *The Handbook of CP*. Washington, D.C.: American Psychological Association.

Gifford, R. (2011). The dragons of inaction: The psychological barriers that limit climate change mitigation and adaptation. *The American Psychologist, 66*(4), 290-302. https://psycnet.apa.org/doi/10.1037/a0023566

Goodman, L. A., Wilson, J. M., Helms, J. E., Greenstein, N., & Medzhitova, J. (2018). Becoming an advocate: Processes and outcomes of a relationship-centered advocacy training model. *The Counseling Psychologist*, *46*(2), 122–153. https://doi.org/10.1177/0011000018757168

Grahn, P., & Stigsdotter, U. A. (2003). Landscape planning and stress. *Urban Forestry & Urban Greening*, 2(1), 1–18. https://doi.org/10.1078/1618-8667-00019

Grineski, S. E., Collins, T. W., Ford, P., Fitzgerald, R., Aldouri, R., Velázquez-Angulo, G., . . . & Lu, D. (2012). Climate change and environmental injustice in a bi-national context. *Applied Geography, 33*, 25–35. https://doi.org/10.1016/j.apgeog.2011.05.013

Guba, E. G. (1990). The alternative paradigm dialog. In E. G. Guba (Ed.), The paradigm dialog (pp. 17-30). Newbury Park, CA: Sage.

Haidt, J. (2020). Tribalism, Forbidden Base rates, and the Telos of Social Science.*Psychological Inquiry, 31*(1), 53-56. DOI: 10.1080/1047840X.2020.1722602

Haverkamp, B. (2005). Ethical perspectives on qualitative research in counseling psychology. *Journal of Counseling Psychology, 52*(2), 146-155. https://psycnet.apa.org/doi/10.1037/0022-0167.52.2.146

Haverkamp, B. & Young, R. (2007). Paradigms, purpose, and the role of the literature: formulating a rationale for qualitative investigations. *The Counseling Psychologist, 35*(2), 265-294. https://psycnet.apa.org/doi/10.1177/0011000006292597

Heesacker, M. (2018). Presidential Address: Counseling Psychology in the Trump Era. *The Counseling Psychologist*, *46*(1), 77–86. https://doi.org/10.1177/0011000018754324

Helms, J. (2017). The challenge of making whiteness visible: Reactions to four whiteness article. *The Counseling Psychologist, 45*(5), 717-726. https://doi.org/10.1177%2F0011000017718943

Hill, C. (2012). Consensual Qualitative Research: A Practical Recourse for Investigating Social Science Phenomena. Washington, DC: American Psychological Association.

Israel, T. (2012). 2011 Society of CP Presidential Address: Exploring Privilege in CP--Shifting the Lens. *Counseling Psychologist, 40*(1), 158–180. https://doi.org/10.1177%2F0011000011426297

IPCC (2018). Global warming of 1.5C – summary for policymakers. Geneva: IPCC.

Jacobs, S., Hoffman, M., Leach, M., & Gerstein, L. (2011). CP and large-scale disasters: Moving on to action, practice, and research. *The Counseling Psychologist, 39*(8), 1203-1211. https://doi.org/10.1177%2F0011000011419309

Joyce, C. (2018, October 8). Climate report warns of extreme weather, displacement of millions. Retrieved from: http://www.npr.org

Kessler, R., Galea, S., Jones, R., & Parker, H. (2006). Mental illness and suicidality after hurricane Katrina. *Bulletin of the World Health Organization, 84*(11), 1-21. https://dx.doi.org/10.2471%2Fblt.06.033019

Kessler, R., Galea, S., Gruber, M., Sampson, N., Ursano, R., & Wessely, S. (2008). Trends in mental illness and suicidality after hurricane Katrina. *Molecular Psychiatry, 13*, 374-384. https://dx.doi.org/10.1038%2Fsj.mp.4002119

Kozan, S., & Blustein, D. L. (2018). Implementing Social Change: A Qualitative Analysis of Counseling Psychologists' Engagement in Advocacy. *The Counseling Psychologist*, *46*(2), 154–189. https://doi.org/10.1177/0011000018756882

Kübler-Ross, E., & Kessler, D. (2005). On grief and grieving: Finding the meaning of grief through the five stages of loss. New York; Toronto: Scribner.

Lee, H. C., Lin, H. C., Tsai, S. Y., Li, C. Y., Chen, C. C., & Huang, C. C. (2006). Suicide rates and the association with climate: A population-based study. *Journal of Affective Disorders, 92(*2), 221–226. https://doi.org/10.1016/j.jad.2006.01.026

Levitt, H.M., Bamberg, M., Creswell, J.W., Frost, D.M., Josselson, R., & Suarez-Orozco, C. (2018). Journal article reporting standards for qualitative primary, qualitative meta-analytic, and mixed methods research in psychology: The APA Publications and Communications Board task force report. American Psychologist, 73(1), 26-46. Doi:10.1037/amp0000151

Lichtenberg, J. W., Hutman, H., & Goodyear, R. K. (2018). Portrait of counseling psychology: demographics, roles, activities, and values across three decades. *The Counseling Psychologist*, *46*(1), 50–76. https://doi.org/10.1177%2F0011000018754532

Litz, B., Stein, N., Delaney, E., Lebowitz, L., Nash, W., Silva, C. & Maguen, S. (2009). Moral injury and moral repair in war veterans: A preliminary model and intervention strategy. *Clinical Psychology Review, 29*(8), 695-706. https://doi.org/10.1016/j.cpr.2009.07.003

Lowe, S. R., Manove, E. E., & Rhodes, J. E. (2013). Posttraumatic stress and posttraumatic growth among low-income mothers who survived Hurricane Katrina. *Journal of Consulting and Clinical Psychology*, *81*(5), 877–889. https://doi.org/10.1037/a0033252

Luber, G., & McGeehin, M. (2008). Climate change and extreme heat events. *American Journal of Preventive Medicine, 35*(5), 429–435. https://doi.org/10.1016/j.amepre.2008.08.021

Milkin Institute School of Public Health (2018). Ascertainment of the Estimated excess mortality from hurricane Maria in Puerto Rico. Washington, D.C.: Milkin Institute of Public Health.

Mollen, D., Smith, N. G., Levy, J. J., & Magyar-Moe, J. L. (2012). Privilege and Belonging: The Quest to Make the Society of Counseling Psychology More Welcoming. *The Counseling Psychologist*, *40*(6), 856–867. https://doi.org/10.1177/0011000012443857

Morrow, S. L., & Smith, M. L. (2000). Qualitative research for CP. In S.D. Brown & R. W. Lent (Eds.), Handbook of CP (3rd ed., pp. 199-230). New York: John Wiley.

Morrow, S. L. (2005). Quality and trustworthiness in qualitative research in counseling psychology. *Journal of CP, 52,* 250-260. https://psycnet.apa.org/doi/10.1037/0022-0167.52.2.250

Morrow, S. (2007). Qualitative research in counseling psychology: Conceptual foundations. *The Counseling Psychologist, 35*(2), 209-235. https://psycnet.apa.org/doi/10.1037/0022-0167.52.2.126

Moser, S. C. (2013). Navigating the political and emotional terrain of adaptation: Community engagement when climate change comes home. In S. C. Moser & M. T. Boykoff (Eds.), Successful adaptation to climate change: Linking science and policy in a rapidly changing world (pp. 289–305). New York, NY: Routledge.

National Weather Service. (2016). Natural hazard statistics. Washington, D.C.: National Oceanic and Atmospheric Administration.

Naylor, B. (2018, September 13). Trump denies death poll in Puerto Rico, Falsely claims 'done by the democrats.' Retrieved from: www.npr.org

Olle, C. (2018). Breaking institutional habits: A critical paradigm for social change agents in psychology. *The Counseling Psychologist, 46*(2), 190-212. https://doi.org/10.1177%2F0011000018760597

Pachauri, R.K., & Meyer, L.A. (Eds.). (2015). IPCC, 2014: Climate Change: Synthesis Report. Geneva, Switzerland: Intergovernmental Panel on Climate Change.

Packard, T. (2009). The 2008 Leona Tyler award address: core values that distinguish counseling psychology: personal and professional perspectives. *The Counseling Psychologist, 37*(4), 610–624. https://psycnet.apa.org/doi/10.1177/0011000009333986

Parham, W. (2011). A call to action: Responding to large-scale disasters, catastrophes, and traumas. *The Counseling Psychologist, 39*(8), 1193-1202. https://doi.org/10.1177%2F0011000011417633

Pearce, M., Eagle, L., Low, D., Schurmann, A. (2015). Cut from 'country': the impact of climate change on the mental health of aboriginal pastoralists. *Australasian Journal of Regional Studies, 31*(1), 50-79.

Perera, F. P., Tang, D., Wang, S., Vishnevetsky, J., Zhang, B., Diaz, D., . . . Rauh, V. (2012). Prenatal polycyclic aromatic hydrocarbon (PAH) exposure and child behavior at age 6–7 years. *Environmental Health Perspectives, 120*(6), 921–926. https://dx.doi.org/10.1289%2Fehp.1104315

Picou, J., & Hudson, K. (2010). Hurricane Katrina and Mental Health: A Research Note on Mississippi Gulf Coast Residents. *Sociological Inquiry*, *80*(3), 513–524. https://doi.org/10.1111/j.1475-682x.2010.00345.x

Pongiglione, F., & Cherlet, J. (2015). The social and behavioral dimensions of climate change: fundamental but disregarded? *Journal for General Philosophy of Science*, *46*(2), 383–391. https://doi-org.lib-proxy.radford.edu/10.1007/s10838-015-9305-9

Prochaska, J., Norcross, J., Diclimente, C. (1995). Changing for good: a revolutionary six-stage program for overcoming bad habits and moving your live positively forward. New York, NY: Harper Collins.

Purcell, R., & McGirr, J. (2018). Rural health service managers' perspectives on preparing rural health services for climate change. *Australian Journal of Rural Health*, *26*(1), 20–25. https://doi-org.lib-proxy.radford.edu/10.1111/ajr.12374

Rosa, E., Rudel, T., York, R., Jorgenson, A. (2015). The human (anthropogenic) driving forces of climate change. In Dunlap & Brulle (Eds.), Climate Change and Society: Sociological Perspectives. Oxford University Press.

Runyon, L., (2018, October 8). In a drying climate, Colorado's 'water cop' patrols for water thieves. Retrieved from http://www.npr.org

Sastry, N., & Gregory, J. (2013). The effect of hurricane Katrina on the prevalence of health impairments and disability among adults in New Orleans: differences by age, race, and sex. *Social Science and Medicine, 80,* 121-129. https://dx.doi.org/10.1016%2Fj.socscimed.2012.12.009

Scheel, M. J., Stabb, S. D., Cohn, T. J., Duan, C., & Sauer, E. M. (2018). Counseling psychology model training program ψ. *The Counseling Psychologist, 46*(1), 6-49. doi:10.1177/0011000018755512

Shay, J. (2014). Moral injury. *Psychoanalytic Psychology, 31*(2), 182–191. https://doi.org/10.1037/a0036090

Simpson, D. M., Weissbecker, I., & Sephton, S. E. (2011). Extreme weather-related events: Implications for mental health and well-being. In I. Weissbecker (Ed.), Climate change and human well-being: Global challenges and opportunities (pp. 57–78). New York, NY: Springer.

Singh, A. A., Hofsess, C. D., Boyer, E. M., Kwong, A., Lau, A. S. M., McLain, M., & Haggins, K. L. (2010). Social Justice and Counseling Psychology: Listening to the Voices of Doctoral Trainees. *The Counseling Psychologist*, *38*(6), 766–795. https://doi.org/10.1177/0011000010362559

Smith, N. G., Keller, B. K., Mollen, D., Bledsoe, M., Buhin, L., Edwards, L. M., . . . Yakushko, O. (2012). Voices of early career psychologists in Division 17, the Society of Counseling Psychology. *The Counseling Psychologist, 40,* 794–825. https://doi.org/10.1177%2F0011000011417145

Smith, K., Woodward, A., Campbell-Lendrum, D., Chadee, D., Honda, Y., … et al., (2014). Human health: impacts adaptations and co-benefits. In: Climate change 2014: impacts, adaptation, and vulnerability. Part A: global and sectoral aspects. New York, NY: Cambridge University Press.

Spanierman, L. B., & Smith, L. (2017). Roles and responsibilities of White allies: Implications for research, teaching, and practice. *The Counseling Psychologist, 45*(5), 606–617. https://doi.org/10.1177%2F0011000017719550

Spokane, A., Inman, A., Weatherford, R., Davidson, A., & Straw, R. (2011). Ecologically based, culturally concordant responding following disasters: the counseling psychologist's role. *The Counseling Psychologist, 39*(8), 1128-1159.

Strauss, A., & Corbin, J. (1998). Basics of qualitative research: techniques and procedures for developing grounded theory. Thousand Oaks, CA: Sage Publications, Inc.

Stocker, T.F., Qin, D. Plattner, G., Alexander, L, Allen, S., Bindoff, N., … Xie, S. (2013) Technical Summary In Climate change 2013: The physical science basis. Stocker, T, Qin, T., Plattner, G. et al (Eds.) Cambridge, United Kingdom and New York, NY: Cambridge University Press.

Sue, D. W., Arredondo, P., & McDavis, R. J. (1992). Multicultural counseling competencies and standards: A call to the profession. *Journal of Counseling & Development*, *70*(4), 477–486. Retrieved from https://lib-proxy.radford.edu/login?url=http://search.ebscohost.-com/login.aspx?direct=true&db=bth&AN=9206290424&site=eds-live&scope=site

Sue, D. W. (2017). The challenges of becoming a White ally. *The Counseling Psychologist, 45*(5), 706–716. https://psycnet.apa.org/doi/10.1177/0011000017719323

Swim, J., Clayton, S., & Howard, G. (2011). Human behavioral contributions to climate change: psychological and contextual drivers. *The American Psychologist, 66*(4), 251-264. https://psycnet.apa.org/doi/10.1037/a0023472

Swim, J., Stern, P., Doherty, T., Clayton, S., Reser, J. … et al., (2011). Psychology's contribution to understanding and addressing global climate change. *The American Psychologist, 66*(4), 241-250. https://psycnet.apa.org/doi/10.1037/a0023220

Swords, B. A., & Ellis, M. V. (2017). Burnout and Vigor Among Health Service Psychology Doctoral Students. *The Counseling Psychologist, 45*(8), 1141–1161. https://doi.org/10.1177/0011000017747548

Sterm, P. (2011). The contributions of psychology to limiting climate change. The American Psychologist, 66(4), 303-314. https://doi.org/10.1016/B978-0-12-813130-5.00007-2

Tam, B., Cough, W., Edwards, V., & Tsuji, L. (2013). The impact of climate change on the well-being and lifestyle of a First Nation community in the western James Bay region. *The Canadian Geographer, 57*(4), 441-456. DOI: 10.1111/j.1541.0064.2013.12033.x

Tebbe, E., Moradi, B., Conelly, K., & Lenzen, A. (2018). "I don't care about you as a person": Sexual minority women objectified. *Journal of Counseling Psychology, 65*(1), 1-16. https://doi.org/10.1037/cou0000255

Trtanj, J., Jantarasami, L., Brunkard, J., Collier, T., Jacobs, J., Lipp, E., . . . Thurston, J. (2016). Climate impacts on water related illness. The impacts of climate change on human health in the United States: A scientific assessment (pp. 157–188). Washington, D.C.: U.S. Global Change Research Program.

Toporek, R., Gerstein, L., Fouad, N., & Roysicar, G. (2006). The handbook for social justice in CP: leadership, vision, and action. Washington, D.C.: American Psychological Association.

Toporek, R. L., Gerstein, L. H., Fouad, N. A., Roysircar, G., & Israel, T. (2006). Future directions for counseling psychology: Enhancing leadership, vision, and action in social justice. In R. L. Toporek, L. H. Gerstein, N. A. Fouad, G. Roysircar, & T. Israel (Eds.), Handbook for social justice in counseling psychology: Leadership, vision, and action (p. 533–552). Sage Publications, Inc. https://doi.org/10.4135/9781412976220.n35

Vera, E. M., & Speight, S. L. (2003). Multicultural competence, social justice, and counseling psychology: expanding our roles. *The Counseling Psychologist, 31*(3), 253. https://doi.org/10.1177%2F0011000003031003001

Yeh, C. & Inmann, A. (2007). Qualitative data analysis and interpretation in counseling psychology: strategies for best practice. *The Counseling Psychologist, 35*(3), 369-403. https://doi.org/10.1177%2F0011000006292596

Yun, K., Lurie, N., & Hyde, P. S. (2010). Moving mental health into the disaster-preparedness spotlight. *The New England Journal of Medicine, 363*(13), 1193–1194. https://doi.org/10.1056/nejmp1008304

Ziska, L., Crimmins, A., Auclair, A., DeGrasse, S., Garofalo, J. F., Khan, A. S., . . . Walls, I. (2016). Ch. 7: Food safety, nutrition, and distribution. In: The impacts of climate change on human health in the United States: A scientific assessment (pp. 189–216). Washington, D.C.: U.S. Global Change Research Program.

Chapter 2

Review of the Literature

Climate change is widely accepted as a significant problem facing the world (Crimmins et al., 2016; Roy, 2018). Furthermore, the impacts of climate change are seen most often in marginalized communities (Clayton et al., 2017; Crimmins et al., 2016; Pachauri & Myer, 2014) and is most likely due to systems of power and privilege that create a "buffering" effect from climate change (Roy, 2018). Although climate change has not been part of the CP discourse up until this point, the field has developed a specialized skill in social justice through its history (Gelso et al., 2014), guiding values (Gelso et al., 2014; Packard, 2009), and educational structures (Scheel et al., 2018). However, despite the knowledge that climate change creates adverse impacts on the health of marginalized populations (Clayton et al., 2017; Crimmins et al., 2016; Prochaska & Miller, 2014), and CP's commitment (Fouad, 2006), history (Gelso et al., 2014), guiding values (Packard, 2009), and training (Scheel et al., 2018) in social justice, little is known about how counseling psychologists view climate change. As a result, this study investigates what counseling psychologists think about climate change and what they believe should be done. The following research questions were identified prior to this literature review:

(a) How do counseling psychologists conceptualize climate change impacts within marginalized and vulnerable populations?

(b) How do counseling psychologists conceptualize CP's role in addressing climate change and the impact within marginalized and vulnerable populations?

(c) What types of activities do counseling psychologists engage in to mitigate climate change?

    a. What limitations do counseling psychologists face in these activities?

    b. What co-benefits have counseling psychologists experienced in these activities?

(d) Given CP's commitment to social justice, what unique factors does the field of CP bring to mitigating climate change as a social justice issue?

This literature review is presented in a thematic manner, rather than a theoretical or methodological manner. This choice was made due to the nature of the study being qualitative and exploratory. As such, the literature will provide an overview of major findings within the climate change research including (a) the natural systems, (b) drivers, and (c) and health impacts within marginalized communities. Additionally, this review will provide an overview of major findings within social justice in CP including (a) the history, (b) programmatic commitments, (c) social justice competencies, and (d) large-scale disaster work. Before exploring each of these themes, key terms and definitions will be operationalized.

Operationalization of Key Concepts and Definitions

Before diving into the review of the literature, an overview of several key concepts and definitions is provided in order to give context and meaning to important terms and abbreviations used throughout the chapter.

Adaptation

Adaptation is used to refer to individual, community, or societal changes that are made as a result of climate change. Examples may include: improvements to public health systems, new policies and procedures to limit climate change, improved early warning systems for natural disasters, and changes to other sections (e.g., agriculture; Smith et al., 2014).

Anthropogenic

The term "Anthropogenic" refers climate change that is due to human processes. For example, the release of CO_2 into the atmosphere due to driving vehicles is an anthropogenic

process since the significant increase in CO_2 in the atmosphere is primarily due to human behavior.

Climate change

Climate change is conceptualized using the Intergovernmental Panel on Climate Change (Pachauri & Meyer, 2014) fifth assessment report (AR5) on climate change. They defined climate change as: observable changes occurring to the climate system, including the atmosphere, eco-systems, oceans, and cryosphere (i.e., frozen components of Earth's water system). These changes result in events such as extreme temperatures, extreme weather, and shifts in precipitation.

Co-benefits

The term "co-benefits" is used to refer to health benefits that occur when an individual engages in climate change mitigation. A common example is the choice to reduce CO_2 by physically commuting (i.e., biking to work). Physically commuting reduces CO_2 and increases physical fitness which is associated with lower health risks like obesity and heart disease.

Counseling psychology

In this study, CP is used to represent the sub-specialty of psychology, Division 17 of the APA.

Direct, indirect, and psychosocial impacts of climate change

Doherty and Clayton's (2011) terms "direct," "indirect," and "psychosocial" are used to refer to the ways in which climate change impacts health. Direct impacts of climate events occur as a result of single climate events (e.g., a hurricane), whereas indirect impacts occur as a result of more subtle effects (e.g., emotional stress after witnessing the impacts of a climate event) and

are often more long-term (e.g., fear of future impacts). Psychosocial impacts result from changes to human-mediated systems such as the economy, vocations, or food security.

At-risk population

In this chapter, the term "at-risk" refers to marginalized and vulnerable populations when discussing them together. However, both concepts have different connotations. The term vulnerable is used to discuss children, pregnant or post-partum women, older individuals, first-responders and emergency workers, and those whose economic livelihood depends on the climate (e.g., farmers). To define marginalized communities, Isarael's (2006) research is used that suggests marginalization is the integration of non-dominant group identity (e.g., race, gender, etc.) and oppression through individual (e.g., stereotyping) and systemic factors (e.g., institutionalized racism). Essentially, both vulnerable and marginalized communities are at a greater risk of experience adverse outcomes from climate change. However, risks in the vulnerable communities are dependent on physiological or specific situational factors whereas marginalized communities experience greater risk due to the maintenance of systems that create oppression.

Mental health and psychological health

Mental health and psychological health are used interchangeably to refer to the same concept. I use the term "health" rather than disease, disorder, or illness to exemplify that climate change creates changes to our experience of mental or psychological health that can result in increased distress or growth.

Mitigation

Mitigation is used to refer to any adaptive behavior or action that is an attempt to reduce the impact of physical, psychological, or other impacts of climate change to an individual, community, or society.

Major reports

Several key reports on climate change are used within this chapter. Specifically, three major reports are utilized throughout this literature review. These reports were chosen for review based on their extensive analysis of the vast climate change literature and their importance in shaping policy and decision. They are briefly described below.

American Psychological Association (APA) and EcoAmerica

The report, *Mental Health and our Changing Climate* (Clayton et al., 2017) was released to provide updated information on climate change and its impact on human health. This report was created as an update to APA's previous report on climate change, *Beyond Storms and Droughts* (Clayton et al., 2014). *Beyond Storms and Droughts* was the second major report published by the APA that described how climate change impacts mental health. The report followed an increase of awareness within the field of psychology that resulted in the 2011 "Resolution on Affirming Psychologists' Role in Addressing Global Climate Change" (see APA, 2011). As the title states, the resolution affirmed that psychology has a role in addressing the issues of climate change and was the first official recognition from the organization's governance. This affirmation coincided with the *American Psychologist's* 2011 special section on climate change research. Following this special addition, an APA report on mental health and climate change, *Psychology and Global Climate Change* (Clayton et al., 2014), summarized the most up-to-date research on mental health outcomes from climate change. Mental Health and

Our Changing Climate (Clayton et al., 2017*)* provides updated information and an expanded section regarding ways to address the problem at hand.

Intergovernmental Panel on Climate Change

The fifth assessment report (AR5) on climate change was published by the Intergovernmental Panel on Climate Change (IPCC; Pachauri & Meyer, 2014) and contains three sub-reports focused on the physical science, impacts, adaptation; and vulnerability; and mitigation efforts. These subgroups were approved in 2009 and subsequently gathered data before publication in 2013, and 2014, respectively. As such, multiple citations may be used in this review that are housed underneath the IPCC AR5 report. This report builds on the subsequent IPCC reports (e.g., AR4) and will soon be followed by an updated assessment that is currently in the revision phase. In fact, this report was recently approved by the UN IPCC committee (as of October 5, 2018), but is still subject to revision. The stated goal for this report was to create a comprehensive framework for climate initiatives moving forward.

United States Global Change Research Program (USGCRP)

The USGCRP published a report entitled *The Impacts of Climate Change on Human Health in the United States: A Scientific Assessment* (Crimmins et al., 2016). After a call from the *President's Climate Action Plan*, this report utilized over one hundred experts from within eight federal agencies to compile data on climate change trends and impacts within the U.S. population. The stated goal of this report is to increase understanding and better inform decision regarding the health and well-being of American citizens.

Climate Change

The first major theme of the literature review is climate change. Climate change is a major concern facing marginalized communities and significant inequities have been

documented within them (Clayton et al., 2017; Crimmins et al., 2016; Pachauri & Meyer, 2014). First, a brief overview of how climate systems change to impact human health using the IPCC report (Stocker et al., 2013) is provided. Following this, the physical and psychological drivers of climate change are discussed to create a context for how climate change is maintained. Finally, the health impacts within marginalized communities are explored.

An Overview of Climate Systems involved in Climate Change

As climate change hastens (IPCC, 2014), it is important to understand how human behavior and climate systems interact to impact health. In this section, a brief review of the basic components of our climate system is provided. Following this, the physical and psychological mechanisms of climate change are discussed. Although a full review of the research on mechanisms of climate change and systems is beyond the scope of this chapter, a brief discussion of these mechanisms is provided as it provides context for the complex interplay between changes to climate systems, psychological and behavioral factors, and health.

Climate change involves variations to the systems that make up the Earth's climate. Broadly speaking, those systems are the atmosphere (i.e., temperature), hydrosphere (i.e., water systems), cryosphere (i.e., frozen components of the water system), lithosphere (i.e., land), and the biosphere (i.e., living organisms). Although all climate systems are impacted by climate change, several systems play a larger role. Stocker and colleagues (2013) found that changes to the atmosphere, the ocean, and the cryosphere are occurring and result in observable changes (i.e., weather patterns), while current changes to the lithosphere and biosphere (i.e., involving the storing and releasing carbon) are less tangible. As atmospheric changes unfold, more and more observable changes will be seen. Stocker and colleagues (2013) found that global and regional surface temperatures have increased, greenhouse gas concentrations have increased, extreme

weather events have increased, sea levels have risen as the cryosphere has decreased, and ocean acidification has increased. These changes result in imbalance to the entire climate system.

Climate systems are conceptualized as a balanced force in which disruption to one is likely to cause disruption to others. Projections of future changes to climate systems suggest current imbalance in some climate systems are likely to cause exponential and potentially irreversible changes in all climate systems (Stocker et al., 2013). Due to the exponential and potentially irreversible nature of these changes, a shift from prevention toward adaptation and mitigation will likely be advantageous by finding ways for individuals to reduce the tangible impacts of climate change. In the absence of anthropogenic processes, climate systems are relatively stable over time (Pachauri & Meyer, 2014). This suggests that the observable changes to the climate are likely a result of human activity.

Climate Change Drivers

In the absence of substantial natural events (e.g., CO_2 release from a volcano), climate systems are relatively stable on their own (Strocker et al., 2013). Thus, current imbalance suggests the presence of a driving mechanism. Climate change that results from anthropogenic processes can be thought of as containing two distinct but related mechanisms. The first is physical drivers and includes chemical or biological systems that disrupt equilibrium (e.g., the sun, CO_2). The second mechanism is psychological in nature (e.g., consumption) and involves both positive (i.e., increasing harmful behavior) and negative (i.e., decreasing helpful behavior) psychological mechanisms.

Physical Drivers

The physical drivers of climate change are both natural and anthropogenic (Stocker et al., 2013). Two commonly used terms are found in the literature on climate change drivers. The

first, “anthropogenic,” refers to pollutions or pollutants that has its origins in human activity (e.g., driving cars). The second term, “radiative forcing,” is used as a metric for natural and anthropogenic changes. Essentially, a positive radiative forcing results in increased changes (i.e, less equilibrium) whereas a negative radiative forcing results in decreased changes (i.e., greater equilibrium) to climate systems. In other words, a substance or process with a low radiative forcing will result in less changes to the climate systems. Physical drivers of climate change may include: wild fires, volcanoes, and other natural events. Anthropogenic drivers can include: the release of CO_2 through driving and methane production from animal production, among others.

Stocker and colleagues (2013) found that anthropogenic processes had the highest radiative force as compared to other natural and anthropogenic substances and processes. Simply put, this suggests human behavior drives the currently observable climate change. Conversely, naturally occurring substances and processes are not likely to result in drastic changes to the climate system alone (IPCC, 2014). Given what is known about the role of human behavior in driving climate change (Stocker et al., 2013), one might ask why humans continue to promote policies and practices that are harming our planet’s various climate systems. One way to approach this question is to look at what psychological drivers influence human behavior that is harmful toward the climate.

Psychological Drivers

Psychological drivers of climate change are often categorized into attitudes, beliefs, and behaviors and play a large role in the maintenance of systems that create climate change. Interestingly, despite recognition that psychological mechanisms drive climate change (Pongiglione & Cherlet, 2015), researchers have found that social psychology has been under-utilized in climate change research (Pongiglione & Cherlet, 2015; Shwom et al., 2017). In fact,

Pongiglione and Cherlet (2015) identified that roughly 1% of the funding was used for understanding psychological mechanisms in a leading report on climate change, the USGCRP report. Regardless, psychological mechanisms are essential to understand as they provide a foundation for better understanding how humans drive climate change and how we can reduce its impact. Below, two concepts that help explain the behaviors that contribute to climate change are described. The first, "positive psychological drivers," refers to behaviors that directly lead to climate change (e.g., consumption goods). The second, "negative psychological drivers," refers to psychological mechanisms that prevent individuals from engaging in climate change mitigating behaviors (e.g., denial).

Positive psychological drivers. Although positive drivers of climate change include many mechanisms, one of the largest and most encompassing mechanisms is consumption (Swim et al., 2011). Historically, consumption has been primarily conceptualized within the field of economics. More recently, models of consumption have been applied to climate change behavior (e.g., Rosas et al., 2015) and provide helpful insight into how climate change is driven through social systems such as capitalism. A thorough review of these models is beyond the scope of this literature review. However, it is important to note that statistical analysis of consumption models has shown that the human behavior of consumption is the leading human factor contributing to climate change (Rosas et al., 2015; Swim et al., 2011).

The anthropogenic process of consumption is vastly complex and involves multiple contributing factors that make addressing consumption difficult. Swim and colleagues (2011) posited a set of factors that contribute to consumption that help to explain the complex interactions and difficulty addressing consumption. Essentially, they argued that a complex set of interactions can contribute to behaviors that either increase or decrease climate change. For

example, the cultural value of being a vegetarian can lead to behaviors that reduce climate change (e.g., not supporting large scale meat production reduces methane production and CO_2 release from transportation). Conversely, their model also suggests the amelioration of poverty through increasing economic success can also lead to behaviors that contribute to climate change (e.g., increased consumption through purchasing power and demand).

Negative psychological drivers. Negative psychological drivers of climate change are psychological mechanisms that prevent individuals from engaging in behaviors that would mitigate climate change. These mechanisms prevent an individual from engaging in a behavior that reduces the impact of climate change. Essentially, if individuals are not cognizant of or willing to address these negative psychological drivers, then they continue to engage in the positive drivers that increase climate change.

Several psychological mechanisms have been described within social psychology research that help to explain negative psychological drivers of climate change. Gifford (2011) consolidated these mechanisms into seven categories, including: (a) limited cognition (e.g., "climate change isn't a real thing"), (b) ideologies (e.g., "climate change is a hoax made up by the liberal fake news media"), (c) comparisons with others (e.g., "I'm doing the same things my friends are doing"), (d) sunken costs (e.g., "I've put too much into my business to change the way we do things"), (e) cognitive dissonance (e.g., "I know driving to work hurts the environment"), (f) perceived risks (e.g., "I'd be run out of town if I drove a Prius"), and (g) tokenism (e.g., "If I drive a Prius I can buy meat from Australia").

In addition to these mechanisms, psychological defense mechanisms may also help to explain the negative psychological drivers of climate change. At the core of climate change is an ecological disaster so drastic and extreme that it is likely difficult to truly integrate into one's

psychological awareness. Brief and subtle recognitions of this disaster seem likely to contribute to utilization of psychological defenses (e.g., denial, avoidance, etc.) that aid an individual in avoiding the emotional turmoil that awareness would result in. Essentially, as individuals experience what Reser and Swim (2011) called "climate threat," they are likely to experience significant emotional turmoil that results in the utilization of psychological mechanisms that avoid this pain. Research on the psychological impact of climate change has resulted in multiple avenues for addressing the threat of climate change such as cognitive-behavioral strategies (i.e., cognitive appraisals; Reser & Swim, 2011) and psychodynamic strategies (i.e., offering forgiveness; Davenport, 2017).

As described, there are physical and psychological mechanisms that contribute to changes in the complex climate systems. Physical mechanisms of climate change include both natural (e.g., wild fires) and anthropogenic processes (e.g., driving to work). Psychological mechanisms of climate change are positive (i.e., increase climate change behavior) or negative (i.e., prevent climate mitigation behavior) that both result in anthropogenic processes that lead to climate change. Ultimately, these mechanisms suggest that humans play a significant role in climate change while also suggesting that the field of psychology will play a significant role in influencing the ways that climate change is mitigated.

Climate Change Impacts on Health

The result of the previously mentioned processes is a significant and detrimental impact on human health (Clayton et al., 2017; Crimmins et al., 2016; Prachauri & Meyer, 2014). The impact on human health is generally thought to be both "acute" and "chronic." Acute impact is often sudden and related to a specific event (e.g., stress reaction following a hurricane"), whereas the chronic impact is often more subtle and long-lasting (e.g., hopelessness after years of crop

failure). Unfortunately, the chronic impact of climate change is often overlooked. For example, a recent article published by National Public Radio (NPR) regarding falsified claims made by President Donald Trump about hurricane Maria highlights the sometimes controversial and confusing nature of understanding the immediate and long-term impact of climate change. The crux of the article is Trump's denial of an independent study finding roughly three-thousand people were killed in Puerto Rico as a result of hurricane Maria. NPR reported the original estimates of the death toll immediately following the hurricane as being 60 individuals (Naylor, 2018), while the independent study conducted by George Washington University (Milkin Institute School of Public Health, 2018) found roughly 3,000 deaths. The acute impact of hurricane Maria was direct, high in severity, short lasting, and resulted in roughly 60 deaths. The chronic impact was indirect, mixed in severity, but long lasting and resulted in roughly 3,000 deaths. This says nothing of the impact of climate change to business, infrastructure, and other domains of livelihood on the island. Having a limited understanding of or dismissing the chronic health impact of climate change has drastic implications; needed resources may be underestimated and health infrastructure may suffer as a result. This underestimation may lead to further chronic impact to human health, such as mental and psychological health.

Exposure Models

Each of the leading reports on climate change contain a conceptual framework for understanding how climate change results in adverse impact on human health. The use of an exposure model helps to pinpoint specific avenues in which human health is impacted and provides a conceptual framework for where intervention could occur. Below, I provide an overview of the USGCRP, IPCC, and APA exposure models followed by a discussion of the similarities and differences within each model.

USGCRP exposure model. The first model used to understand the impact of climate change on human health is found in the USGCRP report. In this model, climate change causes impact through certain exposure pathways (e.g., extreme weather, illness, damage to homes) that result in adverse health outcomes. Exposure pathways and the adverse health outcomes are both influenced by individual (e.g., behaviors), cultural (e.g., values), and systemic (e.g., community preparedness) variables that can change the severity of impact.

One of the benefits of this model of exposure is it works in multiple contexts. For example, the USGCRP chapter on mental health (see Dodgen et al., 2016) used this model to explain how mental health is impacted by climate change. Using mental health as an example, climate drivers trigger exposure pathways (e.g., damage to homes, livelihood, and displacement), which impact mental health and well-being (e.g., depression, grief, and stress). Climate drivers may simultaneously impact environmental and institutional contexts (e.g., access to services) and social and behavioral contexts (e.g., socioeconomic status), which can in turn influence the exposure pathways and mental health outcomes. This model is beneficial in understanding how the impact of climate change is more likely to occur in at-risk communities. For instance, if an individual is experiencing poverty, he or she is more likely going to have a more challenging time adapting to changes in the exposure pathways, which would result in more significant exposure than those with greater means.

IPCC exposure model. The second exposure model reviewed is the IPCC model. Essentially, this model shows how changes to the climate (e.g., increases in heat) interacts with specific environmental conditions (e.g., existing temperature) to impact human health through direct events (e.g., heat wave), indirect exposure (e.g., loss of crops due to heat), and ruptures to social (e.g., increase in heat-related aggression) and economic (e.g., in ability to pay for farming

changes to account for loss of crops) systems. This model theorizes that the systems of public health then contribute to the extent to which an individual experiences adverse outcomes of climate change. For example, if a health system is able to identify at-risk individuals for heat-related death or illness, they can provide preventative care before a heat-wave occurs. Conversely, if a health system is not able to do this, then more individuals are likely to die or become ill. As such, this model provides another mechanism through which at-risk individuals may be impacted by climate change. In comparison to the USGCRP report, this model provides specific avenues for intervention to occur. These can occur at the level of climate change, social infrastructure, and public health capacity.

APA exposure model. Finally, the last model for understanding the impact of climate change on human health is from the APA report on climate change. This report builds on the work of the USGCRP and IPCC reports, and provides an additional focus on the health outcomes with specific emphasis on at-risk and marginalized populations. A Venn diagram is used to exemplify the three main domains of climate effects: (a) physical health, (b) mental health, and, (c) community health. Essentially, climate change can impact the physical, mental, and community health of anyone (as seen in the overlap between each circle). However, individual, physical, and social vulnerabilities make it more likely that at-risk and marginalized individuals will experience greater adverse outcomes of climate change.

Integrating the models. When considering these three models together, several themes emerge. To begin, climate change has at least three pathways to impact human health: directly by weather events, indirectly by disruption to natural systems, and by disruption to human mediated systems (Crimmins et al., 2016). Additionally, several mediating factors exist that can increase or reduce the burden of climate change. The APA report describes a general vulnerability as a

mediating factor (Clayton et al, 2017) while the others expound on vulnerability by describing environmental, institutional, social, and behavioral factors (Crimmins et al., 2016), and adaptation (Smith et al., 2014). As an additional component, Smith and colleagues (2014) demonstrated a feedback mechanism that allows for social infrastructure, public health systems, and mediation to influence climate change itself, which can conversely decrease its impact. Finally, all of these exposure models point to the fact that climate change impacts human health and is likely to impact those who are marginalized or vulnerable due to the interaction between the mediating factors and exposure pathways.

Health Outcomes, At-risk Populations, and Co-benefits within the Major Reports

Climate change impacts human health in a myriad of ways. In this section the IPCC (Pachauri & Meyer, 2015), the USGCRP (Crimmins et al., 2016), and the APA (Clayton et al., 2017) reports will be reviewed regarding the ways that climate change impacts health. Each report will be reviewed for the following themes: physical health, mental health, at-risk populations, and the co-benefits of mitigation. The major findings within each report will be discussed and relevant research that was utilized will be included in this review. The reports will then be summarized and synthesized into the existing literature review.

IPCC climate change report. The IPCC fifth assessment report (Pachauri & Meyer, 2014) gave a comprehensive overview of climate change research at the time of its release. It is separated into three working groups: the physical science, impacts, adaptation; vulnerability; and mitigation. Although this report focuses heavily on the physical science behind climate change, several major implications are drawn regarding the ways in which climate change impacts human health. The major findings regarding the physical and mental health impact, at-risk populations, and co-benefits and resilience are reviewed in the following sections.

Impact to physical health. In this report, physical health is found to be impacted through direct and indirect exposure of (a) direct climate events, (b) changes to ecosystems, and (c) changes to human systems. For example, acute and chronic physical health outcomes come from direct climate events such as heatwaves, floods, droughts, fires, and changes to natural ecosystems. Whereas direct climate events cause physical health impacts such as death and injury, changes to ecosystems more commonly result in vector-borne disease such as Lyme's Disease, food and water infections such as fungus and bacteria, and diminished air quality such as the increase in particles following a wild-fire. This report also finds the impact on physical health is due to alterations of human mediated systems. For example, climate change can impact farming practices, which may result in food scarcity. Additionally, climate change causes the breakdown of human systems such as hospitals and results in individuals not being able to get the immediate care needed to treat their physical illness.

Impact to mental health. The report also found that climate change similarly impacts psychological health through direct and indirect avenues. Direct avenues were most often identified as extreme weather events, whereas indirect avenues were often identified as impact on human mediated systems. Direct avenues were associated with both acute and chronic mental health impacts, whereas indirect avenues were most often associated with chronic mental health outcomes. For example, the direct avenue of extreme weather events (e.g., hurricanes) was overwhelmingly linked with acute adverse psychological outcomes such as stress, acute stress and trauma, and anxiety, while also being associated with chronic adverse mental health outcomes such as post-traumatic stress disorder (PTSD) and depression. The adverse mental health outcomes from indirect avenues were seen as more subtle and complex involving multiple systems of interaction. For instance, forced migration was discussed and is an example of a

complex adverse mental health outcome that results from an indirect avenue of regional and/or economic stability resulting from climate change. Forced migration was described as resulting in significant disruptions to mental health due to the process of migration causing significant disruptions to an individual's life and often being associated with experiences of violence and significant stress.

At-risk populations. This report was also reviewed for reference to at-risk and/or marginalized populations. Several variables were identified from within this report and included geographic location, health status, age, gender, socioeconomic status (SES), indigenous status, and race. Geographic location was primarily discussed in regard to displacement from home and forced migration as a result of climate change. Individuals who experienced displacement or forced migration were more likely to experience adverse mental health outcomes as a result. Similarly, these individuals were more likely to experience adverse physical health outcomes due to disruptions in their access to routine care. Health status (e.g., preexisting conditions) and age (e.g., children and older adults) were more commonly described as being at-risk to climate change due to increased vulnerability and/or susceptibility to disease. Women were also found to be an at-risk population to climate change primarily due to the traditional experience of marginalization. For example, women were less likely to have their health care needs met when facing climate change and also were described as taking on the primary role of caregiver, which was thought to cause substantially higher rates of stress. SES was also linked to greater exposure to climate change for several reasons. First, individuals who are lower SES were more likely to live in areas that experienced the direct impacts of climate change (e.g., the First-Ward during hurricane Katrina). A second factor discussed was the role that access to resources plays in recovering from climate change events. For example, if individuals are not able to repair their

home following a hurricane, they become more vulnerable to adverse physical health outcomes (e.g., mold causing respiratory disease). Finally, an individual's race was also discussed as a risk factor of climate change that could result in negative health outcomes, such as death due to extreme heat. Although these factors represent reasons why someone may be at a greater risk for climate change outcomes, it is important to note that these factors often overlap and may cause compounding vulnerability. For example, a Black American female who also has a low SES is likely to have compounded risks to climate change due to race, female gender, and limited access to resources. Conversely, a Black American male who is moderate to higher SES may still be vulnerable to climate change as a result of his race, but may also exhibit protective factors such as male gender identity and greater access to resources to cope with climate change.

Co-benefits and Resilience. The themes of co-benefits and resilience were found in this report. To examine co-benefits and resilience in each report, co-benefits are considered as behaviors that mitigated climate change (e.g., reduced carbon use) and had observable physical, psychological, or community benefits, whereas resilient behaviors are considered ones that indicated a capacity to recover quickly from climate change. Several co-benefits were found in this report and included reducing pollutants, commuting, dieting, and building green spaces. Reducing pollutants from in home and industrial use was associated with reducing exposure to harmful substances which, was associated with lowered cardiovascular and respiratory risk, rates of cancer, and rates of premature birth. Reducing pollution through choice in transportation increased physical activity, which is associated with lower rates of obesity and general health burden. Eating a "climate change diet" (i.e., reduced meats and high carbon producing foods) resulted in reduced fat intake and better cardiovascular health. Finally, increasing green spaces

was associated with reducing heat in urban areas, which resulted in better physical health outcomes, in addition to psychological benefits such as perceived well-being.

Missing from this report was an explicit mention of resilience. This may be in part due to the emphasis on more technical components of climate change. However, the concept of resilience was apparent in the review of mitigation in that humans have the ability to mitigate climate change, and thus, survive. Resilience is a concept that is at home in CP. In fact, resilience is even found in the research on large-scale disasters in CP. For example, counseling psychologists in the disaster program at the Antioch University of New England were able apply single-session psychological first aid to individuals facing natural disasters that promoted resilience immediately following a natural disaster (Bowman & Roysicar, 2011). However, they did not explore what factors contributed to resilient responses. Although this report suggests that mitigation of climate change increases co-benefits, we do not know if these co-benefits increase resilient responses to the effects of climate change. Overall, this suggests that the exploration of resilience in climate change may be one of the unique contributions of CP to mitigating climate change.

Summary. The IPCC report was published in 2014 and focuses first on the physical science of climate change and second on the adverse health outcomes. This report was reviewed for climate change impacts to physical health, mental health, at-risk populations, co-benefits, and resilience.

Although this report was not intended to primarily focus on health outcomes, at-risk populations, and co-benefits, this information was identified within the report. Climate change was found to impact health in direct and indirect ways. Physical and psychological health are both impacted through direct and indirect avenues. Additionally, each can be impacted through

acute or chronic means. At-risk demographics and marginalized populations were found throughout this report and included geographic regions, health status, age, gender, socioeconomic status, indigenous status, and race. Finally, engaging in climate change mitigating behavior resulted in physical and psychological health benefits, whereas resilience was not overtly addressed in this report.

USGCRP climate change report. The USGCRP climate change report (Crimmins et al., 2016) is a comprehensive review of climate change research that followed the release of the IPCC report in 2014. Both reports have a similar focus on presenting the scientific evidence for climate change. Compared to the IPCC report, the USGCRP report provides a more exhaustive overview on the literature on climate impact on physical and psychological health and at-risk and marginalized communities. Again, this report will be reviewed in light of physical and psychological health outcomes, at-risk and marginalized communities, and co-benefits and resilience.

Impact on physical health. The physical health outcomes of climate change were a strong focal point of this report. This report conceptualized the adverse physical health outcomes of climate change as occurring along two primary pathways: first, through exacerbating existing health problems that are already affected by the climate, and second, by creating unprecedented and/or unanticipated threats to one's health. The report identified eight themes in which these pathways occur: (a) temperature, (b) air quality, (c) extreme events, (d) vector-borne disease, (e) water-related illness, (f) food safety, (g) nutrition, and (h) distribution.

Each of these eight categories was found to be primarily associated with exacerbation of preexisting conditions, unprecedented and unexpected climate events, or both. For instance, temperature was described as relating to both exacerbation by causing heat responsive

preexisting conditions (e.g., heart disease) to become worse with increasing temperatures and adverse physical health outcomes such as stroke and heart attack during unprecedented heat waves. Changes to air quality (e.g., wild-fire smoke), water-related illness (e.g., toxic algae), and vector-borne diseases (e.g., Lyme's Disease) were similarly associated with both exacerbation of preexisting conditions and unprecedented events. Although extreme weather events were described as causing exacerbation of preexisting conditions, the primary pathway seemed to occur as unprecedented events that caused significant disruption to services and physical health outcomes such as injury. Similarly, disruptions to food and health distribution and impact on food safety were most commonly associated with unprecedented events. Finally, higher levels of CO_2 were found to reduce the overall nutritional content of food. Thus, nutrition was most commonly associated with the exacerbation of preexisting conditions.

Impact on psychological health. Several themes regarding psychological health outcomes were found in this report. Three major pathways for adverse psychological health were discussed and included (a) direct climate-related disasters, (b) exposure, and (c) exacerbation of mental health conditions. The first major pathway through which climate change impacts psychological health was as a result of direct climate disasters (e.g., a hurricane). Within this category, there were numerous adverse psychological health outcomes including acute symptoms (e.g., stress, anxiety, and depression) and more chronic impacts to mental health (e.g., development of PTSD). The second major pathway through which climate change impacts psychological health was through media exposure to disaster events. For example, the report outlined how individuals who are exposed to climate-related disasters often experience negative affect in the form of stress, anxiety, and/or depression. The final major pathway through which climate change impacts psychological health was through the exacerbation of existing mental

health conditions. In this report, this finding was primarily discussed in the context of heat exposure and increases to the ambient temperature. For instance, the report outlines how individuals with preexisting mental health conditions (e.g., bipolar disorder) are more likely to experience exacerbation of their symptoms during increases in the air temperature. Similarly, some with preexisting conditions were at a higher risk for heat-related injury and subsequent mental health distress due to the interaction of their medication and temperatures. Additionally, those with preexisting mental health conditions were found to be less able to mitigate the adverse outcomes of climate change due to psycho-social factors that decrease their access to resources.

At-risk populations. Issues concerning at-risk and marginalized populations were frequently addressed in this report. This report identified three concepts that can be used to contribute to an individual's status as a member of a(an) at-risk or marginalized population when considering the impact of climate change. Those are risk of exposure, level of sensitivity, and ability to adapt. When considering these factors, the categories of at-risk or marginalized status in this report included age, race/ethnicity, SES, ability status, pregnancy status, gender, indigenous status, immigrant status, and language. For instance, age accounted for individuals' level of sensitivity and ability to adapt, while it was not strongly associated with rates of exposure. For example, older adults have a greater sensitivity to climate change and may struggle to adapt, young children are more sensitive but have higher adaptability, and middle life adults are neither at an increased risk due to sensitivity or ability to adapt based on age alone. Age, ability status, and pregnancy status were all more commonly associated with sensitivity, rather than exposure and adaptability. Race, SES, gender, indigenous status, immigrant status, and language proficiency all appeared more associated with social structures, were likely to increase one's level of exposure and adaptability, but were not associated with sensitivity. Taken together,

this suggests that traditionally marginalized communities experience unequal distribution of the adverse impacts of climate change.

Co-benefits and resilience. The themes of co-benefits and resilience were all found within this report. resilience was identified in the fact that most individuals recover from mental health distress caused by climate change over time. In fact, this report finds that roughly 80% of individuals exposed to traumatic climate events could be expected to recover over time without intervention whereas 20% would have lingering symptoms such as PTSD. One explanation for this may be individual, cultural, and systemic factors that promote resilient actions. Social support is one factor associated resilience in the face of climate change (Adeolo & Picou, 2014; Ali et al., 2017; Picou & Hudson, 2010) which suggests that individuals who seek out relationships and cultures that promote community togetherness are likely to demonstrate greater resilience after being impacted by climate change. Co-benefits were also found in this report and were broadly discussed. For instance, the report identifies that individuals who work to mitigate climate change experienced benefits to their physical health and psychological well-being. However, it appeared that while these co-benefits were likely to moderate the emotional distress caused by secondary exposure to climate change (i.e., social media), they are not likely to moderate the acute physical and psychological impacts of climate events.

Summary. The USGCRP report was published in 2016, following the publication of the IPCC report. This report was completed on behalf of the *President's Climate Action Plan*, signed by President Obama and was comprised of exhaustively reviewed research surrounding the climate science and the adverse impact to human health caused by climate change. Climate change impacts on health, at-risk populations, co-benefits, and resilience were all found within this report. Physical health was impacted by increasing the severity or frequency of existing

health problems that are impacted by climate systems (e.g., changes to air quality) and creating emergent health problems that did not exist (e.g., Lyme's Disease). Mental health was impacted directly and indirectly by extreme weather events and may be influenced by indirect exposure through the media. Several variables explained why some individuals experience a greater risk to climate change; those were race, SES, immigration status, limited English proficiency, indigenous status, age, sex, and disability status. Co-benefits are likely to moderate the chronic, but not acute, impacts of climate change by increasing resilient responding to disasters.

APA climate change report. The final report reviewed in this study is the APA report completed by Clayton and colleagues (2017). This report is the most recent APA report, and follows the release of the IPCC and USGCRP reports reviewed previously. This report does not provide an exhaustive review of the physical science supporting climate change. Rather it discussesed the physical, psychological, and community effects of climate change. Within this report, Clayton and colleagues discuss the impact on physical and mental health using the terms "acute" and "chronic." Acute impact is described as being immediate, while the chronic impact is longer-term. For example, exposure to hurricanes, flooding, fires, or heatwaves represent an acute impact whereas depression, hopelessness, and disrupted social attachments represents more chronic impact. Those terms will be used to review the impact on physical and mental health, at-risk communities, and co-benefits of resilience. Following this appraisal, a review and synthesis of all three major reports will be provided.

Impact to physical health. This report was reviewed for implications regarding adverse physical health outcomes from climate change. Although not a primary intent of this report, a review of physical health outcomes is provided in the context that physical and psychological health are often interconnected.

Physical health was discussed in the context of acute and chronic mechanisms of impact. Acute impact on physical health was primarily identified as adverse outcomes of extreme weather events. For instance, acute impacts of extreme weather events included death and injury (Alderman et al., 2012), breakdown of infrastructure that prevents rescue and life-saving interventions (Bell et al., 2017) and access to health systems (Alderman et al., 2012), and exposure to disease and toxins (Trtanj et al., 2016). The chronic impacts of extreme weather events included increases in infectious disease (Beard et al., 2016), respiratory illness (Fann et al., 2016), fetal and childhood development problems (Perera, 2016), reduced food quality (Ziska et al., 2016), and disruption to food accessibility.

Impacts to psychological health. Several themes regarding the adverse psychological health outcomes of climate change were found. This report described these outcomes as primarily occurring in two ways: acute and chronic. Acute adverse psychological health outcomes from climate change were primarily in response to one-time disaster events (e.g., a tornado), whereas chronic outcomes were described as being related to the ongoing changes to the climate rather than specific events themselves. The acute impacts in this report included trauma, shock, loss, and decreased well-being. Psychological symptoms were common reactions to acute climate stressors and included anxiety, depression (Ali et al., 2017), and PTSD (Brown et al., 2017). The chronic impacts within this report included aggression (Anderson, 2012), mental health emergencies and suicide (Lee, 2006), loss, helplessness, despair, fear, resignation, and eco-anxiety (Moser, 2013).

At-risk populations. At-risk and marginalized populations were a central feature of this report. To begin, research shows that some racial and ethnic groups experience greater impact beyond socioeconomic status (Grineski et al., 2012). Clayton and colleagues (2017) argued that

social stressors, such as racism, lower resilience following climate change related events and results in greater impact on mental health. This was found to be true during and after hurricane Katrina (Yun, et al., 2010). Additional research finds that some racial and ethnic communities experienced higher impacts of extreme temperature as compared to majority groups (Luber & McGechin, 2008), suggesting that this effect is not limited to natural disasters. The relationship was partially mediated by SES. Similar to the depression outcomes that Ali and colleagues (2017) found following hurricane Katrina, Luber and Mcgechin (2008) suggest that an individual's racial identity likely predicts the relationship even after SES is controlled for. Although not addressed within this research, the reason that race increases risk of climate change may be due in part to systemic injustices such as racism.

Indigenous groups were found to experience greater impact as a result of climate change (Clayton et al., 2017). To begin, livelihood is often tied to geographically risk-prone areas which results in increased likelihood for impact. For example, Tam and colleagues (2013) found that climate change impacted the growing and hunting season of the Fort Albany First Nation community which resulted in reduced well-being and forced migration that stemmed from an inability to engage in their livelihood. This demonstrates how loss of cultural practices of land use and attachment to place can contribute to reduced well-being and resilience.

Several other marginalized or vulnerable communities face an increased risk experiencing the negative impact of climate change (Clayton et al., 2017). Those with fewer physical or financial resources experience a greater burden than those with more resources. Furthermore, those with disabilities and chronic mental and physical health conditions are likely to experience an increased risk. Older individuals are likely to experience an increased risk of exposure to the negative effects of climate change due to compounding factors such as

preexisting health conditions, mobility, and socio-economic status. Finally, women were also found to face an increased risk of exposure to the negative impact of climate change. This is particularly true when a woman is caring for a child.

In addition to these marginalized populations, some populations may also experience an increased risk to the negative effects of climate change even though they do not experience marginalization. Those populations addressed in this report include communities in certain geographic regions that are prone to storms, rising seas, flooding, fires, and droughts; individuals with careers linked to those regions (e.g., a farmer or fisher); and children. Some geographic regions are more impacted by climate change, such as living near water or in a drought prone-region. Climate change can also impact specific vocations by causing disruptions to work that is dependent on the natural environment.

Co-benefits and resilience. Co-benefits and reslience were also found throughout this report. Clayton and colleagues (2017) discussed the co-benefits that can occur when engaging in climate solutions. They argue that physically commuting and taking public transportation increases psychological well-being and invigorates community mental health. Additionally, they argue that increasing green space may result in lower stress. Although this relationship is inversely supported by the fact that decreased access to green space predicts negative well-being (Alcock et al., 2014) it is not fully clear if this relationship is due to other factors (e.g., an individual with lower SES will likely not have access to living in a green neighborhood) or the actual green-space itself. However, Clayton and colleagues (2017) draw on research that suggests access to greenspace predicts positive well-being at least above and beyond SES, age, and gender (Grahn & Stigsdotter, 2003). Furthermore, Clayton and colleagues (2017) argue that

using clean energy is likely to result in reduced health burdens, which results in improved mental health.

The concept of resilience was addressed within this report. The main emphasis is on understanding the factors that contribute to resilient responding including personal attributes and social connects. Personal attributes and actions involve building the belief in one's own resiliency, fostering optimism, cultivating active coping and self-regulation, identifying personal meaning, and boosting preparedness. Social connects are thought to build resilience by increasing support, connecting with family and role models, upholding place-connection, and maintaining a cultural connection.

A final component of this discussion on the co-benefits and resilience is the inclusion of post-traumatic growth within climate change. Post-traumatic growth refers to the concept that an individual can come out stronger than before (Lowe et al, 2013). Clayton and colleagues (2017) suggest that post-traumatic growth may occur as a result of climate change and results in an individual believing that they have gained a skill set or created stronger social support with others. Post-traumatic growth is a related but alternative construct to resilience and suggest that both the process of resilience and post-traumatic growth can occur when addressing the effects of climate change.

Summary. The APA report was published in 2017 and built on the IPCC and USGCRP reports. This report focused primarily on the mental health impacts of climate change, but included a discussion on physical health, co-benefits and resilience. Physical health impacts were described as both acute (e.g., death or injury) and chronic (e.g., lowered nutritional value of food). Additionally, the impacts on mental health were described as acute (e.g., acute stress) and chronic (e.g., depression). The impact of climate change was found to be dependent on the

following variables: Geographic region, career, age, sex, race, SES, disability status, preexisting physical and mental health conditions, and indigenous status. Co-benefits from physical commutes, public transportation, and increasing greenspaces were found. Finally, personal attributes and social connections were found to increase resilience.

Summary and synthesis of the major reports. Within this section, the IPCC (Pachauri & Meyer, 2014) USGCRP (Crimmins et al, 2016), and APA (Clayton et al., 2017) reports were discussed in light of the impacts on physical and mental health, impact on at-risk populations, and co-benefits of resilience. Since the initial publication of the IPCC report in 2014 substantial gains have been seen in the identification of physical and mental health impacts and recognition of at-risk populations and co-benefits. The major findings are summarized below.

Adverse health outcomes. The adverse physical and psychological health outcomes of climate change were found within each report. Across all reports, physical health was found to be impacted by extreme weather (e.g., natural disaster, heatwaves, floods, droughts, and fires), natural systems (e.g., vector-borne disease, food and water infections, nutrition, and diminished air quality), and anthropogenic systems (e.g., occupational hazard and violence and conflict). In comparison, effects on mental health were shown to occur along direct and indirect exposure pathways. Direct exposure led to effects such as trauma, shock, loss, and grief whereas natural and anthropogenic exposure occurred indirectly and led to effects such as aggression, violence, mental health emergencies, solostalgia (i.e., loss of one's relationship to the natural environment due to climate change), loss of autonomy and control, helplessness, depression, fear, resignation, and eco-anxiety. Taken together, these findings suggest that the impacts of climate change are far reaching and will cause a great deal of stress on existent health systems – an outcome of climate change that is already being seen in Australia (Purcell & Mcgirr, 2017).

At-risk populations. At risk status was based on both marginalization (i.e., systemic level barriers) and vulnerability (i.e., exposure, sensitivity, and adaptive capacity). Within all three reports the following variables were found to increase physical and psychological health risks from climate change: (a) Geophonic location, (b) vocation, (c) age, (d) sex, (e) race, (f) SES, (g) disability status, (h)preexisting mental and physical health conditions, (i) indigenous status, (j)immigration status, and (k) language proficiency. Many of these variables may interact with each other and thus compound the impacts of climate change. Additionally, these are moderated by adaptation and other environmental, institutional, social, and behavioral factors (Crimmins et al, 2017; Pachauri & Meyer, 2014). Taken together, this review suggests that climate change does impact at-risk populations to a greater extent than others. Ultimately, this provides evidence that social justice concerns are relevant to issues surrounding climate change since the reasons that at-risk populations face greater impacts are often due to experiences of marginalization. Since counseling psychologist are adept at completing social justice work (Fouad, 2006; Toporek, 2006) and social justice concerns are present in climate change, counseling psychologists would likely do well in addressing these issues.

Co-benefits and Resilience. The reports varied in their discussions of co-benefits and resilience. While all reports found that mitigating behaviors resulted in health benefits, resilience was not as commonly or explicitly discussed. However, resilience was found in all reports. For instance, The APA report (Clayton et al., 2017) found that personal attitudes and social connects increased resilience whereas the USGCRP (2016) reported found that resilience factors were likely to moderate chronic, but not acute distress. The IPCC (2014) addressed resilience through engagement in climate change mitigating behaviors.

Climate change and CP. A review of each of these major reports provides strong evidence that social justice plays a large role in climate change. While the APA (2011) has affirmed psychology's role in addressing climate change, CP has not, even though one of the field's distinguishing features is its emphasis on social justice (Gelso et al., 2014). Despite the fact that counseling psychologists engage in disaster response services (Bowman & Roysicar, 2011; Jacobs et al., 2011; Spokane et al., 2011), this has yet to include a broader recognition and commitment to addressing climate change, particularly as a social justice issue. CP would likely be well suited for addressing climate change due to the emphasis on diversity, strength-based perspectives, social justice, and human development (Gelso et al., 2014; Packard, 2009). Using these strengths, counseling psychologists would be able to conduct research, provide trainings, consult, teach, and do clinical work surrounding the adverse health outcomes associated with climate changes and promote the co-benefits of adaptation.

In this section, the major literature regarding climate change's impact to human health is given using three major reports on climate change: IPCC (2014), USGCRP (2016), and the APA (Clayton et al., 2017). Exposure models from within each report were reviewed. Integration of these revealed three main exposure pathways: direct and indirect via natural and human systems. In addition, five moderating variables were identified as adaptation and environmental, institutional, social, and behavioral factors that influence exposure. Following this, each report is reviewed for the impacts of climate change on physical health, mental health, at-risk populations, co-benefits, and resilience. This review exemplified how the impact of climate change on physical and mental health follows both direct and indirect pathways. Further, evidence that at-risk populations experience greater risk to negative health outcomes was found. Finally, these findings were discussed in the context of CP and suggested that division 17 would be particularly

adept at conducting research, trainings, consultations, teaching, and clinical work surrounding climate change. In the following section, the social justice literature within CP will be explored.

Social Justice in CP

An emphasis on social justice is thought to be one of the distinguishing features of the sub-specialty of CP (Gelso et al., 2014). In fact, social justice has been described as being present in CP even before the field's inception (Fouad, 2006), has been a leading component of the field's core values (Gelso et al., 2014; Packard, 2009) and training (Scheel et al., 2018), and has resulted in active engagement in activities like disaster response and an emphasis on developing conceptual frameworks such as social justice competencies. In this section, an overview of the literature on social justice within CP is provided. First, the historical roots and current social justice activities are discussed. Then, social justice training and competencies are discussed. Finally, a review of CP and natural disaster work is given.

Historical Roots of Social Justice

Since the early commitment to career counseling, social justice has been described as a defining feature that makes CP a distinct sub-specialty within the field of psychology (Gelso et al., 2014). In fact, social justice has been described as one of the primary factors contributing to the classification of CP as a separate discipline (Fouad, 2006) and has resulted in counseling psychologists engaging in a plethora of social justice activities including,

> …the promotion of multicultural competence; working to combat racism, sexism, homophobia, and ageism; increasing access to education and occupational opportunities; understanding and ameliorating career barriers for women; reaching out to work with homeless individuals; resolving ethno-political conflicts; nation building; empowering individuals, families, groups, organizations, and institutions outside of the United States;

> attempting to resolve border disputes between nations; advocating for the release of political prisoners; developing and implementing strategies to eliminate human rights abuses; striving to protect the environment; and influencing the legislative process. (Fouad, 2006, p.1)

Toporek (2006) consolidated the many avenues that counseling psychologists have worked toward social justice within the following categories: (a) training, (b) schools, (c) marginalized communities, (d) career, (e) health care systems, (f) international settings, and (g) policy. Clearly, CP has worked toward social justice in many ways over the years. When considering the context of climate change, a review of the exhaustive list above reveals that addressing climate change would be a natural extension of the ways in which CP has already worked toward social justice in other areas.

Despite the agreement among scholars that social justice has been a strong component of counseling psychology's history (Fouad, 2006; Gelso et al., 2014), a broader systemic inclusion of social justice within the field has been a newer concept within the past 20 years. For instance, Toporek and Mcnally (2006) provided evidence that social justice has not been a systemic level priority in the field of CP as evidenced by a lack of comprehensive initiatives to include the concept within training programs. Furthermore, they suggested that social justice, up until that point, was more dependent on individual programs, faculty, or mentors, which appears to have resulted in a lack of clearly outlined and comprehensive set of competencies for social justice work (Toporek & Williams, 2006).

Prior to 2006, the systemic inclusion of social justice into CP faced several other challenges, including systemic and individual barriers. In regard to the systemic barriers, Toporek and Mcnally (2006) described a lack essential self-reflection and politically engaged

action as a result of social justice primarily being housed from within systems of power and privilege. Furthermore, they provided compelling evidence that the scientist-practitioner model, accreditation requirements for programs, licensing requirements and regulations, and pressures of tenure all contribute to a further difficulty in truly engaging in social justice work as counseling psychologists.

At that time, social justice work also faced individual barriers. For instance, a lack of clear social justice competencies (Toporek & Williams, 2006) and inconsistent social justice training among CP training programs (Toporek & McNally, 2006) likely resulted in confusion for counseling psychologists who hoped to engage in social justice within their professional work. Furthermore, doing social justice work was hard, and required a commitment to personal development and self-care (Toporek et al., 2006), which was likely no easy task. In light of this, Toporek and colleagues suggested several recommendations to improve the state of social justice in CP, including (a) theory development, (b) practice, (c) research, (d) training, and (e) policy development. Since this time, counseling psychologists have worked toward improving social justice in these areas.

One of the areas of research that has aided in this is the explicit inclusion of social justice in the field's core values. Shortly after the renewed call to social justice described previously, Packard (2009) explicitly named social justice as one of the core values within the field. Since then, social justice has been routinely included in the core values of the field (Gelso et al., 2014; Scheel et al., 2018). Furthermore, recent survey data found that not only did counseling psychologists' rate social justice as a high priority, it was also a statically significant difference between counseling psychologists and other sub-specialty psychologists (e.g., clinical psychologists; Lichtenberg et al., 2018). Taken together, this suggests that social justice has, at

least in part, become a more systemic feature of CP, and one that has influenced the values and commitments of counseling psychologists. Over time, this explicit naming of social justice as a core value seems to have allowed some of the original challenges to be addressed.

One of the ways that CP has addressed these challenges is through an increase in conceptualization of social justice. Gelso and colleagues (2014) pulled from Vasquez's (2012) definition of social justice as a mandate to "decrease human suffering and to promote human values of equality and justice" (p. 337). Further, Gelso and colleagues (2014) conceptualized that training in the field would allow counseling psychologists to engage in social justice work at the individual, social, and systemic levels, arguing that "counseling psychologists [are able to] balance their roles in remediation and prevention, making them well suited for social justice work" (p. 155). As such, it appears that the inclusion of social justice has shifted from the challenges described by Toporek and McNally (2006) toward an acceptance of social justice within the broader systems of the field. Now, it appears the challenges of social justice may be in how to enact social justice within the context of CP. One of the ways this question has been addressed in the literature is within training programs.

Programmatic Commitments to Social Justice

Whereas social justice has previously faced challenges in systemic inclusion (Toporek & McNally, 2006), social justice is now thought to be a more prominent feature of CP due, in part, to a strong commitment within training programs (Gelso et al., 2014). Recent developments in the conceptualization of training and education in CP have placed social justice as a core guiding principle that is woven throughout the broad training experiences of counseling psychologists.

In the most recent "Model Training Program," Scheel and colleagues (2018) located social justice as a core feature. The prominence of social justice reflects that "persistent and

resistant problems of intergroup violence, poverty and inequality, and environmental degradation and depletion, remain. Counseling psychologists are called to contribute to understanding the issues and solving the problem" (Scheel et al., 2018, p. 8). In their recommendations, social justice is housed within two main components of MTPs. To begin, it is identified as one of the four core values of MTP's (i.e., growth potential, holistic and contextual, diversity and social justice, and communitarian perspective). Second, social justice is named as one of the 20 principles, dispersed among six clusters (i.e., CP identity; multiculturalism, diversity, and social justice; health service psychology; developmental, prevention, and strengths orientation; science–practice integration; and relationships within and between professional communities) of MTPs. This explicit inclusion in MTPs suggests that social justice is a historical focus of CP and will continue to be a major emphasis within APA-accredited training programs in CP in the future.

Social Justice Competency

Recent CP research in social justice has focused on identifying the core constructs within social justice competency. In their development of a consultation competency program for students, Flores and colleagues (2014) identified that competency in social justice relies on the ability to utilize self-awareness, having value for others, gaining knowledge of social inequality, and developing skills to work with diversity and to build equity. This generally fits within the multicultural competency model created by Sue (1992). In his model, competency is based on knowledge, awareness, and skills.

Although it is important to understand the competencies of social justice, research has been attempting to identify the factors that contribute to a social justice commitment beyond these competencies. Miller and colleague (2011) tested the hypothesis that self-efficacy and

perceived outcomes increased a trainee's commitment to social justice. They found that perceived outcomes did not increase a trainee's commitment to social justice work, while increasing self-efficacy did have an effect on continued social justice work. These results indicate that training models may want to focus on increasing the self-efficacy of trainees' social justice work in order to increase future commitments. In regard to the present study, this research suggests that increasing climate change self-efficacy among counseling psychologists will be important if they are to address the social justice issues presented in climate change. This can likely be done through increased attention to climate change during social justice training in doctoral programs. Similarly, research conducted by Inman and colleagues (2015) on social justice has emphasized several important areas that impact the development and sustained commitment to social justice within the field of CP. They used structural equation modeling to map the factors that contribute to trainees in counseling psychologists commitment to social justice. They report that self-efficacy impacted commitment to social justice actions by influencing trainees' interest in social justice. Additionally, their analysis revealed that a belief in a just world, predicted trainees' commitment to social justice (Inman et al., 2015). Finally, a commitment to social justice is likely to be influenced by socially desirable responding. This suggests that some individuals who espouse for a commitment to addressing social justice in climate change may not exhibit actual behaviors to do so. However, counseling psychologists have worked toward social justice in a plethora of ways (Fouad, 2006), which suggests that socially desirable responding would not completely prevent counseling psychologists from engaging in climate change.

CP, Social Justice, and Large-Scale Disasters

An emerging area of research within the field is the response and role of counseling psychologists within large-scale disasters and is one that appears to be the most explicitly related to climate change. As evidenced in this literature review, natural disasters directly impact marginalized communities. Moreover, the felt impact of some natural disasters has been exacerbated in recent years by the effects of climate change. Counseling psychologists appear to be particularly adept at addressing the direct, disaster related, impacts of climate change.

Counseling psychologists are particularly impactful in disaster work (Bowman & Roysicar, 2011; Jacobs, Hoffman, Leach, & Gerstein, 2011; Spokane et al., 2011). This is due in part to CP training in remediation, prevention, and multiculturalism (Spokane et al, 2011) in addition to the core values of prevention, social justice, and multiculturalism (Bowman & Roysicar, 2011). In fact, Bowman and Roysicar (2011) found that students engaged in disaster responses were rated to have flexibility, openness to culture, self-care and interpersonal skills, resiliency, and compassion for others. However, Parham (2011) argued that responses to disasters involve too few counseling psychologists. Indeed, Jacobs and colleagues (2011) agreed, stating that disaster response is often focused on the immediate impacts while neglecting those that are long-term.

Research in disaster response generally suggests that although CP is well suited for this work, more could be done. Parham (2011) offered an invitation to put our commitments into action in the form of creating programs, procedures, and policies, and engaging in political advocacy. Jacobs and colleagues (2011) shared this call with the question, “what can we do as counseling psychologist with our particular values and research, intervention and prevention skills that can reduce human costs, reduce the long-term pain and ruin?” (p. 1208). Although

Bowman and Roysicar (2011) suggested that CP programs should incorporate disaster response into prevention, training, and general social justice work, Jacobs and colleagues (2011) question still holds true. However, Gelso and colleagues (2014) argued that engaging in social justice work will take stepping outside of our comfort zone, as counseling psychologists. In light of this, the question arises: To what extent do the core values and training emphases lend CP well to the broader issue of climate change and in what ways can counseling psychologists' step outside of our comfort zones when addressing climate change?

As Lynda Buki, the current editor of *The Counseling Psychologist (TCP),* took on her role she identified three main goals for the journal, moving forward. The first is to "address critical societal issues and trends related to individual, interpersonal, and community well-being." The second is to "maintain and expand our scholarly contributions to allied fields, consistent with current trends promoting interdisciplinary and transdisciplinary research." The third goal was stated as "to preserve TCP's role of documenting philosophical perspectives, conceptual shifts, and historical events within the field" (Buki, 2014, pp. 6-7). Including climate change research within the field of CP meets all three of these stated goals and allows one to better understand Parhman (2011) and Jacobs and colleagues (2011) call to find ways to move CP toward action-oriented programs, procedures, policies, and political advocacy for an issue that has garnered substantial attention across multiple scientific disciplines—the threats of global climate change.

Conclusion and Research Questions

Climate change is a substantial issue facing individuals in at-risk communities (Clayton et al., 2017; Crimmins et al., 2016; Pachauri & Meyer, 2014). Whereas vulnerable and marginalized communities are both at-risk for the negative outcomes of climate change,

marginalized communities experience significant systemic factors that contribute to the maintenance of oppression and inequity. As a result, social justice issues are inherently present in climate change.

Social justice has been a core component of CP's history (Fouad, 2006; Gelso et al., 2014). Despite this, the systemic inclusion of social justice has faced many challenges (Toporek & McNally, 2006; Toporek & Williams, 2006; Toporek et al., 2006). However, over the past 15 years, social justice has become a systemic feature of CP as evidenced by the explicit inclusion within the core values (Gelso et al., 2014; Packard, 2009; Scheel et al., 2018), training programs (Scheel et al., 2018), and professional activities such as disaster response within the field. Utilizing Vasqueze's (2012) conceptualization of social justice as the reduction of maleficence and promotion of equity, it appears that social justice agents would naturally be drawn to climate change.

Despite this, little is known about what counseling psychologists think about climate change and how it could be included into the field of CP. Given the previous discussions, it appears beneficial to better understand the relationship between climate change, social justice, and CP. As such, the following research questions were proposed in order to shed light on this area:

(a) How do counseling psychologists conceptualize climate change impacts within marginalized and vulnerable populations?

(b) How do counseling psychologists conceptualize CP's role in addressing climate change and the impact within marginalized and vulnerable populations?

(c) What types of activities do counseling psychologists engage in to mitigate climate change?

    a. What limitations do counseling psychologists face in these activities?

b. What co-benefits have counseling psychologists experienced in these activities?

(d) Given CP's commitment to social justice, what unique factors does the field of CP bring to mitigating climate change as a social justice issue?

Chapter 3

Method

The relationship between social justice and climate change emerges from the well documented findings that marginalized populations are at a greater risk of experiencing the adverse impacts of climate change (Clayton et al., 2017; Crimmins et al., 2016; Pachauri & Miller, 2014). Although social justice is a key component of CP's history (Deblaere et al., 2019; Gelso et al., 2014; Kim, 2019), core values (Packard, 2009), training (Scheel et al., 2019), and personally held values (Lichtenberg et al., 2019), little is known about how the Society of CP (SCP) views the role of social justice advocacy within the broader context of climate change. To better understand this, an exploratory qualitative analysis was employed.

Research Design

This study utilized a single-coder thematic analysis (TA; Braun & Clarke, 2006). TA is clearly demarcated (Braun & Clarke, 2006; 2012; 2018) and has become a commonly utilized method in qualitative research. TA is a flexible approach to qualitative analysis (Braun & Clarke, 2006) that allows the researcher to achieve the core tenant of qualitative research: bringing to light the participant's experience. Common features of qualitative research (i.e., naming the paradigm, establishing trustworthiness and rigor, data analysis and interpretation, and managing the relationships) are well-established components of TA (Braun & Clarke, 2006) and the steps for doing so within a single-coder analysis will be described. Before describing the single-coder thematic analysis in greater detail, an overview of the key features of qualitative methodology is provided.

Qualitative Methodology

Qualitative methodology is a well-established and well-accepted method of study (Creswell, 2009). Compared to quantitative methodology, qualitative methodology provides a

"rich, detailed, and heavily contextualized description" (Levitt et al., 2018, p. 27) of participant experiences and utilizes different techniques in the analysis process (e.g., developing codes and themes; Creswell, 2009; Morrow, 2007). The use of qualitative methodology has been considered especially appropriate within topics of study that have little to no existing research (Creswell, 2009; Levitt et al., 2018; Morrow, 2007). As a result, qualitative methodology allows for a rich and informative study that can provide meaningful descriptions of participants' experiences that lay the foundation for future scholarship.

Qualitative methodology has a strong history and essential function within the research on climate change, marginalized populations, and CP. To study climate change requires the use of both quantitative and qualitative methods, each of which provide a unique but essential function. While strong statistical analysis has led to a wealth of evidence supporting changing climate and its impact to marginalized populations (Clayton et al., 2017; Crimmins et al., 2016; Pachauri & Meyer, 2014), qualitative research has provided a greater understanding of the actual lived experience of those being affected by climate change (e.g., Tam et al., 2013) and has allowed for better conceptualization and recommendations for intervention. Without qualitative research, the experiences of marginalized populations may not come to light.

Qualitative methods have been generally considered better adept at representing the actual lived experiences of participants in marginalized populations (Havercamp & Young, 2007; Levitt et al., 2018; Morrow, 2007). For example, a recent quantitative study found a statistically significant difference between Black and Caucasian individuals' mental health in post-Katrina Louisiana (Ali et al., 2017). Although this study did shed light on the racial inequity of climate change impacts and recovery, it did not provide an in-depth understanding of how this mental health disparity was impacting those individuals. In comparison, a qualitative study on First

Nations individuals found that the solastalgia was a shared experience among participants that may help to explain the relationship between adverse mental health outcomes and climate change (Tam et al., 2013). This exemplifies how a qualitative study helped bring something deeper "to the surface," allowing for it to be better understood and studied.

SCP has a long history and commitment to serving marginalized populations (DeBlaere et al., 2019; Gelso et al., 2014; Kim, 2019) and qualitative methodology is considered one of the tools to do so (Haverkamp & Young, 2007; Morrow, 2007). Specifically, qualitative method is able to give voice to marginalized populations (Levitt et al., 2018), account for bias and values (Creswell, 2007; Haverkamp & Young, 2007) and make clear the role that power and privilege play in the research process (Morrow, 2007). There are several key features of qualitative methodology that allows these to occur.

Key Features of Qualitative Research

Before describing the specific qualitative method of this study, several 'key features' of qualitative research will be operationalized and described.

Paradigms. All qualitative research relies on a core belief that guides the researcher's actions, called a paradigm (Guba, 1990). Morrow (2007) identified four main components of a paradigm: ontological, epistemological, axiological, and methodological. In combination, these four components are used to describe how a belief influences the overall research process, and ultimately the choice of method. Ontology refers to the view of nature and reality, while epistemology refers to how information is known and how it impacts the relationship between the "knower and the known" (i.e., the researcher and participant). Axiology refers to the extent to which values are utilized in the research process. A combination of the ontological, epistemological, and axiological underpinnings is used to determine the methodological choice

for a study. In short, a paradigm, consisting of ontological, epistemological, and axiological components, influences how a method is created and used. After the method is determined, a researcher must work to ensure the rigor of his or her research through some commonly used actions.

Establishing Trustworthiness and Rigor. Trustworthiness and rigor are essential components to a qualitative study that need to be enacted and described throughout the research process. Trustworthiness and rigor can be established using reflexivity, credibility and adequacy of data, interpretation of data, and consequential validity (Yeh & Inmann, 2013). Reflexivity involves the exploration of the impact of the researcher on the research process (Morrow, 2007). Levitt and colleagues (2018) argued that reflexivity involves self-reflection regarding how one's values and assumptions may impact the research process: "When transparency involves describing how researchers approached the task of setting aside their own expectations, it also enhances the trust in the report, as it demonstrates the efforts by which the researcher sought to remain open to the phenomenon" (p. 29). Morrow's (2005) description of reflexivity more explicitly outlined this process by arguing that "making public" the researcher's stances, motivations, assumptions, and biases establishes rigor and trust in the research process.

Generally speaking, a researcher who follows a clearly demarcated research method will ensure data adequacy, quality of analysis, and rich descriptions that answer the research question, whereas a researcher who poorly follows a method or jumps between methodologies is likely to sacrifice data adequacy, quality of analysis, and rich descriptions. The quality of analysis can be established by using semi-structured interviews, interrater reliability (i.e., multiple researchers identifying codes/themes), and external audits (Morrow, 2007) that all allow for collection of adequate data that answers the research question. Data adequacy includes both the type and

amount (Morrow, 2007) and can be established using saturation techniques (Morrow & Smith, 2000) in which codes and themes will be identified until no novel information emerges (i.e., establishing the amount of data). Additionally, considering if the data produced by a given method allows the research question to be answered (i.e., establishing if the data is the correct "type"), establishes data adequacy. Finally, a rich and detailed description of the data allows for trustworthiness and rigor to be established in the sense that it demonstrates how the data answers the research question.

The final component of establishing trustworthiness and rigor in qualitative research is consequential validity, or the extent to which research promotes social and political action (Yeh & Inmann, 2013). Consequential validity allows for research to be considered in the larger context of social justice and whether it promotes the wellfare of those involved in the study. For example, Tan and colleagues (2013) qualitative study in a First Nations community demonstrated consequential validity by highlighting the fact that climate change adversely impacts the vocations and well-being in the community. This promotes both an awareness of the issues climate change poses for First Nation communities as well as advocates for larger systemic steps to be taken to address issues that impact the community.

Managing Researcher and Participant Relationships. Another component of qualitative analysis is identifying and managing the relationship between the researcher and participants (Morrow, 2007). This relationship is managed due to the innate power that accompanies our professional role as psychologists and the trust that it can induce in others. Haverkamp (2005) described the concept of "professional reflexivity" that involves the acknowledgement of power and encourages the ongoing use of informed consent that focuses on

what reactions the participant may have (Morrow, 2007). The researcher attends to rigor from the design of the study to the collection, analysis, and interpretation of data.

Data Analysis and Interpretation. Whereas data analysis in quantitative research relies on the selection of instruments that have good psychometric properties and the use of statistical procedures that can test for the significance between variables, qualitative research relies on a process of "deconstructing evidence," referred to as "an examination and re-examination of the data, refining and modifying the data at multiple levels of complexity (individual, group) in order to locate the main essence or meaning underlying the volumes of data" (Morrow, 2007, p. 389). Several key ingredients help explain how this is done.

Qualitative methods of data analysis and interpretation differ in sample size, generalization of results, use of coding and theme development, and basis for interpretation. In qualitative research, participants are often selected based upon a desire to better understand the experiences of a specific population and involves fewer participants than quantitative research (Morrow, 2007). Use of a small sample allows qualitative researchers to gain a richer understanding of the core experiences of participants but may sacrifice the generalizability of the results to a broader group of people. However, it is not often the goal of qualitative research to generalize the results of a study, as the purpose is to gain a deeper understanding of one specific population (Morrow, 2007). An additional component of data analysis and interpretation is the use of coding and theme development to richly describe the data. Generally speaking, approaches to coding and theme development vary across qualitative methods (Creswell, 2007), but largely draw on the semantic (i.e., word choice) or latent (i.e., underlying assumption) content of the data (Morrow, 2007) and are housed within theoretical (i.e., emerges from prior knowledge or assumptions) or inductive (i.e., emerges from within data without lesser influence

of knowledge or assumptions) approaches that guide the methodology (Braun & Clarke, 2006). As compared to quantitative questions, which describe the relationships between variables, qualitative approaches to data analysis allow for a rich and detailed interpretation of the data that best inform the phenomenological experiences raised in the qualitative research question(s).

Thematic Analysis

This study used a single-coder TA (Braun & Clarke, 2006). TA is a clearly demarcated approach to qualitative data analysis that aligns with the social justice commitments (DeBlaere et al., 2019; Kim, 2019) and core values of CP (Gelso et al., 2014; Packard, 2009), and espouses the key-ingredients of qualitative research outlined previously. TA is a flexible approach to data analysis with established paradigmatic underpinnings, avenues for trustworthiness and rigor, clearly outlined data analysis process, and approaches to manage the relationship between participant and researcher and it allows for flexibility across epistemological underpinnings. As such, when compared to other qualitative methods such as grounded theory (Strauss & Corbin, 1998) and consensual qualitative research (Hill, 2012), TA provided a more flexible approach to a single-coder analysis while still allowing for the core components of qualitative research.

Paradigmatic Underpinning

The naming and discussion of the paradigmatic underpinning of a study is an important step in qualitative research (Morrow, 2007). Whereas other methods of qualitative research are housed within specific paradigms, TA is considered applicable across paradigms (Braun & Clarke, 2006). However, one of the first tasks of a TA researcher is to determine if his or her study is theoretical (i.e., grounded in assumptions) or latent (i.e., assumption free). Since this study was built on the strong research evidence that climate change causes more adverse impacts to marginalized communities (Clayton et al., 2017; Crimmins et al., 2016; Pachauri & Myer,

2014) and pulls from the literature on social justice history (DeBlaere et al., 2019; Gelso et al., 2014; Kim, 2019), core values (Gelso et al., 2014; Packard, 2009), and training (Rotosky, 2019; Scheel et al., 2019) within SCP, a theoretical TA was selected for use. As a result, this study has a paradigmatic viewpoint that several truths exist (i.e., climate change is real and impacting marginalized populations).

Data Analysis and Interpretation in Thematic Analysis

An essential component of qualitative research is a clearly demarcated process for data analysis and interpretation (Creswell, 2009; Levitt et al., 2018; Morrow, 2007) which is abundantly present in TA (Braun & Clarke, 2006; 2012). Compared to other methods (e.g., CQR), the rigor of TA can easily be maintained in a single-coder analysis. Through a single coder analysis, this study uses the six clearly outlined steps for analysis and interpretation and the 15-point checklist to verify adherence to the method. These are discussed in detail to follow.

Analysis in TA is primarily conducted through semantic or latent approaches (Braun & Clarke, 2006), although a later lecture on TA revealed no such distinction was intended (Braun & Clarke, 2018). In line with this research, this study utilized both semantic and latent approaches to coding and theme development. A semantic approach relies on surface level meaning while a latent approach searches for "the underlying ideas, assumptions, and conceptualizations" within the narratives (Braun & Clarke, 2006, p. 84). Although both approaches were used, an emphasis was given to the latent content as it provides more meaningful and rich responses to the research questions.

Coding and thematic identification of the data involved a six-step method presented by Braun and Clarke (2006). The researcher followed each of the following steps in sequential order: (1) the researcher gained familiarity with the data corpus through reading, reviewing, and

taking initial notes; (2) the researcher generated initial codes using a theoretical framework and latent and semantic approaches to coding; (3) codes were clustered into groups and emergent themes were described resulting in an initial creation of a thematic map; (4) themes were reviewed using Braun and Clarke's (2006) recommendations and adjustments to the initial thematic map were made; (5) final themes were defined and named; and (6) the final report was generated.

As an additional component, Braun and Clarke (2006) recommend the use of their 15-point checklist for quality insurance. This checklist focuses on the transcription, coding, analysis, overall process, and the written report. Per Braun and Clarke's (2006) recommendation, this list was reviewed after completing the six-step method described above.

Trustworthiness and Rigor in Thematic Analysis

This study followed the recommendations of Yeh and Inmann (2013) for establishing trustworthiness and rigor in qualitative research. First, reflexivity involved reflecting on the potential for bias and/or influence prior to engaging in the research process (Morrow, 2007) and the making explicit the potential bias and/or influence (Levitt et al., 2017; Morrow, 2005). Reflection led to the awareness that bias and influence are a likely part of this research due to the topic of study. To help account for this, the research questions were approached through a theoretical lens (i.e., from a place of assumption) within TA (Braun & Clarke, 2006), while the code development allowed for latent content to emerge. By doing this, the existing bias could be named and appropriately managed within a well-established method of research and participant experiences were allowed to emerge "organically" which allowed for less influence throughout the analysis process. However, given the fact that this study was a single-coder analysis, an

additional step of accounting for bias was conducted through the use of external audits. This allowed the codes and themes to be reviewed for their "closeness" to the raw participant data.

Credibility, adequacy of data, and quality of interpretation (Yeh & Inmann, 2013) were also components of establishing trustworthiness and rigor in this study. To establish credibility and data adequacy, this research followed the clearly demarcated and well-established protocol of TA (Braun & Clarke, 2006) and included a purposeful approach to the underlying paradigms (i.e., theoretical) and establishment of a protocol coding and theme development (i.e., latent and semantic). Additionally, as recommended by Morrow (2007), the use of a semi-structured interview and audit process allowed for data to be gathered in a flexible yet consistent approach, ensuring that participants' narratives generally focused in the same areas. The use of audit allowed for adherence for adequacy of data and credibility in regard to adherence to TA, responsiveness to research questions, and accurate representation of participant narratives. Finally, to ensure the rigor of interpretation, the themes were given rich descriptions including direct quotes and were then grounded with relevant literature in climate change and CP.

Consequential validity, or the promotion of social and political action, (Yeh & Inmann, 2013), was a final component of establishing trustworthiness and rigor in this study. This was established throughout chapter five and involved the explicit grounding of the findings in this study to the relevant research on climate change and CP. In addition, consequential validity was established in the recommendations that emerged from within this study.

Managing Researcher and Participant Relationship in Thematic Analysis

The relationship between research and participants was an important consideration in this study. Since Braun and Clarke (2006; 2012) have not made specific recommendations regarding how to best manage the relationship in TA, their recommendation for flexibility was

used. To manage the relationship between research and participant, the researcher relied on well documented techniques within qualitative literature (Haverkamp, 2005; Morrow, 2007): Roles and expectations were explicitly described in the informed consent and at the end of interviews, participants were explicitly told that the researcher will not be reaching out for additional information or communication. Attention was given to building rapport in the researcher/participant relationship, but communication and interviews were conducted in a formalized and structured manner. Participants were provided with the opportunity to withdraw from the study and they were explicitly told their data would be deleted and have no other consequences as a result of dropping from the study.

Researcher description

It is common practice in qualitative research to describe the researcher in order to identify and name potential bias and accentuate the frame from which the research is being conducted (Morrow, 2007). As such, a description of the researcher is provided: The lead researcher is a white, cisgender, heterosexual, able bodied male completing a PsyD in CP. He completed a bachelor's in "peace, justice, and conflict studies" and a master's in "clinical mental health counseling." He grew up in rural Virginia and has primarily lived in rural areas or "small cities" (i.e., population of ~30-50,000). The researcher grew up in the Mennonite church and draws a commitment to social justice advocacy from this faith in addition to the training in counseling and CP. He approached this research from within this framework and has strongly held beliefs and values regarding climate change and the role that CP could play in addressing it.

Participants

Participants were 10 doctoral level counseling psychologists or current doctoral students in CP. Participants agreed to complete a recorded semi-structured individual

interview with the primary researcher. Purposeful selection of counseling psychologists was used in light of the focus on this study (i.e., CP). Participants were gathered through purposeful and snow-ball sampling techniques and included recruitment through Division 17 list-serv postings and outreach to CP training directors. No exclusion criteria were used other than identity as a counseling psychologist. Participants were from a variety of professional settings and geographic regions which provided support for the generalization of these findings to the broader field of CP.

Data Collection Tools

Data was gathered using several tools including: (a) a brief demographic form, (b) semi-structured interviews, and (c) the researcher. Each is described below in the following sections.

Demographic Information Form

Participants completed a brief demographic form on Qualtrics. Demographic information included gender, age, ethnicity, degree held, educational status, type of employment, current city and state, and childhood city and state. All demographic data was gathered before the semi-structured interviews were completed. Demographic data is presented in the following chapter.

Semi-Structured Interviews

The semi-structured interview questionnaire was developed by the lead researcher and were based on the research questions. The semi-structured interview was used as a guideline for the interview and therefore specific questions varied between interviews.

Researcher as instrument

The researcher plays a role in data analysis (Morrow, 2007) and therefore is noted as a tool in the data collection process. The researcher relied on the framework of the semi-structured

interview to create consistency in data collection while also utilizing interpersonal and relational cues (e.g., emotional responding) to engage in further questioning or engagement in a particular area. As such, the researcher allowed for adherence to a structured interview while also amplifying the spoken and unspoken experiences of participants during the data collection process.

Procedure

This project was approved by the Institutional Review Board prior to any recruitment or data collection. After approval was granted, participant recruitment began. First, a list-serv recruitment was sent through the Division 17 list-serv. After this, the initial recruitment posting was sent to the list-serv, again. Following these recruitments, an email was distributed to many CP PsyD and PhD training programs throughout the United States requesting participation from faculty, graduates, and current students. Recruitment stopped once 10 participants completed interviews.

Participants responded directly to the lead researcher over email. Once contacted, the lead researcher responded by email and scheduled a time to complete semi-structured interviews. All participants were sent and completed the demographic information form and informed consent prior to the interview with the primary researcher.

All interviews were conducted via video conferencing or telephone and recorded for transcription. Participants were given the opportunity to ask questions regarding the informed consent and topic of the study, and were given a brief background of the primary research. Participants then engaged in the semi-structured interview. Following the collection of an interview, a transcript was created and identifying information was obfuscated to protect privacy.

Data gathered in this study included demographic information and audio/visual recordings of interviews. Demographic information was gathered prior to the interviews and was done so using Qualtrics. Interview data were gathered over Zoom (*n* = 8), Google Voice (*n* =1), and Skype (*n* =1) based on the request and available technology of participants. Interviews ranged between 43 and 60 minutes. The primary researcher conducted all interviews. All interviews were recorded and transcribed using Otter.ai and were reviewed for accuracy by the primary researcher. Identifying information was removed from transcripts and was stored in a password protected file. Following the collection of all data, each interview was combined into the data corpus, and the data analysis process began.

Data Analysis

Data was analyzed using TA (Braun & Clarke, 2006) using primarily a "theoretical**"** and "latent**"** emphasis to analysis. The analysis was completed by the lead researcher and utilized the following six core steps and the 15-point checklist for ensuring quality in TA (Braun & Clarke, 2006; 2012). To ensure rigor and reliability the analysis was audited by the secondary research at several points of the data analysis process as outlined below.

Six Steps to Completing Thematic Analysis

The primary researcher used the following six steps of TA, as outlined by Braun and Clarke (2006), to complete the data analysis.

Step 1: **Familiarizing Self With Data**. In step one, the lead researcher familiarized himself with the data. Nine transcripts were compiled into the data corpus, equaling 85 pages of transcribed data. Braun and Clarke (2012) recommended that reviewers not only read the transcript but listen to the audio-data at least once while taking notes, if available. This is done to help the researcher move beyond the surface level reading of words (Braun & Clarke, 2006). As

such, familiarized himself with the data through the process of conducting interviews, reviewing transcriptions for accuracy, and reading the entire data corpus to create familiarity and allow for the emergence of initial thoughts and impressions. Throughout the familiarization process, initial thoughts and impressions were jotted down in a notebook before beginning to generate codes.

Step 2: Generating Initial Codes. In the second step, a single-coder method of analysis was used. Codes were generated for the entire data corpus in a linear fashion (i.e., transcript 1, then 2, then 3, and so on) until the end of the data corpus was reached. The literature on TA was used to determine the choice of raw data to code. A code, as described by Braun and Clarke (2006), is essentially a summary of a portion of the data. Based on their recommendation to explicitly name the philosophical underpinning of the study, a "theoretical" approach to determining codes was used and relied on the research questions and literature on climate change and CP.

Braun and Clarke (2018) do not require that codes be solely based on semantic or latent data. Therefore, both semantic and latent data points were used for coding as it best reflected the experiences of the participants and allowed for the theoretical underpinning of my study. Per Braun and Clarke's (2006) recommendation, codes were considered flexible and were able to change throughout the coding process. For example, some codes generated in the beginning of the data corpus were changed to reflect more coherent codes that were generated toward the end of the data corpus. Finally, the codes were reviewed by the primary research a final time and were then sent to the secondary researcher for an audit to ensure rigor and trustworthiness (Yeh & Inmann, 2013). Prior to the audit, 207 unique codes were identified within the data corpus.

Following the audit, codes were revisited based on the feedback provided. Codes were reviewed in the context of each transcript, and then in the context of the data corpus. During this

process, some codes were changed to reflect either a transition from a semantic to latent code or a more comprehensive code that emerged later on. Throughout this process, codes naturally began to "cluster" together, and led to the next step of TA.

Step 3: Searching for Themes. Codes began to cluster into seven specific areas with one "miscellaneous" area that allowed for codes to be set aside and recycled later on (Braun & Clarke, 2012). Initial themes were created using the literature on TA (Braun & Clarke, 2006; 2012) and existing studies using TA (e.g., Tebbe et al., 2018), which suggest that initial themes be developed as they provide something meaningful about the study. In this stage, codes were shifted from one cluster to another as the emerging theme of that cluster better represented the latent content of the code. Clusters were categorized into sub-themes within a broader theme. This resulted in the creation of the initial thematic map (See Figure 3). Following the creation of this, a second audit was completed to ensure rigor and trustworthiness (Yeh & Inmann, 2013).

Step 4: **Reviewing Themes.** During this phase themes were reviewed in in the context of the individual transcripts, the data corpus, and feedback from the audit. To ensure quality and rigor of each theme, the following set of questions from Braun and Clarke (2012) were used:

1) Is this a theme? It could just be a code
2) If it is a theme, what is the quality of the theme? Does it tell me something useful about the data set and my research?
3) What are the boundaries of this theme? What does it include and exclude?
4) Is there enough meaningful data to support this theme? Does it have a rich description?

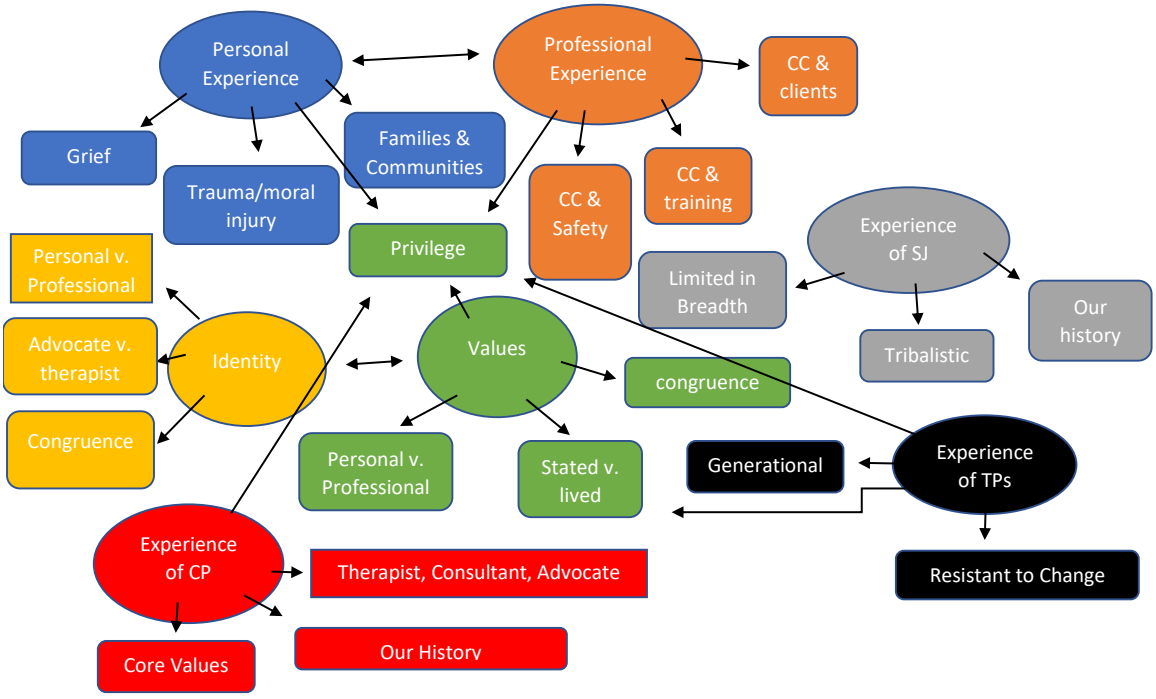

Figure 1. The Initial Thematic Map. The initial thematic map created at the end of step 3. Themes are represented by the oval shape whereas sub-themes are represented by the square or rectangle shape. The following abbreviations are used: social justice (SJ), CP (CP), training programs (TPs), climate change (CC).

Are the data too diverse and wide ranging? Does the theme lack coherence?

The use of these questions resulted in several changes between map 1 and map 2 (see Figure 4). The first change was due to a difficulty in separating the boundaries between the themes of "identity" and "values." When reviewing the coded data within these themes, a significant overlap was found between coded material. As a result, they were combined into one larger theme called "conflicts." A second change was made due to a lack of robust data within the individual themes of "experiences of social justice (SJ)," "experiences of CP (CP)," and "experience of training programs (TPs)." The first two were combined into a new theme called

"conceptualizations" whereas the latter was combined into the existing theme of professional dilemmas. Finally, the theme of privilege was collapsed under the theme of "personal experiences" as it seemed the theme may be too diverse and wide ranging. Following a review of this adjusted thematic map, feedback from the auditor, and reflection on the questions noted above, it was determined that this map was not as representative of the participants' experiences and the themes were both broad and far-reaching which left less meaningful interpretation of the results. As such, the relationship between codes and themes was revisited and a thematic map was adjusted to provider more heterogeneity between themes and better represent the participants' narratives. The adjusted map is presented in the following step.

Step 5: Defining and Naming Themes. In this final step the themes were reviewed per Braun and Clarke's (2012) recommendation of the following questions: (a) the theme has a singular focus, (b) the themes overlap and become repetitive, and (c) the themes provide meaningful implications for the research question. Each theme demonstrated external heterogeneity (i.e., clear distinctions between themes; Tebbe et al., 2018) and provided meaningful implications for the research questions. As a result, a final thematic map was created (see Figure 1). Final names were given to themes and sub-themes in order to represent the essence of each theme.

Step 6: Generating the Report. In this final stage of thematic analysis the final report was generated. To do this, each code was clustered within its corresponding sub-theme and theme. After this, the final report was written and included a rich description of each theme and sub-theme found within the analysis. Per Braun and Clarke's (2006) recommendation, themes were described using direct quotations in order to demonstrate the adequacy of data within each theme. This final stage of thematic analysis resulted in the following chapter.

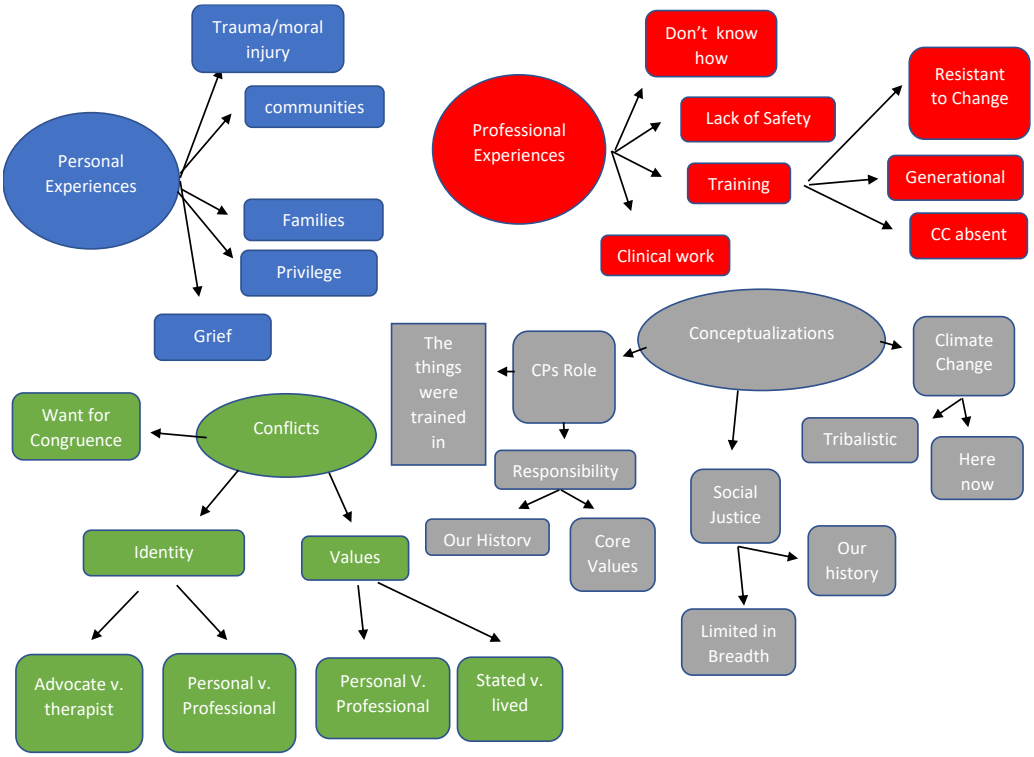

Figure 6. The Second Thematic Map. In this map, the new theme of "Conflicts" contains the original themes of identity and values and the theme of "Conceptualizations" includes the original themes of experience of SJ, experience of TPs, experience of C

Chapter 4

Results

The six steps of thematic analysis (Braun & Clarke, 2006; 2012) resulted in the creation of six major themes: (1) dissonance; (2) professional dilemmas; (3) resistance; (4) CP's role; (5) negative affect; and (6) privilege. These themes are visually represented in Figure 1. With the exception of "privilege," all themes contain a sub-set of themes. The level of themes is categorized as: level 1: "theme," level 2: "sub-theme," and level 3: "component." Schematically, a theme is represented by the "oval" shape, whereas a sub-theme is represented by a "rounded rectangle." To create a concise, and easy to follow thematic map, components are not schematically represented, but are explicitly categorized and described in this chapter. A theme and corresponding sub-themes share the same color. The theme of "privilege" is represented by an ambiguously rounded grey shape in an attempt to physically represent the blurring of privilege with other represented themes. Directional arrows are present in the thematic map and represent a theoretical influence of one construct on the other. These are discussed in the final theme, "privilege."

Demographic Information

Before turning to the themes, it is important to describe who the participants are as their experiences are reflected through this process. By providing some insight into who these individuals are, we can better make sense of how they describe their experiences relative to climate change and CP. Participants in this study were 10 counseling psychologists or counseling psychologists in training (see Table 1). Demographic information gathered included gender, age, ethnicity, degree held, educational status, and type of employment. The majority of participants identified as female *(n* = 8) as compared to male *(n* = 2) and all identified as cisgender.

Participants ranged in age between 26 and 73 with an average age of 36.6. Participants self-identified their ethnicity as “Latina” *(n* = 1), “Middle Eastern” *(n* = 1), and “White, Caucasian, and/or European” *(n* = 8).

At the time of interviews, the majority of participants held a doctoral degree in CP. Those holding doctoral degrees were evenly split between PsyD *(n* = 3) and PhD *(n* = 3). Of those holding doctoral degrees, a minority focused on teaching and research as their primary career *(n* = 2) and included one individual who self-identified as “retired.” The remainder of participants holding doctoral degrees self-identified as having a primary career focus on clinical work *(n* = 4) and included careers in inpatient mental health (n =1), outpatient college counseling *(n* = 1), community mental health *(n* = 1), and private practice *(n* = 1).

Several participants were current students in PsyD *(n* = 1) and PhD *(n* = 3) CP doctoral programs and included a “2nd year,” “3rd year,” and “doctoral intern.” The majority of doctoral students in this study held a master’s degree *(n* = 3) as compared to a bachelor’s degree *(n* = 1) as their highest degree. The highest degree of current doctoral students included: “Master of Clinical Mental Health Counseling” *(n* = 1), “Master of Counseling and Education” *(n* = 1), “Master of Arts” (unspecified, *n* = 1), and “Bachelor of Arts” (unspecified, *n* = 1).

Table 1.

Demographic Data

Demographic Variable	% (*n*)
Gender	
Female	80 (8)
Male	20 (2)
Age	
20-30	30 (3)
31-40	60 (6)
41 and above	10 (1)
Ethnicity	
Latina	10 (1)
Middle Eastern	10 (1)
White	80 (8)
Degree	
Bachelors	10 (1)
Masters	30 (3)
PsyD	30 (3)
PhD	30 (3)
Occupation	
Counseling Center	10 (1)
Doctoral Student	40 (4)
Inpatient	10 (1)
Outpatient	20 (2)
Private Practice	10 (1)

Results of the Thematic Analysis

In the remainder of this chapter, each theme will be given a thorough description, supported with the use of direct quotes. Although not all coded data is represented in this description, as many as possible were used in order to give the reader a clear sense of the participants' experiences and how their experiences were made sense of through this process. Each section will begin with the portion of participant contribution to the theme, followed by a broad description. Then, sub-themes will be presented and will include a portion of participant

contribution to each sub-theme and subsequent description of the components that make up the sub-theme. Participant contribution to each component is combined to make up an overall contribution to the sub-theme, and sub-theme contributions are combined to make up the overall contribution to the theme. Each theme contains 100% contribution from participants (n =9), whereas sub-theme contribution varies. An overview of participant contribution to each theme and sub-theme is presented (see Table 2).

The themes are presented in a purposeful order, as encouraged by Braun and Clarke (2012). The first three themes, dissonance, professional dilemmas, and resistance represent challenges faced by the counseling psychologists in this study. Taken together, these three themes point to a larger narrative that participants in this study are struggling with dissonance, dilemmas, and resistance to climate change, in part, due to a larger debate regarding social justice within the field of CP. The fourth theme, CP's role, is presented next as it appears to emerge as an antithesis to previously noted challenges and presents a broader desire among participants for a more active approach in implementing social justice, allowing them to better address climate change as counseling psychologists. The fifth theme, negative affect, is then presented as it represents the broader impact that participants in this study incur as a result of the challenges faced, and likely, as a result of being an agent for social change. Finally, the sixth theme, privilege, is presented last as it represents an elusive reality that permeates the lived experiences of the participants in this study.

Table 2.

Participant Contribution to Themes & Sub-themes

Theme	Sub-theme	Contribution % (n)
Dissonance		100 (9)
	Personal vs. Professional	66 (6)
	Advocate vs. Therapist	77 (7)
	Stated vs. Lived	66 (6)
Professional Dilemmas		100 (9)
	Missing a Guide	77 (7)
	Keep it to Yourself	55 (5)
	It's in the Room	66 (6)
Resistance		100 (9)
	Training Programs	44 (4)
	Social Justice	66 (6)
	Looking Outside	44 (4)
CP's Role		100 (9)
	History as Vehicle	66 (6)
	Core Values Fuel	55 (5)
	Training as Driver	55 (5)
Negative affect		100 (9)
	Loss	55 (5)
	Specific Emotion	100 (9)
Privilege		100 (9)

Theme 1: Dissonance

"Dissonance" emerged as a theme and included data from 100% of participants (n = 9). The word "dissonance" is used to represent the underlying lived experience of incongruence between participants' personal and professional identities, roles, and values. This theme describes how climate change activated participants' reflection on these areas of incongruence, resulting in a sense of conflict. This theme is represented by three sub-themes: (1) personal vs. professional, (2) advocate vs. therapist, and (3) stated vs. lived.

Sub-theme: Personal vs. Professional

The sub-theme of "personal vs. professional" emerged from 66% of participants *(n* = 6). This sub-theme relates to a sense that climate change has created an experience of dissonance between the personal and professional identities of the counseling psychologists in this study. The "personal vs. professional" sub-theme contains two main components: (1) identity, and, (2) values.

The first component, "identity," was found in several participants' discussions about their personal identity as a member of a family. Three participants described experiencing a conflict between their identity as a parent and their identity as a psychologist whereas one participant recognized this conflict occurring in her role as a child. For example, when describing a struggle to integrate advocacy into his life, one participant stated, "…you know…I'm at a time in my life where my family's young, but I definitely see being more involved in the community in the coming years" (P3). The dissonance between parent and psychologist was shared by another participant who stated, "I feel like as a working parent, working full-time, time is so restricted, and it's so easy on a personal level to just do the more convenient option, which is often less environmentally friendly" (P1). Another participant more broadly described a sense of dissonance related to her family identity, stating, "I feel like a lot of the things that I really love to do, I only get to do evenings and weekends," adding "which is not very much time, especially when you have other things other, you know, family obligations, and things like that" (P4). In addition to the identity of parent, one participant recalled the dissonance that occurred as a child within a coal family:

> The idea of climate change has been on the radar for me for a while, because I grew up in a coal community; And it was a community that, you know, as I was, when I was in [my]

> program … the coal companies were going under, and there was this big push that like, "Oh, we got to get all these coal mines shut down because they're polluting the environment." And I remember being from a coal family, I was like, "Oh, no, no, no, we can't lose jobs, we can't lose jobs," you know? (P9)

The second component, "values," was found in participants' descriptions of struggling to integrate personal and professional values. Two participants discussed difficulty managing conflicting values through a religious lens, one stating, "Yeah, I think from like a biblical perspective, it's absolutely our responsibility, right? But it depends how you interpret that" (P2), while another said, "It's something like religion, right? We don't want to bring our own religious values on to people, and it often feels like that when it comes to climate change" (P4). This participant went on to describe a felt sense of difficulty in trying to manage her personal values in relation to her professional values:

> So all this feels like it is a value, and it's a value that we should have, and it is a responsibility that we have, but how to actually carry that out without pushing your values is really tricky for me to get my head around. (P4)

This sense was shared by another participant, stating:

> We're sort of supposed to be like, "Nemesis." I don't think any of us are the blank slate, right? But we're sort of supposed to be these like, benevolent, or just recipient of other people's problems and concerns. And not judge people and climate change is a little judgy. Like, I'm a little judgy of people's behavior, you know, that contribute to climate change, and people's armchair activism and people's apathy, and that is not so compatible. So, I don't know that our field does a good job teaching us how to reconcile that. (P8)

Sub-theme: Advocate vs. Therapist

The sub-theme of "advocate vs. therapist" emerged from 77% of participants *(n* = 7). This sub-theme relates to a narrative among participants that their identity and values as an advocate are often incompatible with the identity and values as a therapist when considering climate change and social justice, broadly speaking. The "advocate vs. therapist" sub-theme contains two main components: (1) identity and (2) values.

The first component, "identity," was exemplified in participants' explicit, surface level, recognition of dissonance between their identities as advocate and therapist. For example, one participant stated, "We're not sociologists, we're counseling psychologists, and so the work that we're doing with people is largely individual, even group psychology, even group therapy is focused on individual wellness and change, and growth" (P4). Another participant said, "What is the utility of me pushing back hard on that? You know, and is that appropriate given my role? I'm not a politician, I'm not a teacher, I'm a therapist" (P8). Another participant more explicitly named a boundary difference, sharing, "you know … in a certain form of therapy or counseling, I am going to be very unlikely to be in someone's home, but as an advocate, you know, I think our boundaries would be different there" (P3). Later on, this same participant spoke about the sense that time-demand creates dissonance between therapy and advocacy:

> Private practice…it tends to pull more of your time to the clinical work as opposed to, you know, scholarly efforts or…volunteer efforts, you know, for various social justice issues. …It's like the trains never stop moving in private practice … there's not a break period and depending on what you want to keep your caseload at … that's going to take up a lot of the week. And there isn't an offseason for private practice. (P3)

This sense of dissonance was shared by another participant who described experiencing her role as a therapist as a high time-demand:

> At [my job], we have someone with borderline personality disorder who's swallowing everything in sight. That's what our focus is…keeping this patient safe. And so, our day… there's not a lot of time …. So, you know, it's hard to address something that's not an immediate concern in the environment that I currently work in. That would be the big barrier, because I mean…it's life and death, and we're working on, you know, what can we do? How can we solve this problem? How can we keep this person from harming themselves, you know, and so it's not having time to focus on a "big picture" issue because we're, we're fine tuned into what's going on. So, I guess that's the barrier and figuring out a way to, to work something like a conversation about climate change into this fast-paced environment. (P9)

The second component of this sub-theme, "values," was identified in the narratives of participants who described a latent sense of dissonance due to a value conflict between advocacy (i.e., creating systemic level change) and therapy (i.e., beneficence and nonmaleficence). For example, one participant stated, "So, to disrupt the system in any community becomes a public health crisis, and for our end of things, it becomes a mental health crisis" (P3). The dissonance between advocacy and therapy was shared among three other participants who spoke about the impact of lost jobs:

> I mean, there are a lot of people … their jobs are gonna hurt the environment, and I'm like, "what are we, what are we doing for these people?" So, that's the other piece of the puzzle. I'm like, if we're going to get rid of drilling for oil, if we're going to get rid of these coal jobs … you know, will they have jobs in this new market? (P9)

> But, I asked the people in [my community] about that, and they're saying, you know, we we've only been trained to be miners, and, you know, what are we going to do? and our families are going to starve, and in fact, it's really a day to day truth as far as they're concerned. (P6)

> You're always going to poke…somewhere where someone has money and they don't want to lose it right? So even driving a car, you know, eventually people are going to not buy new cars, and that's going to hurt the economy. And then, you know, it always will have a rippling effect…the bigger rippling effect is going to be climate change. And it's like, we're not noticing how big that is because we're too scared to lose the other things. (P2)

Another aspect of this component, "values," was seen in participants' descriptions of implicit value associations between advocate ("value-laden") and therapist ("value-free"). This is best exemplified in one participant's reflection:

> It's interesting, because our stance as therapist is to be open, empathic and warm, and non-judgmental, and receptive, and helping to empower people to find their own way, but activism is a little bit more like saying no, this is the right way. (P8)

This sentiment was reflected in other responses. For example, one participant stated, "I think if anything, it's just us being pulled into the divided ways that things are and then seem to have an agenda. Which God, I mean, we do, so it's true" (P4), which suggests an attempt to stay "value-free" to prevent influence in her work. This same sense of staying "values-free" was shared by another participant who stated, "One of the things I've realized in that, and this particularly applies in a strange way to the to the environment, is I put myself in the middle with the hope that is that we can try to find a middle ground" (P6). The "value-free" stance was linked

to cultural responsiveness by one participant who shared, “The only thing is, I would want to be culturally sensitive. …. I wouldn’t want to go in there and be the climate change advocate…but I would want to be sensitive to the population” (P9).

Sub-theme: Stated vs. Lived

The sub-theme of “stated vs. lived” emerged from 66% of participants *(n* = 6). This sub-theme relates to the idea that these counseling psychologists experience a dissonance between stated values and actual lived values when considering how they and others engage in climate change and social justice actions. The “stated vs. lived” sub-theme contained two main components: (1) individual values and (2) others’ values.

The first component, “individual values,” was seen in participants’ descriptions of dissonance between their own individual stated values and their actual lived values. Two participants recognized dissonance between their stated values as counseling psychologists and their lived values as Americans. The first participant stated, “And knowing you know, we're in America…So, we like to wait until there's a problem and then try to fix it instead of prevent it” (P2), while the second participant described the pressure to conform to American consumerism, saying:

> I do think that in the society we live in…. there might be pressure to, like, live larger…. just that expectation I think within American society in particular that you should have the biggest house you can afford or have more things and they should be new things, all that pressure. (P1)

The component of “individual values” was also found throughout participant narratives and revealed a latent sense that their actual lived values often fell short in comparison to their stated values. For example, one participant said, “And like I’m the person that’s saying like ‘I

care about social justice,' and I don't do anything" (P5). The sense that actual lived values fell short was shared by another participant, who stated, "So, my approach has been to try to do what I can do. And sometimes I think I could do more, but I don't know that I have the energy to do more these days" (P6). Although participants felt dissonance between their own stated and lived values, there was also a general recognition of dissonance between the stated and lived values of others.

The second component, "others' values," was found throughout several participant narratives. One participant described a motivating factor for having stated values, suggesting, "So there is a sense of, for better or worse, you know, we get to be good people because we, we stand up against hatred and we stand up against violence" (P7). Other participants also recognized a tendency of others to express their stated values while noticing their actual lived values often fell short, stating, "But, I think it adds to my frustration when I watch other people and a lot of this like armchair activism type stuff" (P8). This frustration was shared by another participant, who reflected on a dissonance between the stated and lived values of others in the field of CP:

> There's like one thing that drives me crazy. It's like, talking about ideas and doing nothing. Literally, it's pointless.
>
> > *(Interviewer*) So, yeah, we can learn a lot about social justice, but unless we're actually doing something it's, you know, what's the point…
>
> Yeah. Yeah. …. So, people can post about it on social media like 100 times and have this care, and you know, whatever post social media, but like …how does that help? or like, what's happening after that? And I think that's what I often get frustrated with, like,

> within counseling psychology is that it's almost like an identity of caring about social justice versus like doing it. (P5)

The recognition of dissonance between stated and lived values in CP was shared by others. One participant recalled a "MLK service day," stating, "Yeah, we do like one service day a year or something…which is great, but that's like one day, you know? … I think it would be a lot harder to get people to care to do more" (P5). Similarly, a participant described dissonance between the stated and lived values of social justice in counseling psychologists, stating, "I feel like I'm very social justice oriented. So, what I would do for a client would go way further than what some of my colleagues would do" (P2).

Theme 2: Professional Dilemmas

"Professional dilemmas" emerged as a theme, representing 100% of participants *(n* = 9). The term "professional dilemmas" is used to represent these counseling psychologists' shared experience of professional dilemmas related to climate change. This theme includes three sub-themes: (1) missing a guide, (2) keep it to yourself, and (3) it's in the room.

Sub-theme: Missing a Guide

The sub-theme of "missing a guide" emerged from 77% of participants (n =7). This sub-theme relates to the idea that participants are lost in knowing how to integrate climate change into their professional responsibilities. The "missing a guide" sub-theme contains two main components: (1) uncertainty about where to start and what to do, and (2) a sense that one's current career path is not well suited to addressing climate change.

The first component, "uncertainty about where to start and what to do," was seen in participants' explicit, surface-level responses and generally surrounded a recognition that climate change was not part of their current professional responsibility. Two participants spoke about a

general recognition that climate change is not part of their day-to-day professional life. One participant directly stated “I don't think that comes into the professional life very often” (P3), whereas another participant more directly expressed an absence of climate change from several aspects of her professional identity, saying, “It’s not something I bring up really in the classroom…it doesn't show up in my research…there's no professional task that I engage in that's directly related to climate change issues” (P1). In addition to the explicit recognition that climate change is not part of her work, participant narratives also revealed a deeper sense of the dearth of climate change in her professional life.

The more latent, below-the-surface, responses focused primarily on a sense of not having direction and feeling ill prepared to address climate change in their primary professional role. Several participants described a lack of direction, or lack of guidance when considering how to integrate climate change into their professional life. One participant expressed a broad recognition about a lack of direction, stating, “I don’t really know what I can do” (P2). Other participants identified more specific areas where they felt stuck in addressing climate change. For example, one participant described a sense of being lost in taking a “first step,” stating, “I don’t know…I keep asking myself that. It’s just like, ‘where do people start?’ Especially in our field. How do we even start?” (P5). Similarly, another participant spoke about the difficulty in knowing how to address climate change within supervision, “But it also is like it’s a really significant thing. …when I brought that to supervisors, we’ve kind of struggled with how do we, how do we classify that amongst all these other concerns?” (P7). In addition to a lack of direction in addressing climate change, participants also spoke about climate change as being difficult to address within their primary professional role. Both the explicit and latent participant responses suggest that participants are generally struggling to know what to do, and where to start in

addressing climate change. Participants also spoke about their own careers, revealing a deeper sense that participants do not know how to integrate climate change into their current roles.

The second component of this sub-theme, "a sense that one's career path is not well suited to addressing climate change," is a more latent, under-the-surface, view of participants' opinion that climate change may be better addressed through another career path and suggests another avenue in which participants are lacking a guide for integrating climate change. For example, one participant with a primary role as a private practice clinician stated, "I think because right now what I'm doing professionally, it doesn't apply as much…" (P3). This sentiment was echoed by another clinician with a primary role in clinical assessment, who stated, "As I mentioned, I do more assessment than I do therapy. So, I think it is probably more salient for people doing therapy" (P4). Both narratives suggest a latent message that climate change is better addressed through other roles as a psychologist. In comparison, a participant whose primary role is as a professor/researcher stated, "In my imagination, there are more opportunities for outreach, or you know, individual or group based interventions if I had a clinical role right now, but I don't" (P1). Since advocacy is often a tandem-identity, these responses suggest a need for specific guidelines in the ways that participants could incorporate climate change into their professional careers.

Sub-theme: Keep it to Yourself

The sub-theme of "keep it to yourself" emerged from 55% of participants *(n* = 5). This sub-theme relates to the idea that bringing up climate change in professional settings would cause participants' negative consequences, thus creating a sense of hesitancy or resistance to addressing climate change in personal and professional settings due to a lack of perceived safety

in doing so. The “keep it to yourself” sub-theme contains two main components: (1) inter-personal relationships and (2) professional settings.

The first component, “inter personal relationships,” was found in participant narratives and included a fear that it would create conflict and fear of judgement from others. In discussing the fear that addressing climate change would create distance from others, two participants described a hesitation in bringing up climate change. For example, one participant stated, “but it also feels like people are not necessarily open and receptive to that kind of feedback. They feel very criticized when you bring it to their awareness” (P8). Similarly, another participant said, “You’re gonna make some people mad if you’re bringing up the climate change issues because some people don’t believe it exists. Some people don’t believe it's a problem, and they’re just dead set in that” (P9). These expressions seem to represent a belief that addressing climate change would create distress for someone else and lead toward conflict in the relationship. In addition to this sense of conflict, participants also spoke about a fear related to judgement.

Participant narratives revealed a sense that addressing climate change would also result in negative evaluations and/or judgements from others. For example, two participants described a general worry about being considered “better than” when discussing climate change. One stated, “...But I’m always afraid of, I don’t know, sounding self-righteous or annoying or what-have-you” (P1), while the other stated, “I am just worried that people are not all that receptive to it and would see me as being high-and-mighty, or critical, you know, out of place, or something like that” (P8). This feeling was shared by another participant who shared her fears about bringing up climate change in her program:

> I have like a mini feeling that my friends and people around me would like call me “the hippie” or whatever and so, although whatever I don’t care whatever they say, but yeah

> sometimes I feel like it gets taken as like a joke like, “oh, you and your trees”, like “tree lover” stuff. So, I imagined that would be some part of the experience I would get. At least like, I don’t know about my program, but at least like the people that I’m mostly around within the program. Yeah, like kinda joked about. Like, people don’t care more than just making a joke about it. I feel bad saying that. (P5)

The second component, “professional settings,” was found in participant narratives who spoke about the sense that addressing climate change would result in negative consequences in varying professional areas. One participant discussed a fear of negative evaluation within the supervisory relationship, stating, “I have to be cognizant of am I bringing this as a therapeutic concern, or, am I bringing it as a chance to like get on my soapbox?” (P7). Another participant in the professor/researcher role described what it might be like to discuss climate change in her classroom, stating, “I think I would expect…I would get evaluations from students that complained about my being too political, or off task or something, in the classroom” (P1). This participant later described a worry and hesitancy about addressing climate change as an ECP seeking tenure:

> I think in my own professional environment for the most part I think it would be looked upon positively. So, for the most part, but again within limits. Right, like you don't want to be like switching up too much stuff and be seen as a troublemaker. Yeah…within limits, but generally I think it would be looked upon positively in evaluations of me. (P1)

Similarly, another participant shared a worry and hesitation to address climate change due to the impact on professional relationships with clients and colleagues:

> I think there’s always the thought about anything that we do, like, what would happen if this got back to one of my clients that I was working with? Or, how my colleagues feel,

> even. Like, if I took a really vocal stance about climate change, or immigration or, you know, abortion rights, or whatever, and like, would my colleagues say, like, "you're really overstepping." (P8)

Sub-theme: "It's in the Room"

The sub-theme of "it's in the room" emerged from 66% of participants *(n* = 6). This sub-theme relates to the idea that climate change is already impacting the clinical work that counseling psychologists are doing. The "it's in the room" sub-theme contains two main components: (1) specific clients and (2) marginalized populations.

The first component, "specific clients," was found throughout several interviews, when a participant recalled a specific client or related climate change to specific clinical situations. Two participants identified current clinical situations in which climate change was already impacting their clients. The first, stating, "[The] families that I work with are from very low income…you do see the effects there, you know? Kids who don't have coats…one pair of socks…you do see it affecting them in that way" (P2). Another participant discussed how climate change has already been influencing her clinical work in a college counseling center:

> Uhm, professionally, being in a college counseling center, it's something that I've started to see come up with my clients…A few clients have come in and when I asked them what's bringing them in, they will kind of rattle off…general anxieties that you see amongst individuals in a college population, but included amongst those…has been, climate change, and the environment, and "what is the world gonna be like in 10 years?" (P7)

In addition to clinical work with families and in counseling centers, one participant recalled a veteran client who struggled with managing symptoms of PTSD that were triggered by thunderstorms:

> I don't think we made the connection back then, but…one of my cohort mates had a client who…he had a phobia of thunderstorms. …. And so the loud noise of thunderstorms reminded the individual of a war zone. So, you know, the people that we wouldn't even think of, you know, [that] as being particularly impacted by climate change could really be you know, if we're having more thunderstorms and somebody is triggered by that. (P1)

The second component, "marginalized populations," was found in participant narratives who described a connection between climate change and lower SES communities, thus, suggesting that climate change is likely already impacting the communities that counseling psychologists tend to work in. SES emerged as a primary area of discussion. For example, one participant stated, "I know…the people that are going to be affected by it, and they are the most low-income, and not even in America. Look outside. People are already dying because…it's just too cold or it's too hot" (P2). Another participant discussed the connection between SES and climate change in her local community:

> I think, for example, the really long, rainy winter that we had…I think that affected a lot of people and a lot of people's depression levels. Especially people who have a more seasonable aspect to their depression. …. A lot of the patients that I see, their leisure time and their hunting… another way of supplementing their income is through hunting and fishing, things like that. I think changes there could affect them. I don't think I've had

anybody mentioned that specifically, you know what I mean? Like, oh, you know, the weather's changing. But, um, but I do think it does. (P4)

Theme 3: Resistance

"Resistance" emerged as a theme and represented 100% of participants *(n* = 9). The term "resistance" is used to represent these counseling psychologists' experiences of resistance to engaging in climate change advocacy within their training programs and the broader social justice lens of the field. This theme contains three sub-themes: (1) training programs, (2) social justice and (3) looking outside.

Sub-theme: Training Programs

The sub-theme of "training programs" emerged from 44% of participants *(n* = 4). This sub-theme relates to the idea that training programs in CP are experienced as resistant to change in regard to social justice, and in particular, to climate change. The "training programs" sub-theme contains two main components: (1) need to conform and (2) generational hierarchy.

The first component, "need to conform," was found in participant narratives that discussed a general pressure to conform to the expectations of a training program for varying reasons. Three participants spoke about this during their interviews. One participant, a current doctoral student, stated, "I can only do so much. It"s really got to be, uhm, change needs to be made at a macro level. And I as a practicum student, I only feel like I can run this concern so far up the ladder" (P7). Underneath the surface of this statement is a latent assumption that students do not have power to create change and need to conform to the preferences of the program. Another participant jokingly reflected on the underlying message received about conforming to the "status quo" within the program by feeling compelled to look away from internal social justice concerns:

> But we are a social justice-oriented program, yet we still have the internal stuff, you know, so… [laughing]
>
> (Interviewer) The internal stuff being?
>
> The program. So, it's kind of like they want you to be advocating a social justice just not towards their program, right? So, don't, don't look at them. Just look at everything else.
>
> (Interviewer) Yeah, we're good, but…
>
> Yeah, we're good. Everyone else sucks, but we're perfect. [laughing]. (P2)

Another participant discussed feeling pressured as a faculty to maintain the "status quo" of department behaviors that contribute to climate change, stating, "You know, I feel pressured to show up on campus but I'm kind of thinking to myself this would be more efficient as a Skype call or a zoom call" (P1). This same participant described a general sense of feeling the need to "stay within their lane," stating, "I don't want to push anything too much, right? Like I don't want to cause any waves. I just want to, you know, kind of lie low, not lie low, but you know, just blend in" (P1). In addition to a need to conform, training programs were described as generational.

In the second component of this theme, "generational hierarchy," participants focused on their experience that power is kept, in one way, at the top through generational hierarchies. For example, the participant who discussed her experience as an ECP faculty member, shared about her perception of decision making:

> Like with the meeting example that I brought up. I think a lot of junior faculty are like, "yeah, let's just meet remotely," …. It's wasteful and so I think a lot of other younger junior faculty are on board with that idea. But the older guard is kind of like, "oh, but you don't have the same human connection and 'da-da-da,' which I can see it…I'm just saying

> that we could replace some meetings with online and that'll help to reduce waste in multiple ways, not mentioning gas, but other resources are also spent like time …. So, I think maybe tides might change over time as my current generation of professionals becomes more senior. …. I don't think that if you asked my senior colleagues, you know, what their view of climate change was, I don't think their answer would be too different from mine. Only that they might not be as convinced that are that it's worth changing the way that we currently do things. (P1)

The experience of a generational hierarchy was also expressed by three other participants, all of whom were current doctoral students. For example, one participant mentioned, "Some of the professors are older and I don't know how often they're coming into contact with research about specifically climate change and how it's influencing our field" (P5), showing a recognition that information is often passed down from one generation to the next. Another participant who had high praise for her supervisors, described noticing how generational awareness plays a role in the way they navigate her environment, stating, "How visceral the concern is, I think, has differed for all of us. …acknowledging the effect that generation plays…has been another thing I've had to be aware of" (P7). Additionally, another participant described a strong sense of a generational divide between within her program, stating, "I think in my program, I definitely feel it…there's definitely a generational divide and I think that most of the students in the program are aware of it" (P2).

Sub-theme: Social Justice

The sub-theme of "social justice" emerged from 66% of participants *(n* = 6). This sub-theme relates to the idea that participants' experience a sense of resistance to including climate

change in the social justice discourse in CP. The "social justice" sub-theme contains three main components: (1) avoiding politics, (2) limited focus and (3) focus on the individual.

The first component, "avoiding politics," involved the general recognition that climate change and other social justice areas are often experienced as divisive, political, and therefore, avoided. One participant commented about the divisive nature of social justice in CP, stating:

> So, it becomes this kind of thing, like where I think the more I would push, the more people are going to say, but what about me? I mean, what about Black issues? What about female issues? What about aging? What about the ableism? (P6)

This was shared by another participant who expressed a general sense that social justice becomes a polarizing topic in his day-to-day interactions, sharing, "So, you know, our tendency toward political divides and our you know, how polarized that can be absolutely feels like a barrier" (P3). Both narratives suggest that climate change quickly becomes a political and polarizing topic that counseling psychologists struggle to engage in.

The second component, "limited focus," included the perceptions that social justice in CP does not include climate change and has a generally exclusive lens. First, participants described an absence of climate change from social justice discourse in CP. When asked about climate change being included in their social justice training, participants generally responded with denial. For example, one participant stated, "I think the connection's there, but I, I don't really feel that that's been presented in my training or many other professional settings that I found myself in" (P1). One participant shared about her experience getting information about climate change from a supervisor, stating, "That's the only thing I kind of gotten explicitly in an academic capacity. And like I said, that was just her, you know, sending out additional

resources" (P7). Another participant shared about the stark absence of climate change from any of her training:

> I don't think it was talked about at all. So, I … have a master's in counseling and then, like, the PhD in counseling psych, I really don't think it was talked about ever, at all. Which is just notable. I don't think it's come up once. Yeah. I'd actually be surprised if you told me that somebody else had interviewed said it has come up. I mean, it would be cool. But it would surprise me. (P8)

In addition to the absence of climate change from social justice in CP, participants described a sense that social justice has a more narrow lens within the field. Several participants made note of the "typical" areas of social justice in CP. For example, a participant stated, "It seems like [climate change] has not historically been one of our, sort of, hot topics in CP. ….The top three ones are related to gender, race and ethnicity, and sexual orientation" (P1). Another participant shared a similar recognition, saying, "I would say even within…my peers…they care about social justice issues of like race, ethnicity, gender, ability status, and those identities" (P5). While describing the areas of social justice focus in the field, one participant added, "Those initiatives can be really focused on a single issue like poverty, or race, or prevention of sexual violence" (P7). These narratives suggest that participants' experience CP as having a narrow or fine-tuned social justice focus.

The view of social justice as narrow was echoed by other participants. One described the desire for a more holistic approach, adding, "And it's something that American psychologists should be developing more here…Not that we're not, some people are, but we could do a lot more with it" (P4). Several other participants described a narrow lens of social justice as focused on people and individuals, suggesting a missing systemic emphasis. For example, one participant

attempted to describe how climate change is different than "typical" social justice in CP, saying, "It's different because it's not fighting for someone's rights necessarily. And I feel like that's a lot of what social justice has been, is to like uplift oppressed, you know, a marginalized group to make things equal" (P2). Another participant recalled her experience with conducting research outside of the "typical" focus on CP:

> It was interesting because I got some mixed, mixed responses. So, I studied [environmental concerns] and emotional effects on people. …. my original advisor said," No, you can't do that. That is social work. That's social work's base, that's more sociology or social work." (P4)

Sub-theme: Looking Outside

The sub-theme of "looking outside" emerged from 44% of participants *(n* = 4). This sub-theme relates to the idea that participants need to go outside of CP to get beneficial knowledge about climate change. There were no individual components to this sub-theme.

Participants expressed a general need to find information about climate change outside of the social justice literature and training in CP. For example, when asked about where they got her information, one participant listed off news sources, saying, "I guess in popular media outlets, you know, like Washington Post, CNN, NPR. Vice News… So mainstream news media, I guess" (P1). Another participant stated, "What I know about this stuff is stuff that I have either read in like Psychology Today or looked into on my own" (P7). One participant found helpful information from a podcast, but stated:

> I think what's missing is that you kind of have to go searching for it …. I think that that's the missing link. It is something we don't talk about very much. And you know, it kind of gets swept under the rug as something we can work on later. (P9)

Taken together, these narratives suggest a latent desire for helpful information related to climate change, but have needed to look outside of CP, and are likely facing information that is not applicable or relevant to their role as a counseling psychologist, and appears to be captured by one participant's reflection:

> Still, I would say like pretty limited, like, there aren't initiatives of creating more opportunity. There aren't classes about it. There's not like a topic or seminar or anything. So out of the program, I feel like I would have to go and find initiatives or opportunities on my own, like outside of that, within the community. (P5)

Theme 4: CP's Role

"CP's role" emerged as a theme and represented 100% of participants *(n* = 9). The phrase "CP's role" is used to represent participants shared vision of the ways in which CP could address climate change within the field. This theme as three sub-themes: (1) history as vehicle, (2) core values as fuel and (3) training as driver.

Sub-theme: History as Vehicle

The sub-theme of "history as vehicle" emerged from 66% of participants *(n* = 6). This sub-theme relates to the idea that CP has a strong history in social justice which provides the foundation for us to address climate change. The "history as vehicle" sub-theme contains two main components: (1) career and (2) social justice.

The first component, "career," was discussed across several participants. Career entered several participants' narratives and suggests a more latent recognition that the fields history of career counseling is one avenue in understanding how to move forward. For example, one participant described the impact that career has on the clients in her community, stating:

> So, a lot of people have derived their sense of self and their sense of meaning from their work, but also their entire social lives are built around their work. And so when they're no longer working not only do they become kind of isolated from the people that used to be their friends, they don't even feel a real sense of connection with them anymore because, you know, what are they going to talk about when they see their friends. (P4)

Another participant described career counseling as a way to mitigate the impacts of losing a job associated with climate change, saying, "We need…better energy efficient resources….but I want to see the people being trained in those fields so that people aren't being hurt" (P9). Another participant more explicitly named career as a component of our history with a recognition as an avenue for moving forward with climate change:

> Our field doesn't have as much of a career focus as it used to …. there is a you know, really solid base of knowledge and literature that CP is coming from with career issues. And the, you know, the intertwining of career issues as, as it applies to other cultural issues …. I mean, you can imagine, you know, relocation is going to be one of the big impacts whether it's away from a coastal community, or there's a weather disaster that, you know, forces people to move to a different part of the state or the country. So, you know, handling that career transition definitely comes back to one of our specialty areas. (P3)

The second component, "social justice," was also discussed across several participants. Several participants shared an evaluation of CP as having a strong history in social justice, suggesting another historical guidepost on the route to addressing climate change. For example, a participant stated, "I think CP, at least in terms of the APA, and in the field has been a leader on a lot of social justice issues. So why not climate change too?" (P4). Similarly, another participant

shared, “So, I think that like we’ve taken a good stance over the years on things like racism and stuff, and so this, this is like a natural fit because it's social justice oriented” (P8). Another participant described a sense of empowerment for taking on climate change due to the fields historical roots in addressing social justice: “Anytime you take on something that’s any bit controversial, you're going to open yourself up to some kind of negative feedback. But, you know, that's what we do as counseling psychologists anyway” (P9). Similarly, another participant expressed a sense of empowerment coming from our history of addressing social justice, stating, “Just looking at the history of how the APA and our field has advocated and changed the way people view marginalized group and mental illness. That is part of what we do - normalizing things.” (P2)

Sub-theme: Core Values as Fuel

The sub-theme of “core values as fuel” emerged from 55% of participants *(n* = 5). This sub-theme relates to the idea that the field’s core values can provide a sense of energy in helping counseling psychologists know how and when to address climate change. There were no individual components in this sub-theme.

Participant responses primarily focused on the recognition of the core values in CP as unique guiding principles that are strongly motivating in addressing climate change. One participant expressed a more latent sentiment of the core values when describing why CP should address climate change, stating, “I think we have a really big responsibility. It’s like ‘camp fire rules’: Leave it better than you found it” (P7). Another participant expressed a latent associated between CP and being receptive, welcoming, and community driven by stating:

> If you didn’t want to belong to another division, but you want to have a particular interest there are a group of people who get together because that’s where their energy is. And I

> think that that, in some ways, is unique to counseling psychologists, as a part of our identity has developed over time to be this broader view. (P6)

Other participants expressed a more explicit, surface-level, recognition of the core values within CP as guiding principles in addressing climate change. For example, one participant expressed a sense of responsibility in addressing climate change that derives from our core values, stating:

> I think if you are thinking about psychology as a whole, and you're thinking about CP then as a subset of that whole, and the stated values that CP has, that gives us a little more responsibility. (P4)

Another participant shared a similar sentiment, but alluded to the intentionality behind the core values of CP:

> I mean, I would say probably one of the bigger roles, at least within APA, if I were to be speaking with division wise, just because CP did push and put a lot of intention behind what the philosophy in beliefs and values are in CP specifically. (P5)

Sub-theme: Training as Driver

The sub-theme of "training as driver" emerged from 55% of participants *(n* = 5). This sub-theme relates to the idea that the existing training in CP provides us with the mechanisms to address climate change. The "training as driver" sub-theme contains two main components: (1) existing roles and (2) relationships.

The first component, "existing roles," included participants' identification of specific roles that a counseling psychologist is already trained in that could be used to address climate change. This component is best summed up by one participant's reflection on how our training could be used to address climate change:

> As far as like skills that you can use to address climate change…I mean, I think everything you learned in [your] program. I mean, your public speaking skills, your research skills, your skills you learn in working in communicating with people, you know? All of those skills. I mean, we're perfectly suited as counseling psychologists to advocate for any kind of social justice need. (P9)

Sharing this view of advocacy, several other participants spoke about the role of advocate in addressing climate change as a counseling psychologist. For example, one participant stated, "So I think it's our job…I think advocating is a big thing" (P2). Another participant expressed a desire to see advocacy efforts in addressing climate change: "One thing that would be neat to see is policy level changes that we're able to contribute to as counseling psychologists" (P1). Two other participants spoke about advocacy as being an essential component of CP. One stated, "Even though we do therapeutic work mostly with the individual…psychology as a field still needs to have that advocacy branch, that advocacy element, to it" (P7). This was shared by another participant who described advocacy as being a distinct role in CP:

> The advocate role is, is different than our training as a counselor or consultant. And it's, you know, it's maybe a combination of some of the skills that psychologists already have, but are probably also very unique skills and experiences to be had in that advocate role. (P3)

In addition to the role of advocate, other participants spoke about the role of therapist in addressing climate change as a counseling psychologist. One participant described a more explicit recognition that climate change could be addressed through the role of therapy, stating, "It also seems like climate change should have a place in clinical or practical training as well" (P1). Two other participants spoke about related climate change to specific

therapeutic roles that counseling psychologists already take. For example, one participant stated, “I do think that one of the big roles for us as counseling psychologists is, you know, the idea of disaster relief and psychological first aid for communities” (P3). Another participant discussed ways that counseling psychologists can address other social justice issues through the role of therapist, saying, “We are better educated and trained, that we understand people’s anxieties, and so, it is our responsibility to deal with things like Black Lives Matter and the interface between people’s need for protection” (P6).

The second component, “relationships,” included participants’ association between counseling psychologists’ ability to build relationships and deeply value others as a way to address climate change as a counseling psychologist. Several participants described the training in counseling as providing them with essential skills that allow them to relate to and value others. For example, one participant shared, “I think that our field teaches a lot of like the humility…or at least like non-ego-centeredness…like not being egocentric, thinking about systems and the impact of people on each other” (P8). Another participant stated, “Empathy is a great skill and…it is something that you fine tune and learn more through a program. So, yeah, the therapeutic relationship really matters” (P2). While the recognition of relational skills was found in some participants’ responses, others shared about how these skills allow them to have difficult conversations as a counseling psychologist. For example, one participant stated:

> I think just an exposure and a familiarity and an ability to empathize with people who are politically really different than me. I think that's a really valuable skill currently and it’s really hard to do. And the whole political system is so grossly divisive that we can't even have conversations. I mean, I can have conversations with people. And a lot of that …is the training that we get as counseling psychologists to really be good listeners and to

> really be empathic and to hear people just kind of see, see them for who they are and not just our preconceived notion. (P5)

Three participants shared a similar view that they can have difficult conversations as a counseling psychologist. One participant shared, “I kind of see myself as a conflict arbiter, you know, as a counseling psychologist, I can get in and try to do some good” (P6). Another stated, “Having training in facilitating dialogue, engaging in difficult conversations that you know, might be controversial. I think that's probably the number one thing” (P1). In a more latent representation, a different participant described how her training in relationships allows them to plan for successfully navigating difficult conversations: “[Climate change] doesn't have to be so heavy handed. It should be experiential and enjoyable and not like, ‘you should, you should, you should’. Nobody really makes behavioral change with a lot of ‘should’s’” (P4).

Theme 5: Negative affect

“Negative affect” emerged as a theme representing 100% of participants *(n* = 9). The term, “negative affect” is used to represent these participants experiences of negative affect that is occurring as a result of experiencing and witnessing climate change, and feeling powerless to make meaningful change. This theme is represented by two sub-themes: (1) potential for loss and (2) specific emotions.

Sub-theme: Potential for Loss

The sub-theme of “potential for loss” emerged from 55% of participants *(n* = 5). This sub-theme relates to the idea that counseling psychologists have experienced a sense of loss due to climate changes impact on their family and their relationship to the natural world. The “potential for loss” sub-theme contained two main components: (1) loss within family and (2) solastalgia (i.e., a loss of relationship with the natural world).

The first component, “loss within family,” appeared across several participants’ narratives. Two participants spoke explicitly about their experience as a parent, revealing a sense of loss related to the future of their family:

> I became a new mom pretty recently – 10 months ago – and I think about how I don’t think my child will spend as much time outdoors as I had growing up, and I also have some guilt about bringing another human being into this world to further impact the climate in potentially negative ways. I think about that for a future potential second child as well. (P1)

Another participant described a sense of loss related to not being able to teach her newborn the same patterns of plant growth in the spring:

> I think that the increasing level of change makes it kind of a more persistent anxiety or a persistent feeling. And then…I just had a baby. …. I have a son who’s 17, and so I was able to do a lot of those things with him. And so, my second son, I think, huh, “I wonder when I’m teaching him those things how much I'll be able to really teach him the same predictable patterns.” (P4)

The second foci presented in a participant’s sense of loss as it relates to her family’s career:

> When I was in the doctoral program, my dad was working in a mining industry. My uncle, well, he still is, but he’s the only member of my family that still is, but my whole family at one point were all miners. And so, my thoughts on climate change from my perspective of growing up in that community was like, “we need to not talk about this crap because it’s taking the jobs away.” (P7)

The second component of this sub-theme, "solastalgia," was found across several participant narratives. One participant jokingly stated, "Selfishly, I think about all the vacation spots that won't be there. Jamaica, the pig beach, like all of these things are not going to be there for us anymore…" (P2). Underneath the laughter, she expressed a latent sense of pending rupture in consistency and quality of her relationship to the natural world. She went on to describe the impact of this experience:

> So I think it's always been the case in the sense that my entire life I've been watching animals be endangered and extinct because of it… in [my state], we're really big on the Orcas and I spend like every summer going and watching them, and so just seeing that they don't have food this year, and that their babies are dying, and they're mourning the loss of their babies and…watching those changes is just so sad. (P2)

This sense of rupture was shared by other participants who expressed a lack of predictability and safety related to the natural world. One stated, "You know, I really enjoy being outside but it gets harder to have good days to be outside" (P1). Similarly, another participant commented on the changes in extreme weather, adding, "Existentially, it is hard to not allow yourself to get discouraged" (P7). Another shared the loss of predictability and reliability of weather patterns, describing a lack of safety, saying, "It creates some concern and worry, you know?" (P3). Yet another participant shared the lack of safety related to loss of predictability and reliability. While describing her hesitation to take to her child to the beach due to reports of flesh-eating bacteria, she shared, "it's like you can't trust the nature in the same way. …. Do I want to put my baby's feet in the ocean? …. you could actually be poisoned by the water itself. And that's just weird" (P4). Later on, this same participant expounded on her experience of rupture in her relationship to the natural world. The following narrative demonstrates how

seemingly subtle changes to the environment can create a psychological sense of rupture and loss, which results in negative affect:

> I feel very disconcerted by not having predictable seasons. It just it, I don't know if I would call it anxiousness. Probably sometimes it's anxiety, sometimes it's just sadness. But to not, to not be able to have like, "okay, it's Fall, and this is how things feel in Fall, and this is kind of what's going to happen with the temperature, and with the precipitation, etc." So, just a feeling of loss, I think, that things are changing and who knows, in 5 years from now, how things will be?
>
> It's odd being a person who grew up pretty connected to nature. …. Just, you know, if you want to start fall crops, for example, it's really hard to get the timing of that, right, because it's so hot for so long. Or if you're starting early things in the spring, sometimes it's extra rainy for longer, so you can't plant things as early, and then it's hotter earlier. And so think some things that you would plant five years ago in one particular way, you can't really do that now.
>
> So…I think it gives me a sense of uncertainty. Whereas the natural world has always been kind of rhythmic and I'm a person who really likes to have predictable rhythms and patterns in life. So, you can't really even do that with the Earth. It is a feeling of uncertainty, I would say. (P4)

Sub-theme: Specific Emotions

The sub-theme of "specific emotions" emerged from 100% of participants *(n* = 9). This sub-theme relates to the idea that participants are currently specific negative emotions as a result of experiencing the degradation of the climate. This sub-theme contained three main components: (1) awareness, (2) emotions like anger and (3) emotions like depression.

The first component, “awareness,” was seen in several participants’ narratives and included a recognition of climate change as a current and real problem. Participants typically expressed an awareness of climate change before going on to explore the impacts of that awareness. Examples of recognition statements include: “Well, I think it’s real. It's a big problem” (P4); “It’s real. It’s happening” (P7); and “I guess, to me, it’s the fact that this is a real problem and it’s imminent” (P9). In addition to a general recognition that climate change is a current and real problem, participants also expressed a sense of anger.

The second component, “emotions like anger,” included participants narratives who spoke about frustration or anger in response to climate change. One participant commented on the felt sense that witnessing climate change in her day-to-day life created a general frustration, stating, “…It feels frustrating [to see] within my own life” (P5). Another participant shared a sense of frustration at seeing climate change but related it to a sense of failure in stopping it, saying, “I frequently get frustrated because I feel that some of it could have been preventable” (P1). While some participants experienced a more general sense of frustration, another stated, “Uhhm, it makes me angry” (P7), and then went on to describe specific examples of what triggers her anger. Although outrage was certainly present among participants, the most salient component of this sub-theme was “depression.”

In the third component, “emotions like depression,” the majority of participants expressed feelings of guilt, hopelessness, or powerlessness in varying combinations and acuity. One participant related her powerlessness and hopelessness to the inability to enact her ethics, sharing, “I kind of feel like ethically, I should think about it a lot, but I also feel very powerless to it”, going on to add, “I think that speaks to like my greater sense of like, smallness and hopelessness about it is like, you know, what, what impact does any small group of people do?”

(P8). A sense of powerlessness was shared by another participant who stated, "… you just watch it over and over and then nothing's changing and you feel powerless to do anything" (P2). Similarly, another participant shared his sense of hopelessness regarding his ability to impact climate change, adding, "I'm concerned about climate change. I am not particularly hopeful. I don't know if you say it means that I'm realistic, skeptical, or cynical…So, I feel a little hopeless about it" (P6). Adding to the sense of hopelessness and powerlessness, one participant expressed a sense of guilt as a result of her ability to distance themselves from climate change:

> Guilt. It's like, privilege and also some hypocrisy, like, "Oh, I care about the environment and I have a Prius and I recycle," but like, it's like literally does nothing. I mean, it does, but in like a bigger picture it's not actually going to stop all of these like giant disasters that are occurring every day. (P5)

Theme 6: Privilege

Finally, privilege" emerged as the final theme and was represented by 100% of participants *(n* = 9). The term "privilege" is used to acknowledge a shared sense of distance between participants and climate change. No sub-themes were identified for this theme.

The theme of privilege begins to tell a larger story within the overall narrative of this study, starting with the recognition that those without privilege are most likely to be hurt by climate change. Notably, all participants eluded to this connection in their narratives. For example, one participant described her recognition of privilege, saying, "I do think that folks who are already marginalized tend to be hit harder, like Hurricane Katrina comes to mind, and even if you are not, or you are directly impacted, which you're more likely to be if you are lower SES, you have fewer resources to recover from that" (P1). The consistent recognition of marginalized communities and/or communities without privilege suggests that there is a strong

acknowledgement that the communities that counseling psychologists most often serve are being impacted by climate change. However, within the broader narrative, climate change was consistently absent from the work, training, and (with the exception of some impacts) personal lives of counseling psychologists in this study.

This absence led to the recognition that privilege creates a distance between these participants and climate change. Participants continually described a latent sense of distance from climate change. For example, one participant stated, “You know…so far we've been fortunate to be in a part of the country that maybe isn't going to see as many of the effects today” (P3), describing his relationship to climate change in terms of physical distance. Another participant described her relationship to climate change on a different continuum – time – stating, “So yeah, generally I think that it's a huge pressing issue. It’s the future of everyone” (P2), suggesting a sense that climate change is oriented in the future, away from our current day and age. Participant narratives also revealed a component of the story that suggests privilege is able to influence the other five themes through the creation of distance.

The relationship between the themes of “privilege” and “resistance” was found within participant narratives when discussing training programs. For example, expanding on the narrative that participants felt resistance in their training programs, one participant spoke about their training program as being distant from those engaged in climate change activism, saying, “But where we are like in my area…it’s like a very affluent area. So, it’s kind of like collides with climate change activists quite a bit because the more money you have, the less affected you are by it” (P2). This was shared by another participant, “when you’re on a college campus, it’s always kind of, it’s just, it’s different. College campuses are unique environments that are probably not representative of others rural communities” (P1). One participant spoke about how

it is easy to ignore injustices as a counseling psychologist, stating, “Actually, you know, it’s kind of a window that highlights these injustices, that maybe a lot of the time we ignore” (P3).

Returning to the recognition that climate change is impacting the communities that counseling psychologists are likely to work with sheds light on how privilege can create a distance from the theme of “professional dilemmas.” Despite this recognition, the majority of participants described an absence of climate change from their work. For example, one participant stated, “I haven't had people tell me that, you know, I mean, so I feel like if I were in, if I were in a therapy setting, then that may be different” (P4). This was shared by another, who stated, “And I realized that I feel like I'm focusing more on personal life things, but I think it’s because issues of climate change are just not explicitly coming up in a lot of my professional life” (P1).

Privilege also creates a sense of distance from the negative affect caused by climate change. This was seen in participants recognition that they are able to “move away,” avoid, or ignore difficult feelings related to climate change. For example, one participant stated, “Even as bad as things get in my lifetime…my husband and I will probably always have the means to not be so impacted that our life is devastated” (P8). Another participant more explicitly recognized the role of privilege in helping her avoid negative feelings, stating, “I think that part of me has a privilege to be able to avoid some of that. Because it, it does cause a lot of negative affect” (P2).

Finally, privilege has the ability to create distance between what counseling psychologists hope to do about climate change and what we actually do. Participants spoke about the ease to which they are not aware or able to look away from climate change, suggesting that it could be easy to continue delaying action. For example, one participant recognized how easy it is to not be aware, sharing, “Well, I would say for myself I don’t know that I’ve noticed that much of a

difference besides noticing that because I have more privilege, I don't notice it as much" (P5). This suggests the ease at which we can create distance between ourselves and climate change. Another participant spoke about difficulty in breaking free from this:

> Yeah, I think, I think it gets, you forget, it gets easier and you don't want to give up the things that you have, you know? So just, it is painful, too, right? So, it's way easier to look the other way then realize, like people are dying because it's too hot. You know? So, it's easier to be like, well, that's not happening to me, and my clients aren't affected by it. And I don't want to give up these things. And so, I can just kind of ignore it until it's an issue. (P2)

Summary

In this chapter, the results of this thematic analysis were described. Each theme, and corresponding sub-theme and components, were given a rich description including direct quotes from the data corpus to give the reader a sense of closeness to the participants. Themes explored included: (1) dissonance, (2) professional dilemmas, (3) resistance, (4) CP's role, (5) negative affect, and, (6) privilege. Taken together, the overall narrative that emerged from the data corpus is as follows:

Climate change is an issue that is already impacting the counseling psychologists in this study. Thematic analysis found four commonly shared ways that climate change is impacting participants: dissonance, resistance, professional dilemmas, and negative affect. Specifically, participants experience dissonance related to climate change between their personal and professional identities, their professional identity as an advocate and a therapist, and their stated and actual lived values. Participants primarily experienced resistance related to climate change within their training programs and within the social justice framework. Climate change impacted

participants' work life through professional dilemmas such as lacking guidance in knowing how to integrate climate change into their work, feeling the need to keep their stance on climate change to themselves, and recognizing that climate change is already impacting their clinical work. A shared experience of negative affect was also noted and represented a great sense of potential loss and grieving related to family and the natural world in addition to the adverse effects of witnessing the degradation of the climate through a moral and ethical lens.

In addition to these current ways that climate change is impacting the counseling psychologists in this study, participants recognized a shared vision of how CP may address climate change as a profession. Participants spoke about the history of CP as the "vehicle" that will allow us to address climate change as a profession. They described the relationship between career counseling and climate change in addition to the large role that CP has played in advocating social justice in the field of psychology. Participants also shared a sense that the core values of the field of CP may act as "the fuel" to power our motivation and energy in addressing climate change as a field. Additionally, they shared a recognition that our current training as counseling psychologists can act as the "driver" by enacting the active ways we engage in addressing climate change. Participants spoke about the role of advocacy and therapy, in addition to our training in forming and maintaining relationships.

Finally, privilege was viewed as a "moderating" force, if you will, within the narrative by creating a distance between these counseling psychologists and climate change. Participants shared explicit recognition that privilege keeps them cognitively distant from climate change (i.e., "out of awareness"). Privilege was also seen to influence the ways in which these counseling psychologists experience the four ways that they are being impacted by climate change and the shared vision of moving forward in addressing climate change. Privilege

appeared to create distance between counseling psychologists and their experiences of dissonance, their experience of resistance in programs and social justice, their experiences of professional dilemmas, and their experiences of negative affect. Basically, privilege seemed to keep participants from getting too close to these areas. Taken together, this suggests that privilege will impact the ways in which participants may engage in “the way forward” identified in the narrative. Essentially, privilege influences what we see and what we end up doing.

Chapter 5

Discussion

The purpose of this study was to understand the relationship between climate change, social justice, and CP (CP). Despite CP's extensive history and commitment to social justice work within marginalized populations (DeBlaere et al., 2019; Gelso et al., 2014; Kim, 2019), and the fact that climate change is known to impact marginalized populations at a greater rate (Clayton et al., 2017), little is known about how counseling psychologists (CPs) view climate change in the context of the broader field. As such, a qualitative methodology was used to better understand this. Transcribed interviews from nine counseling psychologists were analyzed using the six steps of thematic analysis (TA; Braun & Clarke, 2006) and resulted in six unique themes (Appendix C6.).

Main Findings

The results of this thematic analysis revealed six unique themes: (1) dissonance, (2) professional dilemmas, (3) resistance, (4) CP's role, (5) negative affect, and, (6) privilege. In the previous chapter, each theme was given a Thorough description and included direct quotes from participants to provide the reader with a felt sense of being close to the participant data. With the exception of "privilege," each theme contained a set of "sub-themes," and the majority of sub-themes contained a set of "components," both of which represent unique clusters or participant data within the broader theme. Two common approaches are used to discuss the findings of a qualitative study: (a) a discussion of themes as they respond to the research questions and their relationship to relevant literature and, (b) a discussion of themes, as they emerged from participant narratives, and their relationship to existing literature. In this study, the latter is employed, as the emergent themes do provide a surface level response to the research questions

but also paint a more contextualized and deeper experience of the relationship between climate change and CP.

Relationship to the Research Questions

Despite the flexibility of TA, the method still relies on the use of guiding research questions (Braun & Clarke, 2006). During the formulation of this study, the following questions were proposed as the intended focus of analysis:

(a) How do counseling psychologists conceptualize climate change impacts within marginalized and vulnerable populations?

(b) How do counseling psychologists conceptualize CP's role in addressing climate change and the impact within marginalized and vulnerable populations?

(c) What types of activities do counseling psychologists engage in to mitigate climate change?

    a. What limitations do counseling psychologists face in these activities?

    b. What co-benefits have counseling psychologists experienced in these activities?

(d) Given CP's commitment to social justice, what unique factors does the field of CP bring to mitigating climate change as a social justice issue?

To best answer these questions, a semi-structured interview was created and used throughout the interview process. Although the interview was created to mirror the research questions, it became clear throughout the collection of data and analysis of the data corpus that the emerging narratives of participants was pointing to something much deeper than original considered. As recommended by Braun and Clarke (2006; 2012), a flexible approach to data collection and data analysis was used in order to best reflect the experience of the participants. As such, the results of this study do not explicitly reflect the originally proposed research

questions. While potential limitations can be found in the original research questions, participant narratives allowed for a more in-depth and informative analysis to take place, and thus, better represents the 'spirit of TA' (Braun & Clarke, 2006). As such, the following discussion of themes is not done in explicit response to the research questions.

Themes

Six themes emerged from this study. A brief but rich description of each theme will be provided within the context of relevant climate change and CP literature. Implications will be discussed throughout each theme. Following these descriptions, recommendations from this study will be provided.

Dissonance

The theme of dissonance was a major finding within this study and represented 100% of participants *(n* = 9). In this study, dissonance refers to the perceived and/or actual experience of incompatibility or distance between several constructs discussed by participants. For example, participants in this study experienced a strong sense of dissonance between their professional identity as a therapist and advocate, which resulted in a sense of feeling stuck in being able to address climate change. Dissonance has been extensively researched in psychology and, perhaps most well-known, was an essential component in Roger's (1957) formulation of negative affect (i.e., incongruence), with the opposite (i.e., congruence) being a path for integration and psychological well-being. A review of counseling theories (Ginter et al., 2018) finds that the construct of dissonance is woven into the fabric of virtually all theories of counseling, such as the role of the unconscious in psychodynamic therapy, maladaptive thoughts in cognitive-behavioral therapy, primary and secondary emotions in emotion-focused therapy, and value driven behaviors in acceptance and commitment therapy, and suggests that dissonance plays a

major role in how people experience and navigate their world. In this study, dissonance was experienced in three main areas: (a) personal and professional roles and values (66%, *n* = 6), (b) professional identities as advocate and therapist (77%, *n* = 7), and, (c) stated and lived values of self and others (66%, *n* = 6).

Personal vs. professional. The first major finding of this theme was participants' experiences of dissonance between their personal and professional roles and values. Participants broadly spoke about their roles as parents or children and personally held values (e.g., faith, expressing opinions) that were dissonant from their perceived and/or actual roles and values as a CP (i.e., practitioner – scholar – advocate). Taken together, these results may be explained in two specific ways.

First, it may be that CP has not caught up to the changing demographic trends which results in a dissonance between training models and values that are reflective of a historically homogeneous field. Research on demographics in CP does show a trend toward heterogeneity. A slight diversifying of racial and ethnic identity was seen between the 1980s and early 2000s (Moradi & Neimeyer, 2005), and a survey of CPs between 1985 and 2014 found statistically significant trends toward heterogeneity, specifically in gender, ethnicity, and sexual identity (Lichtenberg et al., 2019). As a result, it may be that current training models are more reflective of CPs past as compared to the current state, or future direction.

Second, the experience of dissonance in this study may be a result of what many scholars have identified as institutionalized values associated with majority groups (i.e., White cisgender heterosexual able-bodied men; Cross & Reinhart, 2017; Helms, 2017; Israel, 2011; Mollen et al., 2012; Smith et al., 2012; Spanierman & Smith, 2017; Sue, 2017). For instance, "white hegemony" (i.e., institutionalized values of whiteness; Spanierman & Smith, 2017) is thought to

permeate the structures of CP (i.e., training programs, coursework; Sue, 2017) and is not reflective of the changing demographics of the field. In other words, the experience of dissonance between personal and professional may be related to the fact that institutionalized values of majority group members do not reflect the lived experience of CPs who are not in those groups. As the field becomes more diverse in demographic and multicultural philosophy, it seems likely that this sense of dissonance will only become more explicit and impactful if these institutionalized values are not addressed. Since addressing the root causes of climate change will take systemic change (Clayton et al., 2017; Crimmins et al., 2016; Pachauri & Meyer, 2014), and the institutionalized values in CP are difficult to change (Spanierman & Smith, 2017; Sue, 2017), it appears that addressing climate change in CP is likely to be a hard task. Thankfully, Spanierman and Smith (2017) provided several recommendations that appear beneficial as the field addresses these institutionalized values and begins to consider addressing climate change:

- Weave the discussion of power and privilege into all aspects of training and start it early on.
- Meet students where they are at with their multicultural and systemic understanding and build from there.
- Use mentorship and relational approaches to addressing systemic and institutionalized barriers and empower students.
- Create strong avenues for collaboration between CP and the groups who are already doing the work.

Stated vs. lived. A second major finding in this theme was the shared experience of dissonance between stated and lived values. Participants described a sense that they struggled to enact their own stated values and described a sense of frustration at seeing others engage in what

one participant called “armchair activism.” This finding suggests that CPs have a strong commitment to social justice advocacy, but struggle to actually live that out. This finding is supported within CP literature and may be related to a general difficulty in engaging in social justice advocacy within the field.

The values associated with social justice advocacy are essential to the identity of CP (DeBlaere et al., 2019; Gelso et al., 2014; Kim, 2019; Packard, 2009) and have been found to be strongly held in self-report data within the field (Lichtenberg et al., 2019). However, research shows that CPs do struggle to engage in these values in their day-to-day lives. Similar to the finding of frustration for “armchair activism” in this study, in a qualitative study of CPs engaging in social justice advocacy, Singh and colleagues (2010) found that participants had a strong distain for individuals who espoused social justice advocacy values but did not “walk the talk.” Their study also relied on self-report data, and found that participants generally rated themselves highly in their commitment to social justice advocacy and named multiple avenues that they engaged these values in their daily lives. In comparison to their research, participants in this study generally reported a sense of not being able to engage in the values of social justice advocacy to the extent to which they are espoused in their explicit commitments. One explanation may be that this study was not explicitly studying social justice advocacy behaviors. As such, participants may have been less defensive and more willing to openly discuss their struggle in this area. This struggle is generally supported throughout the CP literature.

This finding may be explained by the notion that social justice advocacy is actually much more difficult to fully integrate into daily life. For instance, Spanierman and Smith (2017) noted that while CPs are taught about social justice, it is common for students to experience a return to “normative” education and practices that espouse values contrary to the role of social justice

advocates. Similar to Singh and colleagues (2010), another qualitative study found that CPs were able to identity several ways in which they engaged in social justice advocacy (Kozan & Blustein, 2018). However, these researchers also noted that a significant lack of training in social justice advocacy left participants lacking the ability to fully enact these values in their day-to-day lives. Taken together, this suggests that CPs do have strongly held values for social justice advocacy but their actual day-to-day lived experience as a social justice advocate is dissonant. This presents a difficult scenario when attempting to address climate change through the lens of social justice advocacy as climate change mitigation relies heavily on systemic level interventions that will require strong advocacy efforts on the part of CPs.

Advocate vs. therapist. A final finding that emerged from this theme was the experience of dissonance between participants' role as an advocate and their role as a therapist. Participants spoke about a strong dissonance between the values associated with each that resulted in their feeling stuck in being able to address larger systemic level concerns. This finding generally supports the research described previously that finds the role of social justice advocate as difficult to enact in daily life. In addition, this study also suggests that CPs may have an "internalized therapist" (i.e., unconscious values associated with therapy) that create a dissonance with their role expectation as a social justice advocate. The dissonance between the internalized therapist and role of social justice advocate may be related to several explanations.

First, this dissonance may be explained by a lingering, but potentially outdated, emphasis on the role of therapist. A survey of CPs between 1985 and 2014 found that the role of therapist has declined over the years and is the primary career of roughly 25% of CPs (Lichtenberg et al., 2018). The role of therapist is considered an essential identity for CPs (Gelso et al., 2014) and despite the previously noted decline in CPs engaging in therapy, it remains an essential

component of the newly proposed “model training program” (Scheel et al., 2019). It may be that CPs internalize the role of therapist throughout training which may cause conflict as they engage in non-therapy related careers in which social justice advocacy is a more common component. Thankfully, the field of CP has delineated tracks for those who are seeking clinical roles (i.e., PsyD) and those seeking non-clinical roles (i.e., PhD). It may benefit the field to clearly demarcate these programs and find ways to track students into the programs that will be the best fit. In this way, the appropriate identity could be internalized and result in a greater sense of congruence in one’s career.

Second, the dissonance between therapist and advocate may be better explained by the role that institutionalized values of the majority culture play in CP. For instance, participants described the values of the internalized therapist as non-judgmental, a-political (i.e., no political influence), value-free, and focused on the individual. As pointed out previously, dominant cultural values are thought to be espoused and maintained by larger systems within CP (Spanierman & Smith, 2017; Sue, 2017), which indicates that the training as a therapist is likely from within a White, cisgender, heterosexual, male framework.

Finally, the dissonance between therapist and advocate may be explained by the fact that it is simply hard to do. In other words, trying to enact all of the roles of CP, particularly social justice advocate, may lead to burnout and cause CPs to lose interest in particular areas. Participants spoke about the experience of feeling a “time crunch” that impacted their perceived ability to focus on social justice advocacy. Although limited, existing research on burnout in CP suggests that trainees in CP are likely to experience burnout (Clark, 2009; Swords & Ellis, 2017). Although some of the factors that contribute to burnout (e.g., time commitments, finances) resolve after trainees graduation, it seems naive to assume that CPs are able to quickly overcome

this experience as they begin their journeys as ECPs. Additionally, anyone engaged in social justice advocacy will tell you that it is hard work. As Sue (2017) describes, social justice advocacy requires strong emotional awareness, fortitude, and commitment in the face of continual challenge and setbacks, which is no easy task. Therefore, it may be that the role of advocate is particularly difficult, which results in explicit commitments and implicit resistance. Taken together, this suggests that as CPs engage in difficult social justice advocacy tasks, particular attention should be given to tasks like self-care and support.

Professional Dilemmas

The theme of professional dilemmas was a major finding within this study and represented 100% of participants *(n* = 9). In this study, the term professional dilemmas was used to demonstrate several ways in which addressing climate change interacted with professional experiences in a way that felt difficult to resolve and to know how to address. Participants described experiencing professional dilemmas across three main areas: (a) it's in the room (66%, *n* = 6), (b) missing a guide (77%, *n* = 7) and (c) keep it to yourself (66%, *n* = 6). The findings from this theme build off one another in this essential order: (1) climate change – "it's in the room" and impacting professional work of CPs, (2) CPs do not know how to address it, and, (3) they do not feel safe bringing it up.

It's in the Room. The first finding in this theme was a shared experience that climate change is already present in the clinical and professional work of counseling psychologists despite it not being discussed in the field. Participants described clinical and research situations in which climate change was already present in the work they were doing. Additionally, their narratives revealed a collective view that climate change was impacting the marginalized populations within their own communities, the United States, and across the world. These

findings are supported within the literature of climate change and suggest that CPs are already having to manage the impacts of climate change in their professional work in marginalized communities.

In this study, participants provided multiple examples of clinical experiences in practice or training in which climate change was either related to a presenting concern or an important area of focus for a client. For example, one participant described students at a counseling center who presented with existential distress about climate change, whereas another described a veteran whose PTSD was triggered by thunder in increasingly stronger storms. The psychological impacts of climate change are extensive and well documented in the climate change literature (Clayton et al., 2017; Crimmins et al., 2017; Pachauri & Meyer, 2014) and suggest that adverse outcomes of climate change are likely a hidden factor in some of the professional work that is being completed. Furthermore, there is a general consensus among researchers that the most marginalized populations are already experiencing the impacts of climate change (Clayton et al., 2017; Crimmins et al., 2016; Pachauri & Meyer, 2014). Since a focus on marginalized populations has been an essential component of CPs history (DeBlaere et al., 2019; Gelso et al., 2014; Kim, 2019), core values (Packard, 2009; Scheel et al., 2019), and training (Rostosky, 2019; Scheel et al., 2019), it seems appropriate to reason that the work CPs are doing in marginalized communities is already being influenced by climate change. However, without a specific framework for seeing, conceptualizing, and intervening in the adverse outcomes of climate change CPs are likely to feel stuck and overlook the role that climate change plays in their work.

Missing a Guide. The finding that climate change is "in the room" leads to the second main finding in this theme: CPs are missing a guide that would allow them to see, conceptualize,

and intervene on climate change. Overwhelmingly, participants expressed confusion about where to start with addressing climate change in their professional lives. This finding is not surprising given the fact that climate change has not been explicitly discussed in the CP literature and participants overwhelmingly denied talking about, or perceived avoidance of, climate change throughout their programs. Additionally, when considering the role that social justice advocacy plays in mitigating climate change and the research demonstrating the difficulty in engaging in social justice advocacy (Heesacker, 2015; Israel, 2011; Kozan & Blustein, 2018; Olle, 2018; Spanierman & Smith, 2017; Sue, 2017), it is not surprising that CPs in this study struggled to know how to see, conceptualize, and intervene in climate change. Several existing frameworks may help provide direction in this area.

A Framework for Seeing and Conceptualizing Climate Change. There is a wealth of information on the adverse outcomes of climate change that can help CPs better see and conceptualize the ways in which climate change is interacting with their clients or other work. For example, it is well-accepted that the adverse impacts of climate change fall into three main areas: physical, psychological, and communal (Clayton et al., 2017). One way to increase CPs' ability to see climate change in their professional work would be to incorporate the research on climate change (e.g., American Psychological Association's major report on climate change, Clayton et al., 2017) into existing training such as courses on multiculturalism and clinical theory and intervention.

APA's framework for conceptualizing the adverse impacts of climate change (Clayton et al., 2017) is well suited to provide a basic foundation for where CPs could intervene in climate change. For example, a first step in conceptualization would be understanding what type of climate change impact is present. If the primary area of focus is on physical health, then the CP

could draw on the training, research, and evidence-based interventions in behavioral health. If the impact of climate change is primarily within the realm of psychological health, then the CP could draw on the existing training and interventions throughout their program to address the specific psychological need (e.g., trauma work). Finally, if the impact is more communally based, the CP could draw on training in advocacy and social justice interventions. Further research would be beneficial in understanding the ways in which climate change could or needs to be integrated into these interventions. For example, would climate change exist within the framework for conceptualization (e.g., my client has depression because climate change is impacting his or her crop yield) or would it be efficacious to add into the specific interventions (e.g., validating this reaction to a changing climate rather than reframing it as a maladaptive thoughts)?

A Framework for Improving Advocacy and Social Justice Interventions. As noted previously, social justice advocacy is an essential component of CP (DeBlaere et al., 2019; Gelso et al., 2014; Kim, 2019; Packard, 2009), but it is difficult to enact in practical ways (Kozan & Blustein, 2019; Spanierman & Smith, 2017; Sue, 2017). One framework for improving CPs' ability to enact social justice advocacy is through a relational approach. Spanierman and Smith (2017) argued that one way to improve social justice advocacy and address systemic barriers, such as power and privilege, is through mentorship with another CP. This is echoed in Goodman and colleagues' (2018) relational model for teaching social justice advocacy. Both incorporate the role of power and privilege by navigating the systems of teaching social justice that are currently viewed as being intrenched in majority identity values (Sue, 2017). Although the use of a relational model seems promising in improving social justice advocacy interventions, it seems

to fall short in following Israel's (2011) call to address the role that power and privilege play within the field of CP.

In contract to the role of advocacy, the use of a critical framework has been introduced to improve CPs' ability to do social justice advocacy (Olle, 2018) and seems to be a promising approach to beginning to address the role that power and privilege play in the broader field. Similar to Spanierman and Smith (2017) and Goodman and colleagues (2018), Olle (2018) argueed for the need to move beyond the traditional and inadequate structures of teaching social justice advocacy. However, in contrast to a relational advocacy approach, Olle suggested that a critical framework would allow CP to truly enact the explicit values of social justice advocacy in the field. Olle's conceptual view for the critical framework would essentially shift CPs' focus toward what the field is actually doing for social justice, not what is being said about social justice. By incorporating a critical framework, Olle argued that three main changes would occur and allow CPs to truly enact the fields espoused social justice values:

- CP could leave the "Ivory Tower" and return to its roots in the community.
- CP would be able to take a politically subjective stance.
- CP would be able to engage in active behaviors rather than a passive form of advocacy that appeals to higher powers to create change.

Taken together, these do seem like promising directions for the field of CP as we struggle to figure out how to engage in social justice advocacy at the level to which we explicitly commit to it. Additionally, as the field begins to raise its awareness of climate change and consider ways to intervene, this critical framework seems to hold promise for CPs to move past historical approaches to advocacy, which may not be able to adequately address the substantial and drastic systemic changes required of climate change.

Keep it to yourself. The last finding emerged from participants who spoke about an underlying fear about bringing up climate change in their professional lives. Participants broadly worried about the impact that climate change would have on their relationships to others. Some described a sense that discussing climate change would create a rupture with their work colleagues whereas others felt that it would create a rupture with their clients, supervisors, students, or other professional interactions. Another piece of this finding emerged in participants' worry about how bringing up climate change would reflect on them, personally. For example, one participant described feeling worried about being ridiculed or not taken seriously if she brought up climate change in her doctoral program. This finding may be explained in several ways.

We need to Address Maladaptive Defenses. Climate change is an extremely insidious problem, and one that causes significant emotional distress (Clayton et al., 2017), which often results in the activation of defense mechanisms in order to ease this distress (Gifford, 2011). In the absence of a framework for addressing climate change within their professional lives, CPs are likely to experience significant emotional responses to climate change within their professional lives, which seems likely to activate the use of defensive structures to help alleviate this distress (e.g., denial). This need to keep climate change to one's self may be related to a sense of wanting to avoid the negative experience of climate change through using psychological defenses. As CP considers addressing climate change, it will likely be helpful for the process of teaching, mentorship, supervision, advisory relationships, etc., to engage CPs in working through these maladaptive defensive patterns toward a more integrated and cohesive relationship with climate change that results in more positive affect and effective engagement in mitigation.

Several ways the field may do this are proposed. First, the field should integrate the research on climate change into the fabric of training. In this way, climate change will become a normalized component of CP and improve the ability to see climate change in the professional work of CPs. Rather than being presented with novel information that may be experienced as critical and blaming, CPs will be able to feel "ownership" of the research on climate change and may react less defensively when reaching out for help. Second, we need to encourage CPs to utilize our specialized training in prevention, strengths-based approaches, multiculturalism, and relationship building as more adaptive defenses to the negative affect caused by climate change. Rather than feeling overwhelmed, hopeless, lost, etc., this would allow CPs to actively engage with their value systems and contribute to meaningful change. Research suggests that individuals who are able to work toward mitigating climate change experience psychological benefits in the form of empowerment, improved self-efficacy, reduced negative affect, and improved behaviors associated with resilience (Clayton et al., 2017).

We need to address systems of power that maintain the status quo. These findings may also be explained through the ways in which power and privilege are maintained in systems of power. CP is not immune to privilege (Isreal, 2011; Spanierman & Smith, 2017) and the current system of privilege is thought to be maintained throughout the structures of power in CP (Sue, 2017). Additionally, climate change is perpetrated by a system of inequity that impacts marginalized communities the most (Clayton et al., 2017; Crimmins et al., 2016; Pachauri & Myer, 2014). As such, the experience of feeling a need to keep climate change to one's self in this study may be reflective of a collective resistance to addressing CPs' own systems of power that maintain the inequity of climate change.

Although there have been many calls to address the broader systems of privilege in CP (Heesacker, 2016; Isreal, 2011), little has shifted (Sue, 2017), which suggests that, even in CP, these systems are resistant to change. The critical framework for being social justice change agents described previously may hold merit in providing a way for CPs to overcome the sense of needing to keep climate change to one's self. For example, returning to the community would allow a CP to be able to disengage from systems of power that maintain inequity and focus on grass-roots or "bottom up" approaches to addressing climate change. One participant described this in her desire to integrate sustainable farming, mental health, and career skill building, which exemplifies exactly such an approach. Additionally, the use of active stances for social change would allow CPs to avoid the slow and cumbersome bureaucratic systems in which climate change advocacy is often met with silence or initiatives that are too late and too few. Finally, the critical framework would also allow CPs to engage in politically subjective social justice work.

We need to figure out how to navigate politics. These results may also be explained by the fact that climate change has unfortunately become a politically divisive topic (Gallop, 2018). As a result, CPs may feel compelled to keep climate change to themselves in their professional work due to fear of divisiveness due to "the politics" of climate change. Divisiveness within politics is an anecdotally well-known phenomenon, and one that is supported within the research on tribalism (Haidt, 2020). This appears to apply to CP, as well. In his 2016 presidential address, Martin Heesacker pointed out that CPs not only dislike politics, we avoid them. Just as Heesacker argued that the "era of Trump" compels CPs to figure out how to bridge this divide, it appears that climate change does the same.

Resistance

The theme of resistance was a major finding within this study and represented 100% of participants *(n* = 9). The term resistance was used to describe participants' experience of having difficulty getting climate change training in programs and social justice education and theory, which caused them to look beyond the field of CP to meet their needs. The experience of resistance was found in three main areas: (a) training programs (44%, *n* = 4), (b) social justice (66%, *n* = 6) and (c) looking outside (44%, *n* = 4).

Training Programs. The first major finding in this theme was in participants' shared experience that training programs were generally resistant to change and that care about climate change was felt as different across generations. Both of these findings are supported within the literature.

First, there are generational differences in climate change beliefs. A recent Gallop (2018) survey of Americans' attitudes found that roughly 55% of adults 55 and older are worried about climate change whereas another survey of American's found that younger generations are substantially more likely to feel personally impacted and engage in climate change mitigating behaviors (Ballew et al., 2019). This suggests that generational differences do exist in the ways that climate change is viewed. This matches up with participants' experience in this study who described a general consensus that CPs in older generations were concerned about climate change but differed in their response as to what should be done about it.

Second, these findings point to the broader idea that CP is pushing for change, but struggling to make ground. Participants' experiences of resistance to climate change in CP training programs may be reflective of their desire for the field to "go further" in its commitment to social justice and addressing inequity. As described previously, there is a general push for CP to address the systems' of inequity within its own structures (Heesacker, 2016; Helms, 2017;

Israel, 2011; Spanierman & Smith, 2017; Sue, 2017). However, current calls for systemic level change in CP (Israel, 2011; Sue, 2017) have been met with systemic resistance (Spanierman & Smith, 2017). Therefore, rather than viewing training programs in CP as explicitly and actively resistant to change, it may be better to conceptualize this finding as the emerging conflicts of the fields' transition to doing social justice work inside its own structures.

As a field, we need to find ways to integrate the voices of different generations of CPs into decision making. Per the recommendation to work outside of systems of power in novel ways (Olle, 2018), it will be important that those in positions of power in CP be open to new ideas. It would also likely be beneficial to move beyond the integration of different voices to the prioritizing and valuing of those voices through the creation of space for new strategies to be implemented. By doing this, we can account for the hidden influence that power and privilege have and give more weight to new voices. The employ of the critical framework (Olle, 2018) may be of use in conceptualizing novel approaches to climate change and social justice advocacy and give those in power a framework for understanding the ways in which these approaches actually do fit within the broader history, values, and training in CP.

Social Justice Training. A second main finding in this theme came from participants' descriptions of social justice within CP. Participants had a shared experience of social justice as avoiding politics, having a specific focus in certain areas, and primarily focusing on the individual to the detriment of a systems perspective. These findings are generally supported within the literature and may be explained by the conversation of power and privilege in CP.

CPs do avoid politics, focus on specific areas in social justice, and emphasize the individual. As described above, CPs generally avoid politics within the discourse of the field (Heesacker, 2016) perhaps as a way to avoid the subsequent and inevitable tribalism within

(Haidt, 2020). Furthermore, a review of social justice history (DeBlaere et al., 2019; Gelso et al., 2014; Kim, 2019) does exemplify the ways in which CP rose to the challenge of addressing the specific social justice needs throughout history, resulting in a focus on specific areas in social justice. Participants seem to be picking up on this and this finding may simply represent a readiness to address other social justice areas, as well. Finally, as CP begins to explore the role of social justice advocacy, attention has been called to the primary emphasis on individualism (Olle, 2018). Taken together, participants in this study seem to be aware of these challenges facing social justice and seem to be ready to take a step beyond the resistance.

The avoidance of politics, limited focus, and emphasis on the individual may be better explained by the on-going conversation about the role of power and privilege in CP. For instance, the avoidance of political discourse is certainly related to tribalism (Haidt, 2020) and discomfort (Heesacker, 2016) but it is likely also related to Spanierman and Smith's (2017) description of "white hegemony" in CP. From a systemic perspective, avoiding politics may allow the maintenance of systems of power that keep White hegemony in place. Additionally, the historical focus of social justice in CP has been primarily aimed at doing social justice "to" marginalized communities outside of CP, rather than reflecting on change within (Israel, 2011), and have often been focused on the individual (Spanierman & Smith, 2017). This type of social justice advocacy aligns with Olle's (2018) description of passive social justice that works within the systems of power to create change, which by virtue, maintains those systems of power. These participants' experiences of resistance to expanding the social justice frame may actually be reflective of a resistance to acknowledge how this type of social justice advocacy maintains White hegemony in CP.

Looking Outside. A final finding within this theme was that participants went around perceived resistance by looking outside of the field for climate change and social justice advocacy. For example, one participant described her plans to engage in a one-year social justice training program overseas whereas another talked about how European psychologists are becoming more in-tune with integrative practices such as sustainable farming and mental health. These findings are supported within the literature. This study finds that climate change is not currently part of the discourse in CP literature, and thus, supports the notion that participants needed to look outside of CP for climate change research. Additionally, the on-going discussion on the challenges facing the state of social justice advocacy in CP supports the need for participants to look beyond the field for more integrative, holistic approaches to social justice advocacy that seem more in line with what Olle's (2018) critical framework could provide. This study suggests that implementing social justice advocacy frameworks such as the critical framework and integrating new social justice research into the field would allow CPs to better meet their needs without having to go outside of the field.

CP's role

The theme of CP's role was a major finding within this study and represented 100% of participants *(n* = 9). Participants spoke extensively about the ways in which CP could address climate change from within its existing structures. The main findings in this theme were found in three specific areas that informed the "how" and "why" of CP addressing climate change. Taken together, these findings point to the need for a framework to allow CPs to see, conceptualize, and intervene in CP. The findings in this theme will likely help in this endeavor. The major findings of this theme were primarily surrounding (a) history as vehicle (66%, *n* = 6), (b) core values as fuel (55%, *n* = 5) and (c) training as driver (55%, *n* = 5).

History as Vehicle. The first major finding in this theme was the shared perception that CPs history as a field would provide the vehicle in which CPs could address climate change. Participants spoke about the role that CP has played to broadly advance social justice advocacy in the field of psychology and discussed climate change as a natural extension of this history. In fact, CP has played a large role in advancing social justice advocacy as a sub-specialty of psychology (DeBlaere et al., 2019; Gelso et al., 2014; Kim, 2019). Specifically, participants spoke about the role CP played in career counseling and multiculturalism, suggesting that both would be ways in which the fields' history could create a "vehicle" for moving forward with addressing climate change. For instance, loss of career was a concern among participants in this study and a common experience due to climate change (Clayton et al., 2017; Crimmins et al., 2016), and assisting with career transition would certainly benefit those impacted by climate change. Furthermore, research supports the notion that racial and ethnic minority groups are more likely to experience adverse impacts from climate change (Clayton et al., 2017; Crimmins et al., 2016; Pachauri & Meyer, 2014) and suggests that CP's history of addressing multiculturalism (DeBlaere et al., 2019; Gelso et al., 2019; Kim, 2019) would provide a strong foundation for CP to address these climate concerns.

Of course, these would be helpful on the road to addressing climate change. However, the history of CP provides a broader context for addressing climate change that relates to the challenges described previously. Beyond the explicit history of social justice advocacy in the field (DeBlaere et al., 2019; Gelso et al., 2014; Kim, 2019), and despite the much needed work to come (Spanierman & Smith, 2017; Sue, 2017), CP has demonstrated a commitment to doing the right thing. As we are making a transition to doing social justice outside to doing social justice within, the history of the field tells us that we will have the fortitude to weather the natural

storms and hope and excitement for benefit of such hard work to come to fruition. Participants spoke about the strong abilities that CPs have in creating, maintaining, and using relationships for change. As we move toward addressing new social justice areas like climate change, the field could benefit from a renewed focus on building relationships with other professions, the individuals that CPs work with, and with each other. By doing this, CP may be able to avoid some of the fragmentation that seems likely to occur as it addresses large social justice issues like the role that White hegemony plays in CP training, novel approaches to social justice advocacy, and climate change.

Core Values as Fuel. The second major finding in this theme was the participants' identification of the core values of the field as the fuel that could energize a commitment to addressing climate change. Participants spoke about the perception that CP cannot ignore climate change while also holding our core values as essential to our identity. Although some described an underlying sense that the field is driven by values, others explicitly recognized the importance of the core values in informing CPs' response to climate change. The core values of the field are well known and documented throughout the literature as guiding principles that inform the actions of CPs (Gelso et al, 2014; Packard, 2009; Scheel et al., 2019), and given the social justice concerns found in climate change (Clayton et al., 2017; Crimmins et al., 2016), generally support the notion that CP would be compelled to address it.

Training as the Driver. CPs strong history and core values provide a foundation and energy for addressing climate change as a field. Participants in this study spoke about the many ways in which CPs could directly work to address the impact of climate change. For instance, they noted the training in advocacy, multiculturalism, clinical interventions, and relationship building as skills that would help them address the adverse outcomes of climate change.

Participants' beliefs that CPs already have the training and capacity to engage in mitigating the impact of climate change is generally supported within the literature.

Although variations exist in the models of training (i.e., scientist-practitioner, practitioner-scholar, etc.), there appears to be a general consensus that it is important for CPs to be well trained in research methodology and clinical practice. The infusion of core values (Gelso et al., 2014; Packard, 2009; Scheel et al, 2018) into these two foci allows for a broad array of possible avenues to enact training in CP. Most commonly, CPs fall into the following roles: researcher, clinical practitioner, educator, consultant, and social justice advocate (Gelso et al., 2014). In this context, it is not difficult to see how addressing climate change could easily fit into the training of the field. For instance, climate change causes negative affect (Clayton et al., 2017), an area in which CPs are well trained to intervene. Additionally, larger systems of power fuel climate change and maintain systems of inequity in which certain people are hurt more (Clayton et al., 2017; Crimmins et al., 2016; Pachauri & Meyer, 2014). Similarly, training would allow CPs to intervene here. As you continue to compare the impacts of climate change with the ways in which CPs are trained, it becomes quite clear that we are trained in ways that would allow us to create a meaningful contribution to addressing climate change. However, as also found in this study, participants experienced a loss of direction and barriers to getting started in addressing climate change. Again, this points to the need for a broader guide allowing CPs to see, conceptualize, and intervene in climate change.

Negative Affect

The theme of negative affect was a major finding within this study and represented 100% of participants *(n* = 9). Participants in this study described a universal experience of negative affect related to climate change. Since the psychological impacts of climate change are well

known (Clayton et al., 2017; Crimmins et al., 2016), this finding is not surprising, although it is certainly important. This study provides evidence that CPs are not immune to the impacts of climate change. Given the fact that more than 62% of US population reports seeing impacts to their local community (Funk & Kennedy, 2020), this finding suggests that CPs are being impacted by experiencing or witnessing the impacts of climate change within the local communities. As such, it would behoove CPs to have a conceptual framework for understanding, researching, and intervening in this area. This would not only be helpful in understanding the negative affect experienced among members of the division, it would also provide a foundation for being able to translate the social justice advocacy training into meaningful interventions for marginalized populations. Participants' discussion of climate change revealed an underlying sense of negative affect that fell in two primary areas: a) potential for loss (55%, $n = 5$) and (b) specific emotions (100%, $n = 9$). Taken together, these results suggest that CPs are experiencing negative affect as a result of climate change.

Potential for Loss. The first major finding in this theme was in participants' potential for loss related to climate change. The finding of loss contains two components. First, was in participants' sense of loss related to their future. This was primarily spoken about by female participants and surrounded an existential loss related to potentially deciding not to have more children, not being able to impart the same important life experiences (e.g., identifying flowers during the transition from winter to spring), and job-related loss within the family systems due to climate change mitigation (e.g., reduced coal consumption). Existential forms of loss are well documented in the literature on climate change (Clayton et al., 2017). The second component of this finding was found in participants' narratives of "solastalgia" (Albrecht, 2007), meaning, "the

pain experienced when there is recognition that the place where one resides and that one loves is under immediate assault" (pg. 45). Participant narratives revealed exactly such a recognition.

Specific Emotions. A second major finding from this theme was in participants' expression of negative affect that was more specifically defined. For instance, participants described feelings of anger, sadness, hopelessness, and helplessness. The experience of negative affect as a result of direct and indirect exposure to climate change is well documented within the literature (Clayton et al., 2017; Crimmins et al., 2016; Pachauri & Meyer, 2014) and suggests that CPs may be experiencing varying levels of negative affect as they watch climate change happen.

We need to understand and attend to negative affect. Since CPs are likely experiencing varying levels of negative affect as a result of climate change, it is essential that we understand and attend to these experiences. Moral injury and ambiguous loss are two psychological constructs that may provide the context for the presence of negative affect in this study.

Moral injury emerged from the research on trauma and may help to explain some of the finding in this study. Moral injury is a distinct construct that is thought to occur as a result of a betrayal of one's moral code by one's self or an someone in a position of power (Shay, 2014). Similar to the experience of trauma, moral injury also occurs in high stakes situations (Litz et al., 2009). The primary psychological experience of moral injury includes guilt, shame, existential and spiritual concerns, and loss of trust, whereas the characteristics more commonly associated with post-traumatic stress disorder (i.e., avoidance, re-experiencing, etc.) are considered secondary psychological experiences (Jinkerson, 2016). Climate change seems ripe for moral injury given commonly held moral values around home, community, and care for nature.

Additionally, systemic level change is needed to adequately address climate change, which creates an easy mechanism for moral injury to occur. In other words, individual moral codes can be easily strained when individual actions continue to fail at protecting the environment and while governments in a role of power all too often fail to adequately address climate change. Given that the purpose of this study was not to diagnostically interview participants, nor make conjecture beyond a reasonable doubt, a distinction between trauma and moral injury is not made. However, since social justice advocacy is an essential piece of CP (DeBlaere et al., 2018; Gelso et al., 2014; Kim, 2018; Packard, 2009), and CPs endorse it as a strongly held value (Lichtenberg et al., 2018), it appears likely that CPs have strongly held moral codes that could be susceptible to injury through social justice advocacy toward climate change or other common areas within CP. Further research in this area would be beneficial.

Another distinct, but related, concept is ambiguous loss. This concept emerged from the research on the families of soldiers who did not return home from war, but their status was unknown (i.e., "MIA")(Boss, 2016). In essence, it is defined as "a situation of unclear loss that remains unverified and thus without resolution" (Boss, 2016, p. 270), which results in on-going negative affect, difficulty with keeping and maintaining clear roles and boundaries, and general inability to resolve ambiguity. Ambiguous loss can occur when a person is physically present but psychologically absent (e.g., TBI), or when a person is psychologically present, but physically absent (e.g., spouse within a family who is MIA). Given this definition, climate change appears to fit well in the context of an irreversible ambiguous loss. Specifically, given the current understanding of climate change (Crimmins et al., 2016), we may be observing the beginning stages of irreversible ambiguous loss by experiencing a physically present but psychologically distant climate. When considering the common psychological reactions to loss, this concept may

help to explain why the participants' emotional experiences in this study map well onto the early stages of grief (Kubler-Ross & Kessler, 2005), and why their narratives did not reveal emotional experiences associated with later stages of the grief/loss process. Thankfully, the interventions for ambiguous loss involve naming the problem and capacity for resilience (Ross, 2016), something that CPs seems adeptly trained to do.

The theme of negative affect paints a picture in which CPs are experiencing varying levels of negative affect despite not experiencing acute effects of climate change. Taken together, these findings continue to point toward the need for a framework to allow CPs to see, conceptualize, and intervene in climate change.

Privilege

The theme of privilege was a major finding within this study and represented 100% of participants *(n* = 9). There were no sub-themes within this finding. All participants either named an experience of privilege or it was found under the surface of their narratives and described as allowing them to keep a distance from the psychological or physical impacts of climate change. Certainly, as marginalized populations are more likely to experience the worst impacts from climate change (Clayton et al., 2017; Crimmins et al., 2017), the experience of privilege would afford the opposite. Several participants in this study explicitly described how privilege has allowed them to stay at a distance from the most significant effects of climate change. For example, one participant described her experience of privilege in knowing that their family will always be protected from the impacts of climate change. Another participant described her program's location in an affluent area as a form of privilege that keeps a physical distance from those experiencing climate change. Others spoke more broadly about their experience with climate change, denying any personal impact.

A collective emphasis on privilege within the field is a more recent conversation in CP, despite our extensive history on social justice advocacy (DeBlaere et al., 2019; Gelso et al., 2014; Kim, 2019). In her 2011 presidential address, Tania Israel (2012) called attention to the field's almost exclusive focus on oppression and suggested that acknowledging one's privilege is an essential requirement to the role of social justice advocate. While some participants in this study did acknowledge an explicit sense of privilege, the broader conversation of this study supports Israel's (2011) assertion that we are more comfortable focusing on oppression. Participants in this study overwhelmingly described ways to address oppression within climate change. As Israel's (2011) discussion suggests, another essential feature to fighting oppression of climate change is through working on the privilege that maintains the status quo.

Implications and Future Directions

The findings of this study point to several broader implications about climate change, social justice, and CP. Together, they weave the following narrative: Climate change is here, and now, and is impacting CPs in their personal and professional lives, causing negative affect. CPs are highly motivated for social justice advocacy toward climate change and view the history, values, and training experiences in CP as part of the path forward. However, CPs feel stuck in their ability to address climate change and their attempts to do so appear to reveal larger concerns around social justice advocacy and privilege within CP.

Two main recommendations emerge from the findings of this study. The first, is a call to action to address climate change with CP. The second, is a reiteration of previous calls to confront the role that privilege, and specifically the maintenance of dominant cultural norms, plays in CP (Cross & Reinhart, 2017; Israel, 2011; Mollen et al., 2012; Spanierman & Smith, 2017; Sue, 2017) and the maintenance of systems of inequity that sustain climate change

We Need to Address the Impact of Climate Change

Climate change is here. It is impacting more than half of the United States population (Gallop, 2018) and is particularly insidious within marginalized groups (Clayton et al., 2017). The impacts of climate change are vast and include extensive adverse physical, psychological, and community health outcomes (Clayton et al., 2017; Crimmins et al., 2016). This study found that changes to the climate are already impacting the professional experiences of CPs. They feel motivated to address the impact of climate change but have a lack of guidance in doing so. As such, it is essential to create a framework within CP for understanding, teaching, and intervening in the negative outcomes of climate change. A brief review of existing recommendations and initial frameworks for addressing climate change from a psychological lens is provided. Following this, a three-step model for mitigating the adverse outcomes of climate change from within the framework of CP is proposed.

Existing Recommendations for Addressing the Impact of Climate Change

Recommendations for addressing the impact climate change from a psychological framework are found throughout the literature (see Clayton et al., 2017; Davenport, 2017; Stern, 2011) and can be summarized as several broad principles: (a) changing individual behaviors to reduce changes to the climate and ultimately adverse outcomes of climate change, (b) providing psychological intervention to remediate the impacts of climate change, and (c) advocating for systemic change to change the systems that create and maintain changes to the climate and the adverse outcomes of those changes. For example, the most recent APA climate change report provides general recommendations for addressing climate change through a psychological lens (see figure 5) that include recommendations for ways to influence behavior change, remediate negative affect caused by climate change, and reduce systemic barriers to adaptation through

advocacy efforts. Considering CPs' primary roles in remediation, prevention, and education (Gelso et al., 2014) and the fields' strong commitment to training in social justice advocacy (DeBlaere et al., 2019), it appears that CPs would be well-suited to already address the impact of climate change within each of these three areas.

Behavior Change. Changing anthropogenic processes (i.e., human behaviors) is one of the main avenues for psychological intervention found within research. For example, Stern (2011) provided a comprehensive overview of the relationship between psychological factors (e.g., consumption) and climate change and argued that psychologists can intervene through helping individuals, groups, and systems change the psychological behaviors that maintain systems that create climate change. Other authors (see Gifford, 2011) have discussed the role that psychological mechanisms (e.g., defenses) play in maintaining systems that create climate change which suggests that psychologists can work to change psychological mechanisms into more adaptive mechanisms that allow individuals to better engage in climate change mitigation. Because CPs are certainly well versed in engaging in behavioral change, the field brings something unique to this pursuit.

As emerged from this study, the relational component of CP was discussed as a primary area of training that would lend itself well to addressing the impact of climate change. Within this finding, the relationship was really discussed in terms of its humanistic foundation (i.e., non-judgemental and culturally attuned). Given the fact that climate change is politically polarizing (Gallop, 2018), and people tend to become tribalistic (Haidt, 2020), it appears this relational emphasis found in CP will actually lend itself well to addressing climate change.

Remediate interventions. A second general recommendation found within the literature is in the role of remediate interventions. CPs' training in remediation, prevention, and education-

development (Gelso et al., 2014) which gives them a unique skill-set that would allow them to intervene in each domain of climate change impact (i.e., physical, psychological, community health; Clayton et al., 2017; Crimmins et al., 2016; Pachauri & Meyer, 2014). For instance, the psychological impacts of climate change could be addressed through the pathway of assessment and treatment of distress using evidence-based interventions.

Tips to support Individuals	***Tips to support Communities***	***Tips for mental health Professionals***	***Tips for taking care of yourself***
1. *Build resiliency beliefs* 2. *Foster optimism* 3. *Cultivate active coping and self-regulation skills* 4. *Maintain practices that provide a sense of meaning* 5. *Promote connectedness*	1. *Assess and expand the community mental health structure* 2. *Reduce disparities and pay attention to marginalized populations* 3. *Ensure distribution of needed resources and supplement with external supplies* 4. *Have clear and frequent communication*	1. *Become literate in the climate change research* 2. *Engage with other professionals* 3. *Be vocal and model advocacy* 4. *Support solutions to climate-mental health problems*	1. *Make emergency plans* 2. *Improve emotional awareness* 3. *Increase healthy habits for self-care* 4. *Increase connections with important others*

Figure 5. Tips to support individuals, communities, and ways for mental health professionals to be engaged in climate change. Recreated from APA's climate change report (Clayton et al., 2017). See report for more exhaustive descriptions.

Additionally, the community effects of climate change could be addressed through avenues such as community consultation, intervention, and planning. Although remediation within the physical health domain is not often discussed in the literature, there is a growing acknowledgement that CPs are additionally trained to provide interventions within the domain of physical health. For instance, the MTP (Scheel et al., 2018) positions CPs' role in physical health care as one of the emerging domains within the field. As such, CPs working within integrated

health systems may be able to uniquely address the effects of climate change through the use of behavioral health interventions, collaboration, and consultation. Furthermore, CPs have unique training in prevention, strength-based, and culturally competent interventions (Gelso et al., 2014). These will likely allow the CP to move beyond a remediation role and begin to work to promote resilience by promoting the individual or community's own mechanisms for healing.

Advocacy. Finally, advocacy is another avenue for addressing the impact of climate change that is discussed within the literature. CP has a strong history of social justice advocacy (DeBlaere et al., 2019 Gelso et al., 2014; Kim, 2019) that has resulted in a wide variety of systemic level interventions (Fouad, 2006; Kozan & Blustein, 2018). Since addressing the root causes that create and maintain climate change will require addressing larger systems, the role of advocate is a skill set that CPs are already trained to bring to the table. CPs' training in advocacy will allow them to easily navigate systems, and their relational emphasis will likely aid them in building strong relationships that result in some systemic level changes to increase access to resources and decrease systems of inequity.

Climate change primarily impacts people's physical, psychological, and community health. CPs' training in remediation-prevention-education (Gelso et al., 2014), strong social justice advocacy commitments (DeBlaere et al., 2019 Gelso et al., 2014; Kim, 2019), and emerging competencies in integrative health (Scheel et al., 2018), appear to set the field up well for addressing each of these domains. Additionally, guiding principles and values of strength-based care, cultural responsiveness, and relational attunement provide ways that CPs can likely add their own "flavor." However, growing research suggests that systems of power are unlikely to willingly move toward meaningful change (Olle, 2018), a sentiment that was shared in this

study's finding regarding negative affect. As a result, it appears that CPs would benefit from another avenue of intervention beyond those discussed previously.

A Proposed Three-Stage Model for Climate Change Intervention in CP

In light of the findings, a three-stage model for addressing the adverse impacts of climate change is proposed. This model is theoretically constructed and may provide a foundation for future scholarship by offering an initial conceptualization for clinical and systemic level intervention.

The theoretical framework for this model is based on the literature reviewed in combination with the findings of this study (as described previously). Three main theoretical foundations guide this model. First, it relies on the evidence that adverse climate change events impact individuals along multiple but predictable paths (i.e., physical, psychological, and community; Clayton et al., 2017; Crimmins et al., 2016; Puchauri & Myer, 2014). Second, it integrates the core values (Gelso et al., 2014; Packard, 2009; Scheel et al., 2018), social justice history (DeBlaere et al., 2019; Kim, 2019) and direction for training in CP (Scheel et al., 2018) to argue that CPs can provide interventions that are both direct (e.g., psychotherapy) and indirect (e.g., advocacy). Finally, it pulls from the discussion on the challenges in social justice advocacy (Helms, 2017; Kozan & Blustein, 2018; Spainierman & Smith, 2017; Sue, 2017) and uses Olle's (2018) recommendation for the use of a critical paradigm that allows CPs to use non-system dependent interventions. In theory, CPs can move between levels of this model to work toward climate change. When they get 'stuck' in one area, they can utilize interventions from another level. This way, they are continuing to engage their core moral and ethical beliefs and may experience psychological benefits, as a result.

Since no guidelines or frameworks exist for addressing the effects of climate change from within the unique perspective of CP, this proposed three-step model may serve as an initial framework for CPs who want to address climate change within their professional and personal life. In the first stage, direct interventions are applied to remediate adverse climate change outcomes across the main avenues that climate change impacts humans (Clayton et al., 2017). In the second stage, system-dependent advocacy interventions are engaged to promote systemic level change to reduce the impacts of climate change. In the third stage, CPs can use non-system dependent systemic level interventions to reduce the negative effects of climate change and work to change systems that also sustain climate change.

By way of Olle (2018), using Ahmed's (2012) metaphor of change agents as "institutional plumbers," CPs can shift between stages of intervention in this model. For instance, if system-dependent advocacy is not effective in creating change in stage two, a CP may focus on applying a more radical form of change in stage 3 that seeks to empower the use direct interventions to create systemic level change without requiring the support of powerful systems. This model also hypothetically proposes that interventions in stage one and two have the potential to be less congruent with CPs' personally held values, as suggested from this study, and may result in negative affect such as moral injury, burnout, or trauma that could lead a CP to disengage from the role of social change agent. In contrast, this model hypothesizes that using interventions from stage three would allow a CP to experience significantly greater congruence between strongly held moral and ethical beliefs and the CP's day-to-day professional behaviors, resulting in psychological benefit. Finally, this model may also serve as a framework for further researcher, discussion, education, and general discourse around climate change in the CP literature. See Figure 2.

We Need to Address (our) Power, Privilege, and Inequity

It is widely accepted that climate change is maintained by larger systemic forces (e.g., capitalism; Crimmins et al., 2016). Woven throughout these forces is the experience of privilege and power. If and when CP shifts toward addressing the impact of climate change it will be essential to remember Israel's (2011) call-to-action in looking beyond oppression and toward privilege. Leading reports in climate change research suggests that equity within the adverse outcomes of climate change will not be achieved without also addressing the systems that create the inequity in the first place (Clayton et al., 2017; Crimmins et al., 2016; Pachauri & Myer, 2014). Therefore, the social justice advocate role in addressing climate change should include a commitment to addressing oppression and a commitment to routing out and ameliorating the ways in which privilege maintains systems of inequity both within broader systems and within CP.

As Israel (2012) pointed out, CP is great at enacting the social justice advocate role to address oppression within other communities, but falls short in doing the harder work of looking in the mirror. This essence is shared by Heesacker (2018), who described CP as shying away from politically charged topics, and taken together, suggests a resistance to a deeper issue. Recent scholars in CP including Sue (2017) and Cross and Reinhardt (2017) have begun to shine a light on just such an issue: adherence to dominant cultural norms and values (i.e., White, cisgender, heterosexual, male) or "White hegimony" (Spanierman & Smith, 2017).

White homogeneity in CP may likely play a role in some of the findings of this study and suggests that working on privilege is an essential step in becoming effective social justice advocates for issues associated with climate change. For instance, participants broadly spoke about having dissonance between their personal and professional lives and values. Under the

surface, narratives revealed a strong sense of "who I am as a person is not congruent with the expectations of CP" and was primarily described in the conflict between advocate and therapist. It may be that the internalized values of the therapist are more representative of Whiteness, than of the therapist, as it continues to permeate the structures of CP (Sue, 2017). Climate change is a truly daunting concern that will require novel and difficult individual and systemic level changes. If CP is to join, it must heed the call of these prominent scholars and begin the process of looking inside.

Conclusion

The purpose of this study was to better understand the relationship between climate change, social justice, and CP. Thematic analysis (Braun & Clarke, 2006) was used to analyze nine interviews and resulted in six unique themes: (1) dissonance, (2) professional dilemmas, (3) resistance, (4) CPs role, (5) negative affect and (6) privilege. This study finds that climate change is currently impacting CPs' personal and professional lives in the form of identity and value incongruence; professional dilemmas related to climate change and negative affect. Participants had a strong social justice commitment and felt that climate change could be addressed within existing structures of CP. Overall, the results of this study find that CP is potentially well suited to address the social justice dilemmas within climate change but lacks a model. this chapter ended with two calls-to-action: (1) We need to address climate change and (2) we need to address the role that power and privilege play in CP. Additionally, a theoretical three-stage model to allow CPs to better see, conceptualize, and implement interventions to address climate change was proposed and discussed. Taken together, this study provides a foundation for the integration of climate change into CP through future scholarship, clinical practice, and systemic level interventions aimed at climate change.

References

Adeola, F. & Picou, J. (2014). Social Capital and the mental health impacts of hurricane Katrina: assessing long-term patterns of psychosocial distress. *International Journal of Mass Emergencies & Disasters, 32*(1), 121-156. https://dx.doi.org/10.1186%2Fs12888-018-1863-z

Albrecht, G., Sartore, G., Connor, L., Higginbotham, N., Freeman, S., Kelly, B., Stain, H., Tonna, A., & Pollard G. (2007) Solastalgia: the distress caused by environmental change, *Australasian Psychiatry, 15*(1), 95-98. DOI: 10.1080/10398560701701288

Alderman, K., Turner, L. R., & Tong, S. (2012). Floods and human health: A systematic review. *Environment International, 47*, 37–47. https://doi.org/10.1016/j.envint.2012.06.003

Alcock, I., White, M. P., Wheeler, B. W., Fleming, L. E., & Depledge, M. H. (2014). Longitudinal effects on mental health of moving to greener and less green urban areas. *Environmental Science & Technology, 48*, 1247–1255. https://doi.org/10.1021/es403688w

Ali, J., Farrell, A., Alexander, A., Forde, D., Stockton, M., & Ward, K. (2017). Race differences in depression vulnerability following hurricane Katrina. *Psychological Trauma: Research, Practice, and Policy, 9*(3), 317-324. https://psycnet.apa.org/doi/10.1037/tra0000217

American Psychological Association (2011). Resolution on affirming psychologists' role in addressing global climate change. Retrieved from: http://www.apa.org

Anderson, C. A. (2012). Climate change and violence. In D. Christie (Ed.), The encyclopedia of peace psychology. Hoboken, NJ: Wiley-Blackwell.

Azuma, K., Ideka, K., Kagi, N., Yanagi, U., Hasegawa, K., Osawa, H. (2014). Effects of water-damaged homes after flooding: health status of the residents and the environmental risk

factors. *International Journal of Environmental Health Research, 24*(2), 158-175. https://doi.org/10.1080/09603123.2013.800964

Beard, C. B., Eisen, R. J., Barker, C. M., Garofalo, J. F., Hahn, M., Hayden, M., . . . Schramm, P. J. (2016). Vector-borne diseases. In: The impacts of climate change on human health in the United States: A scientific assessment (pp. 129–156). Washington, D.C.: U.S. Global Change Research Program.

Beer, A., Spanierman, L., Greene, J., & Todd, N. (2012). CP trainees' perceptions of training and commitments to social justice. *The Journal of Counseling Psychology, 59*(1), 120-133. https://psycnet.apa.org/doi/10.1037/a0026325

Bell, J. E., Herring, S. C., Jantarasami, L., Adrianopoli, C., Benedict, K., Conlon, K., . . . Schreck, C. J. (2016). Impacts of extreme events on human health. In: The impacts of climate change on human health in the United States: A scientific assessment (pp. 99–128). Washington, D.C.: U.S. Global Change Research Program.

Bowman, S., & Roysicar, G. (2011). Training and practice in trauma, catastrophes, and disaster counseling. *The Counseling Psychologist, 39*(8), 1160-1181. https://doi.org/10.1177%2F0011000010397934

Borenstein, (2018). 'Unprecedented changes' must be made to stop catastrophic change, UN report says. Retrieved from: http://pbs.org

Braun, V. & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*, 77-101. http://dx.doi.org/10.1191/1478088706qp063oa

Braun., V. & Clarke, V. (2012). Thematic Analysis. In H. Cooper (Ed.), APA handbook of research methods in psychology: Vol. 2: Research designs (pp. 57-71). http://dx.doi.org/10.1037/13620-004

Brenen, M. & Saad, L. (2018). Global warming concerns steady despite some partisan shifts. Retrieved from: www.gallup.com

Brown, T. H., Mellman, T. A., Alfano, C. A., & Weems, C. F. (2011). Sleep fears, sleep disturbance, and PTSD symptoms in minority youth exposed to Hurricane Katrina. *Journal of Traumatic Stress*, *24*(5), 575–580. https://doi-org.lib-proxy.radford.edu/10.1002/jts.20680

Burke, M., Gonzalaz, F., Baylis, P., Heft-Neal, S., Baysan, C., Basu, S. & Hsiang, S. (2018). Higher temperatures increase suicide rates in the United States and Mexico. *Nature Climate Change, 8*, 723-729. https://doi.org/10.1038/s41558-018-0222-x

Buki, L. (2014). The relevance of CP in addressing major social issues. *The Counseling Psychologist, 42*(1), 6-12. https://doi.org/10.1177%2F0011000013516369

Clark, H., Murdock, N. L., & Koetting, K. (2009). Predicting Burnout and Career Choice Satisfaction in Counseling Psychology Graduate Students. *The Counseling Psychologist, 37*(4), 580–606. https://doi.org/10.1177/0011000008319985

Clayton, S., Manning, C. M., & Hodge C. (2014). Beyond storms & droughts: The psychological impacts of climate change. Washington, DC: American Psychological Association and ecoAmerica.

Clayton, S., Manning, C. M., Krygsman, K., & Speiser, M. (2017). Mental Health and Our Changing Climate: Impacts, Implications, and Guidance. Washington, D.C.: American Psychological Association and ecoAmerica.

Creswell, J. (2009). Research design: Qualitative, Quantitative, and Mixed Methods approaches. Thousand Oaks, CA: Sage Publications.

Crimmins, A., J. Balbus, J., Gamble, J., Beard, C., Bell, J. … et al. (Eds.). (2016). The Impacts of Climate Change on Human Health in the United States: A Scientific Assessment. Washington D.C: U.S. Global Change Research Program. http://dx.doi.org/10.7930/J0R49NQX

Cross, W. & Reinhardt, J. (2017). Whiteness and serendipity. *The Counseling Psychologist, 45*(5), 696-705. https://doi.org/10.1177%2F0011000017719551

DeBlaere, C., Singh, A. A., Wilcox, M. M., Cokley, K. O., Delgado-Romero, E. A., Scalise, D. A., & Shawahin, L. (2019). Social Justice in CP: Then, Now, and Looking Forward. *Counseling Psychologist, 47*(6), 938–962. https://doi-org.lib-proxy.radford.edu/10.1177/0011000019893283

Dodgen, D., Donato, D., Kelly, N., La Greca, A., Morganstein, J., … et al., (2016) Ch. 8: Mental Health and Well-Being. The Impacts of Climate Change on Human Health in the United States: A Scientific Assessment. Washington D.C.: U.S. Global Change Research Program, Washington, 217–246. http://dx.doi. org/10.7930/J0TX3C9H

Doherty, T. & Clayton, S. (2011). The psychological impacts of global climate change. *The American Psychologist, 66*(4), 265-276. https://psycnet.apa.org/doi/10.1037/a0023141

Fann, N., Brennan, T., Dolwick, P., Gamble, J. L., Ilacqua, V., Kolb, L., . . . Ziska, L. (2016). Air quality impacts. The impacts of climate change on human health in the United States: A scientific assessment (p. 76). Washington, D.C.: U.S. Global Change Research Program.

Flores, M. P., De La Rue, L., Neville, H. A., Santiago, S., Rakemayahu, K., Garite, R., … Ginsburg, R. (2014). Developing social justice competencies: A consultation training approach. *Counseling Psychologist*, *42*(7), 998–1020. https://doi.org/10.1177%2F0011000014548900

Fouad, N., Gerstein, L., & Toporek, R. (2006). Social justice and CP in context in Toporek, R., Gerstein, L., Fouad, N., Roysicar, G., & Israel, T. (Eds.) The handbook for social justice in counselling psychology: leadership, vision, and action (p. 1-23). Washington, D.C.: American Psychological Association.

Funk, C. & Kennedy, B. (2020). How Americans see climate change and environmentalism is 7 graphs. Retrieved from: Pewresearch.org

Gelso, Nut Williams, & Fretz (2014). *The Handbook of CP*. Washington, D.C.: American Psychological Association.

Gifford, R. (2011). The dragons of inaction: The psychological barriers that limit climate change mitigation and adaptation. *The American Psychologist, 66*(4), 290-302. https://psycnet.apa.org/doi/10.1037/a0023566

Goodman, L. A., Wilson, J. M., Helms, J. E., Greenstein, N., & Medzhitova, J. (2018). Becoming an advocate: Processes and outcomes of a relationship-centered advocacy training model. *The Counseling Psychologist*, *46*(2), 122–153. https://doi.org/10.1177/0011000018757168

Grahn, P., & Stigsdotter, U. A. (2003). Landscape planning and stress. *Urban Forestry & Urban Greening*, 2(1), 1–18. https://doi.org/10.1078/1618-8667-00019

Grineski, S. E., Collins, T. W., Ford, P., Fitzgerald, R., Aldouri, R., Velázquez-Angulo, G., . . . & Lu, D. (2012). Climate change and environmental injustice in a bi-national context. *Applied Geography, 33*, 25–35. https://doi.org/10.1016/j.apgeog.2011.05.013

Guba, E. G. (1990). The alternative paradigm dialog. In E. G. Guba (Ed.), The paradigm dialog (pp. 17-30). Newbury Park, CA: Sage.

Haidt, J. (2020). Tribalism, Forbidden Base rates, and the Telos of Social Science.*Psychological Inquiry, 31*(1), 53-56. DOI: 10.1080/1047840X.2020.1722602

Haverkamp, B. (2005). Ethical perspectives on qualitative research in counseling psychology. *Journal of Counseling Psychology, 52*(2), 146-155. https://psycnet.apa.org/doi/10.1037/0022-0167.52.2.146

Haverkamp, B. & Young, R. (2007). Paradigms, purpose, and the role of the literature: formulating a rationale for qualitative investigations. *The Counseling Psychologist, 35*(2), 265-294. https://psycnet.apa.org/doi/10.1177/0011000006292597

Heesacker, M. (2018). Presidential Address: Counseling Psychology in the Trump Era. *The Counseling Psychologist*, *46*(1), 77–86. https://doi.org/10.1177/0011000018754324

Helms, J. (2017). The challenge of making whiteness visible: Reactions to four whiteness article. *The Counseling Psychologist, 45*(5), 717-726. https://doi.org/10.1177%2F0011000017718943

Hill, C. (2012). Consensual Qualitative Research: A Practical Recourse for Investigating Social Science Phenomena. Washington, DC: American Psychological Association.

Israel, T. (2012). 2011 Society of CP Presidential Address: Exploring Privilege in CP--Shifting the Lens. *Counseling Psychologist, 40*(1), 158–180. https://doi.org/10.1177%2F0011000011426297

IPCC (2018). Global warming of 1.5C – summary for policymakers. Geneva: IPCC.

Jacobs, S., Hoffman, M., Leach, M., & Gerstein, L. (2011). CP and large-scale disasters: Moving on to action, practice, and research. *The Counseling Psychologist, 39*(8), 1203-1211. https://doi.org/10.1177%2F0011000011419309

Joyce, C. (2018, October 8). Climate report warns of extreme weather, displacement of millions. Retrieved from: http://www.npr.org

Kessler, R., Galea, S., Jones, R., & Parker, H. (2006). Mental illness and suicidality after hurricane Katrina. *Bulletin of the World Health Organization, 84*(11), 1-21. https://dx.doi.org/10.2471%2Fblt.06.033019

Kessler, R., Galea, S., Gruber, M., Sampson, N., Ursano, R., & Wessely, S. (2008). Trends in mental illness and suicidality after hurricane Katrina. *Molecular Psychiatry, 13*, 374-384. https://dx.doi.org/10.1038%2Fsj.mp.4002119

Kozan, S., & Blustein, D. L. (2018). Implementing Social Change: A Qualitative Analysis of Counseling Psychologists' Engagement in Advocacy. *The Counseling Psychologist*, *46*(2), 154–189. https://doi.org/10.1177/0011000018756882

Kübler-Ross, E., & Kessler, D. (2005). On grief and grieving: Finding the meaning of grief through the five stages of loss. New York; Toronto: Scribner.

Lee, H. C., Lin, H. C., Tsai, S. Y., Li, C. Y., Chen, C. C., & Huang, C. C. (2006). Suicide rates and the association with climate: A population-based study. *Journal of Affective Disorders, 92(*2), 221–226. https://doi.org/10.1016/j.jad.2006.01.026

Levitt, H.M., Bamberg, M., Creswell, J.W., Frost, D.M., Josselson, R., & Suarez-Orozco, C. (2018). Journal article reporting standards for qualitative primary, qualitative meta-analytic, and mixed methods research in psychology: The APA Publications and Communications Board task force report. American Psychologist, 73(1), 26-46. Doi:10.1037/amp0000151

Lichtenberg, J. W., Hutman, H., & Goodyear, R. K. (2018). Portrait of counseling psychology: demographics, roles, activities, and values across three decades. *The Counseling Psychologist*, *46*(1), 50–76. https://doi.org/10.1177%2F0011000018754532

Litz, B., Stein, N., Delaney, E., Lebowitz, L., Nash, W., Silva, C. & Maguen, S. (2009). Moral injury and moral repair in war veterans: A preliminary model and intervention strategy. *Clinical Psychology Review, 29*(8), 695-706. https://doi.org/10.1016/j.cpr.2009.07.003

Lowe, S. R., Manove, E. E., & Rhodes, J. E. (2013). Posttraumatic stress and posttraumatic growth among low-income mothers who survived Hurricane Katrina. *Journal of Consulting and Clinical Psychology*, *81*(5), 877–889. https://doi.org/10.1037/a0033252

Luber, G., & McGeehin, M. (2008). Climate change and extreme heat events. *American Journal of Preventive Medicine, 35*(5), 429–435. https://doi.org/10.1016/j.amepre.2008.08.021

Milkin Institute School of Public Health (2018). Ascertainment of the Estimated excess mortality from hurricane Maria in Puerto Rico. Washington, D.C.: Milkin Institute of Public Health.

Mollen, D., Smith, N. G., Levy, J. J., & Magyar-Moe, J. L. (2012). Privilege and Belonging: The Quest to Make the Society of Counseling Psychology More Welcoming. *The Counseling Psychologist*, *40*(6), 856–867. https://doi.org/10.1177/0011000012443857

Morrow, S. L., & Smith, M. L. (2000). Qualitative research for CP. In S.D. Brown & R. W. Lent (Eds.), Handbook of CP (3rd ed., pp. 199-230). New York: John Wiley.

Morrow, S. L. (2005). Quality and trustworthiness in qualitative research in counseling psychology. *Journal of CP, 52,* 250-260. https://psycnet.apa.org/doi/10.1037/0022-0167.52.2.250

Morrow, S. (2007). Qualitative research in counseling psychology: Conceptual foundations. *The Counseling Psychologist, 35*(2), 209-235. https://psycnet.apa.org/doi/10.1037/0022-0167.52.2.126

Moser, S. C. (2013). Navigating the political and emotional terrain of adaptation: Community engagement when climate change comes home. In S. C. Moser & M. T. Boykoff (Eds.), Successful adaptation to climate change: Linking science and policy in a rapidly changing world (pp. 289–305). New York, NY: Routledge.

National Weather Service. (2016). Natural hazard statistics. Washington, D.C.: National Oceanic and Atmospheric Administration.

Naylor, B. (2018, September 13). Trump denies death poll in Puerto Rico, Falsely claims 'done by the democrats.' Retrieved from: www.npr.org

Olle, C. (2018). Breaking institutional habits: A critical paradigm for social change agents in psychology. *The Counseling Psychologist, 46*(2), 190-212. https://doi.org/10.1177%2F0011000018760597

Pachauri, R.K., & Meyer, L.A. (Eds.). (2015). IPCC, 2014: Climate Change: Synthesis Report. Geneva, Switzerland: Intergovernmental Panel on Climate Change.

Packard, T. (2009). The 2008 Leona Tyler award address: core values that distinguish counseling psychology: personal and professional perspectives. *The Counseling Psychologist, 37*(4), 610–624. https://psycnet.apa.org/doi/10.1177/0011000009333986

Parham, W. (2011). A call to action: Responding to large-scale disasters, catastrophes, and traumas. *The Counseling Psychologist, 39*(8), 1193-1202. https://doi.org/10.1177%2F0011000011417633

Pearce, M., Eagle, L., Low, D., Schurmann, A. (2015). Cut from 'country': the impact of climate change on the mental health of aboriginal pastoralists. *Australasian Journal of Regional Studies, 31*(1), 50-79.

Perera, F. P., Tang, D., Wang, S., Vishnevetsky, J., Zhang, B., Diaz, D., . . . Rauh, V. (2012). Prenatal polycyclic aromatic hydrocarbon (PAH) exposure and child behavior at age 6–7 years. *Environmental Health Perspectives, 120*(6), 921–926. https://dx.doi.org/10.1289%2Fehp.1104315

Picou, J., & Hudson, K. (2010). Hurricane Katrina and Mental Health: A Research Note on Mississippi Gulf Coast Residents. *Sociological Inquiry*, *80*(3), 513–524. https://doi.org/10.1111/j.1475-682x.2010.00345.x

Pongiglione, F., & Cherlet, J. (2015). The social and behavioral dimensions of climate change: fundamental but disregarded? *Journal for General Philosophy of Science, 46*(2), 383–391. https://doi-org.lib-proxy.radford.edu/10.1007/s10838-015-9305-9

Prochaska, J., Norcross, J., Diclimente, C. (1995). Changing for good: a revolutionary six-stage program for overcoming bad habits and moving your live positively forward. New York, NY: Harper Collins.

Purcell, R., & McGirr, J. (2018). Rural health service managers' perspectives on preparing rural health services for climate change. *Australian Journal of Rural Health*, *26*(1), 20–25. https://doi-org.lib-proxy.radford.edu/10.1111/ajr.12374

Rosa, E., Rudel, T., York, R., Jorgenson, A. (2015). The human (anthropogenic) driving forces of climate change. In Dunlap & Brulle (Eds.), Climate Change and Society: Sociological Perspectives. Oxford University Press.

Runyon, L., (2018, October 8). In a drying climate, Colorado's 'water cop' patrols for water thieves. Retrieved from http://www.npr.org

Sastry, N., & Gregory, J. (2013). The effect of hurricane Katrina on the prevalence of health impairments and disability among adults in New Orleans: differences by age, race, and sex. *Social Science and Medicine, 80,* 121-129. https://dx.doi.org/10.1016%2Fj.socscimed.2012.12.009

Scheel, M. J., Stabb, S. D., Cohn, T. J., Duan, C., & Sauer, E. M. (2018). Counseling psychology model training program ψ. *The Counseling Psychologist, 46*(1), 6-49. doi:10.1177/0011000018755512

Shay, J. (2014). Moral injury. *Psychoanalytic Psychology, 31*(2), 182–191. https://doi.org/10.1037/a0036090

Simpson, D. M., Weissbecker, I., & Sephton, S. E. (2011). Extreme weather-related events: Implications for mental health and well-being. In I. Weissbecker (Ed.), Climate change and human well-being: Global challenges and opportunities (pp. 57–78). New York, NY: Springer.

Singh, A. A., Hofsess, C. D., Boyer, E. M., Kwong, A., Lau, A. S. M., McLain, M., & Haggins, K. L. (2010). Social Justice and Counseling Psychology: Listening to the Voices of Doctoral Trainees. *The Counseling Psychologist*, *38*(6), 766–795. https://doi.org/10.1177/0011000010362559

Smith, N. G., Keller, B. K., Mollen, D., Bledsoe, M., Buhin, L., Edwards, L. M., . . . Yakushko, O. (2012). Voices of early career psychologists in Division 17, the Society of Counseling Psychology. *The Counseling Psychologist, 40,* 794–825. https://doi.org/10.1177%2F0011000011417145

Smith, K., Woodward, A., Campbell-Lendrum, D., Chadee, D., Honda, Y., … et al., (2014). Human health: impacts adaptations and co-benefits. In: Climate change 2014: impacts, adaptation, and vulnerability. Part A: global and sectoral aspects. New York, NY: Cambridge University Press.

Spanierman, L. B., & Smith, L. (2017). Roles and responsibilities of White allies: Implications for research, teaching, and practice. *The Counseling Psychologist, 45*(5), 606–617. https://doi.org/10.1177%2F0011000017719550

Spokane, A., Inman, A., Weatherford, R., Davidson, A., & Straw, R. (2011). Ecologically based, culturally concordant responding following disasters: the counseling psychologist's role. *The Counseling Psychologist, 39*(8), 1128-1159.

Strauss, A., & Corbin, J. (1998). Basics of qualitative research: techniques and procedures for developing grounded theory. Thousand Oaks, CA: Sage Publications, Inc.

Stocker, T.F., Qin, D. Plattner, G., Alexander, L, Allen, S., Bindoff, N., … Xie, S. (2013) Technical Summary In Climate change 2013: The physical science basis. Stocker, T, Qin, T., Plattner, G. et al (Eds.) Cambridge, United Kingdom and New York, NY: Cambridge University Press.

Sue, D. W., Arredondo, P., & McDavis, R. J. (1992). Multicultural counseling competencies and standards: A call to the profession. *Journal of Counseling & Development*, *70*(4), 477–486. Retrieved from https://lib-proxy.radford.edu/login?url=http://search.ebscohost.-com/login.aspx?direct=true&db=bth&AN=9206290424&site=eds-live&scope=site

Sue, D. W. (2017). The challenges of becoming a White ally. *The Counseling Psychologist, 45*(5), 706–716. https://psycnet.apa.org/doi/10.1177/0011000017719323

Swim, J., Clayton, S., & Howard, G. (2011). Human behavioral contributions to climate change: psychological and contextual drivers. *The American Psychologist, 66*(4), 251-264. https://psycnet.apa.org/doi/10.1037/a0023472

Swim, J., Stern, P., Doherty, T., Clayton, S., Reser, J. … et al., (2011). Psychology's contribution to understanding and addressing global climate change. *The American Psychologist, 66*(4), 241-250. https://psycnet.apa.org/doi/10.1037/a0023220

Swords, B. A., & Ellis, M. V. (2017). Burnout and Vigor Among Health Service Psychology Doctoral Students. *The Counseling Psychologist, 45*(8), 1141–1161. https://doi.org/10.1177/0011000017747548

Sterm, P. (2011). The contributions of psychology to limiting climate change. The American Psychologist, 66(4), 303-314. https://doi.org/10.1016/B978-0-12-813130-5.00007-2

Tam, B., Cough, W., Edwards, V., & Tsuji, L. (2013). The impact of climate change on the well-being and lifestyle of a First Nation community in the western James Bay region. *The Canadian Geographer, 57*(4), 441-456. DOI: 10.1111/j.1541.0064.2013.12033.x

Tebbe, E., Moradi, B., Conelly, K., & Lenzen, A. (2018). "I don't care about you as a person": Sexual minority women objectified. *Journal of Counseling Psychology, 65*(1), 1-16. https://doi.org/10.1037/cou0000255

Trtanj, J., Jantarasami, L., Brunkard, J., Collier, T., Jacobs, J., Lipp, E., . . . Thurston, J. (2016). Climate impacts on water related illness. The impacts of climate change on human health in the United States: A scientific assessment (pp. 157–188). Washington, D.C.: U.S. Global Change Research Program.

Toporek, R., Gerstein, L., Fouad, N., & Roysicar, G. (2006). The handbook for social justice in CP: leadership, vision, and action. Washington, D.C.: American Psychological Association.

Toporek, R. L., Gerstein, L. H., Fouad, N. A., Roysircar, G., & Israel, T. (2006). Future directions for counseling psychology: Enhancing leadership, vision, and action in social justice. In R. L. Toporek, L. H. Gerstein, N. A. Fouad, G. Roysircar, & T. Israel (Eds.), Handbook for social justice in counseling psychology: Leadership, vision, and action (p. 533–552). Sage Publications, Inc. https://doi.org/10.4135/9781412976220.n35

Vera, E. M., & Speight, S. L. (2003). Multicultural competence, social justice, and counseling psychology: expanding our roles. *The Counseling Psychologist, 31*(3), 253. https://doi.org/10.1177%2F0011000003031003001

Yeh, C. & Inmann, A. (2007). Qualitative data analysis and interpretation in counseling psychology: strategies for best practice. *The Counseling Psychologist, 35*(3), 369-403. https://doi.org/10.1177%2F0011000006292596

Yun, K., Lurie, N., & Hyde, P. S. (2010). Moving mental health into the disaster-preparedness spotlight. *The New England Journal of Medicine, 363*(13), 1193–1194. https://doi.org/10.1056/nejmp1008304

Ziska, L., Crimmins, A., Auclair, A., DeGrasse, S., Garofalo, J. F., Khan, A. S., . . . Walls, I. (2016). Ch. 7: Food safety, nutrition, and distribution. In: The impacts of climate change on human health in the United States: A scientific assessment (pp. 189–216). Washington, D.C.: U.S. Global Change Research Program.

Appendix A: Demographic Information Form

1. Age _____
2. Sex _____
3. Gender _____
4. Ethnicity _____
5. Highest Degree completed _____
6. If in a doctoral program, what program are you in? _____
   What year are you in? _____
7. What school was your highest degree earned at? _____
8. Years since graduation _____
9. Current type of employment
   (i.e., clinical practice, teaching, etc) _____
10. Years in current employment _____
11. Previous type of employment _____
12. Geographic location that you live _____
13. Geographic location that you grew up _____

On a scale of 1 to 5 how would you rate the following questions:
1=little to no 2=some 3=medium 4=moderate 5=high

What is your/the….

14. Knowledge of climate change? 1 2 3 4 5
15. Knowledge of climate change impact to marginalized or vulnerable populations? 1 2 3 4 5
16. Knowledge of social justice in CP? 1 2 3 4 5
17. Interest in climate change? 1 2 3 4 5
18. Level of identification with core values Of CP? 1 2 3 4 5
19. Extent to which you've been personally impacted by climate change? 1 2 3 4 5
    …clients have been impacted? 1 2 3 4 5
    …important others have been impacted? 1 2 3 4 5
    …your community has been impacted? 1 2 3 4 5
20. Current level of addressing climate change? 1 2 3 4 5

Appendix B: Semi-Structured Interview Questions

RQ 1: How do counseling psychologists conceptualize climate change impact to marginalized and vulnerable populations?

(Core: conceptualizing climate change)

Questions:

(a) What do you see as the main impacts of climate change?
(b) In what ways do you see climate change as relating to social justice?
(c) In what ways have you seen climate change impact people?
(d) When thinking about climate change, what do you see as the biggest threats facing marginalized/vulnerable populations?
(e) In what ways do you see climate change as being different from other social justice issues? How is it similar?
(f) In what ways do you foresee marginalized or vulnerable populations benefiting from addressing climate change?

RQ2: How do counseling psychologists conceptualize CP's role in addressing climate change and the impact to marginalized and vulnerable populations*? I.e., what is CP's role in addressing climate change*

(core: perceptions of CP's role)

Questions:

1) What level of responsibility does CP have in addressing climate change?
2) In your opinion, what role does CP play in addressing climate change, as a profession?
3) How would addressing climate change impact your professional responsibilities? (i.e., therapy, research, teaching, etc.)
    a. Specifically, for each area? I.e., how does it impact therapy? How would it impact research? How would it impact your teaching?
4) In what ways could CP include climate change within the field?
5) What barriers do you see facing CP, if it were to address climate change as a profession?
6) In what ways do you foresee CP benefiting from addressing climate change, as a profession?

RQ3: What types of activities do counseling psychologists engage in to mitigate climate change?

(core: personal experiences)

1) To what extent do you incorporate climate change in your work?

RQ3.A: What barriers do counseling psychologists face in these activities?

1) What barriers do you face in addressing climate change as a counseling psychologist? Personally?
2) In what ways do you think addressing climate change would impact you personally and professionally?

3) What barriers do you foresee impacting your ability to address climate change in the future?

RQ3.B: What co-benefits have counseling psychologists experienced in these activities?

1) In what ways have you experienced benefits (psychological or other) from addressing climate change?
2) What benefits do you foresee in addressing climate change?

RQ4: What unique factors does the field of CP bring to mitigating climate change?

(core: what can CP add?)

1) What aspects of your training as a counseling psychologist lend you well to addressing climate change?
2) What aspects of your training as a counseling psychologist feel like they prevent you from being able to address climate change?
3) In what ways do you think CP can address the chronic, long-term effects of climate change?
4) Research shows that mitigating climate change has benefits for physical and psychological health. What role do you think CP could play in this?
5) In what ways would the core values of CP influence how climate change could be addressed?