International Association of Applied Psychology

APPLIED PSYCHOLOGY AROUND THE WORLD

Climate Change and Environmental Psychology

September 2020

IAAP Bulletin
Volume 2, Issue 3
ISSN: 2639-6521

APAW | September 2020

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Editorial

Pr. Dr. Christine Roland-Lévy, IAAP President (2018-2022)

This issue of Applied Psychology around the World focusses on Environmental Psychology and what psychology, psychological science and psychologists can do in order to prevent more Climate Change.

As you will find in the introduction by Terry Harting, who is the President of Division 4 on Environmental Psychology and the Chair of IAAP's Special Project on Climate Change, which started in Montréal, 2018, Terry has done quite a lot on the topic of Applied Environmental Psychology, including presenting at our second Webinar on the theme of *Nature, psychological restoration and health*, a year ago, and making it possible to have and agreement between IAAP Division 4; within this agreement, he has assumed responsibility for a biennial conference series, the International Conference on Environmental Psychology, ICEP, which is further presented in this issue.

Seven out of the eight papers in this issue are directly related to the topic of Environment Psychology and Climate change, including one which is a short comment by a Student member of IAAP who actively took part in the Youth Climate Summit at the United Nations, last September. The last article, by Prof. Dr. Erich Kirchler, is an analysis of how research in Psychology can help understand the processes involved in the COVID-19 crisis, as in many other crises.

Let me take advantage of this Editorial to provide a bit of information about our progress around different points: (1) our Centennial Congress of Applied Psychology, (2) our implication within the Global Psychology Leadership Team, and (3) our recent elections.

Our Centennial anniversary year has obviously not been as we would have expected… Experiencing the COVID-19 pandemic not only disturbed our lives and plans but has created trauma and death all around the world.

In August, IAAP leadership and the Centennial Congress organizing committee made the difficult decision to cancel the Centennial Congress of Applied Psychology. The challenges of presenting an international scientific congress during the pandemic were insurmountable and we didn't want to offer attendees anything less than great.

Despite all our celebrations having been derailed by COVID-19, it is still our centennial year and we don't want to let this milestone go by unnoticed. In lieu of the Congress in Mexico we will be making a collection of lectures and presentations available to all our members in December, during the last month of our Centennial year. These presentations will be on the IAAP website for you to view at your leisure. The next issue of Applied Psychology Around the World, APAW, will be devoted to these scientific presentations among others. Be prepared and send us your proposals. In addition, we will host a virtual Centennial Celebration that you are all invited to take part in – let's commemorate together 100 years of IAAP history!

More details about our Centennial Celebration will be available in the coming month.

On a different topic, the Global Psychology Leadership Team started working together on the theme of Climate Change, the precise topic of this issue of APAW, during last November in Lisbon (cf. APAW, Vol.2, Issue 1, for more on that specific action). IAAP was actively involved. Since then, the informal group of leaders of psychology associations have been meeting on a regular basis, every week since the COVID-19 pandemic started. This group decided this August to create a more formal team with a name: Global Psychology Alliance. This Alliance of Independent Psychology Associations already jointly

prepared a text (see below) to defend psychologists around the world, with the global title of ***Humanity needs Psychology***.

What Do Psychology and Psychologists Offer Humanity? What is psychology and what do psychologists do?

The science of psychology generates knowledge about the nature and development of human thoughts, emotions, and behaviors at both individual and societal levels. Psychology is an autonomous scientific discipline that applies to nearly every aspect of our boundless experience. Psychologists work in a broad range of settings — effectively any place where human functioning is relevant. Psychological science deepens our understanding of human behavior within social, cultural and linguistic contexts.[1] Psychologists have a role in supporting health and well-being globally within a human rights framework with the goal of improving lives.

Why do governments need psychology and psychologists?

It is humanly and financially beneficial for governments to recognize that psychologists make critical independent contributions to the alleviation of suffering and the enhancement of lives. Social determinants of health, such as education, adequate food and nutrition, a reasonable standard of living, work opportunities and equitable treatment are recognized as fundamental human rights enshrined in the United Nations Sustainable Development Goals. Failure to address mental health challenges, such as depression and anxiety, that are often a consequence of lack of attention to social determinants of health costs the global economy $1 trillion annually in lost productivity. Prevention and intervention of psychological health conditions, however, have been proven highly cost beneficial. When psychological science is applied to the contexts in which humans live, work, and play, potential and productivity increase. Yet, in spite of the existence of both money-saving and clinically effective services for at-risk populations or those demonstrating symptoms of mental disorders, the majority of youth and adults in almost every country in the world receive no psychological treatment due to limited resources, stigma and lack of healthcare providers.

What is unique about psychology and psychologists?

Psychologists understand biological, social and environmental research and are trained to apply solid evidence to improve human lives across cultures and languages. To become a psychologist, one must demonstrate high professional, scientific and ethical knowledge and standards. Psychologists' advanced preparation emphasizes technical and scientific autonomy and independent roles within transdisciplinary teams to promote human well-being in every area of life (e.g., family, school, university, health, workplace, public service, and communities to name a few). Psychologists work by applying the scientific method and complementary diagnostic, assessment, and reasoning skills to provide comprehensive and integrated approaches to human health. Employing psychologists for independent, decision-making roles aligns with their advanced training. As the world faces crises without precedent, psychologists' contributions to the alleviation of physical, emotional, and mental impacts on individuals, groups, and communities are critical.

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Within IAAP, we are now starting a new cycle, with a new President-Elect, Dr. Lori Foster who will be the third women President of IAAP, starting her term at the end of December, when the term of Past-President is over. Since August first, we have a new Secretary General, Dr. Pedro Neves, who has already shown his enthusiasm for our community building by creating, some years ago, the Student Division which has flourished ever since thanks to a great start! Pedro has been elected for a four-year term. We also have a new Treasurer, Dr. Kurt Geisinger, who has been a long-lasting member of our Board of Directors and was chairing the Task Force on IAAP Governance, as well as serving as the current President of Division 2: Psychological Assessment & Evaluation. Kurt has been elected for a two-year term, until our next ICAP in Beijing, in July 2022. These new members of the Executive Committee of IAAP will join me for the coming two years of my term as President, along with our Membership Officer, Dr. Luminita Patras. According to our new rules, the position of Past-President will officially stop at the end of December, but Dr. Janel Gauthier will continue to serve on some specific tasks.

I am convinced that the new team will be very efficient, and will work in a good spirit for the benefits of IAAP!

Lori Foster
USA
President-Elect

Pedro Neves
Portugal
Secretary-General

Kurt Geisinger
USA
Treasurer

Special Project on Climate Change: Issue Introduction

Guest editor: Terry Hartig[1]

When she began her tenure as IAAP President in 2018, Christine Roland-Lévy asked me to head a Special Project on Climate Change. She approached me because I had just begun to serve my 4-year term as President of the Division of Environmental Psychology (Division 4), and many of the people affiliated with the Division work with climate change issues in one way or another. In our research, teaching and other professional practice, and in our personal practices, we act on the understanding that anthropogenic climate change presents an extraordinary set of challenges to humanity and to other life. Terrible damage has already occurred, and more such damage will certainly occur in the coming decades, to human communities, to other species, and to our common habitat.

The present climate circumstances do not exactly invite joyous expressions of optimism. Yet, doing nothing is not an option, and we cannot continue with "business as usual." We understand that by working together we can slow the pace of destruction and at the same time move toward sustainability and equity, not only within and across human societies but with regard to the needs of other species as well. We appreciate that many millions of people around the world well understand that the problem exists, recognize the causes, want to bring about needed changes, and have been making great efforts to do so. We see that many and extensive collaborations of widely varying scale have gotten launched, in research, teaching, and practice, and that this joining of efforts is helping to bring people everywhere closer together in a shared understanding of our planet, its systems, their limits, and our common dependence, on them and on one another. And we know of encouraging precedents on which to build, previous collaborations that have helped build community locally, regionally and globally, just as they have helped people around the world address common hazards, as from ozone depletion attending the use of chlorofluorocarbon refrigerants or the threat of destruction from an encompassing nuclear war.

Many have already demonstrated that applied psychologists have vital parts to play in the response to climate change. They have shown that psychological knowledge is needed to understand the damage done and the further threats posed. It is needed to understand the role of individual and collective behaviors in driving climate change; to develop strategies to bring about desired change; to understand which technical solutions are practicable and which are not in light of human ability and behavior; to communicate about the urgency of the problem and the possible solutions. Beyond supporting efforts to prevent or mitigate further harm, applied psychologists have also shown how they can help those who have already suffered some injury and those who will come to suffer. The problems are manifold: trauma following extreme weather events; trauma and insecurity following with displacement, loss of livelihood, loss of community, and armed conflict; gnawing anxiety that springs from knowing that the conduct of one's ordinary activities depends on societal systems and infrastructure that exacerbate the problems; and more.

The need for our knowledge, research and practice capabilities will increase apace the pressure to mitigate and adapt to climate change and to address the consequences of harm already done. The significance of the international organizations that can support the collaborations through which we share knowledge and capabilities will grow accordingly. In

1 Uppsala University, Sweden

her editorial for the first 2020 issue of *Applied Psychology around the World*, Christine Roland-Lévy wrote of two important outcomes of the International Summit on Psychology and Global Health held in Lisbon last November. One was a proclamation that she and representatives from over 40 other psychology associations signed, pledging "to engage in serious dialogue, meaningful agreement, and intentional planning," and formally acknowledging "the willingness of national and international psychological associations to work together in support of advancing psychology's role in global issues, notably Sustainable Development Goal #13: Climate change" (pp. 5-6). Christine included the text of the proclamation in her editorial, and the text of a second important outcome of the summit, a joint resolution that specified actions that psychology organizations can take to help mitigate effects of climate change and facilitate adaptation to it (see https://iaapsy.org/site/assets/files/1082/apaw_2020_jan_vol2_1_-_final.pdf).

What then is the Special Project on Climate Change? It inheres to the orientation of the IAAP as a whole to the challenge of global climate change, under Christine Roland- Lévy's leadership and to be continued after her tenure as President. We who belong to the IAAP know of its importance as an institutional actor with an extensive set of international ties; we understand the good it can do through the initiatives it takes, through the support it provides to collaborative efforts, and through the signals it sends with these initiatives and support. More specifically, the Special Project manifests in efforts to build infrastructure and ways of working within the IAAP that will help members in the different divisions to share their research findings, collaborate effectively, and disseminate their knowledge to other actors and the communities in which they work. In a particular sense, though, the Special Project lives, informally and indirectly, in the work of the members themselves in their many and various constellations, and the many ways in which they form bridges, between divisions of the IAAP and between the IAAP and other actors also working on climate change mitigation and adaptation issues.

The contributions in this issue of APAW illustrate these different aspects of the engagement of the IAAP and its members with the challenges posed by global climate change. The first four contributions describe the work and experiences of specific IAAP members and their immediate collaborators, often together with other actors in other contexts. One comes from Susan Clayton, from the College of Wooster and a past president of the Society of Environmental, Conservation and Population Psychology within the American Psychological Association (APA). She is also a contributor to the work of the Intergovernmental Panel on Climate Change (IPCC). Susan writes of the growing involvement of psychologists in climate change issues, as with the IPCC and the Task Force on Climate Change convened within the APA, and she offers some broad recommendations for the work going forward. Among other things, she notes the importance of recognizing how matters of social and geographical context shape problems and solutions. The IAAP can serve a particularly valuable role in helping researchers and practitioners from around the world to develop an international perspective sensitive to such contextual contingencies.

In their contribution, Thijs Bouman and Linda Steg write of the extensive research that they and their colleagues have done on ways to motivate action to address climate change. They note, among other things, the importance of organizations, like the IAAP, in publicly approving and engaging in climate action. The example thus set encourages involvement by individual actors. Note that this work has been immediately accessible for the IPCC, on which Linda Steg has long served and contributed in report writing. Linda, I can add, is a past president of the IAAP Division of Environmental Psychology, and the group she leads at the University of Gröningen, the Netherlands has been highly influential in environmental psychology.

The next contribution comes from Usha Kiran Subba, a professor at Trichandra College in Kathmandu, Nepal, and a practicing psychotherapist there. She tells of the ways in which climate change compounds other challenges that confront the people of Nepal. The demanding natural environment, issues of resource scarcity and armed conflict already undermine mental health for many, and these problems are getting exacerbated by climate change, in ways that particularly affect already vulnerable groups. Yet, there as elsewhere, many people do not want to engage with the problems that climate change has put at their doorstep.

A fourth contribution offering a personal experience of involvement is offered by Gabrielle Gravely, a student in the Masters degree program in Clinical Psychology at Columbia University and a member of the Student Division of the IAAP. She offers some reflections on her participation in the Youth Climate Summit at the United Nations. Like her peers at the Summit, she clearly recognizes that they represent the future, and that they will have to grapple with uncertainties and challenges stemming from climate change. Participation in the Summit boosted her conviction to act and strengthened her hope for the future of the planet. Going forward, the circumstances call on us to cultivate this kind of conviction and hope, within the IAAP and elsewhere.

The next contribution for this issue of APAW describes the practical work within the Special Project to build infrastructure and ways of working within the IAAP. In doing so, it acknowledges the fundamental importance of affording experiences of community, common cause and commitment like those described by Gabrielle Gravely. Sabine Pahl, Mathew White and I write about the further development of an IAAP conference series, the International Conference on Environmental Psychology (ICEP). Organized with the support of Division 4, the series provides an important outlet for psychologists to share their research on diverse topics related to climate change. The most recent iteration of the conference took place last year in Plymouth, United Kingdom. It attracted some 300 participants from 30 countries. In addition to providing a venue for sharing of new research findings, the 2019 ICEP served as a testbed for ideas about how to support meetings while also minimizing their environmental impacts. Many of us have long recognized that new technologies can facilitate exchange among us. In this time of pandemic-related restrictions, many of us have an intensified appreciation not only of the possibilities that the new technologies offer but also of their limitations. Many of us see a need to meet, in person, to share experiences and understandings, to make new acquaintances and maintain old friendships, to create possibilities for serendipitous exchanges and meetings across borders of one kind or another that cannot so easily happen in the context of a digital meeting room. A challenge for the IAAP going forward is to establish strategies and practices that enable members and others to meet, in person, advancing common efforts to meet environmental goals and build community while not exacerbating the problems of concern. The ICEP series is one arena in which such strategies and practices will get developed.

Finally, with a view to the climate-change articles in this issue of APAW, the contribution by Judy Kuriansky, Jennifer Magnabosco and Judy Otto reflects the broad organizational orientation of the IAAP toward the challenge of global climate change. Their article provides background on a recent policy statement from the American Public Health Association that can be of use to psychologists and many others who work with issues involving climate change and mental health. This includes setting the policy statement into "a context of relevant agreements, conferences and actions by the United Nations, UN agencies and related international bodies, as well as ongoing concerted advocacy efforts by the team and colleagues of the International Association of Applied Psychology (IAAP) accredited at the UN, of which the first author is a veteran representative" (p. 10).

Many members of the IAAP now engage with climate change issues in their work. Some of them have an affiliation with the Division of Environmental Psychology. For example, as I write, I have a copy of a new book on climate and psychology beside me, written by one of my Swedish colleagues, Andreas Nilsson, a Division 4 member who works at the University of Gothenburg (Klimat och psykologi: Varför vi inte agerar hållbart och vad vi kan göra åt det. Lund, Studentlitteratur, 2020). I think of a former president, Robert Gifford (University of Victoria, Canada), who has written extensively about reasons for inaction on climate change. I think of another former president, Gary Evans (Cornell University, USA), who published an article on behavioral impacts of climate change in the Annual Review of Psychology last year (https://www.annualreviews.org/doi/pdf/10.1146/annurev-psych-010418-103023). I also think of Giuseppe Carrus, a Division 4 member working at the University of Rome Three, who together with other colleagues there is preparing to convene the ICEP 2021 in Siracusa, Sicily (http://icep2021.com/). Many Division 4 members hope to meet in person there, after the pandemic has subsided and we can travel safely again. Issues related to climate change will figure prominently in the work presented there, as they did at ICEP 2019, and creating conditions for an environmentally friendly meeting is again an important topic of discussion in the planning.

Climate change is of course not only the concern of the Division of Environmental Psychology. Many members of the IAAP have affiliations with multiple divisions, and these multiple affiliations often reflect the multiple aspects of the problems and possibilities they address in their work. I personally have affiliations with the Divisions for health, transportation, and work and organizational psychology, and I have published work on restorative environments and benefits of nature experience that extends across those areas. Just as our specific professional interests lead us to move across the boundaries of Divisions, so too does climate change as a priority for the IAAP and other organizations in psychology call on us to work together regardless of narrow disciplinary identities. I anticipate that members in all Divisions can easily draw connections to climate change issues, if they have not done so already. The connections drawn or yet to be drawn can add to the basis for the Special Project going forward. I anticipate that the many and varied connections we draw will get represented in conference programming, not only for meetings in the ICEP series (which all IAAP members should feel welcome to attend) but also for the International Congress of Applied Psychology and other meetings held under the auspices of the organization. IAAP members who want to discuss ideas with regard to climate-change related conference programming should feel free to contact the responsible organizers, knowing that the organization as a whole wants to promote such efforts. The connections that IAAP members make to climate change concerns can also get represented in the developing webinar series. Members who would like to disseminate relevant work through the webinar series should feel free to direct an inquiry to me.

That's all for now. I hope you find the reading enjoyable and rewarding.

Terry Hartig at the 2019 ICEP in Plymouth, UK.

Psychologists' Involvement in Addressing Climate Change

Susan Clayton[1]

"What does *psychology* have to do with *environmental* issues?" Those who have been working in the arena of environment and psychology for more than 10-15 years have probably encountered some version of this question, as I have: a question that has come not just from ill-informed laypeople but also from publishers and fellow psychologists. But that time has passed. There is currently widespread recognition that psychology is relevant to our pressing environmental problems, including the problem of climate change.

Psychologists have been working for decades to understand the forces that motivate environmentally sustainable behavior. Much of this work is directly relevant to climate change, or can be easily adapted. Actions that will mitigate climate change by reducing the emission of greenhouse gases continue to be an important focus of attention. Increasingly, psychologists and others are also exploring ways to encourage adaptation behavior, such as through actions designed to make one's house more resistant to flooding, to reduce the risk of wildfires, or to adjust agricultural practices to be compatible with new climate conditions. In the face of widespread climate denialism, psychologists have also studied predictors of risk perceptions associated with climate change, and best practices for communication strategies. Such research has the potential for enormous practical impact.

More recently there has been increasing attention to the psychological impacts of climate change. Such impacts can come from direct experience of extreme weather events, which is associated with increases in depression, PTSD, and interpersonal violence. Less noticeable but potentially more widespread are the impacts of gradual changes in climate such as increasing temperature: a growing body of evidence ties higher temperatures not only to aggression but also to psychiatric hospitalizations and to suicide. Climate change will also have a profound indirect on wellbeing by increasing food insecurity and involuntary migration.

Research is beginning to uncover more abstract affects as well: increases in worry, anxiety, and the grief that is associated with damage to emotionally significant places, which can disrupt personal and social identity (Clayton & Karazsia, 2020). The American Psychological Association, which has surveyed Americans about the extent to which climate change is a source of stress or anxiety, has found a significant increase in the past few years (though the questions have not been phrased consistently each year), see Figure 1. Understanding and describing the extent of this kind of psychological damage, as well as the group-based differences in vulnerability, is important in order for people to recognize the current and potential impacts and to prepare to cope with them.

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1 Susan Clayton is Whitmore-Williams Professor and Chair of Psychology at the College of Wooster (USA). Her PhD, in social psychology, is from Yale University. She has authored or edited six books, including the Oxford Handbook of Environmental and Conservation Psychology (2012), Conservation Psychology (with Gene Myers; 2nd edition in press), Identity and the Natural Environment (2003, with Susan Opotow), and most recently, Psychology and Climate Change (2018, with Christie Manning). She also co-authored the American Psychological Association reports on "Psychology and Global Climate Change" and "Psychological Impacts of Climate Change," and she is a lead author on the upcoming 6th assessment report from the Intergovernmental Panel on Climate Change.

At this point in time, the field of psychology is highly engaged with the topic of climate change. A large number of psychologists are working with interdisciplinary task forces and governmental groups to promote environmental sustainability. There are featured symposia at many psychology conferences, and public health-themed conferences around the world are reaching out to include psychologists. The level of individual involvement is too high for me to cover in any detail, but I do want to draw attention to a few noteworthy institutional and international efforts. Institutional efforts are the best way to leverage individual activity to make a difference, and because climate change does not stop at national borders, but the impacts as well as drivers of climate change vary across countries, it can only be effectively addressed by an international body.

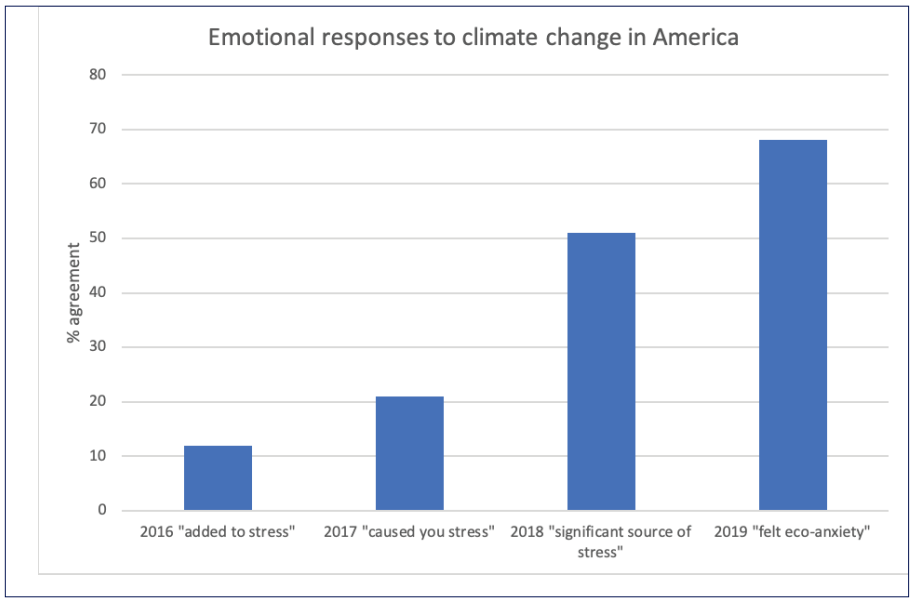

Figure 1: Data from APA Stress in America surveys. Phrasing of questions varied year to year.

The American Psychological Association (APA) has been involved with climate change since a 2010 task force headed by Janet Swim (later published in *American Psychologist*; Swim et al. 2011), and has co-sponsored several white papers on mental health and climate change with EcoAmerica (Clayton et al., 2017). In Fall 2019, it stepped up the game by co-sponsoring a summit meeting that gathered leaders of 43 psychology associations, including the International Association of Applied Psychology, to address climate change. Although COVID-19 has temporarily suspended plans for another in-person meeting, the group has continued to communicate and participants signed a resolution pledging to conduct more research

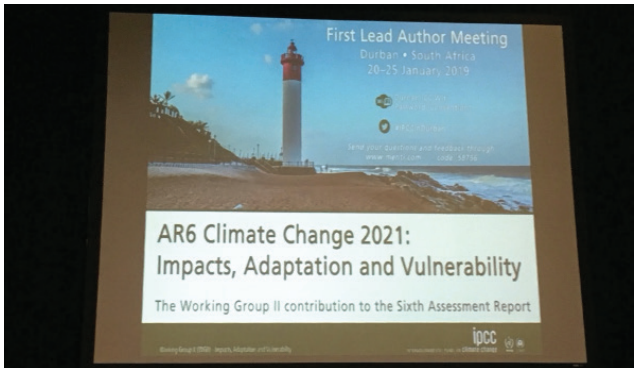

Figure 3: Opening slide from the first meeting of the IPCC 6th Assessment Report Working Group II. Photo credit: Susan Clayton

on the topic as well as work through communication and advocacy to help address the problem.

Even more global is the increased involvement of psychologists with the Intergovernmental Panel on Climate Change. The 5th assessment report from the IPCC, in 2014, talked about mental health impacts very briefly, but the 6th assessment report, due out in 2021, will include much more information related to these effects. The number of psychologists involved as lead authors and contributing authors, reporting on behavioral mitigation and adaptation as well as on psychological impacts, is also significantly larger than in the previous report. The IPCC is the most authoritative international body documenting the likely impacts and mechanisms of climate change, so the inclusion of psychological information means vastly greater potential impact of that information.

For psychological research to be maximally effective in helping society to address climate change, there are ways in which the general research focus could be improved. Nielsen et al. (2020) suggest a few things to consider: pick the right behavior (important, malleable); focus on other roles beside that of consumer; include temporal dimension, such as the extent to which behavior change persists; consider socio-cultural context and constraints; work with others. Although psychologists are addressing the issue of climate change, and people are listening to what psychologists have to say, there is much more work that needs to be done. If psychologists want their research to matter, they need to be mindful about the problems that are most important and think about the other professionals with whom they need to collaborate. An international perspective is crucial for recognizing the ways in which both problems and solutions are shaped by the social and geographical context. But many psychologists are enthusiastic about the opportunity to show the utility of psychological science. Our involvement is just beginning.

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Motivating Climate Action

Thijs Bouman & Linda Steg[1]

Introduction

Climate change is one of the most pressing issues of our time. To reduce climate change and its negative impacts, urgent climate action is needed at an unprecedented wide-ranging scale (Hackmann, Moser, & St. Clair, 2014; Intergovernmental Panel on Climate Change, 2018; Vlek & Steg, 2007). Such actions can be aimed at mitigating climate change as well as at adapting to climate change, and can range from supporting climate policies and system changes to performing climate-related behaviours oneself. Importantly, climate action is needed at all layers of society, including individual citizens. A key question therefore is what motivates individuals to engage in climate action?

General motives underlying climate action

Different motives can underlie individuals' climate actions. Individuals' engagement in climate action is not only motivated out of self-interest, as sometimes assumed in popular discourse, but often also by personal goals to serve a greater good. Indeed, research has indicated that stronger endorsement of altruistic and biospheric values – which reflect general overarching lifegoals to care for others, nature and the environment – consistently predict more engagement in climate action. Conversely, stronger endorsement of egoistic and hedonic values – which reflect goals to obtain status, possessions, pleasure and comfort – are often negatively associated with engagement in climate action, mostly because many climate actions are perceived to have more costs than benefits for egoistic and hedonic values (Bouman, Steg, & Kiers, 2018; De Groot & Steg, 2007, 2008; Dietz, Stern, & Guagnano, 1998; Perlaviciute & Steg, 2015; Schultz & Zelezny, 1999; Steg, Perlaviciute, van der Werff, & Lurvink, 2014; Stern, Dietz, & Guagnano, 1998). Importantly, research shows that individuals often strongly endorse biospheric and altruistic values, more so than they endorse egoistic values (Bouman & Steg, 2019, 2020; S. H. Schwartz, 1992), and appear accordingly quite open to climate action (Bouman & Steg, 2019, 2020). This suggests there is a relatively strong motivational foundation for climate action that could be targeted by interventions and strategies to promote climate action.

In addition to these personal motivations, individuals can also be motivated to engage in climate action by social factors, in particular by the norms and values of the groups that they identify with(Fielding & Hornsey, 2016; Jans, Bouman, & Fielding, 2018). The degree to which individuals perceive others to endorse biospheric and altruistic values (Bouman & Steg, 2019, 2020; Bouman, Steg, & Zawadzki, 2020), to approve climate action (i.e., injunctive norms) and to engage in climate action (i.e., descriptive norms) (Cialdini, Reno, & Kallgren, 1990; Keizer, Lindenberg, & Steg, 2008; Nolan, Schultz, Cialdini, Goldstein, & Griskevicius, 2008; Schultz, Nolan, Cialdini, Goldstein, & Griskevicius, 2007) can all for instance motivate individuals' engagement in climate action.

How to ensure motivations will translate into climate action?

Whereas many people find social and environmental considerations highly important and seem therefore strongly motivated to engage in climate action, current climate action often appears limited and insufficient to reach global climate targets(Intergovernmental Panel on Climate Change, 2018). Accordingly, a key question is what holds individuals back from acting on their values?

One key reason why individuals may not consistently engage in climate action that benefits the altruistic and biospheric values they relatively strongly

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endorse is that many climate actions are also associated with (high) personal costs and inconvenience (De Groot & Steg, 2008; Dietz, Fitzgerald, & Shwom, 2005). For instance, the financial and time investments associated with the implementation of renewable energy systems could be perceived as too high for the environmental benefits such systems are perceived to generate. High costs may be a main barrier for people to act on their altruistic and biospheric values, and may thus hold individuals back from engaging in climate action. To overcome such barriers, system changes are needed that make climate actions more feasible, alleviate personal costs and make sustainable options relatively more attractive, enabling people to act on the things they personally strongly care about (Intergovernmental Panel on Climate Change, 2018).

Another important factor that could make people refrain from taking climate action is that they often underestimate how much others care about altruistic and biospheric values and climate change (Bouman & Steg, 2019; Bouman et al., 2020; Hanel et al., 2018; Sanderson et al., 2019; Steg, 2018). Such (mis)perceptions are obviously not very stimulating, and can make individuals feel unsupported, alone or even rejected in their efforts to mitigate or adapt to climate change, which may reduce their engagement in climate action. Changing such misperceptions – for instance by making it visible that fellow group members, leaders and organizations do strongly endorse altruistic and biospheric values, and approve and engage in climate action – can therefore be critical to effectively promote climate action among individuals, particularly those who are not strongly personally motivated (Bouman & Steg, 2019; Bouman et al., 2020; Ruepert, Keizer, & Steg, 2017).

In addition, people may not consistently act on their values because they do not always consider the impacts of actions on their altruistic and biospheric values. Hence, highlighting benefits (or costs) of a climate action for altruistic and biospheric values can effectively promote (or discourage) this action (Steg, 2016; Steg, Bolderdijk, Keizer, Perlaviciute, & Bolderdijk, 2014). Importantly, as altruistic and biospheric benefits are intrinsic to climate actions, highlighting such benefits may result in relatively enduring effects (i.e., less likely to wear out) which may generalize to other climate actions as well (e.g., positive spill over effects) (Peters, van der Werff, & Steg, 2018; Van Der Werff & Steg, 2018), potentially having a relatively substantial and wide-ranging influence.

Promoting a climate action by focusing on its benefits for hedonic and egoistic values may also effectively promote this action, but this effect appears less consistent and less wide-ranging as such benefits are often extrinsic to climate actions and effects of these benefits typically disappear when incentives are no longer in place (Bolderdijk, Gorsira, Keizer, & Steg, 2013; Bolderdijk & Steg, 2015). Moreover, for many climate actions, such benefits are perceived as small and not worth the effort (Bolderdijk & Steg, 2015; Dogan, Bolderdijk, & Steg, 2014); and directing individuals' attention to these benefits may reduce individuals' focus on environmental considerations and intrinsic motivation, which have proved powerful motivators of climate action (Bolderdijk, Steg, & Postmes, 2013; D. Schwartz, De Bruin, Fischhoff, & Lave, 2015).

Conclusion

Hence, an important reason to engage in climate action is to attain social and environmental goals, which are values that are strongly endorsed and prioritized by many individuals. Accordingly, these motives could – next to alleviating personal costs and promoting personal benefits – be addressed by strategies and interventions aimed at promoting climate action. Interestingly, since environmental and social considerations are often close to people's hearts, actively engaging in climate action for social and/or environmental reasons may elicit positive feelings, since doing something good for the environment is meaningful and enhances wellbeing (Taufik, Bolderdijk, & Steg, 2014, 2016; Venhoeven, Bolderdijk, & Steg, 2016). Hence, even though climate actions are primarily performed for the greater good, taking action may also be strongly personally rewarding.

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Climate Change Challenge and Response in Nepal

Usha Kiran Subba[1]

In Nepal as elsewhere, people are concerned about issues of enormous importance to our society, such as the health of our rivers and forests, pollution of the air and water, the availability of energy, and of course the current health emergency. Yet, the larger issue of climate change will come to the fore, worsening the situation for all of us in diverse respects. Although researchers encourage policy to promote and alleviate the quality of life of human beings, cooperating with leaders, many people seem to be unaware of what is happening with our natural environment and of the consequences already on our door steps. Some political leaders and law makers do not even refer to climate change, as if they have not heard the term. It seems there is not much to hope from the regulatory agencies or tribunals or even from the judiciary.

Yet, the constitution of Nepal, Article 30 states "Every citizen shall have the right to live in a clean and healthy environment". The country has adopted the notion of green development to minimize stress on the environment and to mitigate impacts of climate change. The government has formulated policies and enacted Acts and regulations such as the Environment Protection Act of 1996, the Environment Protection Rules of 1997, and the Ozone Depleting Substances Consumption Rules of 2001. Environment impact assessments (EIA) for development have been institutionalized and standards related to industrial effluents and air quality has been implemented. The 12th 3-year interim plan (TYP) of the government of Nepal stresses the need for effective monitoring system for the implementation of approved standards, strengthened coordination mechanism amongst the line ministries and agencies, and harmonizing environment and sectorial policies and programs.

Thus, in Nepal as elsewhere, we see competing tendencies, with action to address climate change and also evidence of neglect and even denial of the problem. We also see a crucial issue of inequity. The Global Climate Risk Index for 2014 identified Nepal as 7th most vulnerable of the countries covered (Kreft, Eckstein, Melchior et al., 2017), even though Nepal's share in global greenhouse gas emission, the driver of global climate change, is only 0.027 per cent (MoPE, 2016). Climate change has heavy impacts on many people, and particularly those on the social and economic margins whose livelihoods are dependent on land-based natural resources. For this and other reasons, addressing impacts on the local level has been central to the Climate Change Policy of 2011, which directs up to 80% of the climate budget to efforts on the local level, much of it dedicated to developing adaptive capacity of the people and their livelihoods. Again, much of the impacts of the climate change are likely to be manifested in terms of changes in the

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availability of water for rural and urban water supply and for agricultural uses which is the key natural resource to sustain the livelihoods. Throughout the country, more so in the hills and mountains, availability of water almost entirely depends on rainfall pattern and the choices of water sources for different uses are limited. There are evidences of rapid depletion of spring and stream sources throughout the lower and middle mountain regions of the country producing scarcity of water for domestic and agricultural uses (IGES, 2015).

Clearly, then, the people of Nepal, and particularly in rural areas, faced significant challenges stemming from climate change. The country already faces significant challenges from the way in which people can settle in a natural environment subject to flooding, landslides, and massive earthquakes. The country also has internal political and sociocultural conflicts, notably between the people living on the plains and those living in the foothill areas. Some of this conflict is violent, as with the ongoing Maoist insurgency. The people of Nepal also suffer from massive internal forced displacement as well as social, political, economic and gender-based forms of discrimination. Climate change compounds these problems, feeding widespread mental health problems and attendant need for care, particularly in vulnerable groups already struggling from lack of access to basic resources, insecurity and exposure to violence, and one or more forms of discrimination.

Psychologists in Nepal are working to serve these needs. At the same time, we understand the need for civil society and the government in Nepal to act effectively and immediately. The need is great. We do what we can, and we appreciate the collaborations we have through organizations like the IAAP that help us move the public to address issues of climate change. We must do this. Otherwise, we will be silent spectators while the global community loses the race to save humanity.

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Youth Dedication to Climate Action: A Reflection of the Youth Climate Summit at the United Nations

Gabrielle Gravely[1]

The United Nations building seemed to illuminate with passion from the dedication of young climate action leaders committed to change the environmental trajectories when they gathered to attend the historic day-long "First Youth Climate Summit" on the 21st of September, 2019. The youth action leaders came from over 140 countries, armed with their ideas and pledges and action initiatives. Activists such as Greta Thunberg, the teenage Swedish environmental activist, and Wanjuhi Njoroge, the founder and president of Nelig group in Kenya, commanded change to combat the current climate crisis. The summit took place at the United Nations headquarters in New York City. Reflections in this article recount key points stated at the summit and impressions from the robust program.

Attending the summit was part of my field work from the class I am taking on "Psychology and the United Nations," taught by professor Dr. Judy Kuriansky, who has been a representative of the International Association of Applied Psychology at the UN for many years. In her class, we have learned about the contributions of psychologists to the UN Agenda 2030 for Sustainable Development, including about SDG 13, about action for climate change. It is a topic about which I have great interest.

At the summit, the United Nations Secretary-General (SG), Mr. António Guterres, stood in allegiance with the youth, declaring that the trials and struggles of the youth to improve the climate must be heard. Despite the SG's esteemed role and experience, he proclaimed that even *he* must listen at this moment, and urge action.

"We have no time to lose", he exclaimed.

photo credit: United Nations

Rising to the SG's affirmation of the need for action, young entrepreneurs pitched their innovative solutions to combat the climate crisis. Five young people participated in a contest, describing their tech-based solutions to address climate challenges to a panel of environmental executives. These innovations included: 3-D printers that convert plastic waste; data storage being transformed into plant DNA; utilizing crowdsourcing agricultural data to inform farmers; weather apps designed to aid rural farmers in Africa; and a sustainable fashion platform. A winner was chosen by a panel, but all agreed on the valuable outcomes from the innovations of all the participants. These outcomes were that all the contestants

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Reported by Gabrielle Gravely, a member of the Student Division of the International Association of Applied Psychology, in the Masters degree program in Clinical Psychology at Teachers College Columbia University, who was a student in Dr. Judy Kuriansky's class on "Psychology and the United Nations." Gabrielle was an Environmental Conservation Peace Corps Volunteer and plans to pursue a career within the global mental health field.

photo credit: United Nations

presented valuable solutions to challenges urging immediate climate change action, and that their proposals sparked an entrepreneurial focus about the environment in both the youth and the adults attending the summit. Further, this session prompted conversation among youth to convene in later sessions to share their stories of triumph, and burden, as they fight climate change.

"Youth may only be 25 percent of the population but we are 100 percent of the future," professed a dedicated participant at a session on "New Commitments for and by Youth."

Youth groups who have pledged to actively combat environmental challenges from across the globe outlined their goals and strategies to assist in the fight against global warming. One global alliance of climate activists pushed for the inclusion of young people in policymaking. A representative from an association, Earth Uprising College, who describe themselves as "a team of young people who want to save the planet," explained their strategy to integrate climate initiatives into college level courses and curriculum across the globe.

"There is no time for stagnation. There is no time for excuses", proclaimed another young participant leader calling for careful and immediate climate change.

Each speaker echoed the urgency for change throughout the audience.

Being able to witness the commitment to climate change by the young generation motivated me to ask how I, too, can be a climate change leader. I was filled with enthusiasm as I witnessed the dedication of these active young people from various areas of the world.

This summit aroused a sense of cognitive dissonance within me, by forcing me to ask myself, "If I care so much about this topic, then why am I not doing enough to ensure a better climate for future generations?"

My answer is that attending this Youth Climate Summit gave me conviction that I need to become active, and motivated me to consider the global future of our world, and what I am going to do about it.

The experience also gave me hope for the future of the planet.

The International Conference on Environmental Psychology: An IAAP Conference Series and Trial Settings for Environmentally Friendly Meeting Practices

Terry Hartig[1], Matthew White and Sabine Pahl[2]

During these past months of Covid-19 related restrictions on mobility and meetings, many readers of Applied Psychology around the World will have seen one or another conference either cancelled, postponed, or moved entirely on-line. The Centennial Congress of Applied Psychology in Cancun is just one prominent example that we know has affected many IAAP members. The reasons for the decisions to cancel, postpone or re-format conferences are understandable and defensible, and we sympathize with all of those who have had their plans disrupted, sometimes at great cost in terms of investments made and opportunities lost. At the same time, many of us are of necessity asking what lessons we can learn from these difficult circumstances with a view to the possibilities for eventually meeting again.

For many IAAP members, and perhaps particularly for those affiliated with the Division of Environmental Psychology (Division 4), some lessons to learn from the pandemic have to do with the response of humanity to an unfolding anthropogenic catastrophe of far greater scope and significance than the current pandemic. It will not have escaped anyone reading this that climate change has already engendered harm to humans and other species across the globe. Not only that, it will continue to affect life on Earth over a period far greater in duration than that of the present pandemic – and the next one and the next one.... Terrible as it may sound, for climate change mitigation and adaptation, the pandemic offers some benefits. Without wanting to oversimplify a complex dynamic, we can note that it offers a brief respite in some forms of human activity, such as fossil-fuel based travel, that produce the greenhouse gas emissions that exacerbate global warming. It also offers perspectives on what cities can be like when traffic declines dramatically, air quality improves, and people go out into car-free streets and breathe cleaner air. It gives people time for reflection on what they have lost in the way of valued activities.

Of particular concern for us here is the way that the pandemic has reinforced appreciation of the need to find ways to realize the values of scientific meeting without the risks entailed by travel. Many involved with climate change research and practical activities have long and well understood this need. The pandemic is providing something of a trial run of a future in which travel for scientific meetings must be constrained to a far greater extent because of climate concerns.

Some of the lessons we are taking away from the Covid-19 pandemic therefore have to do with ways to use existing and emerging digital technologies for scientific exchange as a means to reduce climate impacts of ordinary business travel. Some of those lessons also bear on related goals involving matters of equity and environmental justice, with a view to making meetings more inclusive, opening for broader participation by people without the economic means to attend a conference in some distant location. The range of channels offering potential for

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interactions in a virtual meeting can also be beneficial. For example, using a chat function to provide comments or ask questions might benefit those who would feel uncomfortable speaking up in front of colleagues. At the same time, though, some of the lessons we are taking away from the Covid-19 pandemic have to do with the appreciation of the values of meeting in person. The digital technologies do support an effective exchange of information and co-working, but they do not so well serve some of the interpersonal processes that also underlie the international scientific enterprise. Colleagues want to meet, in person, for good reasons: to make new acquaintances and maintain old friendships, to create possibilities for serendipitous exchanges and meetings across borders of one kind or another, to experience the places where colleagues live, to share their experiences and their understandings of those places, to learn together about the particularities of place. This cannot so easily happen in the context of a digital meeting room, even though we are continually adapting and finding new virtual ways of connecting effectively.

In light of the lessons from the Covid-19 pandemic, and in light of what we know of what global climate change demands of us, we recognize that a major challenge for the IAAP will be to establish practices that enable its members to build and maintain community while also reducing environmental impacts of its meeting practices. This will require attention to basic matters of infrastructure and ways of working within the IAAP. In this regard, work with a relatively new series of IAAP conferences can prove instructive. Here we will provide some background on the conference series; provide examples of steps toward an environmentally friendly meeting culture; and comment on possibilities for future conferences that build on the lessons of the Covid-19 pandemic and our understanding of the needs for climate change mitigation and adaptation.

Some background on the International Conference on Environmental Psychology

One of the most prominent international conference series in environmental psychology grew from the biennial meetings held by the Environmental Psychology Section of the German Psychological Society (Fachgruppe für Umweltpsychologie in der Deutsche Gesellschaft für Psychologie, DGPs). To open for broader participation and broader dissemination of their research, the members of the Section adopted English as a second official language of their meetings, starting in the early 2000s. This move resulted in so much growth in participation over the subsequent years that the Section finally decided that their series – the Biennial Conference on Environmental Psychology (BCEP) – would be more sustainable if managed by a larger international actor. Around the time of the BCEP held in Magdeburg in 2013, the leadership of the Section turned to the leadership of Division 4 for support in this regard, as many Division 4 members had come to appreciate the high scientific standard of the BCEP conferences and attended them regularly. Finally, in 2015, representatives from the DGPs and the IAAP signed a transfer agreement. According to that agreement, the series would continue on a biennial basis, with its meetings still held in odd-numbered years to avoid conflicts with the IAAP congresses. The new series took on the name International Conference on Environmental Psychology (ICEP). The first ICEP held under the auspices of Division 4 took place in A Coruña, Spain, in 2017, with the organization capably led by Ricardo García Mira and Adina Dumitru from the People Environment Research Group at the University of A Coruña. With more than 300 enthusiastic participants presenting on a wealth of topics, the conference was a success, and so too the transfer from the DGPs Section.

We are happy to say that this success carried over into the most recent ICEP, which took place 4-6 September 2019 at the University of Plymouth, UK. Two of us (Sabine and Mathew) led the Local Organizing Committee (LOC). The conference aimed to include

the latest scientific work in environmental psychology and to encourage greater integration with related disciplines such as landscape architecture, environmental economics and environmental policy. To this end, an interdisciplinary group of keynote speakers was invited to share their perspectives and identify where the links to environmental psychology could be made with related disciplines and applied contexts. In total, 286 oral presentations were given, and a poster session with 59 contributions was held during one extended afternoon coffee break. Poster presenters were also encouraged to keep their posters on display for the entire conference. Sponsorship and other support for the conference came from the University of Plymouth' Sustainable Earth Institute and Marine Institute, which reflected on the inter-disciplinary approach taken with the conference. Support also came from the Environmental Psychology Section of the DGPs and from the IAAP Executive Committee, in keeping with the 2015 transfer agreement. Altogether, ICEP 2019 had 331 attendees, and of paying attendees, just over a third (n = 121, 36.5%) registered as students.

While preparations were underway for ICEP 2017, the Division 4 leadership had developed and implemented procedures for bidding to host a future ICEP; the 2019 conference in Plymouth was the first result of the new bidding process, and the successful bid for the 2021 ICEP was put forward by Giuseppe Carrus and colleagues at the University of Rome Three. So, just as the 2017 ICEP concluded with the announcement that the 2019 ICEP would be held in Plymouth, the 2019 ICEP concluded with the announcement that the 2021 ICEP would be held in Syracuse, Italy. Planning is now underway for an in-real-life meeting there at the end of March, 2021; however, those of us involved in the planning do well understand that if the pandemic is still underway and travel not sufficiently safe, postponement or some other alternative arrangements will have to be made. In the meantime, the planning is taking into consideration the lessons learned and examples made in A Coruna and Plymouth. These, together with the new LOC's own ideas and understanding of the facilities and circumstances relevant for Syracuse, will help give the conference an environmentally friendly profile.

Steps toward an environmentally friendly meeting culture

A meeting can be environmentally friendly in multiple ways. Drawing on the experience with ICEP 2019, we offer examples in three categories: scientific programming, environmental impact reduction, and celebration of place. As will be seen, these are not mutually exclusive. Consistent with the concerns of the IAAP Special Project on Climate Change, we offer them here as sources of inspiration for further development of infrastructure and ways of working within the IAAP as they relate to those scientific meetings for which the stated goals and needs are best served by having some substantial proportion of participants meet in person.

Scientific programming

Issues related to global climate change figured prominently in the programme at ICEP 2019. One of the keynote speakers who directly addressed climate change in her talk was Susan Clayton (College of Wooster, USA), who also contributed a commentary to this issue of APAW. Among other topics in her keynote, she considered how psychology can help to understand climate change perceptions, impacts, and responses and also ways to help people make some personal connection to climate change in the effort to bring about effective adaptation and mitigation. In another keynote address, delivered as the C. F. Graumann Lecture, Gisela Böhm (University of Bergen, Norway; see photograph below) spoke of climate change in the context of studies informed by a dual process model of environmental behaviour that explains how different emotions work to shape individual's risk assessments. She thus demonstrated a joining of basic and applied research often seen environmental psychology.

Keynote speaker Gisela Böhm (left) and Sabine Pahl (right), one of the authors of this article and a leader of the Local Organizing Committee. They are joined by Florian Kaiser, a colleague with whom they have cooperated in the Environmental Psychology Section of the German Psychological Society (DGPs), which initiated the conference series that was the forerunner of the ICEP series.

In addition to keynote addresses, many of the symposia also brought together presentations that directly or indirectly addressed climate change issues, as with sustainable food choices (less meat à less greenhouse gas emissions) and active travel (more walking and biking à better health and less car use). The program in its entirety is freely available for perusal on-line; see https://www.plymouth.ac.uk/schools/psychology/international-conference-on-environmental-psychology/explore-the-programme .

Although it hardly seems surprising for a conference on environmental psychology to have a wealth of scientific programming concerned with climate change, the topic examples just given also speak to the particular concerns of other divisions in the IAAP, such as assessment, health and transportation. They also clearly link to the UN's Sustainable Development Goals (SDGs). Going forward, we would encourage those responsible for meetings to promote submissions that in one way or another address the causes and/or consequences of climate change and approaches to mitigating and adapting to its effects in the context of the SDGs.

One other feature of the scientific program that deserves mention here is the siting of one of the social events in the UK National Marine Aquarium in Plymouth. In addition to the various social activities, the aquarium venue provided a context for presenting some of the research done by researchers in Plymouth on issues around human behaviour and the marine environment. Participants could see first-hand some of the biodiversity at risk with climate change and other threats to the oceans, and so more readily make connections to the research presented in the conference.

Reducing environmental impacts while promoting environmentally friendly alternatives

We are not the first to observe that LOCs can anticipate the various impacts of a conference and work to reduce them while also showcasing and otherwise supporting alternatives that are environmentally friendly (e.g., Bankamp & Seppelt, 2013). This includes measures related to travel to and from the conference location; aspects of the conference venue; accommodations; travel on-site; meals and refreshments; and conference materials.

Conference attendees who chose to travel without flying, for example from countries such as Switzerland, the Netherlands and Germany.

The ICEP 2019 conference systematically addressed these various aspects of the conference environmental profile. First, with regard to travel and from the location, the LOC made preferential travel arrangements with the UK train company Great Western, and they also offered detailed guidance and bespoke support for delegates who wished to travel to the UK from another country without flying. The group of delegates who then did so had a special meeting and most of them can be seen in the photograph below. While giving special recognition to those who

made the extra effort to travel by train, the LOC and professional conference support team took care not to shame those who for one reason or another chose to travel by air.

As for the conference venue, all sessions could be hosted in the Roland Levinsky Building, an award-winning multi-purpose building on the University of Plymouth campus. Named after a prominent former professor and chancellor at the university, the building has a number of sustainable design features, for example related to low energy use, rainwater harvesting, the use of windows on walls and roof to enable natural lighting indoors, and a large atrium space that serves a low-energy ventilation system as well as the lighting (see photograph below). The building has several lecture theatres as well as many smaller seminar rooms, and these, together with the large atrium, made it possible to accommodate all of the plenary sessions, oral and poster sessions, lunches and coffee breaks in one location. This not only aided navigation and made transitions easier but also aided social networking and inclusivity.

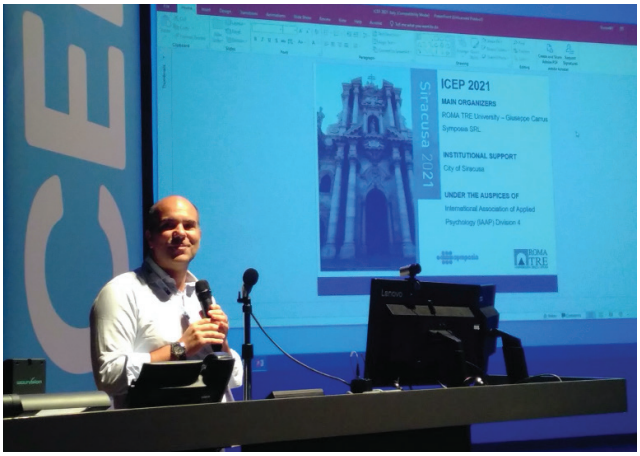
With regard to accommodations and travel on-site, the LOC recommended hotels within different price ranges, all within walking distance of the conference venue. The LOC also included a Plymouth walking distance map in the conference book.

As for meals and refreshments, all food and drink at the venue were vegetarian and sourced from local suppliers. By investing in South West England producers, the catering service used by the LOC contributes to citywide initiatives to alleviate the lack of access of healthy food in the city and provide community access to sustainable cafes. Furthermore, the LOC included a map of refill locations for tap water in the conference handbook. Tap water in the UK is perfectly drinkable, and the LOC wanted to encourage delegates to refill water bottles.

Finally, the LOC made several choices with regard to conference materials that served both to reduce environmental impacts and to support providers of circular-economy products. The name badges were made from recycled materials and were recyclable, and the LOC asked for them to be returned at the end of the conference so they could be used again. The lanyards for the name badges were produced from recycled drink bottles. The conference bags were made from natural unbleached cotton for reuse. The notebooks provided to participants were made with recycled paper, and the accompanying retractable ballpoint pens were made from certified sustainable timber from managed forests. Finally, the LOC did not print a book of abstracts or conference programme, but instead made digital copies readily available to delegates, thus greatly reducing the use of paper and other materials (and costs).

Celebration of place. Some of the measures already mentioned served not only purposes of scientific programming, impact reduction, and promotion of friendlier alternatives, but also celebrated the place in which the participants had gathered. In addition to information on research done there, the evening at the UK National Marine Aquarium offered a 'Taste of the West' event with complimentary food stalls of local produce. Those who attended received a glass to use when sampling the different drinks on offer, and they were free to take this home in a protective cardboard box.

As another meaningful gift, all participants received in their conference package a Beebomb, with a mix of 18 British wildflower seeds, fine, sifted soil and locally



Giuseppe Carrus presenting the next conference in the ICEP series; Syracuse, Italy, in late March, 2021 and in real life, circumstances allowing.

sourced clay, handmade in Dorset. The seeds are native species and designated by the Royal Horticultural Society as "Perfect for Pollinators". Beebombs just need to be scattered onto cleared ground to create a wildflower meadow that will #bringthebeesback.

Finally, the participants celebrated the place with song and dance. The evening at the aquarium featured a sea-shanty singers' group (fitting for a town rich with histories of sailing and sailors). And the well-attended conference dinner, which took place at the city's largest hotel, featured a local ceilidh band who taught delegates several traditional ceilidh dances. Many brave people cast themselves into this with obvious joy, and as we understand it no middle-aged bodies suffered harm that outweighed the delight.

Sabine Pahl and Mathew White, on the left, led the Local Organizing Committee for ICEP 2019. Here they are joined by the participants in a special interactive plenary session on the future of scientific publishing in environmental psychology. Starting third from left, they are Susan Clayton (a specialist in conservation behavior and the psychology of climate change), Charles Ogunbode (a specialist in climate change concerns and perceptions of impact), Linda Steg (past-past president of Division 4), Wes Schultz (past president of Division 4), and Sander van der Linden (editor of the Journal of Environmental Psychology, which is published with the cooperation of Division 4).

In closing

In addition to providing a venue for sharing of new research findings, the 2019 ICEP served as a trial setting for ideas about how to support scientific meetings while also minimizing their environmental impacts and promoting environmentally friendly alternative practices. Many of us have long recognized that new technologies can facilitate our scientific exchange. In this time of pandemic-related restrictions, many of us have an intensified appreciation not only of the possibilities that the new technologies offer but also of their limitations. After this time of restrictions, many of us feel a need to meet, in person, to share experiences and understandings, to make new acquaintances and maintain old friendships, to make room for serendipity. A challenge for the IAAP going forward is to establish strategies and practices that enable members and others to meet, in person, advancing common efforts to meet environmental goals and build community while not exacerbating the problems of concern. The ICEP series is one arena in which such strategies and practices will get developed. As such, work with the ICEP series is congruent with the practical orientation of the Special Project on Climate Change to build infrastructure and ways of working within the IAAP that serve the broader societal response to climate change.

We have not tried to offer an exhaustive account of what has been done toward this end so far in the ICEP series nor what we have in mind for the future. We might for example have said something here about how, in procedures for bidding to host a conference, those responsible for a conference series can promote the development of an environmentally friendly, sustainable approach. We might have said more about all the small and subtle measures that facilitate the community building which in our view lists among the fundamental purposes of such meetings.

But we can take that another time. For now, we will close by expressing the hope that you can stay safe and healthy through the remainder of the pandemic. We look forward to seeing you at an environmentally friendly ICEP or ICAP in the not-too-distant future.

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Climate Change, Mental Health and Well-being: A New Policy Statement for Advocacy

Dr. Judy Kuriansky[1], Dr. Jennifer L. Magnabosco[2], Dr. Judy Otto[3]

Climate change continues to have extensive and often devastating impacts around the world, with dangers to humans, animals, plants, sea life, and the Earth's environment. To date, insufficient policies, financial support, political will, effective programs and behavior change exist to guide action against the negative impacts of climate change. Also, more attention is paid to the dangers that climate change poses to the physical world and physical health compared to the dire impact on people's emotional and psychosocial well-being. To address this inequity, some stakeholders, including civil society organizations representing community-based, professional and trade organizations are advocating passionately about this issue. Additionally, international bodies, like the United Nations and prominent professional organizations in the United States such as the American Public Health Association, the American Psychological Association and the National Association of Environmental Professionals, hold ongoing conferences, create and post a variety of resources, and engage in advocacy activities at multiple levels, to address the ill effects of climate change and to promote mental health and well-being.

This article describes a new policy statement published by the American Public Health Association (APHA) that can be of significant use to psychologists and a wide spectrum of stakeholders committed to the relationship between mental health and climate change. The sections below summarize the development of the policy statement, its importance, recommended action steps and the APHA process of review and approval. This outline can serve as a useful guide for advocacy in general. Additionally, the policy statement is put in the context of relevant agreements, conferences and actions by the United Nations, UN agencies and related international bodies, as well as ongoing concerted advocacy efforts by the team and colleagues of the International Association of Applied Psychology (IAAP) accredited at the UN, of which the first author is a veteran representative.

Authors of the APHA policy statement on climate change and mental health (L-R): Jennifer Magnabosco, Judy Otto, Judy Kuriansky

Overview of the Policy Statement

A policy statement on climate change, mental health and well-being was published in November 2019 by the APHA entitled, *"Addressing the Impacts of Climate Change on Mental Health and Well-being"*. APHA released the statement into the public domain on its

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website, as part of its policy statement database, for use by its members and the public at large after its annual meeting held in Philadelphia. The statement was written by the three authors of this article -- all members of the APHA Mental Health Section -- in accordance with APHA's author guidelines (APHA, 2018) and policy statement review process, and as part of the activities of the Climate Change and Mental Health Working Group of the Mental Health Section. This policy statement was the first of its kind in the APHA policy statement database to "comprehensively address climate change impacts on mental health, well-being, and resilience (both structural and psychosocial) with cultural sensitivity [and] serves as APHA's only policy statement on this topic to date" (APHA, 2019). The authors hope that all stakeholders will join in helping to advocate about, and implement, the "action steps" of the policy statement to realize the prioritization of the mitigation of climate change effects on mental health and well-being.

Background of Select Efforts by the United Nations and International Bodies about Climate Change and Mental Health

To best ensure effectiveness, advocacy efforts need to be grounded in documents, agreements and actions by recognized international bodies. Select relevant and important international actions, agreements and conferences, as well as work of UN agencies, specialized UN agencies, and related international bodies, which served as initial, and ongoing, inspiration for the creation and completion of the APHA policy statement described in this article. These include:

- The United Nations' long history of commitment to the well-being of the planet and to action about climate change can be traced to the 1992 "Earth Summit" which in turn led to the UN Framework Convention on Climate Change (UNFCC), sessions of the Conference of the Parties (COP) held in various cities around the world, and the landmark 2015 Paris Agreement (United Nations Climate Change, 2016).
- The UN Agenda 2030 for Sustainable Development was adopted by the 193 member states of the UN in September, 2015 consisting of 17 goals with 169 targets, where SDG 13 calls for taking "urgent action to combat climate change and its impacts" and SDG3 about "good health and well-being" includes Target 3.4 which calls for the "promotion of mental health and well-being" (United Nations General Assembly, 2015).

- UN Sustainable Development Goals logos: SDG3 on Health and Well-being and SDG13 on Climate Change
- The UN Climate Action Summit was convened at UN headquarters in New York City on September 23, 2019, entitled, *"Climate Action Summit 2019: A Race We Can Win. A Race We Must Win"* (United Nations, 2019a), at which important commitments were made by governments, cities, and private sector companies, to ensure that climate actions outlined in the UN 2030 Agenda were accelerated, including better health for all and protection of the most vulnerable.
- The *"First Youth Climate Summit",* held at UN headquarters in NYC on September 21, 2019, showcased the ever-increasing youth voice promoted vigorously by the UN, that is concerned about the effects of climate change on everyday life, including mental health (United Nations Environment Programme, 2019).
- The Political Declaration on Universal Health Coverage (United Nations, 2019b)
- affirms the rights of all peoples to mental health, and underlines that resilient and people-centered health systems are necessary to protect all peoples.

- The Sendai Framework for Disaster Risk Reduction Plan for 2015-2030 describes roles of national governments and other stakeholders to reduce disaster risk and losses and to "enhance [the provision of] psychosocial support and mental health services for all people in need" (United Nations Office for Disaster Risk Reduction, 2015).
- The Global Compact on Safe, Orderly and Regular Migration refers to the importance of psychological and other counseling services, and psychosocial assistance, for migrant and refugee populations, with specific mention of climate refugees forced ot leave their land due to climate-related events (United Nations Office for Disaster Risk Reduction, 2015).
- The UN Development Programme supports more than 800 active climate change projects and programmes in more than 140 countries to help turn climate goals into action.
- The World Health Organization (WHO) provides advocacy, data reports, publications, capacity-building and support of country projects related to climate change (https://www.who.int/health-topics/climate-change#tab=tab_1) and to health and mental health (https://www.who.int/mental_health/en/), and has put forth the Comprehensive Mental Health Action Plan (World Health Organization, 2013) and mhGAP initiatives (World Health Organization, 2018).
- The World Bank pledged $200 billion during 2021-2025 to significantly "improve infrastructure and capacity building for the betterment of mental health and substance use needs in general, and with regards to climate change" (World Bank, 2019; APHA, 2019). Notably, a two-day event co-hosted by the World Bank co-hosted WHO engaged finance ministers, multilateral and bilateral organizations, the business community, technology innovators, and civil society to move mental health from the margins to the mainstream of the global development agenda by emphasizing urgent investments needed in mental health services and expected returns in terms of health, social and economic benefits (World Bank, 2016).
- The Astana Declaration on Primary Health Care recognizes the importance of health impact of climate change and reaffirms the importance of the inclusion of mental health in primary health care (Global Conference on Primary Health Care, 2019).
- The Inter-Agency Standing Committee (IASC) Guidelines for Mental Health and Psychosocial Support in Emergency Settings provides a framework for planning and coordinating recovery and rehabilitation interventions for the mental health and well-being of persons in emergency situations that include climate-related natural disasters (Interagency Standing Committee, 2007).

Psychologists' Advocacy for Climate Change and Mental Health

Many psychologists who represent psychology-related non-governmental organizations (NGOs) accredited at the UN, and colleagues, have advocated over many years about the intersection of mental health and well-being and psychosocial resilience with climate action and disaster risk prevention and recovery.

For example, on April 12, 2018, the annual Psychology Day at the United Nations was held on the theme of *"Climate Change: Psychological Interventions Promoting Mitigation and Adaptation"* (United Nations, 2018). Psychologists on the panel presented ways that psychological theory, research and practice can mitigate against the deleterious impact that climate change and natural disasters have on individuals and communities, can help to develop resilient individuals and societies, and can facilitate the attainment of the Sustainable Development Goals.

Psychologists who are expert in the field of climate change contributed to the American Psychological Association and ecoAmerica report on climate change and mental health which provides extensive

research about the relationship between climate change and mental health, and 26 strategies and technical assistance guidelines to address the impacts of climate change on mental health and to motivate action (Clayton, Manning, Krygsman & Speiser, 2017).

Also, the first author of this paper has implemented many innovative programs "on the ground" in many countries regarding psychosocial resilience and recovery from climate-related disasters, and, as a representative of the International Association of Applied Psychology (IAAP) with colleagues of the Psychology Coalition accredited at the United Nations by the Economic and Social Council, leads extensive advocacy, detailed in an earlier edition of this publication and in many videos (Kuriansky, 2013, 2019a, 2019b, 2020; Kuriansky, LeMay & Kumar, 2015). Actions have included presenting statements and making interventions promoting psychosocial resilience at many UN events and interactive dialogues at major conferences convened by the United Nations and the UN Office for Disaster Risk Reduction.

Given the strong voice of youth encouraged at the UN, IAAP interns and student members with a strong interest in the inter-connection of climate change and mental health have attended UN conferences on the topic, including as part of their fieldwork in the first author's class at Columbia University Teachers College on *"Psychology and the United Nations"*. An article by one of these students about the historic "First Youth Climate Summit" held in 2019 at UN headquarters, mentioned above, is included in this APAW journal issue (Gravely, 2020).

The American Public Health Association, Climate Change and Policy Statement Process

The below sections of this article describe the American Public Health Association, its activities with regard to climate change, and the process of a developing an official APHA policy statement.

APHA Overview

APHA is the second largest public health civil society organization in the world with a 145 history (www.apha.org). With a vision to "create the healthiest nation on earth", APHA carries out its mission to "improve the health of the public and achieve equity in health status" by incorporating over 40 countries' values about public health in these 5 main domains: science and evidence-based decision-making, community, health equity, prevention and wellness and real progress in improving health (APHA, n.d.a). The organization's 25,000 members can participate in thirty-two sections that encompass major public health disciplines and programs as well as state and regional affiliates, special interest groups, forums, caucuses, various committees and boards and a student assembly. The organization holds annual conferences, manages centers, institutes and campaigns, offers career development and continuing education.

The organization also offers members opportunities to participate in various advocacy and policy-related activities to further APHA's vision, mission, current priorities, and specific goals related to improving public health issues within and across disciplines, communities, sections, and other entities. Key to this advancement is the development of policy statements, or written documents, that describe a public health problem, evidence-based strategies, and action steps to address the problem.

APHA and Climate Change

APHA has a long-standing commitment to climate as a public health issue. For over 10 years, the organization has set climate change as a specific public health priority, created resources for knowledge-building and advocacy, and conducted regular advocacy on Capitol Hill on this topic. Also, climate change has often been a part of the annual meeting session topics, but in 2017, APHA set its overall annual meeting theme as, *"Creating the Healthiest Nation: Climate Changes Health"*. Building on this history of concern and advocacy about the effects of climate change

on public health, APHA created the Center for Climate, Health and Equity in 2019. The Center, "unique [because] it is the first of its kind to bring concerns about climate change, public health and health equity under one roof," aims to offer support and resources, promote better climate and health practices and policies, spearhead more action for the betterment of public health, and "establish itself as the leading voice on climate and public health" (APHA, n.d.c). While many sections and other structures within APHA clearly care about the effects of climate change on health, in this article the authors speak directly only about their experience as members of the Mental Health Section. Over recent years, many members of this section increasingly expressed concerns and interest in the effects of climate change on mental health and well-being, submitting abstracts and making presentations on this topic at annual APHA meetings regardless of the annual theme, and participating in varied APHA and Section activities, including writing this policy statement; advocacy; roundtable and webinar discussions; cross-Section activities about climate change; working groups; and representing the Mental Health Section on the Advisory Board of the Center for Climate, Health and Equity. Members also engage in a variety of activities related to climate change and mental health outside their affiliation with APHA, such as research, writing, teaching, development and implementation of programs, services and policies, informal and formal collaborations.

The Process of APHA Policy Statements

The development process of a policy statement is an internal annual APHA activity with designated writing and submission guidelines as well as review and approval processes. Policy statements can be developed and authored by an individual APHA member or group of members submitting on behalf of an APHA section or other entity. Authors can also request endorsements from other sections and entities within APHA to strengthen its worth for submission. The policy statement then goes through a formal review and approval process, with final approval commencing during a vote (for or against) taken at the Governing Council meeting during the APHA annual conference. Once the policy statement is approved by the Governing Council, original author names and section(s) designation(s) are removed from the document, and it is considered a product of APHA. Once posted on the website, the policy statement is considered to be in the public domain and can be used and quoted as such for advocacy and other purposes.

Policy statements, then, have these several proposed uses (APHA, n.d.b). They can:

- serve as a "regular resource of information to many, including APHA staff, members, affiliate, partners and policymakers", and the public at large;
- be used to advocate for public health with federal, state and local policymakers, and others;
- help shape APHA's position on legislation and regulations [and] drive the content of legislative and regulatory recommendation, including letters and comments sent to Congress, the White House, federal agencies and the judiciary;
- help shape the development of legislative, regulatory and media advocacy activities;
- be referred to as a resource by Congressional staff and regulatory agencies when they develop legislation or regulations;
- be used to write briefs and statements on many public health issues;
- highlight the latest research on specific public health topics; and
- help APHA staff to develop statements, fact sheets, reports and infographics".

Use of the policy statement on climate change, mental health and well-being discussed in this article is considered to be resource-sharing, advocacy-building, and highlighting latest research on a specific topic.

Specifics about the new APHA Policy Statement on Climate Change, Mental Health and Well-Being

The complete policy statement (number 20196), entitled *"Addressing the Impacts of Climate Change on Mental Health and Well-Being,"* completed on November 5, 2019, is posted on the APHA website under the policy statement database tab (www.apha.org). As noted earlier in this article, it serves as APHA's only statement on this topic to date (APHA, 2019). The below section of this article summarizes the statement's sections and gives the full set of Action Steps as they appear in the posted document.

1. ***Relationship to Existing APHA Policy Statements:*** APHA requires that each policy statement list relevant APHA policy statements on the topic being addressed. The authors identified 26 existing policy statements that discussed U.S. and/or global public health approaches to climate change; links among public health systems, health systems, health policies, and climate change; and links among the environment, health, mental health and climate change.
2. ***Problem Statement:*** The problem statement for the policy statement describes the overall threat and consequences that climate change and climate-related events currently have had, and are perceived to have, on mental health, physical health and the environment. It explicitly describes the extensive research base related to the topic, and how approaches to addressing the effects of climate change and climate-related events have under-prioritized mental health needs on comparison to physical health and infrastructure needs.

This section provides specifics about the

- dangers of climate change and devastating climate-related disasters (e.g., hurricanes, floods, droughts, wildfires and heat waves) to people and to the planet that are based in research, especially with regard to research conducted by the Intergovernmental Panel on Climate Change (2015, 2018); impacts of climate change and

climate-related events on physical and mental health symptoms and pre-existing conditions; percentages of people affected and projected to be affected; and differences in affects felt by certain groups of people, including certain regions;

- emotional reactions (e.g., hopelessness, helplessness, fear, acute stress, substance use, anxiety, depression and suicide) that can be immediate or slow in onset; and short- and/or longer-term changes in cognitive, behavioral, interpersonal, social, cultural, economic and work-related functioning;
- importance of developing psychosocial as well as structural resilience, seeking help when necessary; helping people maintain crucial social support systems; and fostering post-traumatic growth (Kuriansky, 2010);
- challenges that current lack of service providers and infrastructure pose for meeting mental health and substance use needs in general and with respect to climate change;
- the global economic cost of mental health disorders, estimated at US$2.5 trillion dollars and expected to double by 2030 (Trautman, Rehm & Wittchen, 2017), as well as the financial investment needed to address the effects of climate change on health and mental health.

3. ***Evidence Based Strategies:*** This section describes the "five tenets that guide the quest to formally establish and expand strategies, practices, policies and actions that can successfully combat the negative effects of climate change and climate-related events on mental health and well-being" (APHA, 2019). Two main approaches to evidence-based strategies for combatting the effects of climate change and climate-related events on mental health are discussed, namely, interventions and programming initiatives. Interventions are described at three levels: primary (equity and social justice prevention interventions related to climate events); secondary (interventions given immediately or shortly after a climate related event); and tertiary (longer term professional help needed). Both global and U.S.-based programming initiatives are presented.

Besides the international initiatives mentioned above in this article, two U.S. based efforts are described, namely, the Building Resilience Against Climate Change (BRACE) model of the United States Center for Disease Control's (CDC) Climate and Health Program (Sheehan, Fox, Kaye & Resnick, 2017) and the APA and ecoAmerica report on climate change and mental health mentioned above (Clayton, Manning, Krygsman & Speiser, 2017).

Opposing Arguments/Evidence

All APHA policy statements are required to cite and address opposing arguments, evidence, or alternative viewpoints, about the "existence and extent of the problem, the validity of the evidence and ethical, equitable and legal issues when appropriate" (APHA, 2018). This section must also discuss why the opposing viewpoints are "not valid". In this policy statement's case, several opposing viewpoints are provided, including differing opinions about the science related to climate change; types of organizations that promote denialism about climate change and its effects on environment and health; types of organizations that do not support climate change legislation; and biases related to values and clinical practices that prioritize physical health over mental health needs.

These opposing viewpoints were invalidated with undisputable research that support the body of the policy statement, and address the specifics of the viewpoints. This section ended with promoting the fact that, "While skepticism is an important and healthy part of science and policymaking (Giddens, 2015), the bases for support, decision-making and service provision for any mental health, health and/or public health need must be based more in facts, fair-minded values, and actions that can result in appropriately targeted and equitable care" (APHA, 2019).

This section also points out that the "well-accepted

scientific precautionary principle directs policymakers to fulfill their social responsibility to protect the public from exposure to harm whenever scientific investigation finds a *plausible* risk (UNESCO, 2005). Information described throughout the policy statement is such an indicator of negative "plausible risk[s]" that climate change, and climate-related events, have on mental health and well-being" (APHA, 2019).

4. ***Action Steps***: APHA policy statements always include "action steps" as their last substantive section. As outlined in the authors' guidelines, action steps are directed to specific entities, other than APHA, regarding what they "should do to see that the strategies [discussed in the body of the statement] are promoted or implemented" (APHA, 2018). Action steps describe and/or recommend "policies" to be developed and/or "principles" to be followed, and as such, do not serve as recommendations for any specific "legislation or regulation". During the internal APHA review process, each action step is evaluated for its "feasibility, ethical and equitable nature, and cultural and linguistic appropriateness to affected populations".

Since the focus of this article is to share current advocacy efforts, and in turn, to encourage participation in advocacy around climate change, mental health and well-being, the content of the 9 action steps is listed verbatim, so that stakeholders can best determine which steps(s) fit their current or future participation and work.

In summary, the action steps call for the following, to specifically target the effects of climate change on mental health and well-being: a) fully implement recommendations made in the most salient global and U.S. based initiatives, and APA and ecoAmerica reports (about climate change); b) assess, enhance and/or better allocate service and system infrastructures, policies, plans, programs, services, funding, financial investments; c) conduct needs assessments, expand and better utilize research and indicators; d) include strategies to operationalize all aspects of resilience and posttraumatic growth; e) expand education and training of professionals; f) advocate that the science about climate change, mental health and well-being is included in initiatives, plans, policies, research and funding considerations; g) create multi-disciplinary public health promotion campaigns; and h) create partnerships and/or coalitions.

The 9 Action Steps as they appear in the policy statement (APHA, 2019) are that:

"APHA urges:

1. Global governments and the U.S. government; policymakers; program developers; service providers; public health, health, mental health, nonprofit, and business organizations; funders; communities at large; educators; researchers; advocates; the media; and all other interested stakeholders in the public and private sectors to prioritize and implement the recommendations of the United Nations 2030 Agenda for Sustainable Development; the Sendai Framework for Disaster Risk Reduction 2015–2030; the Global Compact on Safe, Orderly and Regular Migration; the 2015 Paris Agreement; the United Nations Universal Health Coverage Political Declaration; the Astana Declaration of Primary Care; the World Health Organization Mental Health Action Plan; and the Inter-Agency Standing Committee Guidelines for Mental Health and Psychosocial Support in Emergency Settings to ensure positive mental health and well-being for all individuals who are currently affected (or projected to be affected in the future) by climate change and climate-related events.
2. The U.S. Substance Abuse and Mental Health Administration; the U.S. National Institutes of Health; the National Institute of Mental Health; U.S. state and local governments; the American Psychological Association; the American Medical Association; other professional membership organizations; public health, health, mental health, nonprofit, and business organizations; service providers; program developers; funders;

community partners at large; advocates; and all other interested stakeholders in the public and private sectors to prioritize and fully implement recommendations from the American Psychological Association and ecoAmerica reports on climate change and mental health and the CDC's Climate and Health Program and climate and health adaptation plans to ensure positive mental health and well-being for all individuals who are currently affected (or projected to be affected in the future) by climate change and climate-related events .

3. Global governments, the U.S. government, and communities at large to:
   - Assess and enhance service and system infrastructures, with attention to the aforementioned global and U.S. initiatives and agreements and with regard to planning and implementing a full scope of strategies and interventions that can be delivered directly or collaboratively at three main public health levels: primary (those that help reduce exposures to climate risks, especially plans and procedures for disaster risk reduction and prevention), secondary (those delivered immediately or shortly after a climate event, especially emergency responses that can help address and monitor mental health and well-being challenges), and tertiary (those that help people manage more serious and longer-term mental health and well-being issues related to climate change and/or a climate-related event).
   - Develop, adopt, and implement policies, plans, programs, and services that acknowledge scientific evidence about the dangers of climate change and climate-related events and that seek to minimize the impacts of climate change and climate-related events on mental health and well-being
   - Increase funding and allocate adequate resources to strengthen public health, health, and mental health services and systems to positively address climate change effects on mental health and well-being, including strategies to decrease stigma associated with such effects
   - Increase financial investments in mental health and its workforce and as related to the effects of climate change and climate-related events.
4. Global governments, the U.S. government, communities at large, researchers, and public health, mental health, and health program developers and service providers to continue to:
   - Conduct needs assessments about mental health and well-being to more comprehensively address climate change effects and to better integrate these components into larger health and environmental assessments related to climate change
   - Expand relevant research and evaluations to increase the evidence base for planning, taking action, and disseminating information about effective interventions, strategies, practices, policies, agreements, initiatives, and educational tools that can help prevent and address climate change impacts on mental health and well-being across cultures, especially for high-risk and low-resource groups, taking into account cultural sensitivity, gender, and respect for traditional practices
   - Develop, utilize, and disseminate indicators of climate change impacts on mental health and well-being, including costs
5. Global and U.S. program developers and service providers to include strategies for how to operationalize all aspects of resilience (structural and psychosocial) and set and meet goals for post-traumatic growth in planning, implementing, monitoring, and sustaining services, procedures, and systems that address the effects of climate change and climate-related events on mental health and well-being.
6. Global and U.S. public health, mental health, and health organizations, groups, and educational institutions to expand education and training of professionals, paraprofessionals, volunteers, students, and communities at large to develop and enhance core and advanced competencies in the

science, interventions, strategies, and best practices for addressing climate change impacts on mental health and well-being, especially those that promote resilience, adaptation, constructive action, and hope.

7. Government officials, program developers, service providers, educators, researchers, nonprofit and business organizations, funders, communities at large, advocates, and all other interested stakeholders in the public and private sectors to advocate with global and U.S. policymakers to ensure that the science relating climate change to mental health and well-being is included in initiatives, plans, policies, research, and funding for the public good and the public's health, with special attention to the culture, age, gender sensitivity, and needs of populations, especially those who are vulnerable and at risk.
8. Global and U.S experts and consultants in public health, mental health, substance use, health, government, science, research, program development, service provision, and education, as well as nonprofit and nongovernmental organizations; business, advocacy, and funding organizations; the media; and communities at large, to create multidisciplinary public health promotion campaigns and other educational programs to communicate effectively about the science behind climate change, its consequences for mental health and well-being, and the range of best and emerging practices, interventions, resources, and services that can help address impacts, especially those that promote resilience, adaptation, constructive action, and hope.
9. Global and U.S. stakeholders in both the public and private sectors to create partnerships and/or coalitions to help achieve the actions and activities described above".

Conclusion

An historic step in the recognition of the impacts of climate change on mental health and well-being was taken by the American Public Health Association when it approved a policy statement on this topic in 2019. This statement adds to mounting acknowledgement that the time is now to 1) ameliorate the negative effects of climate change and climate-related events on the well-being of peoples worldwide, and 2) boost psychosocial resilience in the face of climate-related disasters that have been experienced in so many regions around the world. It is also grounded in major international agreements and frameworks. The process of the development and approval of the policy statement can serve as an example for advocacy on this and other important issues. Psychologists and all stakeholders are encouraged to contribute to these efforts by implementing the Action Steps of the APHA policy statement, and by continuing to create a healthier world for people and the planet.

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Psychology During the Coronavirus Crisis

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In the coronavirus crisis, we are experiencing strong behavioral regulation through legal means. Would it be possible to implement the necessary restrictions without prohibitions, by nudging people in the direction of the desired behavior? Certain situations require clear measures that apply to everyone and regulate everyone's behavior. Thus, the German Constitution allows for certain restrictions on our fundamental rights during a pandemic. When physical distancing is necessary to protect public health and the time spent in public needs to be minimized, when working from home and wearing face masks in stores seem prudect, concrete instructions in the form of legal regulations are appropriate. Libertarian-paternalistic methods such as nudging would create a situation in which some people do not follow the "nudges".

We currently find ourselves in a "**social dilemma**." This means we are in a situation in which the individual finds it advantageous to exercise their freedom, to not behave according to the rules – in other words, not to cooperate. When the majority of the population follows the recommendations, the person who does not cooperate has an advantage. Yet if many people behave in a self-interested, utility maximizing way, everyone suffers. Individuals who engage in non-cooperative behavior tend to demotivate cooperative actors and thus quickly find imitators. However, those acting out of self-interest not only put themselves at risk, but also many other people. Thus, the enormous societal costs would be borne not only by those who elected to make use of their fundamental right to freedom of movement, but by the entire society. For this reason, clear, strict measures and compliance monitoring are necessary.

Unterstanding and Accepting Rules

Even though nudging is not the preferred "strategy of the hour", this does not mean that measures grounded in psychology are not sensible. The highest priority is to **concretely and factually communicate the current state of knowledge and appropriate measures in light of current conditions**.

The democratic form of government is currently facing a difficult test, because it must protect the inviolability of individuals' fundamental rights while also preserving the well-being of society as a whole.

Feeling threatened by an invisible enemy that begins far away yet slowly but surely creeps closer, until it finally has the entire world in its grip, crippling it, creates feelings of fear, insecurity, and loss of control. Consequently, people are constantly on the search for information, become addicted to it even. We talk constantly about the threatening unknown so that we can finally understand it, make it tangible. We seek to create a "social representation" of the new phenomenon, of the invisible enemy, in order to obtain an image of it, to become capable of action, to plan and thus to protect ourselves. For example, calling the virus an invisible enemy involves the use of a metaphor of war.

In order to help us view the measures put in place by the government as appropriate and follow them voluntarily, we need concrete factual information communicated professionally by credible experts. Clearly differentiating between thoroughly verified and inaccurate information is also important. We need concrete pointers to places where empirically proven information is available, and clear warnings about fake news are necessary. Partial victories resulting from the measures to stem the spread of the virus are also important, as they increase confidence. Trust in

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experts' professional competence and in the scientific institutions advising policymakers is fundamental. Also fundamental for acceptance and compliance with the imposed measures is trust that political decision-makers have the population's well-being as their highest goal. This is why the measures imposed must be clearly communicated and concretely tailored to the current situation, and why their desired and actual effects must appear comprehensible.

Adaptation and Social Learning

Social comparisons and **social norms**, or observing that other people in public are following the rules, suggest to us that we should follow the legal regulations ourselves. Social comparisons can also be helpful for coping with changed demands at home.

For many people, working from home represents a monumental transition that has led to challenges for both work and family life. Entire occupational categories that had become accustomed to largely face-to-face working conditions now not only need to "invent" a way to work online, but are also struggling with new software and hardware. Many people are totally unaccustomed to spending the entire day with their partner and children. In addition to their paid work, they also need to guide their school-aged children's learning and engage them in play. More than a few have found that these many unfamiliar demands have placed strain on their relationships.

The situation is no better for people who have lost their jobs and have to stay home alone all day. Time drags, boredom and social isolation set in, and one day looks just like the next. Recommendations on structuring one's time, maintaining habitual routines, laying out a plan for working from home, making time for social connections with physical distancing, and creating spatial and temporal niches for oneself are helpful. Knowing that other people are coping with similar challenges and learning how they are dealing with them can likewise be helpful. Seeing how other people are structuring their everyday lives and making ends meet in conversation and via media reports enables people to try out appropriate coping strategies themselves. Social comparisons help us adjust to change. Other people's behavior in comparable situations provides an opportunity for learning and orientation.

Cooperation and the Social Contract

The imposed public health measures have created massive economic costs, pushing self-employed workers and companies to the brink of ruin, with still unforeseeable consequences. While the workload in some industries has risen enormously, in other industries huge numbers of people have shifted to short-time work (reduced hours with continued compensation) or have become unemployed. **Cooperation and solidarity** are the dictate of the hour. Health and preserving jobs have been deemed the highest priorities. "No matter how high the costs" is the motto and comforting slogan for many people who are threatened by the current economic situation.

Until now, proponents of turbocapitalism have placed unlimited trust in the power of the free market, preaching and defending the benefits of harsh competition. This not only promoted the exploitation of people and the state, it also led to significant disparities in income and prosperity in many countries. Increased profits were the yardstick used to measure success. However, the credo of profit orientation cannot provide a useful answer to the current global crisis. We were warned about worldwide crises, watched in shock yet from a safe distance as the COVID-19 outbreak ravaged China, yet did not stop doing everything we could to increase our returns, come hell or high water. "Corporate social responsibility" has been a professed goal of companies for a while now; however, it served less as a behavioral maxim and more as a marketing instrument.

The fact that politicians have united across party lines in the current situation to place health above economic profits demonstrates their appreciation for the well-being of society as a whole and is worthy of emulation. Responsibility for societal well-being,

solidarity and cooperation are needed among political actors, companies, and workers. We ought to have demanded long before the worldwide shutdown that companies voluntarily acknowledge their social responsibilities, exhibit solidarity, maintain the social contract, and avoid recklessly chasing profits.

Anyone who uses the government assistance currently being offered as an opportunity for lay-offs, who reduces their employees' hours on paper through short-time work while still requiring them to work full-time hours, who stops paying rent despite high profits in the past, or who continues to operate their business despite the shutdown because their primary concern is their shareholders' profits is not only engaging in self-interested behavior lacking in solidarity – they should also expect social condemnation. The announcement by an international maker of sports equipment that they would cease to pay rent for their stores triggered a wave of condemnation and indignition. The company quickly came to understand that not everything that is permitted is also socially accepted. Perhaps the coronavirus crisis will lead to a strengthening of the collective will, which does not merely represent the sum of individual interests, but rather seeks to improve everyone's well-being, and sustainably transform solidarity and cooperation into guiding rules of behavior.

Re-nationalization as a paradoxical reaction to a global challenge

The cooperation between policymakers, companies, and citizens observed within countries stands in clear juxtaposition to the cutting of ties to the outside world. People tend to classify others based on various characteristics and thus form social categories or groups. Each of us belongs to different groups, such as our family, the group of employed people, the group of Austrian citizens, etc. There are other categories to which we do not belong. Belonging to groups and setting ourselves apart from others is important because it allows us to generate our social self-image, self-esteem, and social identity. We try to achieve a positive social identity by valorizing the group to which we belong in terms of certain characteristics, while tending to devalue or discriminate against other groups.

Theories of **"social categorization" and "social identity"** provide an explanation for the apparent paradox of closing ranks within a country to search for solutions to our problems while cutting ourselves off from others and closing borders.

However, climate change and COVID-19 are not national but rather global crises, and they demand joint global solutions. Yet fear of the coronavirus threat has strengthened feelings of unity within each country, and not international cooperation. Suggested solutions at the European or international level remain outstanding. Competition among countries has grown stronger: Like robber barons, countries snatch away personal protective equipment already in transit to another country by offering more money, or confiscate deliveries to their neighbors in order to keep the desperately needed goods in their own country. The tendency to valorize one's own nation and devalue others has grown stronger.

However, although social identity theory is able to plausibly explain the dynamics of differentiating between "us" and "them" and discriminatory tendencies, international cooperation should not be abandoned in favor of closing ranks on the national level and setting ourselves apart from others, because the greatest challenges of our time are global problems that spread across national borders. Thus, the UN, EU, and their member-states currently need to find a way to achieve solidarity and cooperation. It remains to be seen whether they will be able to successfully take joint action and support one another.

Errors of explanation and glorification in hindsight

What will happen when the coronavirus crisis has been overcome? Will we remember the objective of placing human health before all else and seeking to preserve jobs? Psychologists have identified a

phenomenon known as **hindsight bias** and are well aware of the weaknesses and tricks our memories can play.

Experiences fade, while memories are constructed in hindsight – and this reconstruction of the past is influenced by one's current motives. This can lead to marked distortions of what actually happened in the past.

Currently, trust in the professionalism of politicians in power is high. The vast majority of citizens share their goals: protecting health and preserving jobs come before economic interests! This is leading voters to flock towards the parties in power, according to public opinion researchers. But how will our attitudes change when the coronavirus crisis has been overcome, but the economic costs are still being borne?

In hindsight, after we have once again gotten away safely, we will perceive the austerity measures imposed as oppressive, complain about the lack of jobs, and believe the economic sacrifices made were too high. The material losses will be painful, and the "rebuilding" phase will last longer than our patience can take. What we currently see as necessary measures to protect human life will not be remembered as such. We will search for people to blame for leading us into this precarious economic situation and think less about the paramount goal of protecting our health. Perhaps we will blame politicians whose strategies the majority of us agree with today.

If the difficult economic conditions last for a while, we will look for quick solutions and not have the patience to focus on factual considerations that will slowly lead us back to prosperity. Some of us will become receptive to the simple answers and salvation promised by populists, who will lead us to believe that they know exactly where the problem lies, who the enemy is, and that they will take up our plight and lead us out of our predicament. We must not follow these "pied pipers". Thus, it is important that we do not make the mistake of remembering the present in a distorted way in hindsight. The memory of our current concerns and current objectives must be kept alive so that we do not allow ourselves to be thrown back into deplorable forms of nationalism as a result of the crisis, the subsequent costs, and the measures taken to address them.

APAW Mission Statement

Applied Psychology Around the World (APAW) is one of three official publications of the International Association of Applied Psychology (IAAP). We have two academic journals - ***Applied Psychology: An International Journal*** (http://bit.ly/IAAPintl) and ***Applied Psychology: Health and Well-Being*** (http://bit.ly/IAAPhealth). Our e-News is published once a month with a series of regular information about Applied Psychology and our community.

Applied Psychology Around the World (APAW) is our newest publication; APAW ISSN registration number is: 26939-6521. The APAW is only distributed online, with three thematic issues per year.

The purpose of APAW is to share news and reports about applied psychology, through theme-based articles. The themes are determined in advance so that one can prepare a paper in relation to the theme of the issue.

The themes of the upcoming issues and article deadlines are as follows:

- Vol. 3. Issue 1: *Submitted Abstracts for the Centennial Congress of Applied Psychology* (January issue)
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APAW welcomes submissions of papers addressing the themes of each issue; one can include scientific research projects, data analysis, information of various kinds (books on the topic, conferences, etc.), and practice related to applied psychology around the world on the theme of the concerned issue.

Submissions are encouraged from members in all regions of the world. Articles should be written to be understood by a diverse range of readers with differing levels of expertise in psychology (undergraduate students, postgraduate students, practitioners or Professors), in correct English (using the US spell check).

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Authors may correspond with the Chief-Editors, Christine Roland-Lévy at president@iaapsy.org. In the subject line of your email, enter the subject: ***"Submission for Publication in APAW".*** All articles and news items for consideration should be submitted in electronic form only in a Word compatible file. Short papers are preferred.

Requirements:

- Written in North American English (use US spell check)
- A short title
- Authors and their e-mail address and institutions
- An abstract of no more than 200 words and up to five keywords, *optional*
- References should follow the style of the American Psychological Association
- All works cited should be listed alphabetically by author after the main body of the text.
- Single space between paragraphs, no indentation, font should be Arial, size 10, section heads/ subhead should be bold.
- Figures (including photos), should be at least 300 dpi resolution, and saved as a TIF, EPS, PNG, JPG, or PDF

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