Attempts to Impact Global Citizenship Identification

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Global citizenship identification is associated with a variety of prosocial beliefs (e.g., social justice, valuing diversity) and behaviors (e.g., environmentally sustainable behaviors, intergroup helping). We report the results of 11 studies in which we attempted to shift participants' degree of global citizenship identification (e.g., educational activities, subliminal priming, self-generated persuasion). None of the experimental manipulations reported worked to significantly increase identification compared to other conditions (e.g., control condition). Taken together, the results highlight the difficulty in manipulating global citizenship identification and the possibility of examining interventions that take place over a longer period of time.

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Global citizenship, and other inclusive identities (e.g., world citizenship, cosmopolitanism, identification with all humanity, human), have often been discussed in disciplines such as education and political science (Carmona et al., 2020; Reysen et al., 2013). However, with a few exceptions (e.g., Der-Karabetian & Balian, 1992), only recently have psychologists showed a renewed focus to empirically examine these inclusive identities (McFarland et al., 2019; Reysen & Katzarska-Miller, 2018). Psychologists researching extremely inclusive identities tend to follow a social identity perspective (Tajfel & Turner, 1979; Turner et al., 1986), with an notable exception being McFarland et al. (2012) who argue for understanding identification with all humanity from theorizing by Adler and Maslow (e.g., reaching self-actualization). A social identity perspective posits that individuals can vary in their degree of ingroup identification, or psychological connection, with different category labels (i.e., groups). Ingroup identification is a key variable as it predicts group members' degree of adherence to the group's norms (e.g., beliefs, behaviors, emotions). Given the importance of ingroup identification, we have conducted experiments over the past ten years trying to increase participants' degree of identification with the category label global citizen. During this time we have conducted a variety of studies in which the results did not reach the traditional level of statistical significance, which we report here.

We define global citizenship as "awareness, caring, embracing cultural diversity, promoting social justice and sustainability, and a sense of responsibility to act" (Reysen et al., 2012, p. 29). This definition is based on research examining the antecedents and outcomes of global citizenship identification (Reysen & Katzarska-Miller, 2013) that shows global awareness (perceived knowledge of the world and felt interconnectedness with others in the word) and normative environment (valued others prescribe a global citizen identity) predicting identification. Following a social identity perspective, global citizenship identification then predicts six clusters of prosocial values: intergroup empathy (concern for others outside one's ingroup), valuing diversity (appreciation and desire to learn about other cultures), social justice (endorsement of human rights and equitable treatment), environmental sustainability (concern for the natural environment), intergroup helping (desire to help others outside one's ingroup), and responsibility to act (felt obligation to act for the betterment of the world).

Subsequent research has consistently shown support for the model and highlighted a variety of factors that predict the model (see Reysen & Katzarska-Miller, 2018). As reviewed by Reysen and Katzarska-Miller, factors such as taking a college course with global content, students' grade point average, perception of one's university as ethically responsible, number of social networks used, liberal political orientation, quest religious orientation, and participation in activist issues are positive predictors. However, these studies were correlational, and thus the causal relationship between these factors and global citizenship identification is unknown. Some experimental manipulations have worked to increase and decrease participants' identification with global citizenship (see Reysen & Katzarska-Miller, 2018). However, a general conclusion of this research is that it is easier to make global citizenship identification go down than it is to make it go up. For example, Snider et al. (2013) framed globalization as either positive (diversity of job opportunities), negatively (competition for jobs), or no information (control) prior to rating global citizenship identification. The results showed the positive framing was significantly different from the negative one, but did not differ from the control condition. Some manipulations do show promise in raising identification. For example, Blake et al. (2014) asked participants to think about their future, possible self as either an active global citizen, inactive global citizen, or write about their typical day (control). The results showed that fear of being an inactive global citizen lead to higher ratings of identification than an active global citizen. Furthermore, participants in the inactive global citizen condition did rate identification slightly, but significantly, higher than those in the control condition. Other researchers have also noted higher ratings of identification with all humanity in studies, such as viewing pictures of individuals suffering from a disease (see McFarland et al., 2019). Presently, we report on other studies in which we manipulated variables to impact identification.

Overview of Present Research

The purpose of the present research is to report the results of 11 experiments examining the effect of various manipulations on participants' degree of global citizenship identification. For each study we briefly give a rationale for the manipulation and report the method and results. Unless noted otherwise, we used a two-item ("I would describe myself as a global citizen," "I strongly identify with global citizens") measure of global citizenship identification (Reysen & Katzarska-Miller, 2013), rated on a 7-point Likert-type scale from 1 = *strongly disagree* to 7 = *strongly agree.* Additionally, most of the studies were conducted at a regional university in northeast Texas.

Study 1: Giving to Others

Prior research shows that spending money on others rather than oneself is associated with greater happiness (Aknin et al., 2011) and observed cross-nationally (Aknin et al., 2013). We reasoned that making one's prosocial spending salient (vs. not) may increase global citizenship identification as it highlights one's normative environment (i.e., thinking about friends and family) and the prosocial nature of global citizenship (e.g., intergroup helping, responsibility to act). To test this idea, participants were randomly assigned to think of a time they spent money on others (vs. self) and assessed global citizenship identification.

Participants and Procedure

Participants ($N = 228$, 80.2% female; $M_{age} = 22.26$, $SD = 6.61$) included students participating for partial course credit, or extra

credit, toward a psychology class. Participants were randomly assigned to write about spending money on others ("Please think back to and describe as vividly and in as much detail as possible the last time you spent approximately twenty dollars ($20) on someone you are very close to (e.g., a good friend, close family member, romantic partner)") or on themselves ("Please think back to and describe as vividly and in as much detail as possible the last time you spent approximately twenty dollars ($20) ON YOURSELF") (Aknin et al., 2011) before rating global citizenship items ($\alpha = .95$).

Results and Discussion

The results showed that participants in the self ($M = 4.24$, $SD = 1.66$) and other ($M = 4.33$, $SD = 1.58$) conditions did not differ significantly on ratings of global citizenship identification, $t(226) = -0.43$, $p = .671$, $d = .06$. Although prosocial spending increases happiness (Aknin et al., 2013; Aknin et al., 2011), the results do not suggest a change in identification with a prosocial identity. One possible explanation is that the giving other others was associated with direct relationships. Perhaps thinking of giving to others outside one's immediate ingroup (e.g., charity) would have resulted in greater identification.

Study 2: Self-Generated Persuasion

Self-generated persuasion is an indirect form of attitude change in which individuals convince themselves to change an attitude (Aronson, 1999). For example, Lewin (1943) famously observed that housewives during WWII were more likely to cook less desirable cuts of meat after a group discussion focused on generating ways to prepare the food compared to a lecture condition. In the present study we asked participants to list ways of engendering global citizen identity in other students (or not) prior to rating identification. We hypothesized that elaborating on ways to encourage global citizen identity would increase their own identification with the identity.

Participants and Procedure

Participants ($N = 168$, 79.2% female; $M_{age} = 22.20$, $SD = 6.42$) included students participating for partial course credit, or extra credit, toward a psychology class. Participants were given a definition of global citizenship and were randomly assigned to continue with the survey (control condition) or asked to generate ideas for how to encourage students to be global citizens ("In the present research we are examining ideas for how to increase global citizenship in students. In other words, do you have any ideas for programs, classes, activities, etc. to encourage students to view themselves as global citizens?") before rating global citizenship identification ($\alpha = .93$).

Results and Discussion

The results showed that participants in the control ($M = 4.23$, $SD = 1.41$) and self-generated persuasion ($M = 4.39$, $SD = 1.54$)

conditions did not differ significantly on ratings of global citizenship identification, $t(166) = -0.73$, $p = .466$, $d = .11$. Although students generated a variety of ways to engender global citizenship in others (e.g., cultural events on campus, celebrating culturally diverse holidays, greater diversity of food offerings at the cafeteria), the results did not support the notion that generating ideas to encourage the identity in others results in greater identification in participants.

Study 3: Ostracism

Social psychologists have long noted that humans have an innate need to belong to groups and form stable connections with others (Baumeister & Leary, 1995). We hypothesized that when one's need to belong is undermined, individuals may identify more strongly with a group to increase their social connectedness with others (e.g., Pickett et al., 2004). We predicted that individuals who recalled an experience of exclusion would identify more strongly with global citizens than those who recalled an inclusive experience (or no mention of inclusion/exclusion in a control condition).

Participants and Procedure

Participants ($N = 232$, 78.9% female; $M_{age} = 21.46$, $SD = 5.73$) included students participating for partial course credit toward a psychology class. Participants were randomly assigned to write about a time they were socially accepted by others, experienced rejection or exclusion by others, or about an everyday interaction with another person (Bastian & Haslam, 2010) before rating global citizenship identification ($\alpha = .93$).

Results and Discussion

The results showed that global citizenship identification did not differ significantly between the inclusion ($M = 4.19$, $SD = 1.54$), exclusion ($M = 4.57$, $SD = 1.48$), and control ($M = 4.16$, $SD = 1.55$) conditions, $F(2, 229) = 1.74$, $p = .179$, $\eta_p^2 = .02$. Although the results are in the expected direction, they were not significant and the effect size was small. Thus, the results do not support the notion that eliciting a need to belong increases identification with global citizens. One explanation is that perhaps the manipulation was individually focused. Participants were free to list whatever form of exclusion they experienced. If participants were instead asked to think of a time they were excluded for breaking prosocial norms (e.g., littering, bigoted comment) greater identification may have been observed.

Study 4: Physical Pain

Similar to Study 3, another proposed antecedent to elicit a desire for affiliation with others is the experience of pain (Bastian et al., 2014). However, rather than emotional pain related to frustrating the need to belong, Bastian et al. (2014) suggest that physical pain can increase a relational focus and promote solidarity. In Study 4,

we asked participants to experience temporary physical pain (or not) and complete a measure of global citizenship identification. We predicted that the experience of pain would increase global citizenship identification compared to a no-pain condition.

Participants and Procedure

Participants (N = 112, 74.1% female; M_{age} = 23.21, SD = 7.02) included students participating for partial course credit, or extra credit, toward a psychology class. Participants were randomly assigned to move marbles from the bottom of a cooler to a glass in that cooler for 90 seconds (or as long as they could handle) in either room temperature or ice-cold water (Bastian et al., 2014) prior to rating global citizenship identification (α = .90).

Results and Discussion

The results showed that global citizenship identification did not differ significantly between the room temperature (M = 4.35, SD = 1.50) and iced water (M = 3.88, SD = 1.70) conditions, $t(110)$ = 2.18, p = .123, d = .29. The results did not support the hypothesis that the experience of physical pain impacts identification compared to the control condition. The result may be due to an individual experiencing pain rather than a collective. For example, a manipulation that highlights the pain of one's group due to environmental factors, or another group due to global inequalities, may have elicited greater identification.

Study 5: Self-Affirmation

A self-affirming exercise reflects an act that bolsters one's self-worth, integrity, and efficacy to manage one's life (Cohen & Sherman, 2014). Given that most of these studies were conducted in Texas, where individuals tend to endorse a conservative political orientation, the notion of global citizenship may be threatening. A self-affirmation task may bolster against a threat and reduce defensiveness toward this inclusive identity. We predicted that participants would rate global citizenship identification higher after a self-affirmation task compared to a control condition.

Participants and Procedure

Participants (N = 106, 66% female; M_{age} = 22.63, SD = 8.34) included students participating for partial course credit, or extra credit, toward a psychology class. Participants completed an interdependent self-affirmation exercise ("write 1-2 paragraphs about a quality that you share with your family, reasons why you and your family share this value, and why it is particularly important to you and your family's lives"), an independent self-affirmation exercise ("write 1-2 paragraphs about a quality that uniquely describes who you are, reasons why this value describes you, and why it is particularly important to your life"), or did not complete an exercise (control condition) before rating global citizenship identification (α = .96). The self-affirmation exercises were adapted from Hoshino-Browne and colleagues (2005).

Results and Discussion

The results showed no significant differences between the conditions, $F(2, 103)$ = 0.11, p = .899, η_p^2 = .002. Participants in the control (M = 4.29, SD = 1.37), personal (M = 4.11, SD = 1.78), and family (M = 4.14, SD = 1.55) conditions did not significantly differ on degree of global citizenship identification. The results did not support the notion that a self-affirmation task would elicit greater identification than those in a control condition. In retrospect, the manipulation may have been too focused on one self and immediate family. Perhaps a condition in which participants affirmed with humanity in general may have highlighted the interconnectedness with others. Although the responses regarding values tended to revolve around positive characteristics, participants may have remembered conflicts or negative family experiences that prevented identification with global citizens.

Study 6: Self-Awareness

Objective self-awareness theory (Duval & Wicklund, 1972) suggests when one is self-aware they focus on one's self as compared to the perceived standards of what is correct (e.g., behavior, beliefs). When objective self-awareness is heightened (e.g., when completing a task in front of a mirror) individuals act in ways that coincide with their morals, and may increase prosocial behavior (see Silvia & Duval, 2001). The lay perception of global citizen as a category label tends to show the term is related to a variety of positive outcomes (e.g., empathy, environmental sustainability, helping) (Reysen & Katzarska-Miller, 2018). We predicted that those made self-aware would rate their degree of global citizenship higher than those not made self-aware.

Participants and Procedure

Participants (N = 67, 73.1% female; M_{age} = 23.41, SD = 8.03) included students participating for partial course credit, or extra credit, toward a psychology class. Participants were randomly assigned to complete a survey regarding global measures, including global citizenship identification (α = .92), while sitting in front of a mirror (self-awareness condition) or not (control condition).

Results and Discussion

The results showed that participants rating global citizenship identification in the absence of a mirror (M = 4.39, SD = 1.33) did not differ significantly from those in front of mirror (M = 4.93, SD = 1.40), $t(65)$ = -1.60, p = .114, d = .40. Although the results were in the expected direction and the effect size was larger than in other studies presented, the difference was not significant. On possible reason for the observed result is that participants did not initially endorse values related to global citizenship. In effect, the values that were activated through self-awareness did not overlap with a global citizen category label resulting in no change in identification.

Study 7: Spaceship Earth

Prior research shows that highlighting the notion that individuals in a group share a common fate can increase ingroup identification (Castano et al., 2003). Thus, if we raise awareness of the fact that all people and life on earth is tied to a common fate, we may increase identification with global citizens. In the present study we predicted that participants asked to read about the earth as a spaceship in which we all share the same fate would rate global citizenship identification higher than those in a control condition (reading about how a thermometer works).

Participants and Procedure

Participants ($N = 373$, 70.5% female; $M_{age} = 22.69$, $SD = 6.63$) included students participating for partial course credit, or extra credit, toward a psychology class (at a university in Texas and a college in New York). Participants were randomly assigned to read about the earth as a spaceship (e.g., "Spaceship Earth is a complex, self-contained, and self-sustaining biosphere that keeps us alive as we travel together through space;" Höhler, 2008) or about how a thermometer works (control condition) before rating global citizenship identification ($\alpha = .92$).

Results and Discussion

The results showed that participants who read about spaceship earth ($M = 4.67$, $SD = 1.48$) did not differ significantly from those in the control condition ($M = 4.59$, $SD = 1.44$) on global citizenship identification, $t(371) = -0.51$, $p = .611$, $d = .05$. The results did not support the manipulation of common fate, or at least this particular manipulation of common fate.

Study 8: Subliminal Priming

Researchers have noted that priming effects have shown poor replicability (e.g., Belaus et al., 2018), while others suggest that priming can activate schemas related to identities (Bargh et al., 1996). In the present study we primed participants with words related to global citizenship (see Reysen et al., 2014 for the process of identifying words related to global citizen category) or neutral words and predicted that global words would result in higher identification.

Participants and Procedure

Participants ($N = 53$, 73.6% female; $M_{age} = 22.81$, $SD = 5.18$) included students participating for partial course credit, or extra credit, toward a psychology class. Participants were randomly assigned to complete a lexical decision task (30 letter strings) during which either neutral (from Bradley & Lang, 1999: cabinet, scissors, barrel, cake, chocolate, cord, icebox, movie, smooth, spray, chair, cork, finger, glass, hotel) or global (international, global, diversity, cultural, community, responsibility, humans, world, environment, connected, awareness, peace, justice, helping, earth) words were subliminally primed (Kawakami et al., 2003, Study 3) prior to rating global citizenship identification ($\alpha = .98$).

Results and Discussion

The results showed that participants in the neutral ($M = 4.93$, $SD = 1.52$) did not differ from those in the global words ($M = 4.85$, $SD = 1.44$) condition on global citizenship identification, $t(51) = 0.20$, $p = .846$, $d = .05$. The results do not support the notion that subliminally priming words related to global citizenship elicits greater identification. Given that subliminal activation of the identity did not show an influence on identification, in Study 9 we tested a more explicit reference to the identity.

Study 9: Salient Symbol

In the present study we presented participants with an American flag, earth day flag (https://en.wikipedia.org/wiki/File:Earth_Day_ Flag.png), or no flag when completing a survey. Based on prior research showing that the presence of an American flag in the room when completing a study can elicit higher nationalism (e.g., Kemmelmeier & Winter, 2008), we predicted that participants exposed to the earth day flag would report higher global citizenship identification than those in the other conditions.

Participants and Procedure

Participants ($N = 135$, 83% female; $M_{age} = 24.39$, $SD = 8.21$) included students participating for partial course credit, or extra credit, toward a psychology class. Participants were randomly assigned to complete a survey, which included global citizenship identification ($\alpha = .91$), with an American flag, earth day flag, or no flag at the top of the screen.

Results and Discussion

The results showed no significant differences between the American flag ($M = 4.40$, $SD = 1.58$), earth day flag ($M = 4.04$, $SD = 1.53$), and control condition ($M = 4.57$, $SD = 1.33$) on global citizenship identification, $F(2, 132) = 1.48$, $p = .232$, $\eta_p^2 = .02$. In effect, the earth day flag (vs. other conditions) had no effect on global citizenship identification. Indeed, ratings from participants in the earth flag condition were trending in the opposite direction.

Study 10: Salient Norms

In Study 10 we manipulated the environment in which students were embedded. We did this in two ways, first manipulating the room (including global citizen related cues such as a world map), and second, the perception of the attitudes of other students (e.g., providing them with percentage of other students who say they are global citizens). Additionally, we had a control condition in which cues and attitudes were absent. We predicted that the subtle cues and the perceived attitudes of other students would elicit greater identification than the control condition.

Participants and Procedure

Participants (N = 84, 71.4% female; M_{age} = 24.15, SD = 7.75) included students participating for partial course credit, or extra credit, toward a psychology class. Participants were randomly assigned to complete a survey in a room with global symbols (e.g., globe on desk, posters regarding recycling), read a vignette about other students endorsing global citizenship, or no symbols or vignette (control condition) when completing a survey that included four items assessing global citizenship identification (α = .94; Doosje et al., 1995; Reysen et al., 2013). The global symbols included a recycling box on a shelf to the left of the participant, a world globe on a separate desk directly in front of the participant, two posters regarding recycling on the walls in front of the participant, and an upside down world map on the wall to the right of the participant (https://www.mapsinternational.com/upside-down-political-world-wall-map.html).

Results and Discussion

The results showed that participants in the poster (M = 4.31, SD = 1.16), vignette (M = 4.83, SD = 1.54), and control condition (M = 4.82, SD = 1.72) did not differ on global citizenship identification, $F(2, 81)$ = 1.21, p = .304, η_p^2 = .03. Thus, subliminal priming (Study 8), an explicit cue (Study 9), and the subtle cues in this study did not elicit greater global citizenship than control condition. Furthermore, an explicit message about the prevalence of self-identified global citizens in the psychology department also did not differ from the control condition. Three of the five global symbols (i.e., those regarding recycling) may not have elicited global citizenship identification due to a lack of overlap between the act of recycling and viewing oneself as a global citizen. Environmental policies are traditionally set at a national level that may not be conceptually linked to the international community for participants. Perhaps future research may use more global symbols to engender global citizenship identification.

Study 11: Educational Activities

Educators have suggested a variety of activities to engender global education in the classroom (e.g., Goldstein, 2007; World Vision Canada, 2008), however there is no empirical data regarding their effectiveness. In a study we tested the effectiveness of seven educational activities compared to a control condition. We predicted that individuals who engaged in the activities would report greater global citizenship identification than those in the control condition.

Participants and Procedure

Participants (N = 226, 62.5% female; M_{age} = 24.77, SD = 8.21) included students attending classes at a mid-sized regional university. Classes of students were randomly assigned to participate in one of eight conditions. The activities included in the present study were designed to encourage taking a global perspective. The classes completed the activity (or listened to the control lecture) and then completed a survey regarding attitudes, including global citizenship identification.

Educational Activities

Stereotyping

In the awareness of stereotypes activity, students were asked to write a paragraph about people in another country, write a second paragraph about how people in that country would describe Americans, and answer a series of questions regarding where stereotypes come from and the support one has for holding those beliefs.

Conflict Management Cartoon

In the conflict management cartoon activity, students were asked to think about a conflict within one's cultural setting, or a cross-cultural conflict, and draw a cartoon showing how the student would manage the conflict. Students were then asked to reflect on the message of the cartoon they drew and relate the conflict mitigation to a larger world conflict.

Global Items

In the global items activity, students were asked to examine the items they had on them (e.g., shirt, shoes, school bag) and note the country where the item was made. Students were then asked to locate the country on a map, estimate the price paid for the item and the payment to the person who made the item. Students were then asked to answer a series of questions that were intended to encourage the student to reflect on the interconnectedness of the global economy, income inequality, and ways to reduce global inequality.

World of 100

In the world of 100 activity students were asked to think of the planet as a village consisting of 100 people. Students were then asked to estimate the percentage of those 100 people for various demographics (e.g., gender, language spoken, religion, place of origin, age, literacy, access to drinking water, etc.). After receiving feedback about the actual percentages, students were asked to write about their thoughts about the activity.

Human Rights

In the human rights activity, students were given 15 human rights (e.g., nobody has any right to make us a slave, the law is the same for everyone). After each right students were asked to indicate whether this is a right they had and to estimate how many other countries also had that right for their citizens. After receiving feedback about the actual number of countries with that right, students were asked to reflect on the activity.

International Role-Playing

In the international role-playing condition, students (majority U.S.) were asked to separate into groups (4-6 people per group) and develop a short play in which the students interacted with a person from another country (with one person playing the role of the international sojourner). After enacting the role-play in

front of the class, students were asked to write a reflection about stereotypes.

Global Links Game

In the global links game condition, students were asked to separate into groups and play a game where they identified linkages between people, places, things, and information from the U.S. and another country (e.g., the U.S. participated in the Olympics in Greece). Following the game, students were asked to reflect on the interconnectedness of the world.

Control Condition

In the control condition students were given a lecture on the definitions of stereotypes, conflict, global economy, diversity, natural resources, and human rights. Thus, students in the control condition were exposed to the concepts that were included in the activities, but did not participate in an activity.

Results and Discussion

The results showed no significant differences on global citizenship identification between the activities, $F(7, 218) = 1.52$, $p = .161$, $\eta_p^2 = .05$. Students completing the stereotyping ($M = 3.75$, $SD = 1.44$), conflict cartoon ($M = 4.20$, $SD = 1.73$), global items ($M = 4.88$, $SD = 1.77$), world of 100 ($M = 3.98$, $SD = 1.87$), human rights ($M = 4.03$, $SD = 1.53$), international role-playing ($M = 3.83$, $SD = 1.63$), and global links game ($M = 4.38$, $SD = 1.50$) classroom activities did not differ significantly on degree of global citizenship identification than students in the control condition ($M = 4.57$, $SD = 1.79$). The results did not support the effectiveness of any of the educational activities for raising identification beyond a lecture on the topic. One possible reason was that classes were randomly assigned to condition rather than individuals. Furthermore, each activity covered one or two specific topics (e.g., interconnectedness and equality) while the control condition contained all of the topics. Perhaps a control condition without mention of the topics would have been better. Also, specific role-playing activity we did not account for what role the student played in the interaction.

General Discussion

The purpose of the present research was to report the results of 11 experiments attempting to shift participants' degree of global citizenship identification. Across the studies the manipulation hypothesized to increase identification failed to do so compared to the control condition. Taken together, the results across the studies highlight the difficulty in shifting individuals' degree of global citizenship identification.

Given the increasing globalization of the world, various educators, activist organizations, and governments have noted the need for people to take a global perspective. Globalization has also afforded individuals to adopt a global citizen identity. Given the prosocial outcomes of identifying with global citizens (e.g., intergroup empathy, valuing diversity, environmental

sustainability), researchers have sought to understand how to raise individuals' degree of identification (see Reysen & Katzarska-Miller, 2018). In the present research we show the varied methods we have attempted to do that in our lab. From eliciting physical pain to subliminal priming, the results show the difficulty of engendering global citizenship identification. However, as noted in the introduction, there have been some successes such as framing issues regarding globalization in a positive manner and thinking about a feared possible self, among others.

Rather than short educational activities and brief laboratory studies, increasing global citizenship identification may require longer or more in depth interventions. Indeed, the two main antecedents (normative environment and global awareness) in the model of antecedents and outcomes of global citizenship identification may require extended exposure to others who value the identity and bolstering of one's perceived knowledge/interconnectedness. Both of these antecedents, while possible to manipulate in an experiment (see Reysen & Katzarska-Miller, 2018), are based on the cultural environment in which one is embedded. In other words, individuals may have to know others who prescribe the identity for a period of time, or be embedded in environments (e.g., study abroad, intercultural work teams) that promote the identity over a period of time. In effect, individuals may need to internalize the norms of the pro-global cultural environments rather than quick one-shot interventions.

With this view in mind, future researchers may attempt to change the environments in which individuals are embedded to examine whether longer interventions can have an impact. There is evidence that students increase in identification over the course of a college semester in classes that have a global focus (Blake et al., 2015), although only by a small amount. Furthermore, individuals who participated in a 9-week compassion training program (vs. not) reported an increase in identification with all humanity (Brito-Pons et al., 2018). We suggest two possible areas where changes can be tested: school and work. Administrators and educators have the ability to construct a whole school approach to global citizenship. School administration and faculty may explicitly note their promotion of the identity and curriculum could be changed to focus on a global perspective. Furthermore, if there is broader support and activities in the broader community this may aid in students being immersed in a pro-global environment. The workplace differs depending on size, scope, and business, however this is another area in which individuals in charge can actively change the norms to include a pro-global focus (e.g., intercultural training, promote educational opportunities, explicit business culture norms). In each of these areas the goal of explicitly making a pro-global normative environment along with enhancing individuals' global awareness may in time engender global citizenship identification.

Each of the studies presented have limitations to consider when interpreting the results (e.g., in Study 11 we randomly assigned classes rather than individuals). However, two broader limitations include the samples and the short measure. All of the studies were conducted at a mid-sized regional university in the U.S. (with the exception of Study 7 which also included students

from a community college in New York). Participants in other cultural spaces may have reacted differently to the manipulations in this research. Related to this limitation is that participants in this region of the U.S. tend to report greater conservative political orientation. However, given random assignment to condition this should not have influenced the results. The majority of studies (except Study 10) used a two-item measure of global citizenship identification. Perhaps measures with more items tapping other dimensions of ingroup identification would have shown different results. Furthermore, the two items were usually embedded in a 22-item measure of antecedents and outcomes of global citizenship (Reysen & Katzarska-Miller, 2013) that was administered immediately after the manipulation. However, this was not always the case which may have led to order effects in the data. Lastly, some of the studies had low sample sizes which may not have been large enough to detect a smaller effect. Although, we strived to collect samples that were similar to others studies on those respective topics (e.g., priming).

To conclude, in the present paper we reported the results of 11 studies that attempted to shift participants' degree of global citizenship identification. The results showed no significant differences between the experimental manipulation and other conditions. These findings may aid other researchers who have thought to try one of these techniques for increasing global citizenship identification, or for meta-analytic purposes. Rather than a deterrent to future research to increase identification, the results show the challenge in this endeavor. Given the prosocial outcomes of identifying as a global citizen the goal of finding effective interventions is needed.

References

Aknin, L. B., Barrington-Leigh, C. P., Dunn, E. W., Helliwell, J. F., Burns, J., Biswas-Diener, R., Kemeza, I., Nyende, P., Ashton-James, C. E., & Norton, M. I. (2013). Prosocial spending and well-being: Cross-cultural evidence for a psychological universal. *Journal of Personality and Social Psychology, 104*(4), 635–652. https://doi.org/10.1037/a0031578

Aknin, L. B., Sandstrom, G. M., Dunn, E. W., & Norton, M. I. (2011). It's the recipient that counts: Spending money on strong social ties leads to greater happiness than spending on weak social ties. *PLoS one, 6*(2), e17018. https://doi.org/10.1371/journal.pone.0017018

Aronson, E. (1999). The power of self-persuasion. *American Psychologist, 54*(11), 875–884. https://doi.org/10.1037/h0088188

Bargh, J. A., Chen, M., & Burrows, L. (1996). Automaticity of social behavior: Direct effects of trait construct and stereotype activation on action. *Journal of Personality and Social Psychology, 71*(2), 230–244. https://doi.org/10.1037/0022-3514.71.2.230

Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin, 117*(3), 497–529. https://doi.org/10.1037/0033-2909.117.3.497

Bastian, B., & Haslam, N. (2010). Excluded from humanity: The dehumanizing effects of social ostracism. *Journal of Experimental Social Psychology, 46*(1), 107–113. https://doi.org/10.1016/j.jesp.2009.06.022

Bastian, B., Jetten, J., Hornsey, M. J., & Leknes, S. (2014). The positive consequences of pain: A biopsychosocial approach. *Personality and Social Psychology Review, 18*(3), 256–279. https://doi.org/10.1177/1088868314527831

Belaus, A., Reyna, C., & Freidin, E. (2018). Testing the effect of cooperative/competitive priming on the prisoner's dilemma. A replication study. *PloS one, 13*(12), e0209263. https://doi.org/10.1371/journal.pone.0209263

Blake, M. E., Pierce, L., Gibson, S., Reysen, S., & Katzarska-Miller, I. (2015). University environment and global citizenship identification. *Journal of Educational and Developmental Psychology, 5*(1), 97–107. http://dx.doi.org/10.5539/jedp.v5n1p97

Blake, M. E., & Reysen, S. (2014). The influence of possible selves on global citizenship identification. *International Journal of Development Education and Global Learning, 6*(3), 63–78. https://doi.org/10.18546/IJDEGL.06.3.05

Bradley, M. M., & Lang, P. J. (1999). *Affective norms for English words (ANEW): Instruction manual and affective ratings.* Technical Report C-1, The Center for Research in Psychophysiology, University of Florida.

Brito-Pons, G., Campos, D., & Cebolla, A. (2018). Implicit or explicit compassion? Effects of compassion cultivation training and comparison with mindfulness-based stress reduction. *Mindfulness, 9*(5), 1494–1508. https://doi.org/10.1007/s12671-018-0898-z

Carmona, M., Sindic, D., Guerra, R., & Hofhuis, J. (2020). Human and global identities: Different prototypical meanings of all-inclusive identities. *Political Psychology, 41*(5), 961–978. https://doi.org/10.1111/pops.12659

Castano, E., Yzerbyt, V., & Bourguignon, D. (2003). We are one and I like it: The impact of ingroup entitativity on ingroup identification. *European Journal of Social Psychology, 33*(6), 735–754. https://doi.org/10.1002/ejsp.175

Cohen, G. L., & Sherman, D. K. (2014). The psychology of change: Self-affirmation and social psychological intervention. *Annual Review of Psychology, 65*, 333–371. https://doi.org/10.1146/annurev-psych-010213-115137

Der-Karabetian, A., & Balian, N. (1992). Ingroup, outgroup, and global-human identities of Turkish-Armenians. *The Journal of Social Psychology, 132*(4), 497–504.

Doosje, B., Ellemers, N., & Spears, R. (1995). Perceived intragroup variability as a function of group status and identification. *Journal of Experimental Social Psychology, 31*(5), 410–436. https://doi.org/10.1006/jesp.1995.1018

Duval, S., & Wicklund, R. A. (1972). *A theory of objective self awareness.* Academic Press.

Goldstein, S. B. (2007). *Cross-cultural explorations: Activities in culture and psychology.* Routledge.

Höhler, S. (2008), "Spaceship earth": Envisioning human habitats in the environmental age. *GHI Bulletin, 42*, 65–85.

Hoshino-Browne, E., Zanna, A. S., Spencer, S. J., Zanna, M. P., Kitayama, S., & Lackenbauer, S. (2005). On the cultural guises of cognitive dissonance: The case of Easterners and Westerners. *Journal of Personality and Social Psychology, 89*(3), 294–310. https://doi.org/10.1037/0022-3514.89.3.294

Kawakami, K., Dovidio, J. F., & Dijksterhuis, A. (2003). Effect of social category priming on personal attitudes. *Psychological Science, 14*(4), 315–319. https://doi.org/10.1111/1467-9280.14451

Kemmelmeier, M., & Winter, D. G. (2008). Sowing patriotism, but reaping nationalism? Consequences of exposure to the American flag. *Political Psychology, 29*(6), 859–879. https://doi.org/10.1111/j.1467-9221.2008.00670.x

Lewin, K. (1943). Forces behind food habits and methods of change. *Bulletin of the National Research Council, 108*, 35–65.

McFarland, S., Hackett, J., Hamer, K., Katzarska-Miller, I., Malsch, A., Reese, G., & Reysen, S. (2019). Global human identification and citizenship: A review of psychological studies. *Advances in Political Psychology, 40*(S1), 141–171. https://doi.org/10.1111/pops.12572

McFarland, S., Webb, M., & Brown, D. (2012). All humanity is my ingroup: A measure and studies of identification with all humanity. *Journal of Personality and Social Psychology, 103*(5), 830–853. https://doi.org/10.1037/a0028724

Pickett, C. L., Gardner, W. L., & Knowles, M. (2004). Getting a cue: The need to belong and enhanced sensitivity to social cues. *Personality and Social Psychology Bulletin, 30*(9), 1095–1107. https://doi.org/10.1177/0146167203262085

Reysen, S., & Katzarska-Miller, I. (2013). A model of global citizenship: Antecedents and outcomes. *International Journal of Psychology, 48*(5), 858–870. https://doi.org/10.1080/00207594.2012.701749

Reysen, S., & Katzarska-Miller, I. (2018). *The psychology of global citizenship: A review of theory and research*. Lexington Books.

Reysen, S., Katzarska-Miller, I., Nesbit, S. M., & Pierce, L. (2013). Further validation of a single-item measure of social identification. *European Journal of Social Psychology, 43*(6), 463–470. https://doi.org/10.1002/ejsp.1973

Reysen, S., Larey, L. W., & Katzarska-Miller, I. (2012). College course curriculum and global citizenship. *International Journal of Development Education and Global Learning, 4*(3), 27–39. https://doi.org/10.18546/IJDEGL.04.3.03

Reysen, S., Pierce, L., Mazambani, G., Mohebpour, I., Puryear, C., Snider, J. S., Gibson, S., & Blake, M. E. (2014). Construction and initial validation of a dictionary for global citizen linguistic markers. *International Journal of Cyber Behavior, Psychology and Learning, 4*(4), 1–15. https://doi.org/10.4018/ijcbpl.2014100101

Reysen, S., Pierce, L., Spencer, C., & Katzarska-Miller, I. (2013). Exploring the content of global citizenship identity. *The Journal of Multiculturalism in Education, 9*(1), 1–31.

Silvia, P. J., & Duval, T. S. (2001). Objective self-awareness theory: Recent progress and enduring problems. *Personality and Social Psychology Review, 5*(3), 230–241.

Snider, J. S., Reysen, S., & Katzarska-Miller, I. (2013). How we frame the message of globalization matters. *Journal of Applied Social Psychology, 43*(8), 1599–1607. https://doi.org/10.1111/jasp.12111

Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. In W. Austin & S. Worchel (Eds.), *The social psychology of intergroup relations* (pp. 33–47). Brooks/Cole.

Turner, J. C., Hogg, M. A., Oakes, P. J., Reicher, S. D., & Wetherell, M. (1987). *Rediscovering the social group: A self-categorization theory*. Blackwell.

World Vision Canada. (2008). *Global education activity resource*. World Vision Canada.