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Do happy people care about society's problems?

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ABSTRACT

Since ancient times, scholars, individuals, and societies have been preoccupied with the pursuit of happiness. But might individual happiness actually be bad for society and the world? A common concern – which we refer to as the Pollyanna hypothesis – is that happy people might be too happy to care enough about important current issues, thus being less likely to act on improving society and the world. In three studies, however, we found that feeling good predicted more, not less, action on current issues. We saw this pattern in the context of the 2017 far right rallies in Charlottesville, VA (Study 1), a wide range of social, political, and environmental issues chosen by participants (Study 2), and environmental action within a nationally representative sample (Study 3). These correlational findings speak against the Pollyanna hypothesis: Happiness does not seem to preclude caring about local and global issues.

In 2011, the United Nations defined happiness as a 'fundamental human goal' and invited Member States to pursue measures that enhance the happiness of their citizens. As nations across the globe become more interested in human happiness, some have expressed concerns about the downsides of being happier and the so-called field of 'positive psychology' (Bohart & Greening, 2001; Lazarus, 2003). What if in our rush to make everyone happy, people became complacent about the plight of their local communities, society, and the world?

The power of negative thinking

Perhaps precisely in reaction to the expanding focus on happiness and well-being, a growing number of popular books (Kashdan & Biswas-Diener, 2015; Knight, 2014) and articles (Adler, 2018; LaBier, 2017) have argued that we should, instead, be embracing our darker side, touting the 'power of negative thinking' and emotions. Such popular critiques of positivity seem to be fundamentally based on a functional perspective of emotion – the idea that (negative) emotions exist to solve particular problems within one's environment (Ekman, 1992). This functional perspective underlies both evolutionary and constructivist theories of emotion and is well supported by research (Keltner & Lerner, 2010). For example, anger has been associated with intentions to take action, particularly in response to perceived unfairness or wrongdoing by

transgressors (Roseman, Wiest, & Swartz, 1994). In one study, British citizens' anger towards the British government predicted not only desire to punish those responsible for the war in Iraq, but also intentions to advocate withdrawal from Iraq and to support compensation to the Iraqi people (Iyer, Schmader, & Lickel, 2007). Even shame – an emotion that is largely seen as maladaptive in the psychological literature (Tangney, Stuewig, & Mashek, 2007) – has recently been shown to promote (at least) the desire for action in the intergroup context (Iyer et al., 2007).

Going beyond specific negative emotions, negative moods seems to also confer benefits, including improved judgment accuracy, reduced gullibility, greater perseverance, and more politeness (for a review, see Forgas, 2013). According to the *feelings-as-information* perspective (Schwarz, 2012), people often use their existing mood state to form a judgment of how they feel about external events. In the context of social, political, or environmental issues, a person prone to negative moods may, therefore, decide they feel more concerned about such issues than would those in more positive moods. Indeed, negative affectivity – the general tendency to experience negative emotions as a personality trait – has also been shown to confer benefits for both the detection and action in the face of danger. A meta-analysis of 75 studies, for example, showed that depressed individuals were more realistic about the future than nondepressed individuals (Oettingen, 2000). And in a lab study, groups of three participants, who were led to believe that there was

a computer fire in the lab, were faster at reacting to the perceived danger when at least one member of the group had high neuroticism (Ein-Dor, Mikulincer, & Shaver, 2011). Thus, by perceiving and responding to danger, people high in negative affect may benefit themselves – as well as those around them.

For what it's worth, the empirical evidence seems to fit with a stereotype of the angry social activist: somebody who joins rallies, argues with those who do not share their point of view, or composes negative tweets. Though direct evidence is lacking, it is reasonable to hypothesize that negative affect may be associated with both greater concern and more action in response to current social issues and environmental threats.

A darker side of positivity

Just as negativity may predict greater propensity to act, too much positivity may predict less action in response to current or anticipated problems. The National Cancer Institute, for example, estimates that people who under-estimate their risk of heart disease – that is, unrealistic optimists – tend to develop earlier signs of cardiovascular problems (Ferrer et al., 2012). Similarly, individuals overly optimistic about health risks were less likely to engage in health-protective behavior, such as buying radon test kits after being advised of the possible presence of this radio-active element (Weinstein & Lyon, 1999). Beyond under-estimating health risks, unrealistic optimism about one's own future life more generally may also be detrimental: In a longitudinal study of almost 7,000 German residents, older adults who overestimated how satisfied they would be with their lives five years into the future were more likely to die over a 12-year period (Lang, Weiss, Gerstorf, & Wagner, 2013). These striking effects of unrealistic opti-mism may be due to a range of maladaptive tendencies that accompany it – from using defensive strategies when faced with information about health risks to actually engaging in riskier behaviors (for a review, see Chang, 2008; Forgas, 2014).

Beyond the domain of personal health, preliminary evidence suggests that very happy people might be less engaged in political action. In a study of over one hundred thousand individuals across 96 nations, people rating their satisfaction with life as 10 out of 10 were less likely to engage in behaviors, such as signing a petition or joining a protest, compared to individuals rating their lives 8 or 9 (Oishi, Diener, & Lucas, 2007).

The benefits of subjective well-being

Most of the evidence for a negative association between positivity and action is based on people with overly optimistic expectations about the future or with extreme satisfaction with their lives. Research on sub-jective well-being and its components – high life satis-faction, frequent positive affect, and infrequent negative affect – suggests that being happy can be beneficial in a range of domains. Happier people, for example, are healthier (Pressman & Cohen, 2005) and live longer (Diener & Chan, 2011). These effects are produced at least in part because happy people engage in more healthy behaviors (Boehm, Vie, & Kubzansky, 2012), taking preventative action to mitigate risk (Kim, Kubzansky, & Smith, 2015), and avoiding risky behaviors like not using sun protection (Grant, Wardle, & Steptoe, 2009).

Beyond taking better care of themselves, happy peo-ple might be more caring and helpful to others. Happy employees, for example, help other workers and the company more than their less happy counterparts, even when the help they are giving is not part of their job description (Boehm & Lyubomirsky, 2008). Though such organizational citizenship is not equiva-lent to societal citizenship, these findings suggest that happy people may be more, rather than less, inclined to engage in action that benefits society. Indeed, happier people are more likely to donate money to charity and more likely to volunteer (Lyubomirsky, King, & Diener, 2005; Oishi et al., 2007). In the realm of political action, happiness has also been associated with a greater like-lihood to vote (Weitz-Shapiro & Winters, 2011).

The pollyanna hypothesis

Our review of the existing literature suggests that nega-tive emotions seem to stir people to action, and so does feeling good – except when it doesn't. Past research suggests that negative affect may prompt greater action in response to various threats and stronger effort to rectify perceived transgressions. But while overly optimistic and extremely happy people are documen-ted to engage in riskier behavior and participate less in some kinds of political action, subjective well-being generally has a positive association with healthy beha-vior, interpersonal prosocial behavior, and political activity like voting. This apparently conflicting state of the literature provides an unsatisfactory answer to the concern – shared by popular and academic authors alike – that efforts to make people ever happier may be counterproductive, producing a society of Pollyannas unconcerned with making progress on sol-ving critical issues and threats faced by their commu-nities, nations, and the world.

A falsifiable test of the Pollyanna hypothesis requires that we clearly define happiness as the presence and

frequency of positive emotions – rather than as the absence of bad emotions. In particular, the Pollyanna hypothesis states that feeling good – feeling happy, joyful, content – should preclude people from also feeling bad – concerned, worried, angry, or guilty – about important current issues. Thus, the Pollyanna hypothesis predicts a negative relationship between the positive affect people generally experience in their daily lives and the negative affect people feel in response to specific events or issues. Notably, the Pollyanna hypothesis does not necessarily suggest that general negative affect is good for enacting change on current issues, but simply that general positive affect may decrease concern about current issues, which is useful in motivating action on those issues. Note, however, that even though the Pollyanna hypothesis is a causal hypothesis, falsifiable evidence inconsistent with that hypothesis does not have to be. Thus, the Pollyanna hypothesis becomes less tenable if general positive affect is not inversely related to negative affect in response to specific issues, as well as with their past, current, and future action on that issue. Of course, evidence that positive affect predicts greater negative affect and greater action in response to an issue would be even more inconsistent with the Pollyanna prediction.

The present research

In Study 1, we explored the relationship of positive affect with specific negative affect and action with regards to *The Unite the Right Rally* in Charlottesville, VA on August 11th and 12th, 2017. In Study 2, we invited participants to identify their own 'social, political, or environmental issue' that they felt was important. We then again assessed the relationships between general positive affect, specific negative affect, and action. Finally, in Study 3, we used a broader, representative sample from the U.S. General Social Survey (GSS), examining the association of happiness with environmental concerns and behavior.

Study 1: the far-right rallies in charlottesville

In Study 1, we explored how levels of positive and negative affect impacted students' responses to a troubling local event. In particular, we were able to access a sample of students in Charlottesville, VA in the aftermath of *Unite the Right Rally* – the far-right rally and ensuing counter protests of August 11th and 12th, 2017 that garnered national attention. This study offered a unique opportunity to explore how happy and unhappy individuals would act after their surrounding community had been impacted by a tangible emotional event, amidst national outcry and calls for action.

Method

In total, 320 students enrolled in the study (Age: M = 18.8, SD = 0.98; 52% Female). All students were recruited through the University of Virginia participant pool for class credit. The sample size for this time-sensitive survey was determined by practical considerations: the researchers' assigned credits for recruitment from the participant pool in the semester following the rallies. Sensitivity analyses indicated that this sample size gave us 80% power to detect true population effects of size $\rho = .16$. The most common race/ethnicity was non-Hispanic White (67%), followed by Asian/Asian American (13%), Black/African American (8%), and Hispanic/Latino (6%). On social issues, rated from 1 (*very conservative*) to 10 (*very liberal*), participants tended to be more liberal (M = 6.78, SD = 2.10), while on economic issues they were relatively centrist on the political spectrum (M = 5.2, SD = 2.23). Participants completed an online survey through Qualtrics.

We operationalized happiness as the positive affect people had experienced over the preceding month and unhappiness as the negative affect people had experienced over the same period. As positive and negative affect are fairly independent (Watson, Clark, & Tellegen, 1988), these operationalizations of subjective well-being best served the key purpose of this research to investigate whether feeling good or feeling bad predicts more action in response to perceived threats and issues. We thus asked participants to rate their positive and negative affect on the SPANE scale (Diener et al., 2010), reporting how much they felt various emotions over the past four weeks on a scale from 1 (*not at all or very slightly*) to 5 (*very much or extremely strongly*). See Table 1 for descriptives.[1]

Participants then read a short paragraph describing the controversial *Unite the Right Rally* that took place 3 months earlier. The description offered a brief summary of the events, while refraining from providing interpretations of the event (see materials on OSF). Participants were asked to imagine they were explaining the event to a friend, focusing on the thoughts and emotions they experienced. Instructions prompted participants to keep responses to a minimum of 5–7 sentences, but to limit their writing to no more than 5 minutes. These tasks were intended to refresh initial sentiments about the event and allow a more accurate assessment of their event-specific affect.

As a measure of concern about the issue, we measured participants' negative affect regarding the Charlottesville rallies. We thus asked participants to complete the SPANE again, but with modified instructions about how they feel when thinking about the rallies. To measure behavioral intentions and past behavior, participants were given a list of 10 possible actions and asked to indicate if they

Table 1. Descriptive statistics.

Study 1: Far Right Rallies in Charlottesville, VA (2017)

	PA	NA	Concern	Past Action	Current Action	Future Action
N	320	320	320	320	320	320
Mean	3.83	2.61	4.08	2.31	4.78	2.55
SD	0.77	0.90	0.84	1.48	1.64	2.40

Study 2: Self-Selected Issues

	PA	NA	Concern	Past Action	Current Action	Future Action
N	544	544	543	544	544	544
Mean	3.55	2.36	3.94	1.98	0.24	2.24
SD	0.92	0.93	0.91	1.62	0.43	1.77

Study 3: Environmental Action (GSS)

	Happiness	Concern	Past Action	Current Action	Future Action
N	1428	1404	–	1423	544
Mean	2.11	3.86	–	2.22	2.24
SD	0.64	1.10	–	0.72	1.77

Note. PA = positive affect (general); NA = negative affect (general). As other constructs were assessed with a range of tools across studies, means and standard deviations should not be directly compared across studies.

(1) have already done, (2) plan to do, or (3) have no intention to do the specified action. Options ranged from intellectual actions (e.g. engage in meaningful conversation with friends) to tangible actions (e.g. write a blog post, join a protest, give money) in order to cover a full spectrum of possible reactions. Lastly, to measure current willingness to act, we presented participants with the option to 'join a community of peers' available to support and assist in instances of intolerance, instilling a sense of accountability in their response. They recorded their interest in this group on a continuum from −3 (*very disinterested*) to 3 (*very interested*), recoded to a 1-to-7-point scale for analyses. See Table 1 for descriptive statistics (materials and data available: https://osf.io/86ngd/?view_only=70ef0a3624ed427aaccf308428530a36).

Results

Concern

General positive affect expectedly predicted lower general negative affect, $r = -0.24$, 95%CI [−.14; −.34], $p < .001$; yet, general positive affect predicted marginally greater negative affect about the rallies, $r = .09$, 95%CI [−.02; .20], $p = .091$. In contrast, despite being measured with the same items, general negative affect was not a strong predictor of specific negative affect about the issue, $r = .05$, 95%CI [−.06; .16], $p > .250$.

Action

General positive affect did not predict past action, $r = .06$, 95%CI [−.05; .17], $p > .250$, but neither did general negative affect, $r = .01$, 95%CI [−.10; .12], $p > .250$. We also found that positive affect did not predict future intentions to act, $r = 0.02$, 95%CI [−.09; .13], $p > .250$, but negative affect did, $r = 0.12$, 95%CI [.01; .23], $p = .029$. Looking at current action

by measuring interest in joining a support peer group, however, we found that general positive affect was a significant predictor of current action, $r = 0.14$, 95%CI [.03; .25], $p = 0.012$, whereas negative affect was a marginally significant predictor of current action, $r = 0.11$, 95%CI [.00; .22], $p = .053$.

Summary

Study 1 failed to produce evidence of the Pollyanna hypothesis that happiness is associated with less action in response to important social concerns. To the contrary, happier individuals, when presented with the opportunity to do so, were more willing to act in the present, helping the community cope with the aftermath of a traumatic local event.

Study 2: choose your own issue

In Study 2, we allowed participants recruited across the United States to select the social, political, and environmental issues that are most personally important to them. This approach allowed us to examine the relationship between happiness and action across a wider range of issues important to the American public.

Method

We recruited 544 participants (Age: $M = 28.2$; $SD = 11.7$), 241 of whom were recruited through the participant pool of a public American university ($M = 18.7$, $SD = 0.87$) and the other 303 were recruited through Mechanical Turk with the help of TurkPrime (Age: $M = 35.8$, $SD = 10.1$; Modal Education = Bachelor Degree [n = 125]). Sensitivity analyses indicated that this sample size gave us 80% power to detect true population effects of size $\rho = .12$. The most

common race/ethnicity was non-Hispanic White (70%), followed by Asian/Asian American (16%), Black/African American (7%), and Latino(a)/Hispanic (4%). The median religious affiliation, on a scale from 1 (*not at all religious*) to 10 (*extremely religious*), was 4 ($M = 4.41$ $SD = 3.02$).

Participants completed an online survey on Qualtrics (see Table 1 for descriptive statistics for all measures). As in Study 1, they rated their positive and negative affect on the SPANE (Diener et al., 2010), reporting how they felt over the past four weeks on a scale from 1 (*not at all or very slightly*) to 5 (*very much or extremely strongly*). Participants were then asked to think about and type in as many political, social, or environmental issues that worried them. On the following page, participants were invited to select the one issue of those they had just listed, and to provide up to 3–5 reasons why this issue was important to them. Participants most frequently selected environmental issues (26.3%), followed by concerns of the current state of the U.S. government (11.8%), healthcare (8.8%), and racism (6.6%). As we intended, however, groups of 2% to 5% of participants also selected a variety of other issues across the political spectrum, including the state of the economy, wealth inequality, terrorism, global war, gun violence, loss of gun rights, decline in morals, humanitarian crises, women's rights, LGBT rights, immigrant rights, and illegal immigration.

After selecting an issue they cared about, participants were asked to recall and describe 'a time or event when [they] felt particularly worried about this issue.' These prompts were designed to ensure we assessed their concern regarding the issue more accurately. As in Study 1, we operationalized concern by asking participants to complete the negative affect of the SPANE but with reference to how they feel when thinking about the issue (e.g., angry, sad, afraid). These items of negative affect about the issue formed a composite measure of concern ($a = .90$).

To assess past and future behavior, we asked participants to indicate whether they had done or plan to do each of six different actions. The given options were similar to those in Study 1 but more limited in number to ensure that they were applicable to the wider range of issues examined in Study 2. The action options included general ways to enact political and social change in a democratic society (e.g., joining a protest/rally, contacting their representative, giving money to organizations whose mission is to solve/resolve the issue). As in Study 1, we summed the number of actions people had done or planned to do to form separate composites of past and future behavior (varying from 0 to 6).

As a measure of current behavior, we asked participants whether they were interested in keeping informed about the issue by signing up for an email newsletter; we then coded whether or not participants provided their email (1) or not (0), providing an objective measure of behavior. Though typing in one's email address in a survey box does not represent, *per se*, a significant effort, we reasoned that the symbolic meaning of this action represents a commitment to stay informed about the issue on a regular basis. To quantify the level of commitment that participants signified by providing their email, we asked participants to indicate how frequently they wanted to receive such newsletter with the anchors of: 0 (*no emails*), 1 (*a few times a year*), 2 (*once a month*), 3 (*biweekly*), 4 (*once a week*), 5 (*several times a week)*, and 6 (*daily*). To make this commitment salient to participants, this question came before participants were invited to sign up for the newsletter. Out of the 129 participants who provided their email (or approx. 1 in 4 of the sample as shown in Table 1), the modal response ($n = 42$) was to choose to receive the newsletter once a week; the median response was 'Biweekly' ($M = 2.23$; $SD = 1.75$), and 8.5% chose to receive an email every day.

As in Study 1, additional variables beyond the focus of the present report were also included (see https://osf.io/86ngd/?view_only=70ef0a3624ed427aaccf308428530a36 for materials and data).

Results

Concern

We found that general negative affect predicted significantly greater specific negative affect about the issue, $r = .09$, 95%CI [.00; .17], $p = .041$. Positive affect, however, also predicted higher, not lower, negative feelings about the issue, $r = .14$, 95%CI [.06; .23], $p < .001$; in contrast, general positive affect was inversely related to general negative affect, $r = -.44$, 95%CI [−.50; −.36], $p < .001$.

Action

Positive affect predicted greater concern about an issue people cared about, but does it also predict greater propensity for action? We found that happy people were more likely to have been proactive in addressing the issue they were worried about, $r = .09$, 95%CI [.00; .17], $p = .040$. At the same time, unhappy people – those higher in general negative affect – were less likely to have done much about the problem they chose as important to them, $r = -.12$, 95%CI [−.20; −.03], $p = .006$. Yet, the more specific negative affect participants felt about the issue, the more likely they were to have done more about the issue, $r = .17$, 95%CI [.09; .25], $p < .001$. Indeed, specific negative affect mediated the relationship between general positive affect and past action, *indirect effect* = .04, 95%CI[.01; .09], $z = 2.06$, $p = .039$,

explaining 26% of the total association between PA and past action.

Next, we examined participants' intentions to do something about the issue in the future, as assessed with the same list of possible actions as we used for assessing past behavior. Positive affect had virtually no bearing on how much people planned to do about the issue in the future, $r = -.01$, 95%CI [−.09; .07], $p > .250$, and the association of intended behavior with general negative affect was also nonsignificant, $r = .06$, 95%CI [−.03; .14], $p = .189$. Even specific negative affect about the issue did not predict greater intention to engage in future activity as measured in the present study, $r = .02$, 95%CI [−.06; .10], $p > .150$. Notably, past behavior was a negative predictor of future behavior, $r = -.25$, 95%CI [−.16; −.32], $p < .001$. This pattern suggests that, if people had already sought to, for example, inform themselves about the issue, they might have felt it was inaccurate to also say that they plan to get informed about the issue.

Finally, turning to our measure of current behavior, a logistic regression indicated that even a single point increase in positive affect was associated with 31% greater likelihood to provide one's email to sign up for the newsletter, exp(B) = 1.31, $z = 2.33$, $p = .020$, $\chi^2(1) = 5.69$. For consistency in providing effect sizes, we also estimated the Pearson correlation, yielding the same conclusions, $r = .10$, 95%CI [.02; .18], $p = .019$. In contrast, general negative affect was not associated with the likelihood of signing up for the email newsletter: exp(B) = 1.03, z = 0.30, $\chi^2(1) = 0.09$; $r = .01$, 95%CI [−.07; .10]; $ps > .250$. As with future action, specific negative affect also did not predict significantly greater likelihood of signing up, exp(B) = 1.19, $\chi^2(1) = 2.23$; $r = .06$, 95%CI [−.02; .15], $ps > .140$. We did not find any associations with the frequency of wanting to receive these emails.

Summary

Across a broader national sample of individuals who chose a current issue that they cared and felt worried about, we found further evidence against the possibility that happy people are unconcerned about current issues or that they are unwilling to be proactive in addressing these issues. General positive affect predicted feeling greater negative affect about issues people chose as most important to them, having taken a greater number of past actions, and being more willing to act when given the opportunity to do so in the present (i.e. to provide one's email to stay informed about the issue through a regular newsletter). Though general negative affect was also related to more issue-specific negative affect, this general propensity to feel negative emotions predicted having engaged in fewer past

actions and did not predict greater likelihood to act when given the opportunity to do so. In contrast, issue-specific negative affect was the strongest predictor of past behavior (though not of current action or future intentions). Thus, the evidence suggests that negative emotions are not necessarily associated with less action; rather, although general unhappiness in life may indeed predict less action, situationally-bound negative emotions about a specific issue may be adaptive, predicting more action on the issues people are worried about.

Though Studies 1 and 2 provide consistent evidence, the nonrepresentative samples do not allow us to meaningfully examine the possibility that the observed relationships may be explained by third variables, such as common demographics. Richer individuals, for example, might be both happier and have more resources to dedicate to taking action on the issues that they care about. Accordingly, in Study 3, we use nationally representative data from the GSS to address these questions.

Study 3: environmental action (general social survey: GSS)

In Study 3, we used a broader, representative sample from the U.S. General Social Survey (GSS) in 2010 to examine the role of happiness in the context of environmental issues – the category of issues most commonly chosen by participants in Study 2.

Method

In all, 2044 participants were polled in GSS 2010 (Median age = 47, Range age = 18–89; 56% female; Median years of education = 13). A representative subsample of people was asked questions on the environmental module, which was included in two out of three versions of the 2010 GSS poll (Ballot A: $n = 667$, and Ballot B: $n = 763$). Thus, the total number of participants with data on the environmental variables was $N = 1430$. Sensitivity analyses indicated that this sample size allowed us to detect true population effects of size $\rho = .07$ with 80% power. As the GSS carefully samples each subballot, the demographic profile of the subsample used in the current study was identical to the one reported above for the full GSS 2010. Of course, due to small nonresponse rates, the exact ns vary slightly across different variables (see Table 1 for details and for descriptive statistics for all key variables). Participants in the GSS indicate whether they are *very happy, pretty happy*, or *not too happy*. As a measure of environmental concern, we used responses to the item: 'Generally speaking, how concerned are you about environmental issues?' assessed on a scale ranging from 1 (*not at all concerned*) to 5 (*very concerned*). Participants also responded to a more specific

item about climate change: 'In general, do you think that a rise in the world's temperature caused by climate change is dangerous to the environment?' from 1 (*not at all dangerous*) to 5 (*extremely dangerous*).

We found four items of current daily behaviors in the GSS relevant to environmental issues, including recycling, avoiding products that may hurt the environment, attempting to reduce fuel consumption while driving, and driving less altogether – all rated on scales of 1 (*never*), 2 (*sometimes*), 3 (*often*), and 4 (*always*), α = .69. We identified three items in the GSS that measured people's willingness to sacrifice in the future in order to protect the environment, including a willingness to pay higher taxes, willingness to pay higher prices, and willingness to accept a cut in living standards (see Table 1 for means and standard deviations). These items were rated on continuous scales, from 1 (*not at all willing*) to 5 (*very willing*), formed an internally consistent composite, α = .84, and were analyzed together.

Results

Because happiness in the GSS is measured with three clearly defined categories – rather than with a multi-item continuous composite scales – we used ANOVAs to compare mean differences in concern and action between people who are *very happy*, those who are *pretty happy*, and those who are *not too happy* (see Figure 1). To test whether the effects can be explained away by common demographics, we add covariates using ANCOVAs (see Table 2).

Concern

An ANOVA comparing not too happy, pretty happy, and very happy people indicated no overall differences in general environmental concern, $F(2, 1399) = 0.14$, $p > .250$. An ANOVA predicting concern about the climate, however, did indicate an omnibus difference between people of varying levels of happiness, $F(2, 1320) = 3.96$, $p = .019$. This omnibus effect was not explained by age, gender, income, and education when added to an ANCOVA – even though younger people ($\beta_{age} = -.10$, $p < .001$), the less wealthy ($\beta_{income} = -.08$, $p < .013$), and females ($\beta_{sex} = .06$, $p < .029$) worried significantly more about climate. Pairwise comparisons of the marginal means in the ANCOVA indicated that 'not too happy' individuals were more concerned about the climate than 'very happy' individuals, $p_{tukey} = .033$ (see Table 2 for details).

Current behavior

Unhappy people were more likely to worry about climate, but were they more likely to act to protect the environment? The ANOVA indicated an overall omnibus effect on current behavior between people with differing happiness levels, $F(2, 1418) = 4.68$, $p = .009$. Unlike the results for climate concern, however, very happy people were most likely to engage in environmentally friendly behavior (Figure 1). In particular, pairwise comparisons indicated that 'very happy' participants were more likely to engage in daily environmental action than both 'not too happy' participants, $MD(SE) = .14(.06)$, $p = .024$, and 'pretty happy' participants, $MD(SE) = .13(.04)$, $p = .004$; in contrast, 'not too happy' participants were not significantly less likely to take daily environmental action than 'pretty happy' participants, $MD(SE) = -.01(.06)$, $p > .250$. Despite these differences in the predictors of concern and action, people who were more concerned about climate were, expectedly, more likely to act to mitigate their environmental impact, $r = .38$, $p < .001$. Older ($\beta_{age} = .09$, $p < .001$), richer ($\beta_{income} = .02$, $p < .001$), and more educated people ($\beta_{educ} = .13$, $p < .001$), as well as females ($\beta_{sex} = .06$, $p < .001$), were more likely to be environmentally friendly. Controlling for these demographics, however, did not fully explain the effect of being very happy on current environmental action (Table 2).

Future sacrifice

The effects on willingness to make personal sacrifices mirrored those on current action. We observed a marginally significant omnibus effect of happiness category, $F(2,$
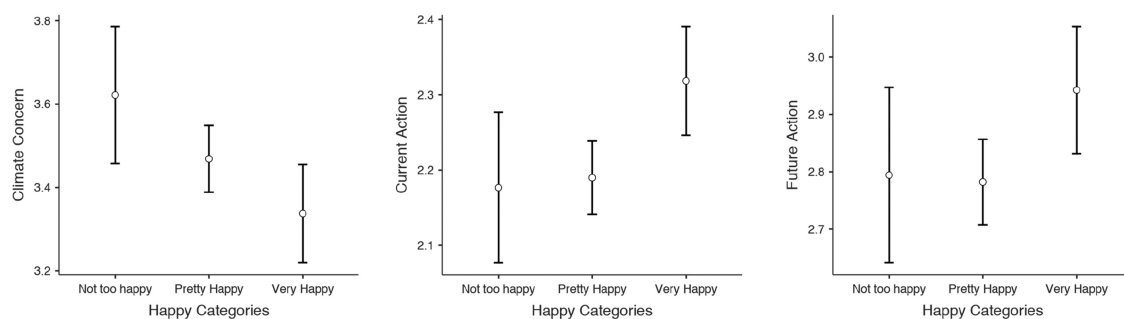

Figure 1. Individuals who are not too happy worry most about climate, but very happy individuals are most likely to act to protect the environment in the nationally representative sample in Study 3 (GSS).

Table 2. ANCOVA results comparing social action between very happy, pretty happy, and not too happy individuals in GSS controlling for major demographics.

		Concern			Current Behavior			Future Action		
		F	t	p	F	t	p	F	t	p
Omnibus	Happiness	3.17		.042	2.93		.054	3.25		.039
	Age	12.31		<.001	10.53		.001	1.22		.270
	Sex	4.75		.030	3.89		.049	0.77		.381
	Income	6.01		.014	0.58		.447	0.00		.969
	Education	0.15		.702	19.44		<.001	13.55		<.001
Pairwise										
Very Happy	←→ Pretty Happy		−1.47	.305		2.41	.043		2.51	.032
Very Happy	←→ Not Happy		−2.50	.033		0.96	.601		0.88	.653
Pretty Happy	←→ Not Happy		−1.66	.220		−0.78	.713		−0.96	.602

Note. P-values in pairwise comparisons are Tukey corrected.

1395) = 2.88, $p = .057$, which was significant after controlling for demographic factors (Table 2). Using pairwise comparisons, we again found no difference between 'not too happy' individuals and 'pretty happy' individuals, $MD(SE) = .01(.09)$, $p > .250$, but 'very happy' individuals were significantly more willing to sacrifice than the 'pretty happy' individuals, $MD(SE) = .16(.07)$, $p = .019$ (Figure 1) – an effect that remained significant after controlling for age, sex, income, and education (Table 2). There were no differences, however, between 'very happy' individuals and 'not too happy' on how willing they were to sacrifice. Only education significantly predicted greater willingness to sacrifice, $\beta_{income} = .11$, $p < .001$.

Summary

In a nationally representative sample of Americans, we obtained evidence that very happy individuals were more, not less, likely to take environmental action – even though people who were not happy worried more about climate. This suggests that, even if happy people worry less, they are more likely than unhappy people to take action in their daily lives towards being environmentally conscious. Notably, very happy individuals were also more willing to engage in future sacrifices than pretty happy individuals. Although this study found no difference in willingness to sacrifice between very happy and unhappy individuals, this seems to be due to insufficient power as fewer people reported being 'not happy' (see Figure 1). This distinction provides evidence against the argument that making people happier will decrease their willingness to act on societal issues. These effects were relatively robust to controlling for a key possible confound – income – as well as other demographics.

Discussion

Are happy people less likely to be involved in social, political, and environmental action? Contrary to this Pollyanna hypothesis, we found evidence across three studies and various social issues that happiness predicts more, not less, social action. Although these associations were statistically small, they generally revealed that happier people tend to engage in more current action in response to environmental threats, local social issues, and global social issues that they care about. The size of these associations remained robust after controlling for demographic factors in a nationally representative sample. Furthermore, we observed associations between positive affect and action in demographically homogenous samples (college students at an elite university, where the students tended to be upper-middle-class, largely Caucasian, and liberal in political attitudes) making it unlikely that factors, such as income or education, are the key drivers of the observed associations. Thus, while causality cannot be inferred from correlational data, we found no evidence for the Pollyanna hypothesis: Happy people do not seem to be too self-involved to participate in social action or strive to enact change across local and global issues.

In contrast to happy people's propensity for action and involvement, unhappy people – though sometimes concerned about important current issues – were no more likely to act when given the opportunity to do so in the context of our studies (e.g., signing up for email newsletter to stay informed and engaged with an important to them issue) or in their daily life (e.g. recycling or conserving energy). Notably, however, situationally-bound negative feelings about the specific issue did predict more action.

Theoretical integration and implications

The overall pattern of observed relationships is consistent with the *affect-as-cognitive feedback* model (Huntsinger, Isbell, & Clore, 2014). According to this perspective, positive affect serves as a cognitive 'Go!' signal, whereas negative affect serves as a corresponding 'Stop!' signal. Thus, when happy people feel driven by negative emotions to participate in social, political, or environmental action, their brighter

mood may catalyze such intentions to act into actual behavior. In contrast, when unhappy people feel concerned about an issue or driven to act, their somber mood may impede this intention from turning into tangible effort and action.

The pattern of findings for negative affect is further consistent with the *feelings-as-information* model (Schwarz, 2012) by showing that high negative affect predicts greater concern when thinking about various issues. The feelings-as-information perspective, however, fails to explain why we observed the same – and even somewhat larger – association between positive affect and concern about issues. This apparent theoretical discrepancy may be due to a methodological discrepancy: Whereas most of the research underlying the feelings-as-information theory is based on temporary moods induced in the lab (Schwarz, 2012), we examined people's frequency of experiencing positive emotions over an entire month. Thus, while watching a funny video in the lab may put people in a giddy mood, leading them to feel less worried about current issues, being generally in a good mood across one's daily life may serve as an emotional resource: Feeling good most of the time may allow people to feel, or even actively cultivate feelings of, anger, indignation, or worry about issues that they see as impacting their community, society, and the world. Further research and theory are needed to distinguish between the cognitive effects of momentary positive moods versus those of being happy.

Boundary conditions

We began this article by reviewing a growing literature on the effects of negative emotions – from anger to shame – on behavior aimed to engender personal, social, or political change (Kashdan & Biswas-Diener, 2015). Do the observed negative-to-null associations of being unhappy with social action contradict this past research? We do not think so. Indeed, even though general negative affect did not predict greater action across most of our studies, negative affect experienced in response to a specific issue did generally predict more action and engagement. This pattern fits with functional accounts of human emotion (Darwin, 1872; Ekman, 1992) by suggesting that negative emotions are useful only in as much as they serve motivational purposes in the context of specific events (but not when being also elicited by benign stimuli). The contribution of the present research is to distinguish between context-bound negative emotions and feeling bad in general.

It is important to note that the effects we observed were statistically small. Of course, given the great number of demographic and psychological factors that likely play a role in motivating social action, from income to values or free time, we should hardly expect any larger effects of positive affect – only one factor among many. Still, it is also important to point out that statistically small effects are not necessarily practically insignificant. Thus, for example, even though Study 3 (GSS) produced some of the smallest correlation coefficients, we observed that going from 'not too happy' to 'very happy' was associated with up to 50% greater engagement in behavior that is costly to oneself but beneficial to society (such as donating money to environmental causes). Ultimately, however, we note that the size of the statistical effects is immaterial to the primary theoretical question behind this research: To examine whether, as increasingly suggested by popular and academic writers, promoting personal happiness may be counterproductive to societal and environmental stewardship. On the contrary, negative, rather than positive, affect is associated with inaction in response to local issues and global threats.

Future research

In the present research, we set out to systematically examine the nature of the association of positive and negative affect with action. Our research, therefore, in no way can, or attempts to, address the issue of causality. While we did not explore causality, the positive associations we observed do suggest that being happy is not inherently bad for engaging in meaningful action. Thus, our findings do suggest that programs and initiatives aimed at increasing happiness are unlikely to result in a world full of Pollyannas unmoved by important current issues. Our research, however, in no way suggests that interventions designed to raise happiness would raise people's engagement in social and political activity. Future research needs to examine whether, as suggested by Fredrickson's Broaden and Build Model (Fredrickson & Losada, 2005), the causal path may flow both ways, whereby greater positive emotions lead to more engagement in social and political action, which, in turn, may foster greater happiness.

Coda

In contrast to the backlash against positive psychology and positivity, Stephen Pinker (2011) has argued that far from suffering from unrealistic optimism, people across the globe tend to be unrealistic pessimists, viewing the

world through an increasingly negative and politicized narrative despite an immense progress of human civilization and the unprecedented quality of life of most modern humans. In the present work, we have shown that we need not worry that such calls to be more positive, happier, and optimistic could jeopardize this progress by turning people into inactive participants in the challenges faced by communities, nations, and humanity.

Note

1. We also measured other components of well-being, including life satisfaction, which are not the focus of the present report. Because the results of life satisfaction mirrored the results of PA, we decided to focus this report on affect.

Disclosure statement

No potential conflict of interest was reported by the authors.

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