CURRENT RESEARCH IN SOCIAL PSYCHOLOGY

FINDING POSITIVES IN THE PANDEMIC: THE ROLE OF RELATIONSHIP STATUS, SELF-ESTEEM, MENTAL HEALTH, AND PERSONALITY

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ABSTRACT

Approximately 6 months into the first COVID shutdowns, we examined the likelihood of finding positives in the pandemic experience among people living in the United States (N = 101). People did find positives in the pandemic and the themes of those positives were largely consistent with those identified in early work on PTG. The likelihood of finding positives was associated with being in a romantic and/or sexual relationship, higher self-esteem, and higher conscientiousness and extraversion. Contrary to predictions, higher pandemic-related anxiety was also associated with a greater likelihood of finding positives.

INTRODUCTION

"Everything can be taken from a [person] but the last of the human freedoms -- to choose one's attitude in any given set of circumstances." -- Viktor Frankl

The COVID-19 pandemic has caused widespread disruption in the form of illness, death, social disconnection, and diminished educational and vocational opportunities, among other negative consequences. Still, consistent with Frankl's quote, many people have thrived during extraordinarily difficult circumstances. The abundant literature on benefit finding (BF), resilience, and posttraumatic growth (PTG) underscores this positive aspect of the human condition (e.g., Helgeson et al., 2006; Jayawickreme & Blackie, 2014; Park & Helgeson, 2006). The aim of this research was to extend this work by examining whether people living in the United States found positives in the COVID-19 pandemic, identify the nature of the benefits found, and examine characteristics of people who were more likely to find benefits.

BF and Related Phenomena

Philosophers, theologians, and psychologists have been interested in the ability to find positive aspects in negative life conditions and events for millennia. Although not the first scientific research on this phenomenon, the early 2000s ushered in newfound interest (cf. Park & Helgeson, 2006). As this research has expanded, researchers have discovered that people find benefits in a host of serious health conditions such as cancer (e.g., Abdullah, et al., 2015), and

life circumstances such as caregiving for those with Autism Spectrum Disorder (Adams, et al., 2022) or for those recovering from stroke (Fu, et al., 2022). People have even reported benefits in violent situations such as war (Wood, et al., 2012) and sexual assault (Cole & Lynn, 2010).

Clearly, many people are able to find benefits in these negative situations. We therefore expected that some people would find benefits in the COVID-19 pandemic and its concomitant isolation (Derrer-Merk, 2022), work closures (Yang, et al., 2020), and educational interruptions (Watts & Pattnaik, 2022). Although we were interested in determining what types of benefits people would report, we did not have strong predictions considering the novelty and wide-ranging effects of the pandemic.

Characteristics Associated with BF

Researchers have studied correlates of BF and related phenomena in various contexts (see Jayawickreme & Blackie, 2014; Park & Helgeson, 2006, for reviews). Based on earlier research, we examined relationship status, self-esteem, pandemic-related mental health, and the Big 5 personality characteristics as potential predictors of finding positives in the pandemic.

Several studies implicate close relationships as a potential predictor. People who have head and neck cancers are more likely to find benefits in their diagnosis if they live with a relationship partner (Llewellyn, et al., 2011). Similarly, Li and colleagues (2021) found that, among Chinese nurses working in the pandemic, those who were married experienced more PTG. Those in active military service also experience more positive growth when their spouses find benefits in the service member's deployments, over and above the service member's own BF (Renshaw & Campbell, 2012). Other research has found that being single is associated with more posttraumatic stress and deficiency, although the authors did not specifically test for PTG (Ikizer et al., 2021). We predicted that those in romantic relationships would be more likely to find positives in the COVID-19 pandemic.

Zhou and colleagues (2018) have shown self-esteem may be one mechanism by which social support leads to a greater likelihood of PTG. High school students in the U.S. were more likely to experience PTG and especially personally-relevant aspects of PTG (Taku & McDiarmid, 2015). These and other findings (e.g., Roberts & Bengtson, 1993; von Rezori et al., 2022; Wang & Hoyt, 2020) support our prediction that higher self-esteem will be associated with increased likelihood of finding positives.

Many researchers have noted associations between mental health conditions and less BF. Jansen and colleagues (2011), for example, found this in a sample of people with colorectal cancer. In a meta-analytic review, depression was associated with lower rates of BF, although anxiety was not (Helgeson et al., 2006). Helgeson and colleagues noted that some of these findings were complex, particularly for anxiety. Based on these and other findings, we expected that people who experienced pandemic-related depression, anxiety, and stress would be less likely to find benefits in the pandemic.

Some research has found associations between the Big Five personality traits and PTG or BF. Indeed, Jayawickreme and Blackie (2014) have described BF as positive personality change.

Previous research has demonstrated that some personality dimensions are positively associated with BF and/or PTG. People who are high in extraversion and conscientiousness demonstrate higher levels of BF or PTG (e.g., Tedeschi & Calhoun, 1996). We expected that we would find similar results in the present work.

Current Study

To test our hypotheses, we conducted a study in which participants answered questions about their relationship status, self-esteem, changes in mental health resulting from the pandemic, the Big Five personality traits, and whether they found positive aspects related to the pandemic. Data were collected in the United States several months after the pandemic began (August/September of 2020) and many states and municipalities remained in active shut down.

We predicted that (1) many of our participants would report finding positive aspects in the pandemic. Based on Tedeschi and Calhoun's (1996) theory and findings, we predicted that at least some of the themes of relational connectedness, new possibilities, appreciation of life, and spiritual change would emerge in the descriptions of what people found positive about the pandemic. We also expected that people would be more likely to report finding positive aspects in the pandemic if they had the following characteristics: (1) current involvement in a romantic/sexual relationship, (2) higher self-esteem, (3) had less pandemic-related anxiety, stress, and depression, and (4) were higher in extraversion and conscientiousness. Although we did not have particular predictions about how the other Big Five characteristics would relate, we explored those associations as well.

METHOD

Participants

Participants were 101 people who ranged in age from 18 to 74, with a median age of 22, who predominantly identified as White (74.26%). A plurality identified as female (46.50%), followed by male (24.80%), trans/non-binary (21.80%), and other (6.90%).

Measures and Procedure

We recruited participants from various social media platforms (e.g., Facebook, Reddit) and used snowball sampling. After reading a brief description, those interested clicked on a link and completed the measures described below.

Narratives of Positive Outcomes

Participants responded to the following open-ended question: "Has COVID-19 resulted in any positive changes in your life? Please describe if your answer is yes." This allowed us to establish the frequency of finding positives and to explore the themes that emerged in the narratives. Participant responses were examined and thematically coded using an adapted version of thematic analysis (Braun & Clarke, 2006).

Relationship Status

Participants indicated their relationship status by answering the following question with a Yes-No response option: "Are you currently involved in a romantic and/or sexual relationship with at least one other person?"

Self-Esteem

Participants reported their self-esteem level by responding to one item using a 7-point Likert scale (1 = *Not at all true*, 7 = *Very true*): "I have high self-esteem" (Robins et al., 2001).

Mental Health Due to COVID-19

Participants responded to three questions using a 7-point Likert scale (1 = *Disagree strongly*, 7 = *Agree strongly*) to report whether they felt an increase in stress, anxiety, and depression due to the COVID-19 pandemic

Big Five Personality Traits

Participants completed the Ten-Item Personality Inventory (TIPI; Gosling et al., 2003) using a 7-point Likert scale (1 = *Disagree strongly*, 7 = *Agree strongly*).

RESULTS

Narratives of Positive Outcomes

Forty-five participants (44.55%) reported finding at least one positive outcome of the pandemic. After examining all 45 responses, the authors discussed the different codes assigned to participants' data. Comparisons led to a consensus that four main themes characterized participants' responses (described below): (1) *Connecting more with others*, (2) *Practical outcomes*, (3) *Self-understanding and growth*, and (4) *New hobbies/direction*s. We then independently coded all 45 responses with a yes/no for each of the four themes. Inter-rater reliability was strong (93.99% agreement across all four codes on all 45 responses). We reached consensus to resolve disagreements.

Connecting More with Others

Twenty-seven participants (34.18%) mentioned that they connected more with others during the pandemic. Many participants spent more time with family and romantic partners. Others mentioned connecting online more frequently with relatives and friends who lived farther away.

Practical Outcomes

Eighteen participants (22.78%) mentioned that COVID-19 led to practical outcomes in their lives, such providing more time for rest, working from home, or starting a new business or job.

Self-Understanding and Growth

Eighteen participants (22.78%) mentioned that COVID-19 increased their self-understanding and growth by helping them appreciate nature, self-reflect, and prioritize different aspects of life.

New Hobbies and Directions

Sixteen participants (20.25%) mentioned that COVID-19 led them to find new hobbies and directions in life. COVID-19 afforded them a variety of new opportunities including political engagement and forming new virtual friendships.

Summary of Qualitative Results

Many participants found positive aspects in the COVID-19 pandemic. The categories that emerged in this study were similar to three of Tedeschi and Calhoun's (1996) themes of Relating to Others, New Possibilities, and Personal Strengths.

Predictors of Finding Positives in the Pandemic

We predicted that the following would predict a greater likelihood of finding positives in the pandemic, controlling for age and gender: (1) being in a relationship, (2) higher self-esteem, (3) lower COVID-induced stress, lower COVID-induced anxiety, and lower COVID-induced depression, and (4) higher conscientiousness and extraversion. We did not have predictions for neuroticism, agreeableness, or openness to experience.

Relationship Status

Eighty-nine participants (88.11%) completed the question about relationship status. Fifty-four of these participants (60.67%) indicated that they were in a relationship. A logistic regression revealed that age and gender were not significant predictors (see Table 1), but that relationship status was. The overall model marginally predicted finding positives in the pandemic, $\chi^2 = 6.675$, df = 3, $p = .083$ and accounted for between 7.3% and 9.7% of the variance in positives found from the COVID-19 pandemic, as estimated by the Cox & Snell R square and the Nagelkerke R square, respectively. Relationship status was the only significant predictor, $B = .964$, $SE = .460$, $p = .036$. The odds ratio associated with relationship status was 2.62. Thus, being in a relationship status was associated with a 162% increase in the odds of finding positives in the pandemic.

Table 1
Logistic Regression for Relationship Status Predicting Finding Positives

Variable	***B***	***SE B***	***p***	***e^B***
Gender	-.259	275	.346	.772
Age	.012	.016	.435	1.012
Relationship Status	.964	.460	.036	2.622

Self-Esteem

Seventy-four participants (73.27%) reported their self-esteem level. A logistic regression revealed that neither age nor gender were significant predictors (see Table 2), but that self-esteem was. The overall model predicted finding positives in the pandemic, $\chi^2 = 7.883$, df = 3, $p = .048$ and accounted for between 10.1% and 13.6% of the variance in finding positives, as estimated by the Cox & Snell R square and the Nagelkerke R square, respectively. Self-esteem was the only significant predictor, $B = .326$, $SE = .155$, $p = .035$. The odds ratio associated with self-esteem was 1.39. A one-unit increase in self-esteem was associated with a 39% increase in the odds of finding positives in the pandemic.

Table 2
Logistic Regression for Self-Esteem Predicting Finding Positives

Variable	B	SE B	p	e^B
Gender	-.248	.304	.415	.780
Age	.012	.021	.559	1.012
Self-Esteem	.326	.155	.035	1.386

COVID-Related Mental Health

Seventy-two participants (71.28%) answered questions about pandemic-related changes in mental health. A logistic regression revealed that age and gender were not significant predictors (see Table 3). The overall model predicted finding positives in the pandemic, $\chi^2 = 13.034$, df = 5, $p = .023$ and accounted for between 16.6% and 22.4% of the variance in positives found from the COVID-19 pandemic, as estimated by the Cox & Snell R square and the Nagelkerke R square, respectively. Unexpectedly, pandemic-related anxiety significantly predicted increased likelihood of finding positives in the pandemic, $B = 1.071$, $SE = .427$, $p = .012$. The odds ratio associated with pandemic-related anxiety was 2.92. Thus, a one-unit increase in pandemic-related anxiety was associated with a 192% increase in the odds of finding positives in the pandemic. However, contrary to our predictions, pandemic-related stress, $B = -.466$, $SE = .429$, $p = .277$, and pandemic-related depression, $B = -.279$, $SE = .220$, $p = .204$, were unrelated to finding positives in the pandemic.

Table 3
Logistic Regression for COVID-Related Mental Health Predicting Finding Positives

Variable	B	SE B	p	e^B
Gender	-.325	.332	.328	.723
Age	.023	.024	.335	1.023
Anxiety	1.071	.427	.012	2.918

Stress	-.466	.429	.277	.627
Depression	-.279	.220	.204	.757

Big Five Personality Traits

Seventy-four participants (73.27%) responded to questions about the Big Five personality traits. A logistic regression revealed that age and gender were not significant predictors (see Table 4). The overall model predicted finding positives in the pandemic, $\chi^2 = 15.455$, df = 7, $p = .031$ and accounted for between 18.8% and 25.4% of the variance in positives found from the COVID-19 pandemic, as estimated by the Cox & Snell R square and the Nagelkerke R square, respectively. As expected, conscientiousness significantly predicted finding positives in the pandemic, $B = .831$, $SE = .312$, $p = .008$. The odds ratio associated with conscientiousness was 2.30. Thus, a one-unit increase in conscientiousness was associated with a 130% increase in the odds of finding positives in the pandemic. The association for extraversion, $B = .479$, $SE = .279$, $p = .084$, approached significance in the predicted direction. Finally, neuroticism, agreeableness, and openness to experience were not significant predictors of finding positives in the pandemic (see Table 4).

Table 4
Logistic Regression for Big Five Personality Traits Predicting Finding Positives

Variable	**B**	**SE B**	**p**	**e^B**
Gender	-.290	.334	.384	.748
Age	-.023	.024	.320	.977
Extraversion	.479	.279	.086	1.614
Agreeableness	.114	.365	.755	1.120
Conscientiousness	.831	.831	.008	2.296
Neuroticism	-.260	-.260	.455	.771
Openness	.184	.184	.614	1.202

DISCUSSION

We conducted this investigation to determine whether people found positives in the COVID-19 pandemic, determine the character of those positives, and examine correlates of the tendency to find them. Many of our hypotheses were confirmed: (1) people found positives in the pandemic,

(2) thematically, the positives bore resemblance to those of Tedeschi and Calhoun (1996), (3) people in romantic/sexual relationships were more likely to find positives, and (4) people with higher self-esteem were more likely to find positives. COVID-related mental health and the Big Five personality traits were associated differently than expected with finding positives in the pandemic.

Although the percentage of participants who found positives in the pandemic (44.55%) was lower than some have found (58% - 83%, as reviewed by Jaywickreme et al., 2006), it still reflects a substantial portion of people. Furthermore, the wording of the question allowed participants to easily skip it. In this sample, 73.77% of those who responded at all answered in the affirmative to this question, suggesting that our percentage may be closer than it first appears.

We did not find evidence to support our hypothesis that increases in depression or stress would be associated with a lower likelihood of finding positives. We were surprised, however, to find that higher COVID-related anxiety was significantly associated with a *greater* likelihood of finding positives in the pandemic. Helgeson and colleagues (2006) stated that associations between anxiety and BF are nuanced, however. Furthermore, other research has shown that anxiety can serve a motivating role by moving people toward goals (Strack, et al., 2017) and helping them avoid emotional exhaustion (Strack et al., 2015). Although we are cautious in interpreting this unexpected finding, it is consistent with some previous work on anxiety and merits future attention. Future research could look at anxiety generated by the stressor itself and determine whether that anxiety increases the likelihood of BF.

Implications and Conclusions

In summary, we have found that people found positives in the pandemic. Using a bottom-up approach, the themes of these positives overlapped considerably with those developed for Tedechi &Calhoun's (1996) scale. Relationship status, self-esteem, and conscientiousness were all associated with finding positives in the pandemic in theoretically expected directions. Extraversion was associated in the predicted direction, although marginally. Perhaps most interestingly, higher COVID-related anxiety predicted higher likelihood of finding positives in the pandemic, which should be examined in future work.

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