

Digitalization of Personality Adaptations During COVID-19

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«Цифровая» адаптация личности в период распространения COVID-19

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Abstract. Since the Millennium, there has been a growing interest in categorizing personality adaptations. Research by Nemeth and colleagues utilized a Year 2000 Questionnaire to analyze these adaptations. With the assistance of R. Landes, at the Boston University Center for Millennial Studies and SurveyMonkey, people throughout the world were able to respond. In general, thousands of people took advantage of this opportunity. Six factors emerged; they were as follows: (1) Psychotic leaders. (2) Dependent followers. (3) Religious fundamentalists. (4) Militants. (5) Aggressive actors (Paranoid thinkers). (6) Corporate sociopaths. Mainstream Adaptation is also possible. It was hypothesized that, at times of great upheaval, personality structures became exacerbated. The current research, which was based on a revised Year 2000 Questionnaire, was titled: the COVID-19 Questionnaire. An IRB exemption, from Advarra, was granted and SurveyMonkey was utilized. Data collection has been underway since June 17, 2021.

Keywords: digitalization; personality adaptations; COVID-19; Y2K; COVID-19 Questionnaire

Аннотация. Начиная с нового тысячелетия наблюдается растущий интерес к классификации личностных адаптаций. В исследовании, проведенном Д. Г. Немет и коллегами, для анализа этих адаптаций использовался опросник «Year 2000 Questionnaire». Благодаря Р. Ландесу из Центра тысячелетних исследований Бостонского университета и платформе SurveyMonkey респондентами стали тысячи людей со всего мира. Были выделены шесть вариантов личностной адаптации: (1) корпоративные социопаты; (2) зависимые последователи; (3) религиозные фундаменталисты; (4) агрессивные деятели (параноидальные мыслители); (5) боевики; (6) психотические лидеры. Также возможна «обычная» адаптация. Было высказано предположение, что во времена великих потрясений личностные структуры меняются. Нами на основе пересмотренного опросника «Year 2000 Questionnaire» был разработан «Опросник COVID-19» и использовалась платформа SurveyMonkey. Сбор данных ведется с 17 июня 2021 года.

Ключевые слова: цифровизация; адаптация личности; COVID-19; Y2K; опросник COVID-19

Introduction

Y2K, it now seems so far away. Yet, this event was only 22 years ago. At the time of the millennium, there was considerable angst. People, governments, and corporations had become reliant on computers. University researchers had shifted from hand run data analysis to digitalization.

The world was changing. In the late 1960s, this shift began with COBOL programming (which was a common business-oriented programming language). Most of these programs were designed to last from 25 to 30 years. Instead of replacing these finite programs with new ones, they were merely “upgraded.” They were never designed to last indefinitely. Yet, that is how they were being utilized — repaired rather than replaced! It was cheaper.

Peter de Jager, a Canadian computer engineer, began sounding the alarm. He wrote books, gave lectures, used humor, and made appearances on this subject; yet, initially, he was just a voice calling in the desert — The John the Baptist — calling the alarm. At first, no one believed him. At the 1997 Southern States Retailers Association Conference, Peter kept saying — “we only have a few years to fix this” (De Jager, 1999).

Again, these COBOL programs were not designed to roll over to the next century. They only went to 1999 — built in obsolescence! Instead of rolling over to the year 2000, they would simply register 1900, effecting many aspects of everyday life. For example, in the United States, senior citizens’ social security checks would have been disrupted. Slowly, people, business industry and even governments began to recognize the problem.

When Peter de Jager came to Baton Rouge for that business and industry seminar in 1997, George Hearn, PhD, an Industrial / Organizational Psychologist, and I were recruited by Bonnie Bray of Bray Communications, Inc. to develop a research project to sample peoples’ understanding of and attitude towards this Y2K roll over.

Salient Y2K Issues

Using SurveyMonkey, over 5,300 responses were received. When the data was factor analyzed, four salient issues emerged:

- (1) *Content knowledge of Y2K* — many people had no idea of what this even was.
- (2) *Depression / discouragement* — for those who did, they were somewhat depressed or discouraged as to whether or not this problem would be fixed in time.
- (3) *Anxiety / aggression* — many respondents expressed considerable anxiety regarding this problem and / or aggression (anger) regarding the over-reliance on computers.
- (4) Lastly, there were those who responded with either *Denial* or *Resistance* to even addressing the problem.

Although Mr. de Jager addressed this issue for many years previous to his 1997 visit to Baton Rouge, it was literally only in those last years before the millennium that his voice began to resonate with people who were in leadership positions to address the problem (De Jager, 1999, p. 66–71). By then, however, most COBOL programmers were either retired or deceased. The new programmers were not familiar with these COBOL systems. Hurriedly, there was an attempt to identify or recruit such individuals. One such training program was set up at the University of West Virginia in the United States. In Louisiana, Wesley Smith, the assistant director of COBOL application support, was still at the helm. At the cost of millions of dollars, most programs were fixed in time, and the rollover went smoothly across the world's various time zones (Fig. 1, 2).

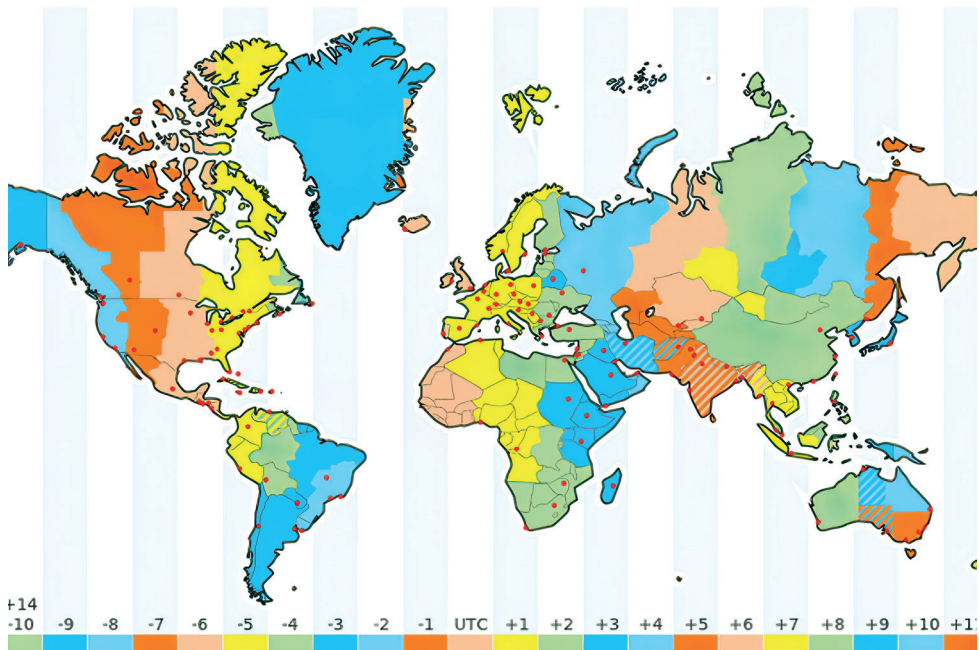


Figure 1. Word Time Zone Map

Y2K wave rolls through the world

The year 2000 will roll through the world's time zones before the U.S. usher in New Year's Day. Y2K will arrive in New Zealand 17 hours before the eastern U.S. If that country's technology fails, U.S. experts hope the time difference will allow them to make system adjustments or implement back-up plans. Using Eastern Standard Time, here's when the new year arrives in selected countries and their potential Y2K problems.

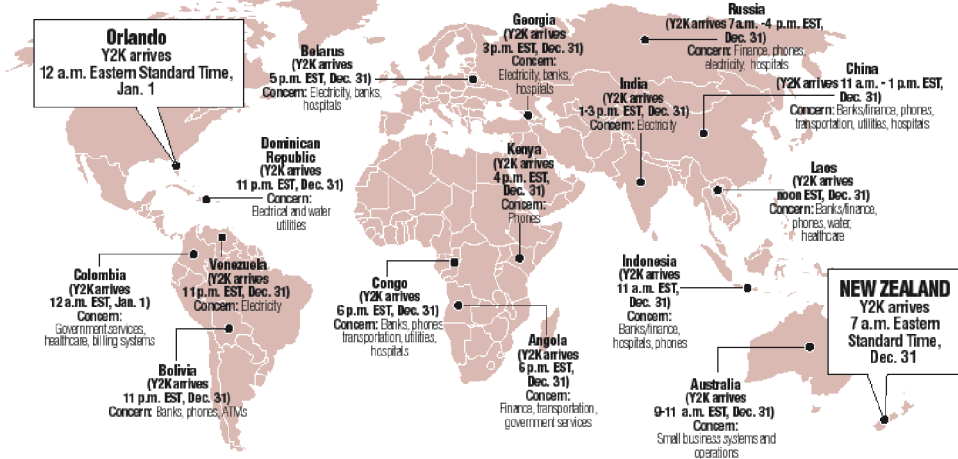


Figure 2. Y2K wave rolls through the world

In any worldwide event or even “non-event,” as Y2K was perceived to be, people, eventually, become sensitized to the impending crisis.

Year 2000 Personality Adaptations

Because of the 1997 conference and our Y2K research, I was invited by noted historian, Richard Landes, PhD, to join a “think tank” at the Boston University Center for Millennial Studies, and a new investigation was born. Using SurveyMonkey once again, the Year 2000 Questionnaire was launched. Over 3,500 responses were received. Via factor analysis, my colleague, Ralph M. Dreger, PhD, and I found that six personality adaptations emerged (Nemeth & Whittington, 2012, pp. 119–120). They were as follows:

- (1) *Psychoid Leaders* — these individuals rise to power by taking advantage of others’ vulnerabilities. They offer simple solutions to complex problems during times of vulnerability. They are often perceived to be “crazy like a fox.” Via spin, they convince others of even the most illogical ideas. They influence pre-existing prejudices and invite extreme responses. They rely on half-truths, fear tactics, and aggression to rule. One such leader was Adolf Hitler (Langer, 1972, p. 214).
- (2) And then there are the disturbed or *Dependent Followers*, who are susceptible to psychoid leadership. Dependent followers are prone to “group-think” (Janis, 1991). They fear the future and are either unwilling or unable to engage in independent, logical thinking. Rather, they think emotionally and are reactive (e.g., the men who cut off their penises in the Heaven’s Gate suicide cult).

- (3) Some like *Religious Fundamentalists*, prepare for the end of the world and as they know it. They cluster together to fortify their beliefs and to prepare for the end. One such group became the Branch Davidian Compound in Waco, Texas, lead by their psychoid leader, David Koresh (Koresh in Nemeth & Whittington, 2012).
- (4) If not in denial, the next group features the *Militants*. They are prepared for anything; just like those who stormed the United States Capitol on January 6, 2021 (Fisher, Flynn, Contrera, & Leonnig, 2021). They stockpile weapons and are skilled in various war techniques so that, when the time comes, they are ready to create chaos.
- (5) Such individuals are often incentivized by *Paranoid Thinkers* who typically perceive the world to be a dangerous place and are convinced of their own righteousness. As they drift into psychosis, they often take aggressive action against the outside world. One such example was Ted Kaczynski, the Unabomber (Kaczynski in Nemeth & Whittington, 2012).
- (6) Most unsettling of all, however, are the *Corporate Sociopaths*, who, regardless of their wealth, are willing to lie, cheat, deceive, and distort reality in order to line their own pockets, and, somehow, these “quasi-oligarchs” (i. e., heads of a small group of people with considerable financial power and control) get away with it. Certainly, the opioid crisis in the United States is just one example of corporate greed. Most likely, the Sackler family will declare bankruptcy and be right back in business (Mann, 2021). From the BP oil spill to the Fukushima Nuclear Disaster, the denial of responsibility seems to be the corporate way (Onishi, 2012, p. 25).

Lastly, there are those who remain in the *Mainstream*. People who can tell right from wrong and act accordingly, regardless of the circumstances. They retained their ability to think logically (i. e., good executive functions) and maintain responsibility for their actions.

A Non-Event or a Trend?

But how did people’s cognitions become so distorted during this Y2K “non-event”? Was it a one-time adaptation or was it a trend at times of such worldwide phenomena? In order to explore this possibility, the Year 2000 Questionnaire was updated to focus on the concerns that people might be having during this COVID-19 pandemic. Thus, the purpose of this study was two-fold:

- (1) To see if the same factors would emerge at another time of global distress (as was the case in the Year 2000).
- (2) If yes, to compare the results to the factors that were previously identified and hypothesized that, at times of great upheaval, personality structures became exacerbated.

With an IRB (Institutional Review Board) exemption, this survey (Understanding Personality / Psychological Adaptations to the COVID-19 Pandemic) was available on

the internet to all on SurveyMonkey in three languages, English, Spanish, and Russian. Approximately 260 people have responded.

The factor analysis is being conducted by Kevin McCarter, PhD, professor of experimental statistics at Louisiana State University (LSU).

Why is This Important to Neuropsychology?

As neuropsychologists, we must understand an individual's brain functions in context. That is why Dr. Ralph M. Reitan (*Fig. 3*) referred to it as "brain-behavior functions." Dr. A. R. Luria (*Fig. 3*) was of like-mind. Both focused on the "whole person," not just the brain. In order to understand the "whole person," an individual's natural personality structure and any exacerbation thereof must be understood.

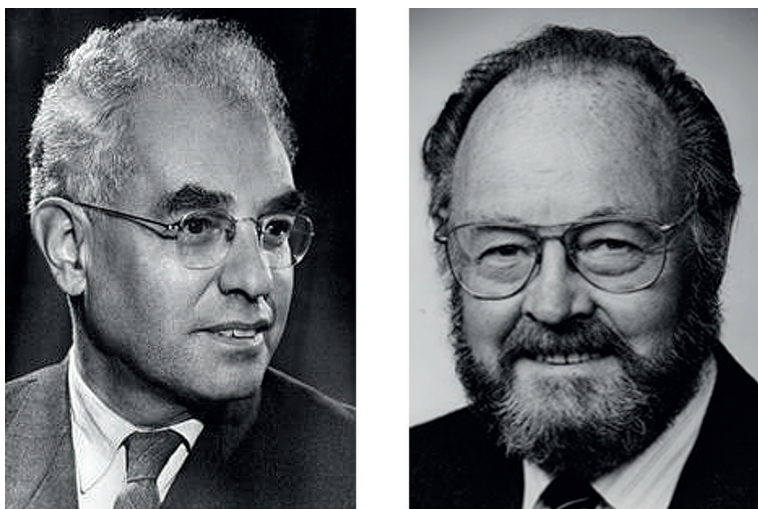


Figure 3. Photos by A. R. Luria and R. M. Reitan

Psychologist Theodore Millon, PhD, DSc, classified 14 personality structures (Millon, 1997a, 1997b, p. 27). It is likely that, just like color of eyes, a person is born with a personality style. Thus, seven of Millon's (1997a, 1997b) 14 personality patterns have been selected for review. They are as follows:

- (1) *Antisocial* — expressively impulsive, interpersonally irresponsible, cognitively deviant, autonomous self-image, acting-out, unruly organization, callous mood.
- (2) *Dependent* — expressively incompetent, interpersonally submissive, cognitively naive, inept self-image, introjection, chaotic organization, pacific mood.
- (3) *Masochistic (self-defeating)* — expressively absent, interpersonally differential, cognitively self-conscious, undeserving self-image, exaggeration, inverted organization, dysphoric mood.

- (4) *Narcissistic* — expressively haughty, interpersonally exploitive, cognitively expansive, admirable self-image, rationalized, spurious organization, apathetic mood.
- (5) *Paranoid* — expressively defensive, interpersonally provocative, cognitively suspicious, unalterable self-image, projection, inelastic organization, irascible mood.
- (6) *Sadistic* — expressively precipitate, interpersonally abrasive, cognitively dogmatic, combative self-image, isolation, irruptive organization, hostile mood.
- (7) *Schizotypal* — expressively eccentric, interpersonally secretive, cognitively autistic, estranged self-image, undoing, fragmented organization, and distraught or insentient mood.

One can either benefit from or suffer from these personality styles when they are exacerbated, either by circumstances or by choice (*Tab. 1*).

Table 1

Millon's personality adaptations

Type	Characteristics	Cognitive style	Affect/Mood
Antisocial	Impulsive, irresponsible, autonomous self, acts out	Deviant	Callous
Dependent	Incompetent, submissive, inept self, introjection	Naïve	Pacific
Masochistic (Self-defeating)	Absent, differential, undeserving self, exaggeration	Doubtful	Dysphoric
Narcissistic	Haughty, exploitive, admirable self, rationalized	Expansive	Carefree
Paranoid	Defensive, provocative, unshakeable self, projection	Suspicious	Irascible
Sadistic (Aggressive)	Precipitate, abrasive, combative self, isolation	Dogmatic	Hostile
Schizotypal	Eccentric, secretive, estranged self, chaotic, undoing	Autistic	Distraught or insentient

It appears that the following personality styles were likely exacerbated during the Year 2000. They are now compared to 7 of Millon's personality types (*Tab. 2*).

Table 2

Comparisons of personality patterns

by Millon	by Nemeth
Antisocial / Narcissistic	Corporate sociopaths
Dependent	Dependent followers
Masochistic	Religious fundamentalists
Paranoid	Aggressive actors (Paranoid thinkers)
Sadistic	Militants
Schizotypal	Psychoid leaders

Loneliness → Personality Adaptations → Brain Functions

Are these exacerbations present during COVID-19? One major factor is loneliness. In general, people are gregarious. Social interactions are essential; yet, since March 2020, many have been without these opportunities. Restaurants, theaters, schools, sports, etc., have all suffered. Many people have been isolated from family, friends, travel, etc. Conferences have been virtual. Little to no face-to-face contact has been possible. No touch, no smiles, no warmth; this has had a devastating effect on people's psyche — their personality adaptations. What was once in-balance is now out-of-balance. The result → loneliness.

According to John T. Cacioppo, PhD, and William Patrick (2008), this loneliness, whether forced or self-imposed, has resulted in significant changes in brain functions. People have become more paranoid, more depressed, and, as a result, have experienced altered executive functions, including reduced cognitive and emotional controls (Loneliness = ↑Paranoia; ↑Depression; ↓Executive functions).

In terms of intervention, since most Louisiana hospitals are filled to capacity with COVID-19 patients, where do people go for evaluation and treatment of neuropsychological problems? Will they receive a thorough evaluation? Will their personality adaptations and/or exacerbations be considered? Will the "whole person" be examined? What if that person has become extremely paranoid? These are significant issues confronting neuropsychologists today.

↓ Social Connection = ↓ Oxytocin

According to Cacioppo and Patrick (2008), loneliness can cause depression, paranoia, and cognitive and affective changes in brain functions. The “master chemical” of social connection, oxytocin, is no longer functioning optimally (p. 139). Typically, oxytocin influences “the regulation of blood pressure, pulse, alertness, movement, and feeling” via the hypothalamus, pituitary, and brain stem regions (p. 139). It can calm or excite (*Fig. 4*).

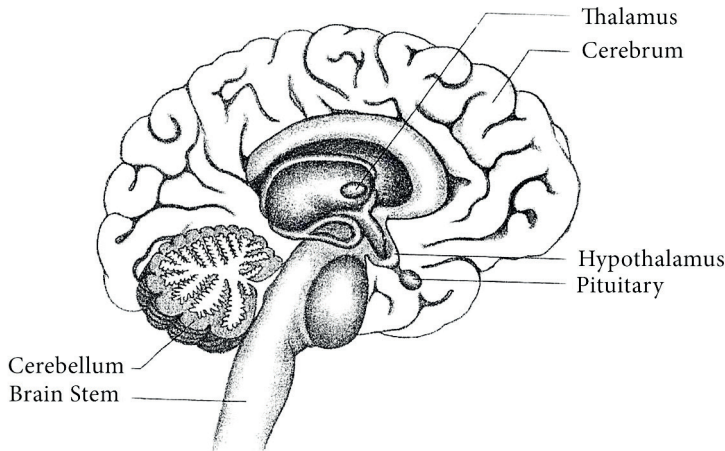


Figure 4. The location of the hypothalamus and the pituitary gland.

Source. Cacioppo & Patrick, 2008, p. 140

Without the warmth of physical touch and active oxytocin stimulation due to chronic loneliness, a decline in executive control is likely (p. 141). This loss of executive control may lead to a lack of persistence and chronic frustration (p. 83). Thus, stress and pain, emotional or physical, tend to increase (p. 141). Social isolation, imposed by this pandemic, deprives people of what E. O. Wilson (*Fig. 5*) refers to as “their sense of belonging and purpose” and increases maladaptive functioning (Wilson in Cacioppo and Patrick, 2008, p. 144).

Loneliness interferes with people’s states of well-being. As early as 1948, The World Health Organization (WHO) defined well-being as involving three functions: physical, mental, and social.

Brown and Garner note that “people see themselves in three dimensions: the intimate self, the relational self, and the collective self” (as cited in Cacioppo and Patrick, p. 78–79) (*Fig. 6*).

Even if people function within a family and have a partner and / or children, they may be unable to benefit from a sense of community due to the current COVID-19 restrictions. All three aspects of the self need to be present in order to prevent loneliness. As Baumeister and Twenge point out, all 3 dimensions of the self must be intact and interconnected for individuals to function optimally (in Cacioppo and Patrick, 2008, p. 38).

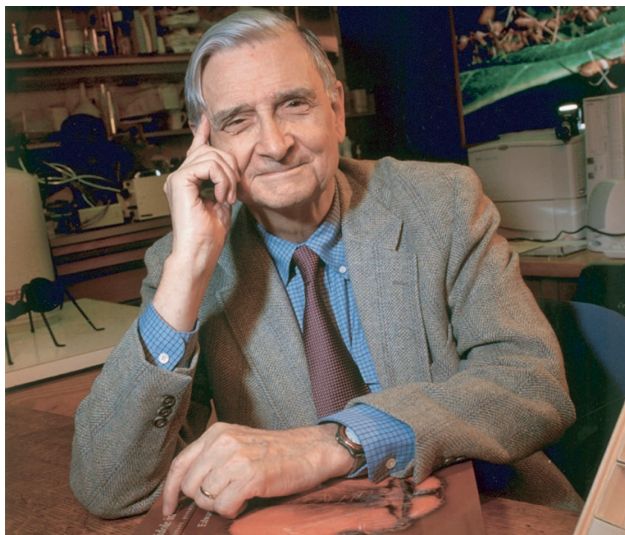


Figure 5. E. O. Wilson

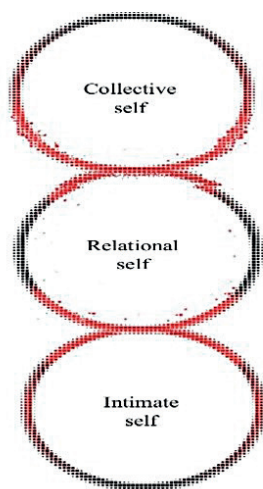


Figure 6. Three dimensions of human according to Brown and Garner

Most significant is the “collective self”. Whether due to COVID-19 or trauma (e.g., TBI, stroke, hurricanes, forest fires, etc.), when the “collective self” — the sense of community — begins to disintegrate, a ripple effect follows. Baumeister and Twenge state that, “feeling socially excluded can get in the way of our exercising some of the human characteristics we value most” (in Cacioppo and Patrick, 2008, p. 38). Hawkley and Cacioppo (2010) note that: “Loneliness has been associated with personality disorders and psychosis, suicide, impaired cognitive performance and cognitive decline over time, increased risk of Alzheimer’s Disease, diminished executive control, and increases in depressive symptoms.” They conclude that “Loneliness predicts increases in depressive

symptoms [...] perceived stress, fear of negative evaluation, anxiety, and anger, and diminishes optimism and self-esteem.” Their data also suggests that a “perceived sense of social connectedness serves as a scaffold for the self — damage the scaffold and the rest of the self begins to crumble” (Fig. 7).



Figure 7. Crumble of the self

Rebuilding the Scaffold

As Chief Neuropsychologist at an outpatient neurorehabilitation facility in Baton Rouge, Louisiana, I saw this first-hand. Individuals, who were there for recovery, had lost their sense of the “collective self.” Because of their injury, usually through no fault of their own, they had lost their place in their community. They were no longer choir or civic members of a cherished group. This loss of identity eventually trickled down to effect their “relational self.” They became impoverished with little to say to their family. Eventually, family members dropped them off with little investment in their rehabilitation. This decremental effect on their “intimate self” began to show.

In order to combat this, a new “collective self” had to be organized. All, regardless of their conditions, became members of a group and the “collective self” was restored (Nemeth, Songy, & Olivier, 2015). Group members listened, shared, and empathized. They were “in it together,” so to speak. They, once again, had a sense of belonging and purpose.

This changed their “relational self.” In the large physical therapy gym, group members would check on one another and offer encouragement. When they went home at night, they had things to say and stories to share. The renewed sense of pride was evident.

Now that people are cloistered due to COVID-19, they are losing their sense of the “collective self,” their sense of belonging and purpose. For many, religious and civic activities are “off limits.” Work, school, and professional activities are often virtual. That sense of the “collective self” is disintegrating. Belonging and purpose are fading. This disintegration has affected the “relational self.” In the United States, domestic violence has increased considerably over this past year. According to Erika Sussman, “the rates of abuse have increased dramatically to about 50 % and higher for those marginalized by race, ethnicity, sexual orientation, gender identity, citizenship status, and cognitive physical ability” (as cited in Kluger, 2021). Ms. Sussman is the executive director of the Center for Survivor Advocacy and Justice (CSAJ), a support and research organization. Hope is diminishing. Hospitalizations among the unvaccinated are increasing.

Yet, hope is one of the most important feelings involved in recovery (Nemeth & Whittington, 2012, p. 133). Maintaining a sense of hope allows people to problem solve. Dissolving into hopelessness, on the other hand, leads people to succumb to depression and anxiety.

In order to avoid this dissolution of the “intimate self,” people must maintain a belief in themselves, each other, and their community. Resilience, the ability to be grounded in the present and learn from the past, so that people can see themselves in the future, is key (Nemeth & Olivier, 2017, p. 155).

Flexible thinking and robust leadership will allow people to face their feelings and fears for the collective good. Even though inconvenient, people can embrace the behaviors required of them today in order to build a better tomorrow.

The Solution

Group processes, whether post personal or environmental trauma, can be an effective way of restoring one’s “collective self.” When safe to do so, people will return to in-person community activities in order to restore their sense of belonging and purpose. Just like in the aftermath of an environmental trauma, like Hurricane Katrina, or a neurological insult, like a stroke, restoring one’s “collective self” is crucial to people’s psychological, let alone physical, well-being.

Conclusion

For those in the “general population” category, as seen in the Year 2000 results, this is easier than for others. It is likely that those who are somewhat dependent, masochistic, or schizotypal, this might be more difficult. Then there are those who may likely be antisocial, narcissistic, sadistic, or paranoid, who are creating chaos, rather than solving problems.

Have these personality adaptations once again emerged or was it just a Y2K / Millennial fluke? The collected data is currently being factor analyzed by Dr. Kevin McCarter and will be available in a subsequent article to help us to understand this phenomenon.

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