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Closer together or further apart? Values of hero generations Y and Z during crisis

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CLOSER TOGETHER OR FURTHER APART?

VALUES OF HERO GENERATIONS Y AND Z DURING CRISIS

Abstract

Purpose – Drawing upon cohort theory, the age-period-cohort framework, and the Portrait Value System, this research examines differences in basic human values between generations Y and Z as they are shaped by recent major events (most importantly the COVID-19 pandemic).

Design/methodology/approach – Hypothesized differences between values of generation Y and Z were tested using a content analysis of recent articles (Study 1) and an online survey through Prolific crowd sourcing website (Study 2).

Findings – This research finds that while both generations value *universalism* and *benevolence*, Generation Y is more likely to *conform* and follow *traditions* while Generation Z values *stimulation*, *hedonism*, and *achievement* more. The top two COVID-19 concerns for both groups were health of others and financial security. Generation Y is more concerned about the economy while Generation Z is more worried about uncertainty in their future.

Research limitations/ implications – This paper provides insight into how the current environmental crisis has shaped the values of generations Y and Z and offers understanding of the similarities and differences in values between these two generations.

Practical implications – The findings have direct implications for the design of products/services and for the creation of effective marketing communications to reach these two consumer groups.

Originality/value – This research is novel in identifying the basic human values of generations Y and Z as they are shaped by recent events such as the most recent economic recession and COVID-19.

Keywords Generation Y, Generation Z, cohort theory, values

Paper type Research Paper

Introduction

Americans face seemingly insurmountable crises today. Unquestionably the coronavirus pandemic tops the list, effecting the entire world and impinging on everyone's lifestyle behavior. Further, the economic recession that followed has been hanging on American minds. The protests for social justice and equality following alleged police brutality and the political upheaval societally dividing the country only add fuel to these challenges. Everyone would agree that this is a time like no other, a time causing dramatic and expected long-lasting changes in America and the world. Most would affirm that this is a time of crisis.

Consumer values are likely to change when the cultural, environmental, and/or social situations to which individuals need to function in life change (Kahle and Xie, 2008). Specifically, based on cohort theory, consumer values are forever shaped by major events they witness when coming of age (Scott and Zac, 1993; Meredith and Schewe, 1994). The current research compares the fundamental values of those generations which are coming of age during this time of crisis: generations Y and Z. Generation Y, also known as millennials, is born between 1981 and 1996, and Generation Z is born after 1997. Generation Y came of age during the Great Recession while Generation Z were to inherit a very strong economy, but the pandemic changed that and now their life is full of uncertainty (Pew Research Center, 2020). In fact, the pandemic may be considered the greatest challenge young generations and even those older have faced in their lifetime (Gharzai *et al.*, 2020). The resulting coronavirus recession is the second recession that Generation Y has experienced early on in its career. Generation Z, many of whom are in college, have been under increased stress given the change in learning environments (Marshall *et al.*, 2020) and have in addition been deprived of the traditional college experience.

Generations Y and Z with their significant size of approximately 42% of the US population (Statista, 2019), are the societal future of America that will drive change through the present time (Strauss and Howe, 1997). Understanding the values of these two consumer groups shaped by the recent environmental changes, and the differences between them, help with understanding their attitudes and behaviors regarding everyday decisions such as consumption, information search, education, work, personal life, social responsibility, and beyond.

Past research has assessed Generation Y in terms of its fundamental values (Debevec *et al.*, 2013), psychographics (Valentine and Powers, 2013), media usage (Moore, 2012), early childhood cultural influencers (Young and Hinesly, 2012), and the impact of community service self-efficacy on service engagement (Credo *et al.*, 2016). Research also has examined Generation Z in terms of student engagement (Seemiller and Grace, 2017), purchasing behavior (Djafarova and Bowes, 2021), workplace perceptions (Iorgulescu, 2016), and technology and media use (Turner, 2015). Research comparing generation Y and Z, however, has been limited. These two generations have been found similar when it comes to important social and political issues (Pew Research Center, 2019). However, research to date has not provided a systematic analysis of generations Y or Z on their basic human values since the COVID-19 health and economic crisis.

Through adapting an established human values system, Schwartz *et al.*'s Portrait Values (1992, 2012), we intend to tap into this important gap. Schwartz's Portrait Value System is one of the most theoretically grounded and empirically validated value systems (Cieciuch and Davidov, 2012) and has also been validated cross culturally in more than 80 countries (Hanel *et al.*, 2018). We apply a multi-method approach to adapt the Schwartz's Portrait Values Questionnaire (PVQ) and further calibrate the scale based on the recent trends associated with the COVID-19 crisis. Our method is comprised of content analysis of recent articles through a

media monitoring software, a survey of generations Y and Z using an established scale (PVQ) as well as open-ended questions about COVID-related concerns. Our findings provide a more holistic picture of the basic human values and have direct implications for marketing strategy—in particular for the design of products/services and for the creation of tailored marketing communications to reach these two consumer groups. In addition to marketing-related implications, knowledge about the importance of basic human values for generations Y and Z can also benefit other stakeholders such as education systems, government agencies, human-resource professionals, health-care providers and most importantly public policy makers.

In the following sections, we review the literature related to different stages in American history and the generational archetypes coming of age during each stage. We further discuss the age-period-cohort framework and the Portrait Value System upon which we build our hypotheses related to the differences between values of generations Y and Z. The study methodology, results, and discussion are presented afterwards.

Conceptual Development

The Fourth Turning

By tracing back generations and their social experiences in Anglo-American history over hundreds of years, Strauss and Howe (1997) identify four societal turnings (phases), each lasting 20-22 years. These turnings make up a recurring generational cycle approximately equal to a human lifespan. We describe these next.

The First Turning is a High—a period of institutional power, economic growth, and optimism. The High is an era of community purpose but lacks individualism and moral direction. The Second Turning is an Awakening—a period when society attacks established institutions,

questions the prosperity and certainty of the preceding High, and demands greater autonomy. The Third Turning is an Unraveling which comes after the moral rebirth of the Awakening and is characterized by weak institutions and fun-seeking self-reliant individuals. The Unraveling eventually provides ground for a Fourth Turning which is a Crisis. A Crisis is a period of destruction, revolution, and rebuilding of institutions and purposeful community. While the Fourth Turning is characterized with ultimate darkness, it finally leads to the emergence of hope and a new High.

According to Strauss and Howe (1997), the post-World War II era between 1946 and 1964 was the most recent High. The “Consciousness Revolution” from mid-1960s to early 1980s were the most recent Awakening; the Culture Wars and Long Boom from 1984 to around 2005 were the most recent Unraveling, and the Crisis era started post 9/11 (Howe and Strauss, 2007). Other major events during the Fourth Turning the US have witnessed are the Great Recession (2007-2008), the election of the first African-American President, Barack Obama, the election of Donald Trump, and now the COVID-19 pandemic.

Generational Archetypes

Strauss and Howe (1997) define distinct generational archetypes who come of age and dominate each of the Four Turnings. High, Awakening, Unraveling, and Crisis archetypes are characterized as Artists, Prophets, Nomads, and Heroes, respectively. Each of these archetypes is shaped by shared historical events and opposing reaction to the generation that raised them. For instance, Artists are raised suffocated by Heroes and therefore raise their Prophet children with a relaxing fun strategy. Prophets, in turn, revert to a tightening practice in nurturing their Nomad children, and Nomads raise their Hero children even more over-protected (Snyder, 2007). Heroes

are the driving force in society to move out of a crisis—they have energy and are ignorant of perils.

The most recent historical examples of the four archetypes are Baby Boomers as Prophets, Generation X as Nomads, and Generation Y as Heroes who entered young adulthood during a crisis (Mann, 2011). Since the most recent Fourth Turning started in 2005 and is still ongoing, the oldest group of Generation Z is also coming of age during a crisis. In this research, our focus is on generations Y and Z whose values are being shaped during a crisis and their actions will be influential in bringing the US back to a High.

The Age-Period-Cohort Framework

To assess differences in values between generations Y and Z, we apply a cohort analysis also known as the age-period-cohort (APC) model that has been found to be useful in generational marketing (Fukuda, 2010). The APC model teases out three types of effects leading to generational differences. Age effects represent biological age changes across the life course of an individual. Period effects represent changes due to major events such as economic recessions, social movements, wars, and technological breakthroughs. Cohort effects can be explained by cohort theory. According to cohort theory, cohorts consist of individuals born during the same period in history and their values are affected by major events they witnessed when coming of age or when they were approximately 18-23 year old (Scott and Zac, 1993; Meredith and Schewe, 1994). Several important cohorts have been identified in the US including Baby Boomers (born between 1946-1964), Generation X (born between 1965-1980), Generation Y (born between 1981-1996), and Generation Z (born after 1997) (Pew Research, 2019). Our research focuses on two of America's youngest cohort groups, generations Y and Z. These two generations have faced growing inequality, debt, and insecure job marketplace (Kurz *et al.*,

2019). Both are proficient when it comes to technology, but Generation Z is considered digital native or a generation that does not know the world without the internet and social media (Francis and Hoefel, 2018)).

Cohort effects represent the life-long impact of major events on individuals coming of age during those events (Rentz *et al.*, 1983; Reynolds and Rentz, 1981) while period effects are related to the influence of important events on individuals in any age group and not just the ones who are coming of age. For instance, we expect that the coronavirus pandemic and the resulting “coronavirus recession,” will be such major events impacting all generations based on the period effect (Rudolph and Zacher, 2020), but their impact on Generation Z will persist over their lives based on the cohort effect since Generation Z are in that lifestage when their long-lasting values are still being shaped. Differences in values between generations Y and Z resulting from the age, period and cohort effects will be discussed in more details in the discussion of our hypotheses.

Portrait Value System

The Schwartz theory of basic human values (1992, 1994, 2006) is considered one of the most theoretically and empirically validated theories of values (Cieciuch and Davidov, 2012). This theory, which is grounded in the motivational role of values and their interconnectedness, has been validated by numerous studies including cross-cultural contexts in more than 80 countries (Bilsky *et al.*, 2011; Schwartz, 2012). The Schwartz’s theory of values is the strongest predictor of prosocial behavior, mental health, and pro-environmental behavior (Hanel *et al.* 2018) which makes it a great candidate for the current research which is focused on the future role of Heroes (generations Y and Z) in the American society.

According to Schwartz (1992), values are “desirable, trans-situational goals, which vary in importance and serve as guiding principles in people’s lives.” The set of values Schwartz *et al.*

(1992, 2012) developed consists of 10 basic values which are defined in response to humans' biological needs, the need to coordinate social interactions, and the need for welfare and survival of groups. These 10 basic human values are *conformity* (restraint of actions that violate social expectations), *tradition* (respect and commitment of customs), *security* (safety, harmony, and stability of relationships), *universalism* (caring for the welfare of all people and nature), *benevolence* (preservation and enhancement of the welfare of people with whom one is in personal contact), *self-direction* (independent thought and actions), *stimulation* (excitement and novelty), *hedonism* (pleasure), *achievement* (personal success), and *power* (social status and prestige). The 10 values form four higher-order values (see Figure 1), conservation (*conformity*, *tradition*, and *security*) versus openness to change (*self-direction*, *stimulation*, and *hedonism*), and self-transcendence (*universalism* and *benevolence*) versus self-enhancement (*achievement* and *power*).

[Figure 1 inserted here]

Schwartz et al. (2012) introduced an intertwined contrast between values with respect to personal focus (openness to change and self-enhancement) versus social focus (conservation and self-transcendence); and self-protection values (conservation and self-enhancement) versus self-growth values (openness to change and self-transcendence). These contrasts are used and discussed in more details in the development of our hypotheses.

Hypotheses Development

In this paper, we focused on the differences between the oldest group of Generation Z (18 to 24 years old) and mid-age Generation Y (28 to 34 years old). The oldest group of Generation Z is especially interesting since it has recently entered early adulthood, a period when values are still being shaped and will be imprinted forever. The choice of mid-age Generation Y was to

allow enough age difference between the two generations to perform statistical group comparison. The oldest of Generation Z has entered early adulthood (coming of age) during 2013 to present. They were raised under the Great Recession in an environment with growing movements for social justice and care for the planet. The major events they have witnessed during young adulthood include the Trump Presidency and the COVID-19 pandemic. Mid-Generation Y came of age during years 2003 to 2015 and is now in its early adulthood. The most important external events in the lives of mid-Generation Y have been the Great Recession and the Election of Barack Obama, the first African American president.

In order to apply the Age-Period-Cohort framework we examine how human values are different for generations Y and Z as a result of a) transitioning from the first six years of early adulthood (18-24 years old) to the mid-six years of early adulthood (28-34 years old) (i.e., age effect), b) differences in major external events that occurred in their lives (i.e., period effect), and c) differences in major external events which happened when they were coming of age (i.e., cohort effect). Table 1 presents our hypotheses related to the differences between generations Y and Z on each of the 10 Portrait Values and the type of effect (age, period, or cohort) driving each difference.

[Table 1 inserted here]

Past research suggests that values related to the well-being of others (Self-Transcendence) and maintaining the status quo (Conservation) become more important with age while values concerned with personal interests (Openness) and self-promotion (Self-Enhancement) become less important with age (e.g., Schwartz, 2005; Milfont *et al.*, 2016). Consistent with these findings, our hypotheses in Table 1 indicate Conservation and Self-Transcendence to be more important for Generation Y and Openness and Self-Enhancement to

be more important for Generation Z because of the age effect. This categorization is in line with research suggesting that Generation Z is more individualistic (Turner, 2015) while Generation Y is more group-oriented (Sladek and Grabinger, 2014). Generation Y was raised by Baby Boomer parents in a more relaxed environment, so they have learnt to be team players and focus on benefits of society rather than just benefits of self. Generation Z, in contrast, has been raised primarily by Generation X parents who taught them to be competitive and self-focused to survive and even lead (Sladek and Grabinger, 2014). Therefore, while the American society is consistently known as one of the most individualistic cultures (Hofstede, 1984; Hofstede, 2001; Fernandez *et al.*, 1997), different generational cohorts within this society exhibit different levels of individualism.

Value changes due to major events can be categorized as period or cohort effects depending on the age of the generation experiencing them. We expect COVID-19 to have a stronger current impact (period effect) on Generation Y's concerns over financial *security* - given their lifestage being in the workforce or even providing for family. However, we expect COVID-19 to have amplified long-lasting impact (cohort effect) on the importance of health and relationships for Generation Z. The Great Recession happened while Generation Y was coming of age, so we expect life-long importance of financial security value for this generational group based on the cohort effect. Considering the prominence of the social justice, equality, and climate change movements in the life span of Generation Z (period effect) and more importantly during recent years when its oldest group is entering young adulthood (cohort effect), we expect *Universalism* values to be more important for Generation Z compared to Generation Y (exceeding the prior suggested age effect).

Based on the analysis presented in Table 1, we anticipate *Conformity, Tradition, Security, and Benevolence* to be more important for Generation Y, and *Universalism, Self-Direction, Stimulation, Hedonism, Achievement, and Power* to be more important for Generation Z. Due to the cross-sectional nature of the current study, we formulate ten hypotheses and five propositions (non-testable cohort effects on shaping values in the long term) to present these generational differences.

Conservation: Conformity, Tradition, and Security

Conformity reflects complying with social standards and norms. There are various motivations for conforming, a major one is being part of a group or fear of missing out. Seeking social approval from others is a reason why we conform (Deutsch and Gerard, 1955) and so is the motivation to avoid being seen as different (Cialdini, 1998). When it comes to generations Y and Z, past research indicates that Generation Y prefers being part of a team while Z is more individualistic (Sladek and Grabinger, 2014). When one is part of a team, conforming to others only seems natural. Therefore, we hypothesize:

H1. *Conformity* is more important for Generation Y compared to Generation Z.

Generation Z is the first generation brought up by three different generations of parents—Baby Boomers, Generation X, and Generation Y (Sladek and Grabinger, 2014). This is likely due to people starting families at a later age. As a result, Generation Z has been exposed to greater diversity in parenting styles, which is likely to result in higher diversity in values since each generation has its own list of values they are known for. Further, research suggests that Generation Z is more open to new social trends such as same-sex marriage and gender-neutrality

than older cohorts (Pew Research Center, 2019). Thus, we predict traditions will matter less for Generation Z than Y:

H2. *Tradition* is more important for Generation Y compared to Generation Z.

We focus on three aspects of security which are relevant to our research: financial, cleanliness, and inter-personal/social relationships. As explained above, conservation values including *security* become more important by age (age effect) and given the lifestage of Generation Y, we expect financial security to be valued even higher by them based on the period effect. Similarly, we expect Generation Y to value relationships more than Generation Z because of the age affect. However, the dominating force impacting Generation Z's health consciousness seems to be the period effect because of their exposure to a greater number of social efforts to encourage healthy eating and exercising (Sladek and Grabinger, 2014). So overall, we hypothesize:

H3a. Financial *security* is more important for Generation Y compared to Generation Z.

H3b. Maintaining health and cleanliness is more important for Generation Z compared to Generation Y.

H3c. Maintaining relationships is more important for Generation Y compared to Generation Z.

On the other hand, Generation Y has experienced direct impacts of the Great Recession as they were entering early adulthood (cohort effects) while Generation Z was still too young and only observed the influence of the recession on their families. Therefore, we propose:

P1a. Financial security will be important for Generation Y during its lifetime.

As a result of the COVID-19 pandemic, people have started caring more about ensuring cleanliness and health as recommended by the CDC. In addition, because of social distancing, people have either reduced or completely been unable to spend time with family and friends and therefore, value their relationships more than ever before. So overall, we predict that maintaining healthy habits and relationships will become of special importance for all generations (period effect) especially for Generation Z whose values are being shaped during this point in their lives when they are coming out of age (cohort effects):

P1b. Cleanliness and focus on health will be important for Generation Z during its lifetime.

P1c. Relationships will be important for Generation Z during its lifetime.

Self-Transcendence: Universalism and Benevolence

When it comes to *universalism* or caring for the welfare of all people (Schwartz, 1992), both generations Y and Z express great concern for equality (Pew Research Center, 2019). For Generation Y the election of President Obama, the first African American president, was a cataclysmic event that likely made this value even more salient. Generation Z is the most racially and ethnically diverse generation in the US history. According to Pew Research Center (2018) 48% of Generation Z identify as ethnic minorities compared to 39% of Generation Y. Generation Z values equality even greater than any other generation (NEW and Deloitte, 2018) perhaps due to being more exposed to the social justice movements and equality campaigns especially when they are coming of age. Therefore, we predict:

H4a. Equality is more important for Generation Z compared to Generation Y.

P2a. Equality will be important for Generation Z during its lifetime.

Protecting the environment is important for all generations (Pew Research Center, 2010). On issues like climate change, generations Y and Z have been reported to share similar views (Pew Research Center, 2019). However, Generation Z has been exposed longer to green educational materials and issues in associated with climate change have become more prominent in our society. In fact, in 2020 the climate movement has become global and digital (Kestin *et al.*, 2020). Based on the period and cohort effects, we expect:

H4b. Care for nature is more important for Generation Z compared to Generation Y.

P2b. Care for nature will be important for Generation Z during its lifetime.

Based on the explained age effect, we predict greater care for the welfare of those close to them for Generation Y:

H5. *Benevolence* is more important for Generation Y compared to Generation Z.

Openness to Change: Self-Direction, Stimulation, and Hedonism

Self-direction is about generating independent thoughts and actions. Based on the explained age effect, we expect Generation Z to value *self-direction* more than Generation Y:

H6. *Self-direction* is more important for Generation Z compared to Generation Y.

Young people are excitement-oriented and tend to associate happiness with excitement (Mogilner *et al.*, 2011). Even though Generation Y is still in young adulthood, a significant number of them have entered the married lifestage and parenthood. This new lifestyle may limit the time for excitement and fun for most. Compared to Generation Y, Z is to a great extent free from major responsibilities (age effects). Therefore, we expect that:

H7. *Stimulation* is more important for Generation Z compared to Generation Y.

H8. *Hedonism* is more important for Generation Z compared to Generation Y.

Self-Enhancement: Achievement and Power

When it comes to self-enhancement, research finds Generation Z to become the most educated cohort to date (Pew Research Center, 2019) which also associates money with success (Boroujerdi and Wolf, 2015) (age effects). However, Generation Y has suffered the Great Recession, will be more financially burdened during the pandemic, and is likely to be more pessimistic about its chances of success in the workplace (cohort effects). Therefore, we expect:

H9. *Achievement* is more important for Generation Z compared to Generation Y.

H10. *Power* is more important for Generation Z compared to Generation Y.

Study 1 - Content Analysis

The purpose of Study 1 was to calibrate the Schwartz's Portrait Values Questionnaire (PVQ) and add to its external validity by accounting for value manifestations shaped by recent events, especially COVID-19, which are not captured by the scale. For this purpose, we performed a content analysis of recent popular news articles on the topics of COVID-19 or Generations Y and Z. Content analysis is a research technique which is used for systematically and objectively identifying specific characteristics of recorded communication about a specific subject in a specific place and time (Lasswell *et al.*, 1952). Content analysis can be done on a variety of texts from transcripts of interviews, web content, social media posts, and films to magazine or newspaper articles (Macnamara, 2005).

Following an approach used by Huey and Apollonio (2019), we used a media monitoring software to compile recent articles with topics related to COVID-19 and/or the two generations of

interest (generations Y and Z). Article sources were filtered based on reach (top 5%), geographic focus (US national), and language (English). Media channels included trade publications, newspapers, and other trusted online sources such as Forbes, the Atlantic, Newsweek, National Geographic, Business Insider, Washington Post, Adweek, Vox, Pew Research, Boston Globe, The Conversation, Wall Street Journal, and CNN. In the first stage, two of the authors, independently, reviewed these articles and extracted a preliminary list of 22 terminal (i.e., desires and goals one likes to achieve throughout his/her lifetime, e.g., friendship) or instrumental (i.e., preferred modes of behavior, e.g., better hygiene) values related to generations Y or Z. Next, the two authors reduced the list and retained 11 items which were different from the existing items in the PVQ-21 (Schwartz, 2003) and were related to the research hypotheses. Statements related to these items were further created to be used in the online questionnaire in Study 2. These statements are listed in Table 2.

[Table 2 inserted here]

Study 2 – Online Survey

The purpose of Study 2 was to test our hypotheses related to the differences between generations Y and Z in terms of Schwartz's 10 Portrait Values (Schwartz, 2003). Our survey included Schwartz's (2003) established PVQ-21 scale and the extracted items from our content analysis in Study 1, in multiple choice format. In addition, we also asked subjects to express their top concerns during the pandemic in an open-ended format to further capture any other potential manifestations of the ten values. These qualitative responses were then coded, analyzed for themes, and used to further test our hypotheses.

In summary, we tested our hypotheses based on the three operationalizations of the 10 Portrait Values: a) PVQ items, b) items derived from our content analysis, and c) COVID-19 concerns extracted from our qualitative data analysis. Through this multi-method approach and by combining quantitative and qualitative responses, we provide more support for the validity of our measurement model.

Participants and Procedures

We launched our survey on Prolific, an online provider of consumer panel data. Participants were screened based on U.S nationality and the two age brackets of 18-24 (oldest group of Generation Z) and 28-34 (mid-group of Generation Y); and compensated \$1.10 per completed survey. Based on our pretest, we chose four minutes as the survey duration threshold and eliminated respondents who completed the survey in less time. Our final sample consisted of 569 participants: 279 members of Generation Z (49% male, 53% unemployed, 1% married) and 290 members of Generation Y (55% male, 21% unemployed, 38% married).

Subjects first answered questions related to the 21-item PVQ (plus two items from PVQ-40 related to cleanliness and health as they were particularly relevant to the pandemic) and items extracted from our content analysis. The PVQ included items such as: “Thinking up new ideas and being creative is important to him/her. S/He likes to do things in his own original way”, “S/He looks for adventures and likes to take risks. S/He wants to have an exciting life”, and “S/He strongly believes that people should care for nature. Looking after the environment is important to him/her” measured using a 6-point Likert scale. Items extracted from our content analysis (Table 2) were measured using an 8-point Likert scale. Subjects were then asked to list their top concerns about the COVID-19 pandemic and finally, answered demographic questions.

Analysis of the Qualitative Responses

Respondents' qualitative responses were used as an additional method for testing our hypotheses. Two of the authors reviewed respondents' concerns related to COVID-19 and designed a coding scheme for classification. The coding scheme included "economy", "financial security/ job-related", "health of self", "social life and activities", "mental health", "access to necessities", "uncertainty about future", "future of the virus", "government decisions", and "health of others". Next, two independent coders classified all passages based on the given coding structure with inter-coder reliability of .91 kappa coefficient κ (Cohen, 1960). The coders discussed and resolved areas of discrepancy. As a final step, two of the authors categorized the identified codes in relation to the 10 Portrait Values to be used for analysis of the results.

Results

Table 3 indicates our hypotheses, the measures used to test our hypotheses (PVQ, content analysis, and COVID concerns), and whether the hypotheses are supported. To test the hypotheses, we used Analysis of Variance (ANOVA) to compare the differences in means for the PVQ or content analysis items and z-test to compare the differences in the number of mentions (counts) for COVID concerns between the two generations.

[Table 3 inserted here]

Before performing group difference analyses, consistent with an approach suggested by Schwartz (2003), we centered the individual scores on both the PVQ items, and the items we used to calibrate the PVQ (through our content analysis). Centering within person is highly recommended in using value systems to correct for individual differences. For this purpose, for each respondent, the mean across all scale items was subtracted from each of the value scores. Positive scores indicate greater importance of a given value while negative—lower importance.

The centered means along with the number of times (counts) each of the COVID concerns were mentioned by each group are reported under the Centered Means/Counts in Table 3.

Conformity in terms of following rules ($M_{GenY} = -.72$; $M_{GenZ} = -1.11$) and conforming to societal norms ($M_{GenY} = -.27$; $M_{GenZ} = -.50$) and *tradition* ($M_{GenY} = -.99$; $M_{GenZ} = -1.31$) were not considered as important values (as indicated by means below zero) for either of the two generations. But they were still significantly more important for Generation Y (*conformity*: $F(1,567) = 13.43$, $p < .001$; *tradition*: $F(1,567) = 7.85$, $p < .05$), consistent with H1 and H2, respectively.

H3a predicts financial *security* to be more important for Generation Y compared to Generation Z. We found that both generations are equally cautious with spending ($M_{GenY} = .69$; $M_{GenZ} = .63$; $F(1,567) = .28$, $p > .10$), and are concerned about their finances and jobs affected by the pandemic ($C_{GenY} = 145$; $C_{GenZ} = 122$; $z = 1.50$, $p > .10$). But concerns about the overall economy were almost twice as often mentioned by Generation Y than Generation Z ($C_{GenY} = 112$; $C_{GenZ} = 58$; $z = 4.65$, $p < .001$). These results provide support for H3a and H3c but no support for H3b, suggesting personal health, cleanliness and relationships are more important for Generation Y compared to Generation Z. We found that personal cleanliness was more important for Generation Y ($M_{GenY} = .05$; $M_{GenZ} = -.19$; $F(1,567) = 4.85$, $p < .05$) while personal health was an important value ($M_{GenY} = .37$; $M_{GenZ} = .24$; $F(1,567) = 2.73$, $p > .10$), and a main COVID-19 concern for both generations ($C_{GenY} = 86$; $C_{GenZ} = 92$; $z = .85$, $p > .10$). Relationship with family was more important for Generation Y ($M_{GenY} = .14$; $M_{GenZ} = -.38$; $F(1,567) = 13.94$, $p < .001$), while disturbed social activities are among the main concerns for both generations ($C_{GenY} = 32$; $C_{GenZ} = 25$; $z = .82$, $p > .10$). Other security concerns were mental health, access to necessities, uncertainty about the future, virus future (i.e., how long it will last, when a vaccine will be

available), and government decisions/political unrest. Protecting one's online personal brand did not seem to be important for either group.

Universalism was measured in terms of equality concerns, care for nature, and gratitude for life. H4a predicts greater equality concerns for Generation Z compared to Y. We found that both generations believe that everyone in the world should be treated equally ($M_{\text{GenY}} = 1.12$; $M_{\text{GenZ}} = 1.15$; $F(1,567) = .10$, $p > .10$) and care for the whole world ($M_{\text{GenY}} = .75$; $M_{\text{GenZ}} = .91$; $F(1,567) = 2.23$, $p > .10$). However, Generation Z values gender neutrality more ($M_{\text{GenY}} = -.16$; $M_{\text{GenZ}} = .35$; $F(1,567) = 9.88$, $p < .01$). These results partially support H4a. Similarly, regarding care for nature, we found partial support for H4b as both generations found this value important ($M_{\text{GenY}} = .65$; $M_{\text{GenZ}} = .70$; $F(1,567) = .40$, $p > .10$) but Generation Z indicated greater concern about climate change ($M_{\text{GenY}} = .68$; $M_{\text{GenZ}} = 1.04$; $F(1,567) = 7.69$, $p < .01$). Gratitude was equally important for both groups ($M_{\text{GenY}} = .84$; $M_{\text{GenZ}} = .73$; $F(1,567) = 1.38$, $p > .10$).

In terms of *benevolence*, both generations were concerned about the wellbeing of people around them ($M_{\text{GenY}} = .55$; $M_{\text{GenZ}} = .64$; $F(1,567) = 1.28$, $p > .10$), but Generation Y indicated greater concern about health of others ($C_{\text{GenY}} = 210$; $C_{\text{GenZ}} = 163$; $z = 3.51$, $p < .001$). This finding supports H5. Helping the community did not seem to be as important for either group relative to other values.

Generation Y valued independence more than Generation Z ($M_{\text{GenY}} = .68$; $M_{\text{GenZ}} = 1.04$; $F(1,567) = 7.69$, $p < .01$), opposite to our prediction in H6. Being practical and optimistic were equally important for both generations; not making impulsive decisions was more important for Generation Y. In addition, consistent with H7 and H8, Generation Z valued excitement ($M_{\text{GenY}} = -.62$; $M_{\text{GenZ}} = -.35$; $F(1,567) = 6.67$, $p < .05$) and fun ($M_{\text{GenY}} = -.23$; $M_{\text{GenZ}} = -.02$; $F(1,567) = 5.45$, $p < .05$) more than Generation Y. It should be noted, however, that *stimulation* and *hedonism* did

not seem to be very important values for either group as showed by negative means (centered data). Finally, consistent with our predictions in H9 and H10, we found *achievement* ($M_{\text{GenY}} = -.30$; $M_{\text{GenZ}} = .08$; $F(1,567) = 15.67, p < .001$) and *power* ($M_{\text{GenY}} = -.42$; $M_{\text{GenZ}} = -.18$; $F(1,567) = 6.93, p < .01$) to be more important for Generation Z.

Figure 2 illustrates the relative importance of each of the ten portrait values as well as each of the four higher-order dimensions values for each of the two generations based on the PVQ.

[Figure 2 inserted here]

In summary, the most important values for both generations were *universalism* ($M_{\text{GenY}} = .81$; $M_{\text{GenZ}} = .82$), *benevolence* ($M_{\text{GenY}} = .81$; $M_{\text{GenZ}} = .82$), and *self-direction* ($M_{\text{GenY}} = .53$; $M_{\text{GenZ}} = .39$), with *self-direction* being more important for Generation Y ($F(1,567) = 4.75, p < .05$). The most mentioned COVID-19 concerns for both generations were health of their close ones ($C_{\text{GenY}} = 210$; $C_{\text{GenZ}} = 163$), financial security of their families or themselves ($C_{\text{GenY}} = 145$; $C_{\text{GenZ}} = 122$), their own health ($C_{\text{GenY}} = 86$; $C_{\text{GenZ}} = 92$), and the economy ($C_{\text{GenY}} = 112$; $C_{\text{GenZ}} = 58$). Interestingly, both generations cared for others' health more than their own. This could be due to both generations being fairly young and feeling less at risk for serious effects of the virus.

General Discussion

In this research we compared the values, beliefs, and pandemic concerns of generations Y and Z, also referred to as the Heroes of the most recent Fourth Turning (Strauss and Howe, 1997). The future of America and its move to the next Turning, one of High or prosperity, will be directly affected by the actions of these two generations. Our results provide a snapshot of how the current environmental trends (most importantly the COVID-19 pandemic) shape values for generations Y and Z and offer valuable insights into understanding their similarities and

differences. This knowledge helps with understanding the decision-making process for these two consumer segments and suggests ways in which different entities (e.g., marketers, employers, public policy institutions) can communicate to them more effectively.

This research bridges the gap between human values and generational differences capitalizing on the two focal generational cohorts, Y and Z. Our research is novel in several ways. First, to our knowledge research to date has not examined how generations Y and Z differ on their basic human values, which is an important gap we tried to address. Through applying one of the most theoretically grounded and empirically validated human value systems, Schwartz's Portrait Values, we examined the relative importance of the ten values for the two generations and added to the knowledge about these two important groups of consumers. Second, the context and complexity of the current environmental crisis (political, social, economic, and health) is likely to have a profound impact on the values shaped for these two generations and are thus important and timely. Third, our triangulation approach in examining the values of generations Y and Z through calibrating an established scale through content analysis and subjects' qualitative responses not only adds layers of rigor to our research methodology, but also extends the PVQ measure in the context of recent events. This calibration of the PVQ to account for tangible sub-values directly relevant to our current environment (e.g., gender neutrality, uncertainty about the future, and online personal brand) makes an important contribution to the literature on values.

Building upon Schwartz's basic value system (Schwartz 1992, 1994, 2006) and the age-period-cohort framework, we identified differences in important values between generations Y and Z. As Figure 2 shows, we find that self-transcendence values of *universalism* (e.g., *equality, care for the world, nature, and gratitude*) and *benevolence* are the most important values for both groups. *Security* (financial, health, and relationships) and *self-direction* are more important for

Generation Y while *achievement* and issues like gender neutrality and climate change are even more important for Generation Z. Generations Y and Z do not see *conformity, stimulation, and hedonism* as important values which can be influential in fostering institutional reform and transition to a new High.

Generations Y and Z expressed similar concerns during the COVID-19 pandemic. Their concerns align with two major values—*benevolence* and *security*, and included concerns about others' health, their own health—both physical and mental, financial security, maintaining relationships, and uncertainty about the future. Generation Y appeared more concerned about others' health and the economy. This could be due to Generation Y's parents being older compared to those of Z's and a greater proportion of Y being part of the workforce. Generation Z was more concerned than Generation Y with uncertainty about the future. The identified values and concerns are important for understanding future behaviors of Generation Z in particular as the COVID-19 pandemic is the first major event that has happened when this generation was coming of age. Generation Z's approaches toward managing finances, consumption, relationships, parenting, social responsibilities, and retirement can be influenced by these values. Based on our results, we expect Generation Z to be cautious spenders, health-conscious consumers, devoted partners, over-protective parents, and open-minded citizens.

Managerial Implications

Our findings have various implications for designing effective social campaigns, new product development, and overall, more effective marketing communications toward generations Y and Z. Regarding social campaigns, our results suggest focusing on socially benevolent communication themes rather than individualistic ones with slogans such as the ones used at

ending of NBC Nightly News, “Please take care of yourself and each other” or Vistaprint’s “This is not a mask—this is a ticket back to doing what you love” ad during the pandemic promoting the importance of wearing masks to mitigate the spread of the virus.

Regarding new product development, our findings suggest development of more conservative and financially risk-averse portfolios and plans targeted towards generations Y and Z by those companies who offer security as their core value proposition (e.g., financial institutions, insurance companies, health care providers, and home security services) as well as the ones who consider security as a part of their augmented value system (e.g., dating websites, restaurant takeout, subscription services). Understanding Generation Z’s level of uncertainty and insecurity seem to be key in tapping into this demographic group. On the positive side, embracing equality, care for nature, and care for others seem to be essential in developing communication strategies to reach both generation Y and Z.

Our research findings can apply to a variety of contexts including web design, selection of advertising appeals in traditional or digital media, and social media influence strategies. As social networks are important part of both generations’ lives, brands, influencers, and sponsors of social causes can design their social media communications around those values that are deemed to be important for the hero generations. In crafting the best strategies to reach these two generations, it should be noted that Generation Z uses social media for entertainment purposes first then for keeping up with family and friends whereas these two reasons are about equally important for Generation Y (YPulse, 2021). Compared to Generation Y, Generation Z is more influenced by online celebrities (e.g., bloggers, vloggers, social media influencers, etc.). When it comes to evaluating products and making decisions about purchases, Generation Z’s perception of novel

technology is motivated by product reliable benefits, fun experience (Ng *et al.*, 2019), product innovativeness and product referrals on social networks (Cheung *et al.*, 2020).

Limitations and Future Research

Despite valuable insights, we acknowledge that our research has some limitations. Items generated from our content analysis can be tested and validated in future studies. Collecting data during the pandemic may result in slightly inflated evaluations of values and our cross-sectional approach did not allow for assessment of the findings over time. Validity of the current findings and our propositions related to the cohort effect can be tested through future longitudinal research for the American society. Future research can also focus on the impacts of COVID-19 on generational values within other cultural environments especially the collectivist ones for which the age-period-cohort dynamics can be completely different. Without any doubt the COVID-19 pandemic has had major impacts on many different areas of life that this research falls short in addressing them all. We suggest future research to have a more focused lens to address one area of impact at a time (e.g., economic, health-related, personal life, brand selection) for more in depth understanding of generational values.

Conclusion

Our research provides an initial understanding of how the current environmental trends (most importantly the COVID-19 pandemic) are shaping the values of generations Y and Z and offers valuable insights into understanding the similarities and differences in values between these two generations. This knowledge can explain the life choices of these two groups of young consumers when it comes to important decisions. Generation Y appears to attribute more importance to conservation, self-direction, and welfare of others while Generation Z embraces

equality, care for nature, and self-enhancement. Generation Z also indicates a more positive view of change. Both of our self-transcendent heroes care deeply about the welfare of the whole world and are concerned about equality, two values shining light at the end of the darkness.

References

- Bilsky, W., Janik, M. and Schwartz, S.H. (2011), “The structural organization of human values-evidence from three rounds of the European Social Survey (ESS)”, *Journal of Cross-Cultural Psychology*, Vol. 42 No. 5, pp.759-776.
- Boroujerdi, R. and Wolf, C. (2015), *Emerging Theme Radar: What if I told you*, Goldman, Sachs & Co.
- Cialdini, R.B. and Trost, M.R. (1998), Social influence: Social norms, conformity and compliance. In D. T. Gilbert, S. T. Fiske, & G. Lindzey (Eds.), *The handbook of social psychology* (pp. 151–192). McGraw-Hill.
- Cheung, M. L., Leung, K. S. W., and Chan, H. S. (2020), “Driving healthcare wearable technology adoption for Generation Z consumers in Hong Kong,” *Young Consumers*.
- Cieciuch, J. and Davidov, E. (2012), A comparison of the invariance properties of the PVQ-40 and the PVQ-21 to measure human values across German and Polish samples. In *Survey Research Methods*, Vol. 6, No. 1, pp. 37-48.
- Cohen, J. (1960), “A coefficient of agreement for nominal scales”, *Educational and Psychological Measurement*, Vol. 20 No.1, pp.37–46.
- Credo, K. R. Patricia A. L. Curtis F. M. and Susie S. C. (2016), “Narcissism and entitlement in millennials: The mediating influence of community service self-efficacy on engagement”, *Personality and Individual Differences*, Vol. 101, pp. 192-195.
- Debevec, K. Schewe, C.D. Madden, T.J. and Diamond, W.D. (2013), “Are today's Millennials splintering into a new generational cohort? Maybe!”, *Journal of Consumer Behaviour*, Vol. 12 No. 1, pp. 20-31.
- Deutsch, M. and Gerard, H. B. (1955), “A study of normative and informational social influences upon individual judgment”, *The Journal of Abnormal and Social Psychology*, Vol. 51 No. 3, pp. 629-636.
- Djafarova, E. and Bowes, T. (2021), “Instagram made Me buy it: Generation Z impulse purchases in fashion industry”, *Journal of Retailing and Consumer Services*, Vol. 59.
- Fernandez, D. R. Carlson, D. S. Stepina, L. P. and Nicholson, J. D. (1997), “Hofstede’s country classification 25 years later”, *The Journal of Social Psychology*, Vol. 137 No. 1, pp. 43-54.
- Francis, T. and Hoefel, F. (2018), “True Gen: Generation Z and its implications for companies.” McKinsey & Co, available at <https://www.mckinsey.com/industries/consumer-packaged-goods/our-insights/true-gen-generation-z-and-its-implications-for-companies>
- Fukuda, K. (2010), “A cohort analysis of household vehicle expenditure in the US and Japan: A possibility of generational marketing”, *Marketing Letters*, Vol. 21 No. 1, pp.53-64.

- Gharzai, L. A., Beeler, W. H., and Jagsi, R. (2020), "Playing into stereotypes: engaging Millennials and generation Z in the COVID-19 pandemic response," *Advances in Radiation Oncology*, Vol. 5 No. 4, pp. 679-681.
- Hanel, P. Litzellachner, L. and Maio, G. (2018), "An Empirical Comparison of Human Value Models", *Frontiers in Psychology*, Vol. 9.
- Hofstede, G. (1984), *Culture's consequences: International differences in work-related values*, Newbury Park, CA: Sage.
- Hofstede, G. (2001), *Culture's consequences: Comparing values, behaviors, institutions, and organizations across nations*, Thousand Oaks, CA: Sage.
- Howe, N. and Strauss, W. (2007), "The next 20 years: how customer and workforce attitudes will evolve", *Harvard Business Review*, Vol. 85 No. 7-8, pp.41-52.
- Huey, J. and Apollonio, D.E. (2018), "A content analysis of popular media reporting regarding increases in minimum ages of legal access for tobacco", *BMC Public Health*, Vol.18 No. 1.
- Iorgulescu, M. C. (2016), "Generation Z and its perception of work", *Cross-Cultural Management Journal*, Vol. 18, pp. 47-54.
- Kahle, L.R. and Xie, G.X. (2008), Social values in consumer psychology, *Handbook of consumer psychology*, pp.575-585.
- Kurz, C. J., Li, G., & Vine, D. J. (2019). Are millennials different?. In *Handbook of US Consumer Economics* (pp. 193-232). Academic Press.
- Kestin, O. Lock, H. and Gralki, P. (2020), "12 Important Moments in the History of Climate Action in Pictures", *Global Citizen*, available at: <https://www.globalcitizen.org/en/content/important-moments-climate-history-in-photos/>
- Lasswell, H. D. Lerner, D. and Pool, I. d. S. (1952), *Comparative study of symbols: An introduction*, Stanford University Press.
- Macnamara, J. R. (2005), "Media content analysis: its uses, benefits and best practice methodology", *Asia Pacific Public Relations Journal*. Vol. 6 No. 1, pp. 1-34.
- Mann, D.L. (2011), "Capturing the voice of the customer before the customer knows what they want: TRIZ, spiral dynamics, and the fourth turning", *Procedia Engineering*, Vol. 9, pp.573-581.
- Marshall, A. L., and Wolanskyj-Spinner, A. (2020), "COVID-19: challenges and opportunities for educators and generation Z learners," In *Mayo Clinic Proceedings*, Vol. 95, No. 6, pp. 1135-1137. Elsevier.
- Meredith, G. and Schewe, C. (1994), "The power of cohorts: Americans who shared powerful experiences as young adults, such as the hardship of the great depression, fall into six cohorts", *American Demographics*, Vol. 16, pp.22-22.
- Milfont, T. L. Milojev, P. and Sibley, C. G. (2016), "Values stability and change in adulthood: A 3-year longitudinal study of rank-order stability and mean-level differences", *Personality and Social Psychology Bulletin*, Vol. 42 No. 5, pp. 572-588.

- Mogilner, C. Kamvar, S. D. and Aaker, J. (2011), "The shifting meaning of happiness", *Social Psychological and Personality Science*, Vol. 2 No. 4, pp. 395-402.
- Moore, M. (2012), "Interactive media usage among millennial consumers", *Journal of Consumer Marketing*, Vol. 29 No. 6, pp. 436-444.
- NEW and Deloitte (2018), *Welcome to Generation Z*, available at: <https://www2.deloitte.com/content/dam/Deloitte/us/Documents/consumer-business/welcome-to-gen-z.pdf>
- Ng, S. I., Ho, J. A., Lim, X. J., Chong, K. L., and Latiff, K. (2019), "Mirror, mirror on the wall, are we ready for Gen-Z in marketplace? A study of smart retailing technology in Malaysia," *Young Consumers*.
- Pew Research Center (2010), *Millennials. A Portrait of Generation Next*, available at: <https://www.pewsocialtrends.org/2010/02/24/millennials-confident-connected-open-to-change/>
- Pew Research Center (2018), *Early Benchmarks Show 'Post-Millennials' on Track to Be Most Diverse, Best-Educated Generation Yet*, available at: <https://www.pewresearch.org/social-trends/2018/11/15/early-benchmarks-show-post-millennials-on-track-to-be-most-diverse-best-educated-generation-yet/>
- Pew Research Center (2019), *Defining Generations: Where Millennials end and Generation Z begins*, available at: <https://www.pewresearch.org/fact-tank/2019/01/17/where-millennials-end-and-generation-z-begins/>
- Pew Research Center (2019), *Generation Z looks a lot like Millennials on Key Social and Political Issues*, available at: <https://www.pewsocialtrends.org/2019/01/17/generation-z-looks-a-lot-like-millennials-on-key-social-and-political-issues/>
- Pew Research Center (2020), *On the Cusp of Adulthood and Facing an Uncertain Future: What we Know about Gen Z so Far*. available at: <https://www.pewresearch.org/social-trends/2020/05/14/on-the-cusp-of-adulthood-and-facing-an-uncertain-future-what-we-know-about-gen-z-so-far-2/>
- Rentz, J.O. Reynolds, F.D. and Stout, R.G. (1983), "Analyzing changing consumption patterns with cohort analysis", *Journal of Marketing Research*, Vol. 20 No. 1, pp.12-20.
- Reynolds, F.D. and Rentz, J.O. (1981), "Cohort analysis: an aid to strategic planning", *Journal of Marketing*, Vol. 45 No. 3, pp.62-70.
- Rudolph, C. W., and Zacher, H. (2020). "The COVID-19 generation": A cautionary note. *Work, Aging and Retirement*, Vol. 6 No. 3, pp.139-145.
- Schwartz, S.H. (1992), "Universals in the content and structure of values: Theoretical advances and empirical tests in 20 countries", *Advances in Experimental Social Psychology*, Vol. 25 No. 1, pp.1-65.

- Schwartz, S.H. (1994), "Are there universal aspects in the content and structure of values", *Journal of Social Issues*, Vol. 50 No. 4, pp.19-45.
- Schwartz, S.H. (2003), "A proposal for measuring value orientations across nations", *Questionnaire package of the European social survey*, pp. 259-319.
- Schwartz, S. H. (2005), *Robustness and fruitfulness of a theory of universals in individual human values*. In A. Tamayo and J. B. Porto (Eds.), *Values and Behavior in Organizations* [in Portuguese] (pp. 56-95). Petropolis, Brazil: Vozes.
- Schwartz, S. H. (2006). *Basic Human Values: An overview*.
- Schwartz, S.H. Cieciuch, J. Vecchione, M. Davidov, E. Fischer, R. Beierlein, C. Ramos, A. Verkasalo, M. Lönnqvist, J.E. Demirutku, K. and Dirilen-Gumus, O. (2012), "Refining the theory of basic individual values", *Journal of Personality and Social Psychology*, Vol. 103 No. 4, pp. 663-688.
- Scott, J. and Zac, L. (1993), "Collective memories in Britain and the United States", *Public Opinion Quarterly*, Vol. 57 No. 3, pp.315-331.
- Seemiller, C. and Grace, M. (2017), "Generation Z: Educating and engaging the next generation of students", *About Campus*, Vol. 22 No. 3, pp. 21-26.
- Sladek, S. and Grabinger, A. (2014), "Gen Z. Introducing the first Generation of the 21st Century," available at:
https://www.xyzuniversity.com/wpcontent/uploads/2018/08/GenZ_Final-d11.pdf.
- Snyder, L.D. (2007), "Civilizations and the fourth turning", *Comparative Civilizations Review*, Vol. 57 No.57, pp.6-9.
- Statista (2019). Resident population in the United States in 2019, by generation. Available at <https://www.statista.com/statistics/797321/us-population-by-generation/>
- Strauss, W., and Howe, N. (1997), *The Fourth Turning: An American Prophecy*. New York: Broadway Books.
- Turner, A. (2015), "Generation Z: Technology and social interest", *The Journal of Individual Psychology*, Vol. 71 No. 2, pp. 103-113.
- Valentine, D.B. and Powers, T.L. (2013), "Generation Y values and lifestyle segments", *Journal of Consumer Marketing*, Vol. 30 No.7, pp. 597–606.
- Young, A.M. and Hinesly, M.D. (2012), "Identifying Millennials' key influencers from early childhood: insights into current consumer preferences", *Journal of Consumer Marketing*, Vol. 29 No.2, pp. 146-155.
- YPulse (2021), Gen Z & Millenials use social media differently—Here’s three charts that show how. Available at <https://www.ypulse.com/article/2021/02/22/gen-z-millennials-use-social-media-differently-heres-x-charts-that-show-how/>

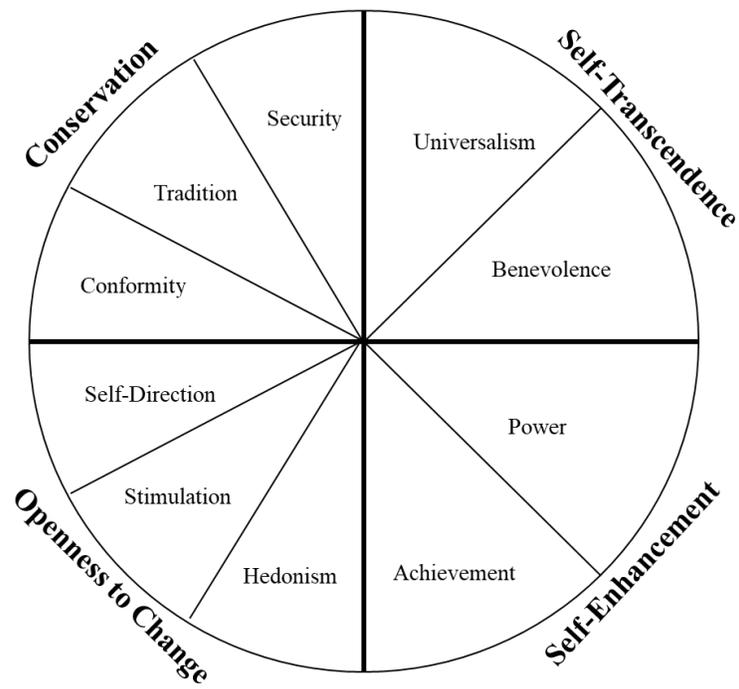


Figure 1: Schwartz theory of basic human values (Schwartz et al., 2012)

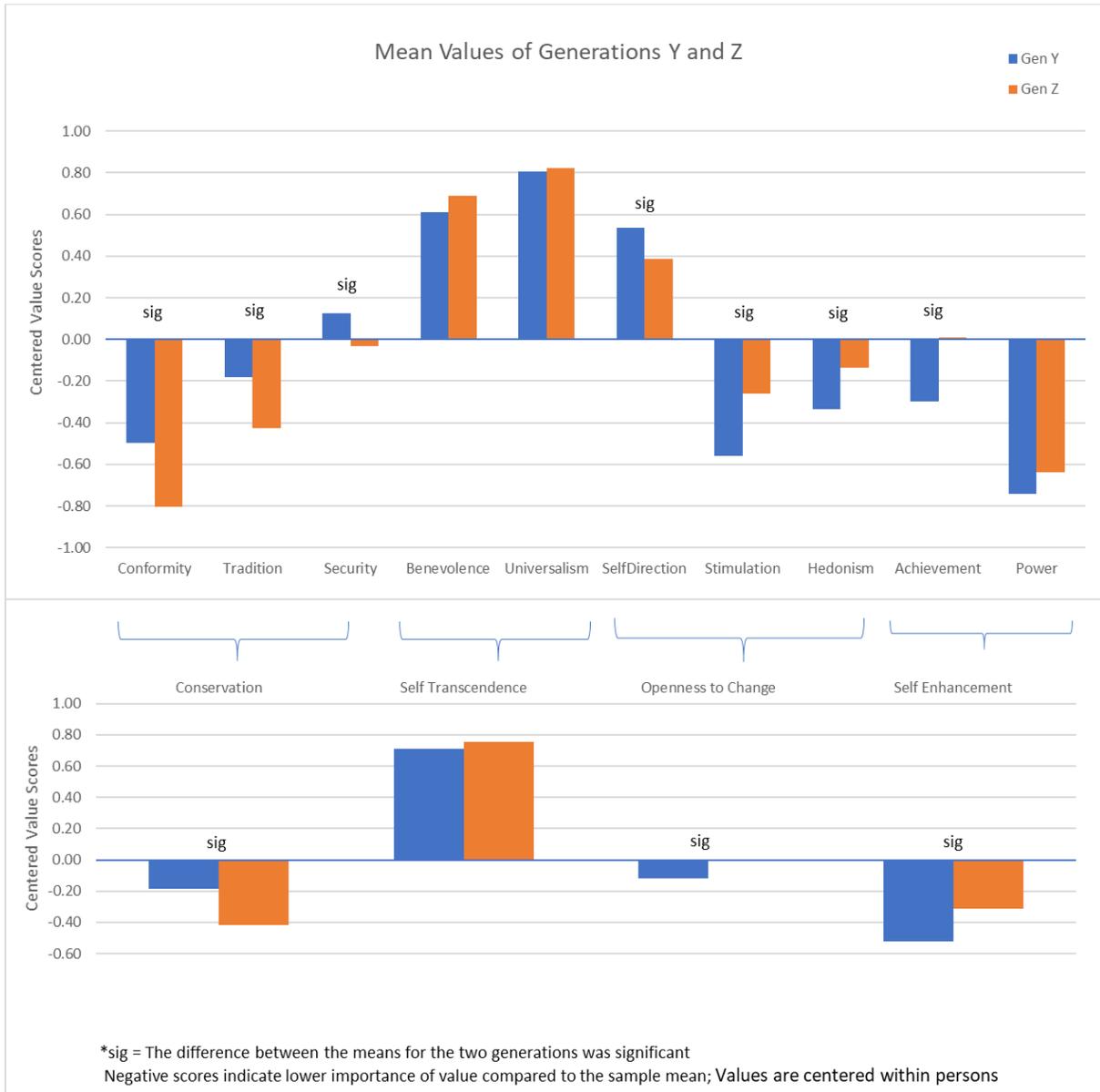


Figure 2: Mean 10 Portrait Values and Four Higher Order Values - Generations Y and Z

**Table 1 Portrait Values Differences Between Generations Y and Z Based on
the Age-Period-Cohort Framework**

Portrait Values		Hypotheses	Value is more important for Gen...		
			Age Effect	Period Effect	Cohort Effect
Conservation	Conformity	H1: Rules, Social Norms	Y		
	Tradition	H2: Customs			
	Security	H3a: Financial		Y (COVID-19)	Y (The Great Recession)
		H3b: Health, Cleanliness		Z (Healthy lifestyle educational programs)	Z (COVID-19)
	H3c: Relationships				
Self-Transcendence	Universalism	H4a: Equality	Y	Z (Social justice, Climate movements)	Z (Social justice, Climate movements)
		H4b: Nature			
	Benevolence	H5: Welfare of others close to us			
Openness to Change	Self-Direction	H6: Thoughts and actions	Z		
	Stimulation	H7: Adventure, surprises			
	Hedonism	H8: Pleasure			
Self-Enhancement	Achievement	H9: Success	Z		
	Power	H10: Control and Status			

Table 2: Items Generated from Content Analysis (Study 1)

1. Being cautious with how I spend my money.
2. Spending more time with family.
3. Being careful about building my online personal brand (image I convey to others online).
4. Accepting gender neutrality.
5. Caring for the interest of the whole world.
6. Taking climate change seriously.
7. Being grateful for everything I have.
8. Helping the community I live in.
9. Not to make impulsive decisions.
10. Being practical (concerned with the actual doing or use of something rather than with theory and ideas).
11. Being optimistic about the future.

Table 3 Generation Y and Z's Human Values

Portrait Values		Hypotheses	Operationalization			Centered Means / Counts		Hypothesis supported?			
			PVQ (Established Scale)	Content Analysis (Recent Articles)	COVID Concerns (Qualitative Responses)	Gen Y (n= 290)	Gen Z (n=279)	F (1,567)	Z		
Conservation	Conformity	H1	Rules			-0.72	-1.11	13.43***		<input checked="" type="checkbox"/>	
			Societal Norms			-0.27	-0.50	4.51*		<input checked="" type="checkbox"/>	
	Tradition	H2	Customs			-0.99	-1.31	7.85**		<input checked="" type="checkbox"/>	
				Cautious with Spending		0.69	0.63	0.28		<input checked="" type="checkbox"/>	
	Security	H3a			Economy	112	58		4.65***	<input checked="" type="checkbox"/>	
					Financial Security/ jobs	145	122		1.50	<input checked="" type="checkbox"/>	
		H3b	Personal Cleanliness			0.05	-0.19	4.85*		<input checked="" type="checkbox"/>	
			Personal Health			0.37	0.24	2.73		<input checked="" type="checkbox"/>	
		H3c		Health-self			86	92		0.85	-
				Relationship with Family			0.14	-0.38	13.94***		<input checked="" type="checkbox"/>
					Social Life and Activities		32	25		0.82	-
					Online Personal Brand		-1.68	-1.37	3.30		
			Mental Health		15	25		1.77			
			Access to Necessities		24	15		1.37			
			Uncertainty about Future		33	50		2.21*			
			Virus Future		42	26		1.90			
			Government Decisions		52	40		1.16			
Self-Transcendence	Universalism	H4a	Equality Concern			1.12	1.15	0.10		<input checked="" type="checkbox"/>	
				Gender Neutrality		-0.16	0.35	9.88**		<input checked="" type="checkbox"/>	
				Care for the Whole World		0.75	0.91	2.23			
		H4b	Nature			0.65	0.70	0.40		<input checked="" type="checkbox"/>	
			Climate Change Concern			0.68	1.04	7.69**		<input checked="" type="checkbox"/>	
	Benevolence	H5		Gratitude		0.84	0.73	1.38			
Caring					0.55	0.64	1.28		<input checked="" type="checkbox"/>		
			Help the Community		-0.35	-0.29	0.24				
				Health-others		210	163		3.51***	<input checked="" type="checkbox"/>	
Openness to Change	Self-Direction	H6	Independence			0.75	0.58	4.24*		<input checked="" type="checkbox"/>	
				No Impulsiveness		0.03	-0.38	9.02**			
				Practical		0.17	0.11	0.27			
				Optimism		0.25	0.20	0.18			
	Stimulation	H7	Excitement/ Adventure			-0.62	-0.35	6.67**		<input checked="" type="checkbox"/>	
Hedonism	H8	Fun			-0.23	-0.02	5.45*		<input checked="" type="checkbox"/>		
Self-Enhancement	Achievement	H9	Success			-0.30	0.08	15.67***		<input checked="" type="checkbox"/>	
	Power	H10	Dominance			-0.42	-0.18	6.93**		<input checked="" type="checkbox"/>	

*** $P < .001$ ** $P < .01$ * $P < .05$ *Centered means reported for PVQ and Content Analysis Items; Number of mentions/ counts reported for COVID Concerns