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# Rachel Bottrill, Danni Horsley and Stuart Armon

## Media Consumption and Human Values: An investigation into how media consumption has changed human values pre and post Internet.

This research examines the relationship between media consumption (newspaper and Internet) and millennial human value change over-time. We explore the themes of media consumption and values (Schwartz 1992) and compare them against two specific dates. Our chosen timestamps are 2004 and 2016, with data we retrieved from the European Social Survey (ESS). We will have data from 2004 as it is post Internet, and then we will benchmark these results against 2016, where Internet and the use of social media is more a prevalent part of people's lives. We believe it is important to investigate this as there is a lack of research and understanding in academic literature about the role certain mediums have when influencing millennials human values. Therefore, we believe that our research into this will help future practitioners understand more about how media consumption can impact human values. Our findings suggested that there is, in fact, a lack of significant relationships between our media consumption independent variables and human value change. However, our research did indicate a negative relationship with Self-Transcendence and Self-Enhancement with millennials when they read, watch or listen about news on politics. We were also able to conclude that in 2016 men and women changed some of their human values, however, it wasn't as a result of our independent variables (media consumption). We therefore conclude by recommending that further research can be produced to understand why these changes in human values occurred with men and women, and that further research will need to be done using other independent variables.

**Keywords:** Media consumption, human values scale, post-internet

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### INTRODUCTION

Often, media consumption has been initially explored in the literature by looking at mass media as a concept. However, the relationship between media consumption and human values as well as the existence of value mean change over time. Although it has been

understood by the research that mass media has an influential role in society (Bandura, 2001), few studies have explored the new media consumption that has the rapid influx of information targeting mostly young individuals (Hartman, Gehrt & Watchravesringkan, 2004) (e.g. Millennials). While existing studies look at mass communication and individuals in general, few studies examined millennials' traditional media and web consumption its impact on their human values over years (Page & Uncles, 2004; Hartman, Shim, Barber & O'Brien, 2006). Therefore, it is important to understand whether there is change in our human values since 2004 (pre-social media) and whether, there has been a significant change 12 years later (after social media) in what human values are now most important to millennials within the UK.

Schwartz (1992) defines human values as what is important to us in life and centers values around four overarching dimensions; Self-Transcendence, Conversation, Self-Enhancement and Openness-to-Change. It is suggested that over-time, values change due to many varying factors, and there is a presumption that human values are influenced and modified as a result of the actions of other "partners" in society. Therefore, because of the rapid influx of media consumption in the past 10-20 years, it is fundamental to understand which values have been manipulated by the media consumption. It is important due to the increasing use of media and the understanding of how this can potentially alter human values. With Besley (2008) suggesting how the established role of values can help us predict outcomes such as participation and other pro-social behaviour.

Given a limited research information regarding media consumption and its impact on millennials human values, one research question was raised in this study whether mass media consumption impacted core millennial values over time. In order to answer this research question, two objectives were investigated by this study. First, to investigate a relationship with media consumption and the rise of the Internet to find if it impacted millennial human values. The second area the research examines whether gender and year of birth of UK millennials have an impact on media consumption and human value change. The development of this research was partly based on the work Schwartz's (1992) human values scale and collect the data for this longitudinal study using the European Social Survey (ESS).

## LITERATURE REVIEW

### Human Values

Values are beliefs that guide and justify people's actions whilst also reflecting cultural ideals (Dobewall, H., Tormos, R. and Vauclair, C.-M. 2017). Our research complies with the theory of human values proposed by Schwartz (1992). This theory maps ten motivations using two dimensions: Self-Transcendence v Self-Enhancement, and Conservation v Openness-to-Change.

Conservation holds the values of Security, Conformity and Tradition. Security values motivates us to be safe, with ourselves, within relationships and within society. Conformity is that of self-discipline and responsibility. The value of Tradition refers to a respect and acceptance of customs that someone's culture or religion holds. It has been found that wealthier countries (such as the UK) have lower levels of Conservation

(Tormos, R., Vauclair, C.-M. and Dobewall, H. 2017). More specifically, it has been found that, in general terms, being male, educated for longer, being in the labour force, and living in larger municipalities reduced Conservation. It is worth noting, however, that this research focused on European values, limiting the understanding of a specific country's culture, such as the UK.

Self-Enhancement concerns values which refer to Achievement and Power. Elliot and McGregor (2001) define Achievement as 'performance motivation' and it is suggested that an Achievement goal is defined through success of competence according to societal standards (Schwartz 1992). Power is defined by Schwartz (1992) as obtaining a social status and control over things. Similarly, the value of Power has been theorised as a personality trait by Allport (1961) where Power is achieved through authority, wealth and social capital. Research which focused on European values (adults) from 2002 and 2003, found that Self-Enhancement values bore a negative relation with age, and men of all ages scored higher in this value type than women (Robinson 2012).

Openness-to-Change holds the values referring to Self-direction, Stimulation and Hedonism. People who hold the value of Self-direction are independent, private and intelligent. This value is said to be derived from the need to feel in-control (Bandura 1977). Stimulation is driven by the attitude of someone who gains excitement through challenge in life. Similarly, Hedonism refers to a value of pleasurable gratification for oneself. It has been found that the average European valued Openness-to-Change as increasingly less important (Dobewall, H., Tormos, R. and Vauclair, C.-M. 2017), however this study lacked focus on a specific European country.

Lastly, Self-Transcendence holds the values of Universalism and Benevolence. According to Schwartz (1992), Universalism motivations refer to the knowledge and appreciation of others' welfare and for nature. This value is held by people who search for equality and are in unity with nature. Benevolence refers to maintaining and developing others' welfare. This value is held by people who are honest, responsible and loyal. Studies into value change across life cycle (Dobewall, H., Tormos, R. and Vauclair, C.-M. 2017) found that Self-Transcendence endorsement was stronger in more affluent European countries (such as the UK). Whilst an exploration of European value change across lifecycle makes the study generalisable, it again lessens the amount of focus on one country's values such as the UK, making room for research in UK human value change.

The theory of basic human values has been heavily used as a basis for research. However, some scholars argue that there could be some issues with it, suggesting that the circular arrangement of values represents a series of related motivations rather than a set of distinct motivations (Davidov, Schmidt, & Schwartz, 2008, p. 424.). Jowell et al (2007) argue that the surveys incorrectly use double barreled questions. Seen as within each 10 values is a minimum of 2 supporting questions that help to depict that variable, they argue that the use of 2 questions is limiting as people may believe in the first half of the question but disagree in the last half. However, even though this has been highlighted as a potential limitation, further work by Jowell et al (2007) showed that, overall, through testing of 2 different questions, the variables are different even though the intercorrelations between them were the same. Ultimately, they concluded that that the Human Value Scale proved highly productive.

Furthermore, employing a human values scale can be used for other purposes. For example one can examine change in value scores over time as an indicator of societal change (Davidov, Schmidt, & Schwartz, 2008). Therefore, an investigation based on the ten basic human values (Schwartz 1992) over-time within a specific demographic and country is a key focus of this research. Whilst external differences might alter over time, core human values can still be measured under the same theoretical motivations. Longitudinal studies have been found advantageous due to the ability to see an evolution of factors. This solidifies a potential pathway for this research and a longitudinal study as a potential research design.

## Media Consumption

Consumption is perceived to have “experiential as well as instrumental outcomes” (Babin, Darden & Griffin, 1994, p.664). In order to investigate media consumption, the Uses and Gratification (U&G) approach dominated research in the late 1950s and early 1960s with attempts to measure the short-term effects on people of their exposure to mass media campaigns. It reflected a desire to understand audience involvement in mass communications in terms that were more faithful to the individual user’s own experience and perspective than the effects that tradition could attain (Blumler, 1979). As U&G theory postulates that people use media both selectively and actively, it has more recently become a fundamental research approach for exploring the use of the Internet, as well as social networking sites, which also requires active participation (Eighmey, 1997; Ruggiero, 2000). U&G theory has several assumptions regarding users’ behaviour (West & Lynn, 2007). First of all, the audience is considered active and his/her media usage is goal directed (Blumler, 1979). The media competes with other sources for an individual’s need for satisfaction. Lastly, it is considered that people are aware of their media usage, interest and motives, and so can provide researchers with an overview thereof.

The European Social Survey (ESS) categorizes media into ‘old’ media (radio, newspapers, magazines, TV) and ‘new’ media (the Internet). In his proposal to the ESS on media and communications questions, Newton (2002) argues that one should know roughly how much time is spent on mass media and for what purpose it is used. ESS survey questions have been developed using many previous surveys with existing questions on communications and media, such as the British General Election Study (1997). This highlights that ‘old’ media metrics are still important as they can demonstrate consumption over time, linking to our specific research. Furthermore, many social analysts agree that media is becoming rapidly more important and is likely to continue to undergo rapid change, giving the ESS a strong reason to include media and communications questions in their survey.

Despite extensive literature on human values, there is limited research that explores the relationship between values and media consumption. For the purpose of this research, we will now review the literature that is focused on consumption of Newspapers and the Internet and its relation to human values (Schwartz 1992).

## Newspaper consumption and current affairs

There has been limited research on newspaper consumption and current affairs linked

to values, demonstrating an area for focus. This seems remiss as, before the Internet and Social Media, newspapers were a core way to consume media. Sotirovic and McLeod (2001) found that post-materialist values positively mediated the relationship between newspaper use and political participation. Furthermore, research into values and media use in 2004 (cited in Besley 2008) found that newspaper consumption appeared to be related to more Openness-to-Change values. It has also been found that in countries such as the UK, among those that do not consume newspapers to keep informed about politics, there is a high probability of having negative evaluations of the state of society (Elchardus and DeKeere 2013). Therefore, newspaper readers are potentially more positive about the state of society, linking to the value of security - Conservation. Given that Openness-to-Change has not been explored we have developed the following hypothesis.

*H1: Newspaper consumption will impact the value of Openness-to-Change over time.*

### Internet Consumption

Moving beyond newspaper consumption, a look into how the Internet and values has been discussed also reveals only a handful of relevant papers. According to Pew Research Centre, most millennials came of age as the Internet became ubiquitous and were rapid adopters of the new technology (Shugerman 2015). Millennials can be defined as those born between 1981 and 1996 (Dimock 2018). Evidence has suggested that individuals use the Internet predominantly for entertainment rather than community engagement (Althaus and Tewksbury 2000), suggesting they might hold a positive relationship to Self-Enhancement and Conservation values. In support, research from Fromm and Garton (2013) has found that Millennials are more likely to consume the Internet as a platform to broadcast their thoughts and feelings, as they have been born into a world filled with technological advances which empower the consumer. This therefore falls under the value of Self-Enhancement.

Furthermore, a European survey (2002) found that email (78% of users) and 'looking for topical items' (73% of users) were the most common uses of the Internet, suggesting little potential for Self-Transcendence or increased Openness-to-Change. Research into values and exposure to the Internet in 2004 found that Internet use was associated with both Openness-to-Change values and 'conservative' Self-Enhancement values (Besley 2008).

This research (Besley 2008) gives us insight into how the Internet had significant impact on values in 2004 within Europe. However, it lacked an understanding of value change over-time as it purely focused on data within 2004. This continues to spark potential for further research into value change through a longitudinal study method. Besley (2008) also points out the need for research within an individual country in order to gain more focus, and this further supports the case for research to focus on the UK.

Interestingly, research from Motorola (2009) found that age can no longer dictate media consumption and that regardless of age, consumers are turning to cross-generational influencers who are defined by their media consumption habits. This is supported and enhanced by Fromm and Garton (2013) who claim that young adults are part of the 'Millennial culture' meaning that the way they behave are strongly influencing people of



all ages. The study suggests that they are actively trying to assimilate other generations into their media consumption culture. Millennials can therefore be described as ‘leaders’ or trend-setters via their use of media, falling under the human values of Openness-to-Change and Self-Enhancement.

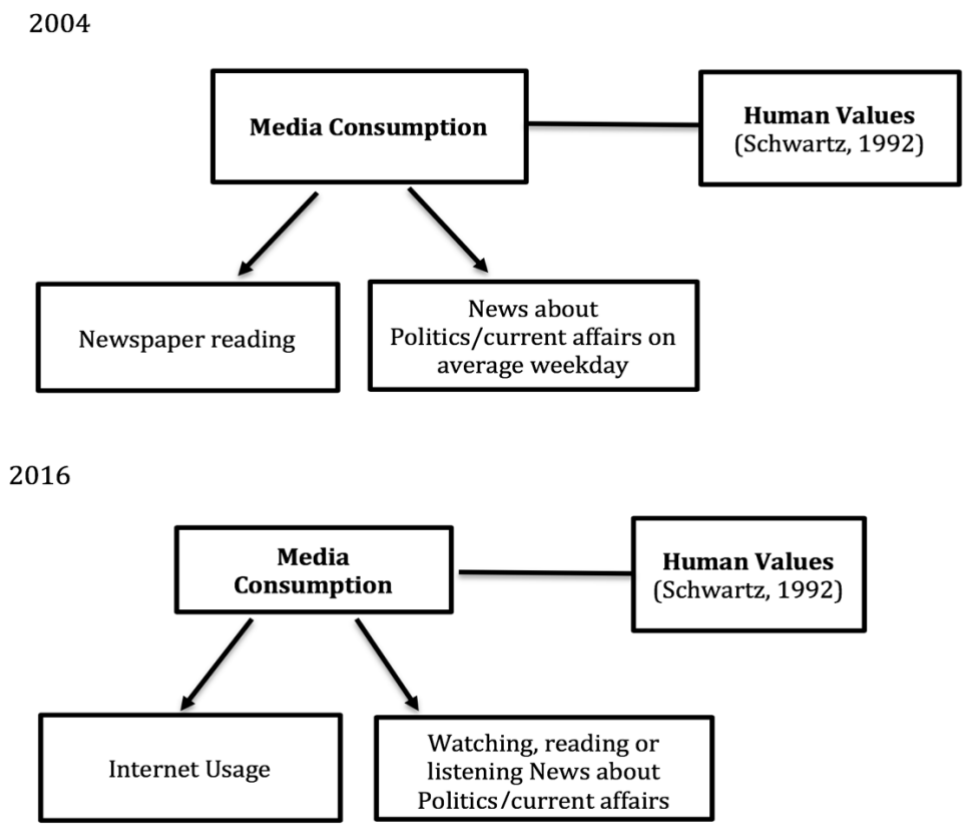
Altogether there are a few conflicting literature findings that determine what and how millennial values are affected by the Internet, demonstrating an area for potential research in a specific demographic and country in order to solidify results. We predict that Internet use will most likely positively relate to Self Enhancement values over time.

*H2: Internet use of millennials will positively relate to their Self-enhancement values over time.*

**Conceptual Framework**

For 2004, media consumption will be the independent variable (newspaper reading, politics/current affairs on average weekday) and human values will be our dependent variable. For 2016, media consumption will be the independent variables (news about politics and current affairs, watching reading or listening and Internet usage) and human values the dependent variable.

**Figure 1: Conceptual Framework**



**METHODOLOGY**

Our research used big data from the European Social Survey (ESS). We collected this data

using a longitudinal study as we focused on collecting and comparing data over a prolonged period (Caruana et al 2015). One advantage of using ESS is that we were able to use an extensive number of responses across 2 different time zones. This allowed for a longitudinal study where we could collect more useful data in the environment we were measuring (Berger 1986). For our research paper we focused on gathering data from the years 2004<sup>1</sup> and 2016<sup>2</sup> in the ESS. Variables we used for our 2004 dataset consisted of 'old' media consumption as our independent variable and the controls of "Gender" and "Year of Birth<sup>3</sup>". We also implemented the dependent variables of Human Values. For 2016, we used an 'old' media consumption independent variable, and a 'new' media consumption variable to help answer our aims and objectives. Other than that, we collected the same controls and dependent variables.

After cleaning our data, we tested the reliability of our human value variables. Instead of performing an Exploratory Factor Analysis (EFA), we used the established scale of Cronbach Alpha. We used this because the sampling questionnaire that was used to collect our sample survey results was based on a 1-6 Likert-type scale. So, because this survey used a likert-type, we deemed it imperative that we would have to calculate and report the results with Cronbach's alpha coefficient for "internal consistency reliability for the scales we are using" (Gliem, J and Gliem, R 2003). Additionally, ESS wrote that when computing scores for the ten human values; "an EFA isn't suitable for discovering the theorized set of relations among values" (ESS 2018).

## Sampling

Because our data was collected by the ESS, it meant that we couldn't control the samples. However, to control our data, we added the controls of "Year of Birth" and "Gender". We used "Year of Birth" to reduce the results of our two surveys to only millennials who were born in the years 1981-1996 (Dimock 2018). However, we cut this to 1981-1990 because ESS sampling restricts participants to be of 15 years and older. Therefore, anyone born in 1991-1996 wouldn't be able to take part in the 2004 survey because they would be too young.

Additionally, ESS has provided us with their guidelines for their sampling collection process. Both the 2004 and 2016 guidelines for a strict sample were similar. Ensuring for strict random probability sampling, a minimum target response of 70% with rigorous translation protocols. Also, both sample processes involved an hour-long face-to-face interview. With the main difference between the 2 protocols being the questions that were asked in the different interviews. This only affected us because the 2016 questions

<sup>1</sup> We chose to focus on the year 2004 as it was post the public release of Facebook.com, which was released in 2005 (Phillips 2007). This meant that for the purpose of this research piece, we deemed our 2004 data results as pre-influence of social media, as it was just before the influx of social media platforms.

<sup>2</sup> 2016 was our chosen second date as we deemed it the most valid to test the impact of the "rise of social media". We position this, not only because it was the most recent survey available to us on ESS, but also because 2016 saw an 8.7% increase in use of social media (Battisby 2016). Therefore, it can be argued that, from the data available to us, 2016 provided the most realistic results at the time this dataset was collected in

<sup>3</sup> Year of birth was used as a dummy variable to focus purely on those born in the years 1981-1996, as these are the years Millennials were born in. However, we later cut this range from 1981-1996 to 1981-1990. Our sample technique will explain this in further detail.



were more focused on looking at 'new' media like internet, instead of 'old' mediums.  
**Data Collection**

As mentioned previously, to test our aims and objectives we complied with Schwartz (1992) Human Value Scale. To test human values, ESS set out 21 questions that were used to measure the 10 different motivationally distinct variables. Results were then based off a 1-6 Likert scale<sup>4</sup>. The questions that were asked can be seen in the below table, as well as the motivational variable they are meant to equal.

**Table 3: ESS Human Values (Schwartz 2003)**

| <b>Motivational Values</b> | <b>ESS Variable</b>   |
|----------------------------|---|
| <b>Self-direction</b>      | <ul style="list-style-type: none"> <li>• Important to think new ideas and being creative</li> </ul>   |
| <b>Universalism</b>        | <ul style="list-style-type: none"> <li>• Important to make own decisions and be free</li> <li>• Important that people are treated equally and have equal opportunities</li> <li>• Important to understand different people</li> <li>• Important to care for nature and environment</li> </ul> |
| <b>Benevolence</b>         | <ul style="list-style-type: none"> <li>• Important to help people and care for others well-being</li> <li>• Important to be loyal to friends and devote to people close</li> </ul>  |
| <b>Tradition</b>           | <ul style="list-style-type: none"> <li>• Important to be humble and modest, not draw attention</li> <li>• Important to follow traditions and customs</li> </ul>   |
| <b>Conformity</b>          | <ul style="list-style-type: none"> <li>• Important to do what is told and follow rules</li> <li>• Important to behave properly</li> </ul>   |
| <b>Security</b>            | <ul style="list-style-type: none"> <li>• Important to live in secure and safe surroundings</li> <li>• Important that government is strong and ensures safety</li> </ul>   |
| <b>Power</b>               | <ul style="list-style-type: none"> <li>• Important to be rich, have money and expensive things</li> <li>• Important to get respect from others</li> </ul>   |
| <b>Achievement</b>         | <ul style="list-style-type: none"> <li>• Important to show abilities and be admired</li> <li>• Important to be successful and that people recognise achievements</li> </ul>   |
| <b>Hedonism</b>            | <ul style="list-style-type: none"> <li>• Important to have a good time</li> <li>• Important to seek fun and things that give pleasure</li> </ul>  |
| <b>Stimulation</b>         | <ul style="list-style-type: none"> <li>• Important to try new and different things in life</li> <li>• Important to seek adventures and have an exciting life</li> </ul>   |

ESS tested the 2004 media consumption variable using a 1-7 Likert scale<sup>5</sup>. Comparatively, the 2016 survey tested the 'old' media consumption variable by asking

<sup>4</sup> Human value likert scale: 1=very much like me and 6= not like me at all

<sup>5</sup> 2004 media consumption: 1-7 Likert scale: 1= Less than ½ hour, and 7= more than 3 hours

participants to write how many hours and minutes on a typical day they used those mediums. However, when testing for Internet Usage, respondents answered using a mixture of a 1-5 Likert scale<sup>6</sup>, and writing in a typical day how many hours and minutes did they use the Internet. This scale measurement differentiation will be noted in our limitations section.

For the purpose of this investigation, we defined media consumption in 2004 to be 'Newspaper reading, politics/current affairs on average weekday'.<sup>7</sup> Wolswinkel et al (2008) and Bakker (2004), support our investigation of newspaper consumption as a valid media that young adults use. However, in the discussion section, we suggest testing other media consumption activities to test such as television.

Additionally, for the 2016 dataset we used a proxy to represent 2004's media consumption variable which is 'News about politics and current affairs, watching, reading or listening'. This proxy had to be used as in the ESS survey results, no other variable represented any other form of 'old' media consumption to test results from the 2004 dataset.

### Descriptive statistics

After reviewing and checking both datasets for skewed results due to unengaged or incomplete responses, we were able to conclude that our 2004 dataset had 111 viable respondents and the 2016 dataset had 283 respondents. The lack of consistency in the number of viable respondents is noted in our limitations section.

Further information regarding the sample demographic for this paper can be found below in Table 1 and 2. As the tables show, in both datasets the gender percentage is nearly equal. With Table 1 showing that 49.5% were male, and 50.5% were female. Table 2 shows more female respondents, with 59% of respondents being female and only 41% being male. Additionally, as the tables demonstrate, the only respondents we had were millennials.

**Table 1. Demographic frequencies for 2004 dataset**

|                      | Frequency | Percentage |
|----------------------|-----------|------------|
| <b>Gender</b>        |           |            |
| Male                 | 55        | 49.5%      |
| Female               | 56        | 50.5%      |
| <b>Year of Birth</b> |           |            |
| 1981                 | 16        | 14.4       |
| 1982                 | 9         | 8.1        |
| 1983                 | 7         | 6.3        |
| 1984                 | 14        | 12.6       |

<sup>6</sup> 1= Never, and 7= Everyday

<sup>7</sup> Though it may be disputed that Newspaper reading 2004 was a dying medium, and therefore not the best choice to measure the UK's media consumption, we disagree. As Wolswinkel et al (2008) wrote, even though paid newspapers were dying out, free newspaper reading was on the rise. Additionally, Bakker (2004) found that everyday 700,000 free newspapers were being read. Wolswinkel et al (2008) also suggested "the format of free newspapers better fits the youth's way of news consumption than the format of paid".

|      |    |      |
|------|----|------|
| 1985 | 11 | 9.9  |
| 1986 | 16 | 14.4 |
| 1987 | 17 | 15.3 |
| 1988 | 11 | 9.9  |
| 1989 | 9  | 8.1  |
| 1990 | 1  | 9    |

**Table 2. Demographic frequencies for 2016 dataset**

|                      | Frequency | Percentage |
|----------------------|-----------|------------|
| <b>Gender</b>        |           |            |
| Male                 | 116       | 41%        |
| Female               | 167       | 59%        |
| <b>Year of Birth</b> |           |            |
| 1981                 | 34        | 12         |
| 1982                 | 32        | 11.3       |
| 1983                 | 24        | 8.5        |
| 1984                 | 40        | 14.1       |
| 1985                 | 28        | 9.9        |
| 1986                 | 29        | 10.2       |
| 1987                 | 27        | 9.5        |
| 1988                 | 24        | 8.5        |
| 1989                 | 20        | 7.1        |
| 1990                 | 25        | 8.8        |

N=283

### Reliability and Validity

To test reliability and validity of our human values, we used Nunnally's Cronbach Alpha scale (Table 4 & 5). To understand any relationships between the different variables we used a correlation analysis, mean, mode and median (Table 6 & 7). Finally, to test our hypotheses we used a linear regression on SPSS 25 (Tables 8,9,10, 11). When carrying out a reliability test on our variables we used the acclaimed scale of Nunnally's Coefficient Alpha, aka Cronbach Alpha. The main premise of a Cronbach Alpha test is to get a result that is higher than 0.7. However, results closer to 1 are deemed to be more reliable (Hair et al. 2010).

However, as Table 4 and 5 illustrate, our 2004 dataset had the average result of 0.730, whereas our 2016 dataset had on average results of 0.670. Though before excluding our data, we researched the above statements' accuracy. As a result, we found research that suggested that this blind following cannot be considered as the gospel truth. Cho and Kim (2015) highlighted that Nunnally wrote about the numerical reference of what is an acceptable level purely with the intention of giving readers practical aid. Additionally, they noted how it is only in the second edition of his work that he specified that an acceptable level is above 0.7. But, if you read the first edition of his work, then he justifies

that having a reliability of .5 or .6 is sufficient for exploratory research (Nunnally 1967). Therefore, we position our average Cronbach Alpha results to satisfy both editions of Nunnally’s work and is therefore reliable enough to test.

**Table 4. 2004 Cronbach Alpha results**

| <b>Human Value</b> | <b>Motivational Variable</b>                        | <b>Cronbach result</b> |
|--------------------|---|------------------------|
| Self-Transcendence | 1. Universalism<br>2. Benevolence                   | 0.718                  |
| Conservation       | 1. Security<br>2. Conformity<br>3. Tradition        | 0.691                  |
| Self-Enhancement   | 1. Power<br>2. Achievement<br>3. Hedonism           | 0.783                  |
| Openness to Change | 1. Hedonism<br>2. Stimulation<br>3. Self- direction | 0.726                  |

**Mean:** 0.73

**Table 5. 2016 Cronbach Alpha results**

| <b>Human Value</b>        | <b>Motivational Variable</b>                        | <b>Cronbach result</b> |
|---------------------------|---|------------------------|
| <b>Self-Transcendence</b> | 1. Universalism<br>2. Benevolence                   | 0.633                  |
| <b>Conservation</b>       | 1. Security<br>2. Conformity<br>3. Tradition        | 0.655                  |
| <b>Self-Enhancement</b>   | 1. Power<br>2. Achievement<br>3. Hedonism           | 0.704                  |
| <b>Openness to Change</b> | 1. Hedonism<br>2. Stimulation<br>3. Self- direction | 0.675                  |

**Mean:** 0.67

Table 6 shows 2004 the independent variable of had a positive correlation at 5% confidence with the dependent variable of Self-transcendence. Comparatively, table 7 showed that 2016’s independent proxy variable, had a negative correlation at 5% confidence with the dependent variable of Openness-to-Change. Apart from that, no significant relationships were found between the dependent and independent variables.

**Table 6. 2004 Means, Standard Deviations, and Correlation**

|   | Mean  | Standard deviation | Newspaper reading, politics/current affairs on average weekday | Gender | Year of Birth | Conservation | Self Enhancement | Openness to Change | Self-Transcendence |
|---|-------|--------------------|--|--------|---------------|--------------|------------------|--------------------|--------------------|
| <b>Newspaper reading, politics/current affairs on average weekday</b> | .825  | .865               |  |        |               |              |                  |                    |                    |
| <b>Gender</b>   | 1.50  | .502               | 0.044  |        |               |              |                  |                    |                    |
| <b>Year of Birth</b>  | 1985  | 2.577              | -0.143   | -0.025 |               |              |                  |                    |                    |
| <b>Conservation</b>   | 2.950 | .7486              | -0.105   | 0.023  | 0.107         |              |                  |                    |                    |
| <b>Self Enhancement</b>   | 2.620 | .8097              | -0.077   | 0.181  | -.247**       | .300**       |                  |                    |                    |
| <b>Openness to Change</b>   | 2.350 | .7028              | -0.012   | .217*  | -.274**       | .224*        | .783**           |                    |                    |
| <b>Self-Transcendence</b>   | 2.288 | 0.678              | -.217*   | -0.132 | 0.022         | .481**       | .367**           | .474**             |                    |

\* 0.05 level (2-tailed) \*\* Correlation is significant at the 0.01 level (2-tailed)

**Table 7. 2016 Means, Standard Deviations, and Correlation**

|  | Mean    | Standard deviation | News about politics and current affairs | Internet use, how often | Gender | Year of Birth | Conservation | Self Enhancement | Openness to Change | Self-Transcendence |
|--|---------|--------------------|---|-------------------------|--------|---------------|--------------|------------------|--------------------|--------------------|
| <b>News about politics and current affairs</b> | 81.09   | 157.405            |   |                         |        |               |              |                  |                    |                    |
| <b>Internet use, how often</b>                 | 4.73    | .824               | 0.029                                   |                         |        |               |              |                  |                    |                    |
| <b>Gender</b>                                  | 1.59    | .493               | -0.007                                  | 0.086                   |        |               |              |                  |                    |                    |
| <b>Year of Birth</b>                           | 1985.14 | 2.831              | 0.017                                   | -0.005                  | 0.037  |               |              |                  |                    |                    |
| <b>Conservation</b>                            | 2.886   | .803               | -0.025                                  | 0.033                   | -0.073 | -0.001        |              |                  |                    |                    |
| <b>Self Enhancement</b>                        | 2.956   | .7645              | -0.061                                  | -0.049                  | 0.051  | -0.099        | 0.017        |                  |                    |                    |
| <b>Openness to Change</b>                      | 2.760   | .768               | -.143*                                  | -0.038                  | .129*  | -0.047        | .185**       | .720**           |                    |                    |
| <b>Self-Transcendence</b>                      | 2.130   | .667               | -0.1                                    | -0.097                  | -.140* | 0.019         | .383**       | .287**           | .229**             |                    |

\* 0.05 level (2-tailed), \*\* 0.01 level (2-tailed).



## ANALYSIS AND FINDINGS

Hypothesis 1 predicts that newspaper consumption will impact millennials' value of Openness-to-Change over time. Table 8 shows the relationship newspaper reading had with Openness-to-Change in 2004, and Table 10 shows whether Openness-to-Change was impacted by newspaper consumption in 2016. As Table 8 and 10 show, there was no significant relationship overtime with newspaper consumption and Openness-to-Change with millennials in. This indicates no support to hypothesis 1.

Hypothesis 2 expects "Internet use" to have a positive relationship with Self-Enhancement over our 2 time periods. However, as table 11 shows, there has been no significant change in any of the human values as a result of Internet use. This indicates no support for hypothesis 2.

**Table 8: 2004 regression model for Newspaper reading, politics/current affairs on average weekday**

|   | Model 1                |              | Model 2          |              | Model 3              |              | Model 4                |              |
|---|------------------------|--------------|------------------|--------------|----------------------|--------------|------------------------|--------------|
|   | DV: Self-Transcendence |              | DV: Conservation |              | DV: Self-Enhancement |              | DV: Openness to Change |              |
|   | b                      | S.E.         | b                | S.E.         | b                    | S.E.         | b                      | S.E.         |
| <b>Constant</b>   | 8.93299<br>4           | 49.4325<br>9 | -51.5991         | 55.7566<br>2 | 164.584<br>4         | 57.6059      | 152.125                | 49.5384<br>9 |
| <b>^Newspaper political reading,</b>                            | -0.167*                | 0.07419<br>1 | -0.08031         | 0.08368<br>3 | -0.11418             | 0.08645<br>8 | -0.04992               | 0.07435      |
| <b>Gender</b>   | -0.16597               | 0.12657<br>2 | 0.04346<br>7     | 0.14276<br>4 | 0.29037<br>4         | 0.14749<br>9 | 0.29718<br>6           | 0.12684<br>3 |
| <b>Year of Birth</b>  | -0.00315               | 0.02489<br>6 | 0.02748          | 0.02808<br>1 | -0.082**             | 0.02901<br>3 | -0.07566               | 0.02494<br>9 |
| <b>R Square</b>   | 0.062                  |              | 0.021            |              | 0.106                |              | 0.123                  |              |
| <b>Adjusted R Square</b>  | 0.036                  |              | -0.007           |              | 0.081                |              | 0.098                  |              |
| <b>F Test</b>   | (3)2.373 p<0.074       |              | (3)0.749 p<0.525 |              | (3)4.246 p<0.007     |              | (3)4.992 p<0.003       |              |
| <b>Note '* is 0.01&lt;p=&lt;0.05, '** is 0&lt;p=&lt;0.01</b>    |                        |              |                  |              |                      |              |                        |              |
| ^Newspaper reading, politics/current affairs on average weekday |                        |              |                  |              |                      |              |                        |              |

**Table 9: 2016 regression model for News about politics and current affairs, watching, reading or listening and Internet use, how often.**

|  | Model 1                |          | Model 2          |          | Model 3              |          | Model 4                |          |
|--|------------------------|----------|------------------|----------|----------------------|----------|------------------------|----------|
|  | DV: Self-Transcendence |          | DV: Conservation |          | DV: Self-Enhancement |          | DV: Openness to Change |          |
|  | b                      | S.E.     | b                | S.E.     | b                    | S.E.     | b                      | S.E.     |
| <b>Constant</b>  | -8.83592               | 27.53605 | 1.498425         | 33.65302 | 29.76456             | 31.51951 | 56.98689               | 32.00633 |
| <b>^News watching, reading or listening</b>                              | -0.00042               | 0.000249 | -0.00014         | 0.000305 | -0.001*              | 0.000286 | -0.00028               | 0.00029  |
| <b>Internet use</b>  | -0.06647               | 0.047807 | 0.039577         | 0.058427 | -0.04206             | 0.054723 | -0.04936               | 0.055568 |
| <b>Gender</b>  | -0.181*                | 0.080002 | -0.12572         | 0.097774 | 0.208*               | 0.091575 | 0.091991               | 0.092989 |
| <b>Year of Birth</b>   | 0.005843               | 0.013872 | 0.000711         | 0.016954 | -0.01354             | 0.015879 | -0.02726               | 0.016124 |
| <b>R Square</b>  | 0.037                  |          | 0.008            |          | 0.041                |          | 0.019                  |          |
| <b>Adjusted R Square</b>   | 0.023                  |          | -0.007           |          | 0.027                |          | 0.005                  |          |
| <b>F Test</b>  | (4)2.669 p<0.033       |          | (4)0.539 p<0.707 |          | (4)2.991 p<0.019     |          | (4)1.355 p<0.250       |          |
| <b>Note '* is 0.01&lt;p=&lt;0.05</b>                                     |                        |          |                  |          |                      |          |                        |          |
| ^News about politics and current affairs, watching, reading or listening |                        |          |                  |          |                      |          |                        |          |

**Table 10: 2016 regression model for News about politics and current affairs, watching, reading or listening.**

|   | <b>Model 5</b>         |          | <b>Model 6</b>   |          | <b>Model 7</b>       |                     | <b>Model 8</b>         |          |
|---|------------------------|----------|------------------|----------|----------------------|---------------------|------------------------|----------|
|   | DV: Self-Transcendence |          | DV: Conservation |          | DV: Self-Enhancement |                     | DV: Openness to Change |          |
|   | b                      | S.E.     | b                | S.E.     | b                    | S.E.                | b                      | S.E.     |
| <b>Constant</b>                             | 9.46512                | 27.57834 | 1.873043         | 33.61583 | 29.36642             | 31.49214            | 56.51968               | 31.98991 |
| <b>^News watching, reading or listening</b> | -0.000*                | 0.00025  | -0.00013         | 0.000304 | -0.001*              | 0.00028519945831497 | -0.00029               | 0.00029  |
| <b>Gender</b>                               | -0.191*                | 0.079835 | -0.11999         | 0.097313 | 0.202*               | 0.091165            | 0.084847               | 0.092606 |
| <b>Year of Birth</b>                        | 0.00601                | 0.013895 | 0.000612         | 0.016937 | -0.01344             | 0.015867            | -0.02714               | 0.016117 |
| <b>R Square</b>                             | 0.030                  |          | 0.006            |          | 0.039                |                     | 0.016                  |          |
| <b>Adjusted R Square</b>                    | 0.020                  |          | -0.005           |          | 0.029                |                     | 0.006                  |          |
| <b>F Test</b>                               | (3)2.904p<0.035        |          | (3)0.567p<0.637  |          | (3)3.797p<0.011      |                     | (3)1.545 p<0.203       |          |

Note '\*' is  $0.01 < p < 0.05$

^News about politics and current affairs, watching, reading or listening

**Table 11: 2016 regression model for Internet use, how often.**

|                          | <b>Model 9</b>                |         | <b>Model 10</b>         |         | <b>Model 11</b>             |         | <b>Model 12</b>               |         |
|--------------------------|-------------------------------|---------|-------------------------|---------|-----------------------------|---------|-------------------------------|---------|
|                          | <b>DV: Self-Transcendence</b> |         | <b>DV: Conservation</b> |         | <b>DV: Self-Enhancement</b> |         | <b>DV: Openness to Change</b> |         |
|                          | b                             | S.E.    | b                       | S.E.    | b                           | S.E.    | b                             | S.E.    |
| <b>Constant</b>          | -                             | 27.6215 | 1.75187                 | 33.6005 | 31.0056                     |         | 57.5024                       | 31.9987 |
| <b>Internet use</b>      | 8.07055                       | 9       | 3                       | 2       | 6                           | 31.7765 | 1                             | 7       |
| <b>Gender</b>            | -                             | 0.04794 | 0.03878                 | 0.05831 | -                           | 0.05515 | -                             | 0.05553 |
| <b>Year of Birth</b>     | 0.06887                       | 1       | 3                       | 8       | 0.04595                     | 2       | 0.05097                       | 8       |
|                          |                               | 0.08025 | -                       |         |                             |         | 0.09289                       | 0.09297 |
| <b>Gender</b>            | -0.180*                       | 7       | 0.12527                 | 0.09763 | 0.210*                      | 0.09233 | 4                             | 6       |
| <b>Year of Birth</b>     | 0.00544                       | 0.01391 | 0.00057                 | 0.01692 | -                           | 0.01600 |                               |         |
| <b>Birth</b>             | 5                             | 5       | 9                       | 7       | 0.01419                     | 8       | -0.027*                       | 0.01612 |
| <b>R Square</b>          | 0.027                         |         | 0.007                   |         | 0.022                       |         | 0.016                         |         |
| <b>Adjusted R Square</b> | 0.017                         |         | -0.004                  |         | 0.011                       |         | 0.005                         |         |
| <b>F Test</b>            | (3)2.604p<0.052               |         | (3)0.652p<0.582         |         | (3)2.072p<0.104             |         | (3)1.492p<0.217               |         |

Note '\*' is  $0.01 < p < 0.05$ , '\*\*' is  $0 < p < 0.01$

## DISCUSSION

As our literature review highlights, rarely have researchers investigated newspaper consumption on millennial value alteration. Besley (2008) was our closest academic author, as he discussed the role of media use in influencing human values. Interestingly, he found that newspaper consumption was related to the human Openness-to-Change in 2004. Additionally, Elchardus and DeKeere (2013) made the link between newspaper readers having either a negative or positive resolve about the state of society (Conservation value), depending on whether they read a newspaper or not. Therefore, thanks to this research, we found it important to test whether newspaper consumption still will impact Openness-to-Change within a millennial demographic in the UK.

However, our findings don't correlate with our academic research findings. Instead, this particular dataset shows that there was no significant relationship between millennials and their value of Openness-to-Change due to newspaper consumption in 2004 and 2016. Our results showed the opposite to this hypothesis, as seen in Table 10, it showed that the less newspapers participants read, watched etc, meant the more they related to Self-Enhancement and Self-Transcendence. However, a potential reason for our lack of support for our hypothesis, could be a result of a limited number of analysed participants due to our small sample group. Alternatively, it can be noted that Besley's work looked over 12 countries in Europe, whereas ours only explored one. Additionally, research showed that young adults do still consume newspapers, but not as regularly as they consume television (Lauf 2001), which can be deemed as a limitation and a future recommendation of exploring other 'old' mediums. Additionally, we would recommend exploring other age groups as well, with a similar number of participants.

Hypothesis 2 had more research to refer to. With theory highlighting a relationship between a Self-Enhancement change due to Internet usage. Literature supporting this

includes Fromm and Garton (2013)<sup>8</sup> and Besley (2008)<sup>9</sup>. It was because of the literature that we understood the importance of testing to see whether Self-Enhancement was impacted by the Internet overtime. However, again we were unable to collaborate any of the literature we found with our own data findings. Table 11 shows that Internet had no relationship with any human values. A reason for this could be because, as Besely (2008) wrote, "Without knowledge of what Web sites and other resources respondents were using online, it is difficult to form hypotheses regarding the likely relationship between Internet use and reported human values".

Interestingly, a significant finding was found in Table 8, 10 and 11. This showed that compared to 2004, women in 2016 believe they related more to the Self-Enhancement value. Additionally, more men in 2016 relate to the human value of Self-Transcendence. However, these values were not altered by media consumption, our independent variable. In summary, the conducted research we carried out, contrary to what our literature argued, indicated no significant relationship with millennial values of Openness-to-Change and their newspaper consumption. Additionally, we found no indication that millennials had a positive relationship with Self-Enhancement due to Internet usage. Instead, our results showed the opposite to hypothesis 1, with the less 'old' media being consumed in 2016, meaning more participants related to Self-Enhancement and Self-Transcendence. Furthermore, as noted, a significant finding from our dataset showed that, compared to 2004, 2016 had two instances of either men or women changing their human values. This shows the potential for further research to be done in this area to understand why they changed their human value relationship.

## CONCLUSION

The aim of this paper was to investigate whether media consumption had altered millennial human values pre and post the rise of the Internet. Additionally, this paper had the objective of determining whether gender and year of birth of UK millennials had an impact on media consumption and human value change.

Though our literature concluded that there was research suggesting newspaper consumption and Internet had impacted people's certain human values, our findings showed no significant relationship to support any relationship that the literature suggested. Contrary to popular belief, mass media consumption and internet usage isn't influencing young adults' human values, as our dataset shows no evidence to support this. The most significant relevant research shows a negative relationship with Self-Transcendence and Self-Enhancement with millennials when they read, watch or listen about news on politics. However, because the majority of our results have been inconclusive, we cannot endorse any confirmed recommendation for professionals in the media industry. All we can suggest is that further exploration into this subject is needed,

<sup>8</sup> Fromm and Garton (2013) supported hypothesis 2 as they wrote how millennials are more likely to consume Internet and use it to articulate their thoughts and feelings, helping to empower them. This we argue falls under Self-Enhancement as it refers to the feeling of social power

<sup>9</sup> Besley (2008) supported hypothesis 2 as he researched human values and media consumption over 12 countries and he found that Internet use was seen to associate with the human values of Openness-to-Change, and "conservative" Self-Enhancement.

as seen by our results that showed that men and women changed their human values, but not of a result of our independent variables (media consumption). We therefore further conclude by recommending that future academics could focus on looking at other age groups and by testing using the impact of different mediums.

## LIMITATIONS

One limitation to this study was the scales that were used to test 'old' media consumption; Newspaper reading, and news and politics, watching, etc. This limited our analysis as this variable was tested using a likert scale. Comparatively, the 2016 dataset, didn't have an explicit variable that tested just one option of 'old' media. Instead, the only proxy variable that was most similar, was to test by using watching, reading and listening. These implied that participants were asked about their frequency of reading a newspaper, listening to the radio, and watching TV. This makes comparing the two results difficult, as they recorded different elements. Additionally, the 2016 dataset collected results by asking participants to write numerically how many hours they spent on an average weekday reading, watching or listening to news about politics. This meant that we were unable to use a means difference test as the scales used to measure these questions were too different to compare. A future recommendation of this would be to test using the same scales. Additionally, because our results weren't conclusive, it can suggest that another future recommendation would be to test using different independent variables.

Another limitation is that because we tested millennials our 2004 dataset had over 100 less respondents than 2016. This is a result of the sampling process, with them explicitly only testing participants 15 years and older. This limited the number of available participants we could test. Additionally, because testing was done 12 years later, we haven't considered that other factors would impact participants human values. For example, the educational system has changed significantly over the years, and these factors should be considered in future testing to be able to collect more realistic research results. Furthermore, it should be noted that because we have done a longitudinal study, it also means that we aren't testing the same group of people. We are testing a different group that may have had different values in 2004. Therefore, in the future, to avoid this limitation, we would position retesting with the same group of older participants and consider the role of other external factors.



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