Investigating the effects of social media usage, maternal & individual education, and household income on levels of conspiratorial belief.

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Abstract

Aims: The present study examined the relationship between social media and Instagram usage, maternal and individual education, and household income on conspiratorial belief levels. Previous research has identified that social media usage, as well as education and income, affect conspiratorial belief levels, with longer time spent on social media, as well as low levels of education and income leading to the adoption of conspiratorial beliefs. **Method:** Multiple questionnaires were administered to participants (n = 83) through a google forms document containing a demographics questionnaire, the Instagram intensity scale (IIS), the social media networking intensity scale (SNAIS) and the generic conspiratorial belief scale (GCBS). **Results:** Results showed that social media and Instagram usage were significantly correlated with conspiratorial belief levels, while maternal and individual education, and income, found no significant effect. Findings indicate a weak positive relationship with both Instagram ($p < .03$) and social media usage ($p < .02$) at a statistically significant level. **Conclusion:** Findings provided the literature with a significant correlation with social media usage and conspiratorial belief within a well-educated high-income sample. Challenging previous research that such a sample would find low levels of conspiratorial belief, suggesting further research to examine possible mediating factors between social media, education, and income as predictors of conspiracy belief.

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Introduction

Conspiracy theories are a phenomenon with varying degrees of definitions, making the construct difficult to measure. A comprehensive, commonly used definition and the definition in which this research will measure the variable, state conspiracies as "explanatory beliefs of how multiple actors meet in secret agreement in order to achieve a hidden goal that is considered to be unlawful or malevolent" (Zonis., 1994). It is important to outline the difference between a "specific conspiracy belief" and a "generic conspiracy belief" when discussing conspiratorial belief. Although different, specific conspiracy beliefs are related to generic conspiracy beliefs (Swami., 2010). A generic conspiracy belief would constitute a statement such as *"Evidence of aliens are being concealed from the public"* whereas a specific conspiracy belief would state *"Area 51 in Nevada, is a secretive military base that contains hidden alien bodies and/or alien spacecrafts"*. Both constructs were believed by respondents in multiple studies, which led social psychologists to formulate an individual variable called conspiracist ideation, which measures a general belief in conspiracy theories (Swami., 2011; Brotherton., 2015).

Conspiracy theories have been found to date as far back as the Roman era (van Prooijen., 2016). Where during the year AD 64, the great fire of Rome took place, and many people subsequently lost their lives and livelihoods. Emperor Nero was out of town however during the fire and returned home to help the victims days later. Around this time conspiracy theories started to spread throughout Rome, accusing Emperor Nero of starting the fires to rebuild and reimagine a new Rome (Brotherton., 2015). Nero was not amused by such theories and decided to make up a conspiracy theory of his own, stating that the Christian community started the fires, which eventually led many Christians to be burned alive. In contrast, more modern-day conspiracy theories tend to revolve around governmental institutions and pharmaceutical companies. Famous historical crises such as the 9/11 terrorist

attacks and the world economic and financial crash have brought with it many conspiracy theories, such as the theory that the financial crash was caused by the Democrats to elect Obama, or that the 9/11 attacks were conducted by the US government to start the war in Afghanistan (Dunbar., 2011) or more recently the conspiracy stating that pharmaceutical companies created the coronavirus to increase drug sales (Romer., 2020).

Psychological factors of Conspiratorial Belief

Whether or not there is any truth behind any conspiracy theory, there has been conflicting evidence revolved around labelling a theory as a "conspiracy theory" and the implications this has on dismissing evidence surrounding said theory (DeHaven-Smith, 2012; Husting & Orr., 2007). Both DeHaven-Smith and Husting & Orr have argued that labelling a theory a "conspiracy" implies a negative connotation where people disregard the evidence presented regardless of the quality and quantity of the evidence put forth. In contrast, there has been new emerging evidence stating that this is not the case (van Prooijen., 2017; Wood., 2015). Both studies set out to establish if labelling a theory, a conspiracy theory de-value its efficacy. Both Woods & van Prooijen found the opposite finding to that of De-haven and Smith, suggesting that labelling a theory as a "conspiracy theory" isn't taken any less seriously than if it was referred to as just a theory. Both Woods & van Prooijen's findings are surprising, as evidence surrounding the argument tends to point out that labelling a theory as a conspiracy provides a problem with efficacy rather than having no effect. Both findings may explain that there is a positive portrayal of conspiracy theories, possibly through a romantic portrayal in some media institutions, while Husting and Orr (2007) suggest it's rather the person making the claim where the validation and credibility are judged, rather than the theory itself.

The psychological literature, however, only began studying Conspiratorial beliefs around the mid-1990s (Woods.,2016). With little attention given to conspiracy belief within

the psychological literature before the ’90s, (Bratich., 2002, 2008; Coady., 2019; DeHaven-Smith., 2010, 2013; Husting & Orr., 2007) only within the last decade or so has research looked at operationalising and measuring conspiratorial belief (Swami., 2017).

Initially, conspiratorial belief was measured using the variable conspiracist ideation. A self-report questionnaire containing between six to thirty items relating to popular conspiracy events such as the JFK assassination, or the spread of HIV/AIDS would be administered. The responses would then be measured on a scale similar to a Likert scale ranging from certain disbelief to certain belief (Goertzel., 1994; Abalakina-Paap., 1999; Leman and Cinnirella, 2007; Darwin et al., 2011; Douglas and Sutton, 2011; Swami et al., 2012). The consistent problem with previous measures of conspiratorial belief was the introduction of novel measures for each new study with little to no reporting of the psychometric properties, aside from Cronbach’s alpha. The problem with the continuous introduction of a novel measurement is that each measurement would consist of a unique sub-set of currently popular conspiracy theories (Douglas & Sutton., 2011). In addition, two separate measures may include the same conspiracy theory within and still not be directly comparable due to the differences in wording. Consider for example a conspiracy theory measuring extra-terrestrials, one measurement may word such a question as *“Governments are suppressing evidence of the existence of aliens”* (Douglas & Sutton., 2011; Wood et al., 2012), whereas another measurement may word it as *“Area 51 in Nevada, U.S. is a secretive military base that contains hidden alien spacecraft and/or alien bodies”* (Swami., 2017). Although both look to measure the same theory, the difference in wording may result in biased responses from participants. Concluding that multiple different measures of conspiratorial belief are not comparable, therefore there is a need for a single standardised measure. The Generic Conspiratorial Belief Scale (GCBS) is used within this research to measure conspiratorial belief due to its generic, more abstract phrasing of questions such as

"Governments routinely hide information about the deaths of public figures to deceive the public". An endorsement of such a claim could indicate to a researcher that the individual may believe in various government assassination theories such as the assassination of John F. Kennedy, Osama Bin Laden, Princess Diana etc. This generic non-event-based approach should alleviate some of the psychometric issues mentioned.

A host of studies have concluded that the adoption of conspiratorial belief is a symptom of an underlying psychological disorder and the traits associated with such disorders (Goreis., 2019; Barron., 2014; Darwin., 2011). Paranoid ideation and schizotypy are the most primarily reported psychological connections with conspiratorial beliefs. As both show similar traits, such as odd and unusual beliefs, beliefs in special powers, or illusions of an absent person present (Barlow., 2009). Suffering from such disorders can create thoughts of external agents wanting to cause harm toward them, which may arise through physical or verbal threats, which is relevant to conspiratorial belief, as the fear of deception and exploitation is present (Freeman., 2017; Darwin., 2011).

Paranormal belief has been found to relate to paranoid ideation and schizotypy and found to correlate positively with conspiratorial belief (Darwin., 2011). It is a condition operationalised as an "acceptance of phenomena that would be deemed scientifically impossible". Individuals with a strong association with paranormal belief tend to show signs of doubt toward scientific knowledge and in turn, if doubt is shown by scientists toward paranormal beliefs, it further strengthens their assumptions that if doubts are provided for one are of belief, then such doubts must be present in other official explanations of events, leading to the belief in conspiracies (Dagnall., 2007).

Furthermore, another condition that is related to paranoid ideation is narcissism, a salient link to the belief in conspiracies. As narcissism is described as an exaggerated feeling of self-love, this form of self-evaluation can amplify paranoid thinking as they may perceive

the actions of others to be intentionally targeted at them (Kumareswaran., 2014; Cichoka et al., 2015; Fenigstein & Vanable., 1992). This finding is further strengthened due to self-esteem, a positive self-evaluation shows to be negatively correlated with conspiratorial belief (Paulhus., 2004).

A further relationship between fear and anxiety have been associated with conspiratorial belief (Grzesiak-Feldman., 2013). Fear is a consequence of the feeling of anxiety, a person may feel anxious due to a perceived threatening situation or having low feelings of control (Swami., 2016). Low feelings of control is a concept that is at the core of conspiratorial belief as it is a sense-making motivation, which provides an explanation of events and an ability to cast blame (van Prooijen & van Dijk., 2014; Leiser.,2017; Rose., 2017).

Within the psychological literature presented, evidence points to many factors as to why someone would develop high levels of conspiratorial belief. Such high levels of belief seem to have a strong association with believing in unusual beliefs and experiences, a negative self-evaluation which possibly leads to feelings of alienation, in conjunction with a lack of control within their own lives.

Conspiratorial Belief in the context of social media

Furthermore, societal events such as the COVID-19 pandemic has given researchers of conspiratorial belief an opportunity to measure such beliefs in relation to the novel coronavirus, and the misinformation surrounding the pandemic and how these spread throughout various platforms, as misinformation and conspiratorial belief are significantly correlated (Del Vicario., 2016; Tucker., 2018; Quinn., 2020; Theocharis., 2021; Jensen., 2021).

Previous research looked to establish significant findings on whether social media has an impact on the spread of conspiratorial belief, with most studies looking predominately at

Facebook, Twitter, YouTube, and with few looking at Instagram as possible platforms that may lead to the adoption of Conspiratorial belief. Significant results have been found to link various social media platforms with the adoption of conspiracy theories, with Facebook, Twitter & YouTube being the primary platforms with significant findings (Stecula., 2021; Bantimaroundis., 2020; Enders., 2021; Visentin., 2021; Jamieson & Albarracin., 2020; Stempel., 2007.) Although being the most widely used social media, Facebook and YouTube are still not studied to the same extent as Twitter, due to data availability issues., as Twitter tends to attract more political and media elites. Previous research has tended to focus on social media platforms as a single measure, specifically survey research (Stecula., 2021). This is problematic to the findings as researchers have identified that the spread of information may change depending on the platform due to the different ways in which social media presents information (Neuman., 1992; Sydnor., 2017; Piltch-Loeb et al., 2021), Although it is important to look at activity on all social media sights as it has been found that users' comments and posts become more negative the more active, they become online, which may lead to negative thinking, a predictor of adopting conspiratorial belief. (Del Vicaro, 2016).

Facebook and Twitter are text-based platforms primarily, except for some video and photo content, while YouTube is primarily a video platform. This is an important consideration when assessing social media's influence on the spread of conspiracy theories, as it has been found that images (E.g., video) are processed almost automatically, while text is processed slow (Powell., 2018). This idea of platforms having different effects due to their presentation of information has been examined by Theocharis et al (2021), which differentiated different social media platforms into either symmetrical (meaning, information is shared with friends) or asymmetrical (meaning, information is shared with a more diverse audience) categories. The findings suggested that there is a multifaceted relational structure between social media and the user which either enables or constrains behavioural outcomes

(Evans., 2016). This gives rise to the idea of abandoning a single measure when assessing social media and conspiratorial belief adoption, encouraging studies to look at a particular social media in isolation. Information through video has shown to be somewhat more convincing over text-based information (Wittenberg., 2020; Stecula., 2021b), which brings up the importance of looking at platforms than tend toward a more video format, such as Instagram and YouTube.

Furthermore, more research has yet to be conducted however on Instagram and the effects it has on disseminating conspiratorial belief. A study conducted by Quinn et al. (2020) looked to examine Instagram and its relationship to the spread of conspiracy theories, concluding that there is a cobranding present with misinformation and conspiracy theories being spread throughout Instagram. A limitation, however, was evident within the methodology of the study, the authors looked to search through hashtags within Instagram to identify themes, however useful, this does not address the issue of Instagram's usage affecting the adoption of conspiracy belief, but rather a "pointing-out" of conspiracy beliefs being spread throughout the platform. A further study taken from a German population found there to be a weak correlation concerning Instagram usage and the uptake of conspiratorial belief (Jensen., 2021), with multiple other studies looking at misinformation, particularly surrounding COVID-19, and conspiracy theories, which tend to conclude that Instagram is a platform that represents a significant amount of exposure to health-related misinformation (Massey., 2020; Baker., 2022; Amobi., 2021). While these findings help discern the significance of conspiracy theories throughout the platform, few have looked at the adoption of conspiratorial belief with Instagram usage, as these studies tend to focus on specific conspiracy theories rather than measuring an individual's level of conspiratorial belief.

Education and Income

Furthermore, multiple studies have looked to understand certain demographic factors such as an individual's level of education, maternal education, and household income, in relation to the likeliness of an individual to adopt conspiracies (Douglas., 2019; Georgiou., 2019; Bantimaroudis., 2020). Findings in relation to individual education all seem to suggest a negative correlation, suggesting the higher one's education level increases, the propensity to adopt conspiratorial belief decreases (Douglas., 2015; Van Prooijen, Krouwel, & Pollet, 2015). Education is an important demographic marker when discussing an individual's relationship with the adoption of conspiratorial belief, due to education being significantly correlated with already existing predictive attributes to the adoption of conspiratorial belief, such as a belief in paranormal phenomena (Darwin., 2001), low self-esteem (Cichocka., 2015; Crocker., 1999; Swami et al., 2011), and low feelings of control (Abalakina-Paap et al., 1999). The importance of education level on having the ability to think analytically, and to logically reason cannot be understated, as previous research has pointed out the necessity of having these abilities to protect the individual from adopting conspiracy theories. This ability to think analytically has been shown to be a mediating process between having disbelief in paranormal phenomena and adopting conspiratorial beliefs (Aarnio & Lindeman, 2005; Gervais & Norenzayan, 2012). This is due to high education levels promoting the ability to detect nuance and differences across different domains while being able to consciously reflect on these nuances. Low feelings of control, a subsequent predictor of conspiratorial belief, has been shown to relate to education levels, as having a higher level of education, makes individuals feel more in control of their life and social world (Mirowsky., 2003). Individuals tend toward conspiracies when they feel a lack of control within their life and broader society. Mental sense-making can be a product of this feeling, which creates connections that may not be necessarily present (Whitson., 2008). Lastly, the relationship between low self-

esteem and education, although somewhat a smaller difference in significance than previous predictors, nonetheless many studies have found that education levels influence self-esteem levels (Baumeister., 2003). Students, particularly relate their level of education to their self-esteem (Crocker., 2002). Only low self-esteem is associated with the adoption of conspiratorial belief, with multiple studies finding a modest relationship between the two variables (Cichocka., 2015; Crocker., 1999; Swami et al., 2011).

When measuring individual education, an important demographic factor to incorporate is maternal education. A longitudinal study conducted by Bornstein (2013) looked to assess maternal education on whether it directly or indirectly (or both) contributes to academic achievement in their offspring, academic achievement being a predictor of conspiratorial belief (van Prooijen., 2017). Findings from the 14 year-long study found IQ and maternal education as the top two predictors of academic achievement. This finding has been found in multiple other studies, stating that not only does maternal education predict lower academic achievement, but that poverty (socioeconomic status) and low-level maternal education predicts a lower level of academic achievement and IQ (Alexander., 1993; Duncan., 1994; Pianta., 1993; Zill., 1995). This finding is not limited to western societies, as cross-cultural studies have found the same effect, among Zimbabwean children (Mpofu., 2000). A previous meta-analysis conducted in (1982) by White, however, found evidence to the contrary, suggesting that one's socioeconomic status does not affect academic achievement throughout the lifespan, with effects diminishing with age. A recent study incorporated both maternal education and household income as relevant demographic mediating markers of conspiratorial belief, finding income and maternal education explaining some of the increased melding's with certain social media groups online (Bantimaroudis., 2020). The sample looked specifically at different European students, with the researcher suggesting further research to implement a broader demographic.

The Current Study

Current and past research conducted on conspiratorial belief and social media has primarily looked to investigate Facebook, YouTube, and Twitter. Instagram, however, has been studied to a significantly less degree. Due to the differences in how social media spreads information, whether it be text-based or video-based fundamentally, previous research has pointed out that information presented through video is somewhat more convincing, therefore this research would like to study Instagram usage as an independent measure, as Instagram is fundamentally a video-based platform. Furthermore, when Instagram has been measured in previous studies, a lack of research that is evident seems to be an individual's usage with Instagram and how this relates to the adoption of conspiratorial beliefs, with most studies investigating the spread of conspiracy theories throughout the platform. Previous studies have identified that the more active an individual is on social media, the more negative their comments and posts become leading to a negative thinking style (Zollo., 2015), a predictor of conspiratorial beliefs, therefore, this research would like to assess general social media usage to control for this, particularly within a young adult population due to recent statistics finding that 84% of adults between the ages of 18-29 years stating they use all social media sites, with a further 71% of 18-29-year-olds being the majority population using Instagram (Auxier & Anderson., 2021). Education is a salient demographic marker to assess in relation to conspiratorial belief due to its highly significant correlations with already existing predictive attributes of conspiratorial belief. This demographic marker also provides researchers with a wider social context rather than just a psychological context to the adoption of conspiratorial belief, as well as providing a possible mediating process to the adoption of conspiratorial belief, due to education and the ability to think analytically (a protective factor of adopting conspiratorial beliefs) showing high correlation. This mediating process is seen again with maternal education and income as both have been found to predict low academic

achievement (education) in the individual cross-culturally. This demographic marker has been suggested in previous studies to focus on a broader population as most previous research has assessed this within a student population.

Therefore, the aim of this research is to explore whether a young adult population's social media and specifically Instagram usage, personal and maternal education, as well as family household income, affect an individual's levels of conspiratorial belief. These aims produce the following research questions and hypotheses.

Research Question 1: Do young adults who spend more time on Instagram have higher levels of conspiratorial belief? The hypothesis of the research question: To predict that young adults who spend more time on Instagram will have higher levels of conspiratorial belief.

Research Question 2: Do young adults who spend more time on social media have higher levels of conspiratorial belief? The hypothesis of the research question: To predict that young adults who spend more time on social media will have higher levels of conspiratorial belief.

Research Question 3: Does an individual's parental income affect their levels of conspiratorial belief? The hypothesis of the research question: To predict that parental income will influence an individual's level of conspiratorial belief.

Research Question 4: Does an individual's maternal education affect their levels of conspiratorial belief? The hypothesis of the research question: To predict that maternal education will influence an individual's level of conspiratorial belief.

Research Question 5: Does an individual's education affect their levels of conspiratorial belief? The hypothesis of the research question: To predict that an individual's education will influence their levels of conspiratorial belief.

Methodology

Participants

The research sample for the current study consisted of 83 (Males: *n* = 30; Females: *n* = 53) young adults. The participants were recruited using convenience sampling, utilising the researcher's social media accounts (Instagram & Facebook) to advertise the study. This recruitment process ensured that the participants willing to take part were active users of social media accounts, providing a more valid response regarding the research question. Concerning the ethical guidelines, all participants were required to provide informed consent before taking part in the questionnaire. Participants were also required to be over the age of 18 to participate. The average age of participants (M = 22.5; SD = 1.9) was 22 years of age, which was a required piece of demographic information as this study looked to explore young adults' social media usage in relation to levels of conspiratorial belief.

Measures

The study was comprised of a demographic questionnaire and three other scales which were incorporated into a Google Forms document, a survey administration software. Demographic information such as individual and mother's education, parental income (before taxes, yearly), as well as gender, were administered as these were variables being assessed within the study. Further demographic information such as age was taken due to the study focusing on a young adult population between the ages of 18 – 25 years of age (see appendix I)

Instagram Intensity Scale (IIS): (Cronbach's alpha = .83) developed by Ellison et al., (2007) is a modification of the Facebook intensity scale by replacing the word "Facebook" with "Instagram". This scale has been adopted in other studies to measure other social media engagement with platforms such as Snapchat (Piwek & Joinson., 2016) (Cronbach's alpha >.70), cross-cultural Facebook interaction (Jiang & Bruijn., 2013) and

Instagram usage (El Khouly., 2018) (Cronbach's alpha >.89). A Cronbach's alpha was conducted for IIS used within this study, finding an acceptable value of >.75. This scale was also shown to support Convergent validity, showing significant positive correlations with other scales measuring social media engagement, specifically the Social Media Use Integration Scale (r = .77; Jenkins-Guarnieri et al., 2013) and the Social Networking Activity Intensity Scale (r = .52; Li et al., 2016).

The scale consists of 8 items which include two self-report measures to assess Instagram behaviour (E.g., "Instagram is part of my everyday activity") as well as measuring an individual's connectedness (E.g., "I would be sorry if Instagram shut down"). The remaining 6 items are measured on a 5-point Likert scale ranging from 1 = strongly disagree to 5 = strongly agree. Each score can be computed by calculating the mean of all items in the scale, however, the open-ended questions, questions seven and eight are computed by taking the log before averaging across items, due to the different item scale ranges (see appendix for II further details)

Social media networking intensity scale (SNAIS): (Cronbach's alpha = .89) developed by Li et al., (2016) was designed to measure the frequency of using multiple types of social networking platforms in addition to measuring activities on these platforms. The scale covers three facets of social network site engagement, a) self – presentation, b) action and participation, and c) usage and activity counts. The psychometric properties of this scale, which include test-retest reliability showed to be (r = .85). The structural validity of the scale was reported to be .95, however, there are still some concerns surrounding its structural validity. A Cronbach's alpha was conducted within this study, finding a preferable Cronbach's alpha = .86. The scale consists of a 14-item questionnaire with two sub-scales. Questions 1-10 measure social function use intensity and questions 11-14 measure entertainment function use intensity. The sub-scales have a good reliability measure of

Cronbach's alpha = .09 and .06. The scale is measured using a 5-point Likert scale ranging from 0 = Never and 4 = Always. The items on this scale are written out as questions in response to the statement "How often have you performed the following online social networking activities in the last month?" for example question 1 "Sent messages to friends on message board" (see appendix III). The scale is computed by adding all the numerical values together, with high scores indicating higher usage levels.

Generic conspiracist belief's scale (GCBS): (Cronbach's alpha = .93) was developed by Brotherton et al., (2013). It is the most widely used scale that measures one's conspiratorial belief levels (see appendix IV) (Goreis., 2019). The internal reliability of this scale is very high with a level of .093. The test-retest reliability is also very strong, reporting a score of r=.89. A psychometric property analysis was conducted on the GCBS to investigate its effect on different samples. The study confirmed that it was an appropriate measure to administer when looking at either a student or non-student population (Brotherton et al., 2013). The Cronbach's alpha that was conducted within this study, found a high score of .93.

The scale consists of 15-items and contains five factors (Government Malfeasance, Extra-terrestrial Cover-up, Malevolent Global Conspiracies, Personal Wellbeing, and Control of Information). The 15-items are presented as statements (E.g., "The power held by heads of states is second to that of small unknown groups who really control world politics"). Participants respond to these statements within a 5-point Likert scale, 1= definitely not true, to 5 = definitely true. The scale is then computed by calculating the mean of all items in the scale.

Design & analyses

This study used a cross-sectional quantitative between groups questionnaire research design. The independent variables of interest were time spent on social media, time spent on

Instagram, mother and individual education, and parental income. For hypotheses three, four, and five, a one-way between-groups ANOVA was conducted on individual/mother education ("Less than secondary school", "Leaving certificate or equivalent", a postsecondary non-degree award", "Bachelor's degree", "Master's degree", "Doctoral or professional degree") in relation to their levels of conspiratorial belief, and parental income ("Less than €25,000", "€25,000 to €34,999", €35,000 to €49,999", "€50,000 to €74,999" "€75,000 to €99,999", "€100,000 or more") was compared to levels of conspiratorial belief. Hypotheses one and two were correlational analyses comparing, social media usage and Instagram usage in relation to conspiratorial belief.

Procedure

The data collected within this study was obtained through an online questionnaire. The questionnaire was held within a google forms document, with four separate scales embedded, measuring demographic information, social media usage, Instagram usage, and conspiratorial belief levels. The questionnaire was shared through the researcher's social media accounts (Instagram & Facebook) by providing a link and a poster describing the research aim (see appendix V). If participants decided to take part in the study, they were first provided with an information sheet which contained the description of the study, the length of the study, and what was involved in participation, as well as providing the inclusion criteria to take part and any risks or benefits of participation (see appendix VI). The study was stated to take on average between 5-8 minutes to complete. Participants could not begin the study without providing an answer of, either "yes" or "no" in response to the consent sheet which was provided after the information sheet. Once participants agreed to the consent form (see appendix VII), they were able to begin the study.

A set of demographic questions were the first set of questions provided, which asks participants their age, gender, mother's education, personal education, and parental income.

The first scale that is presented to participants was the social media networking intensity scale, participants then answered the Instagram intensity scale questions and finally, the last scale presented to participants was the generic conspiratorial belief scale. Once all questions within the study have been answered, participants are provided with a de-briefing sheet which states that all the data collected is anonymous (see appendix VIII).

Ethical considerations

The data collected within this study was obtained in line with the NCI and PSI's ethical guidelines. Participants were explicitly told that taking part in this study will not infringe on their anonymity and that all information provided will remain anonymous to the researcher and the researcher's supervisor. Before commencing the study, participants were unable to begin unless providing consent to take part. The possible risk and benefits of partaking in the study were outlined, with no incentive afforded for participation. Participants were also informed that the results from this study will be presented to my peers within the National College of Ireland and the data gathered will be retained by the researcher for up to 5 years, in accordance with the data retention policy of the National College of Ireland.

Results

Descriptive Statistics

The data presented has been analysed from a sample of 83 participants (n = 83). The outcome of the descriptive statistics employed on all categorical data can be found in table 1.

Table 1: *descriptive statistics for maternal/individual education, gender, parental income, N = 83.*

Variables	Frequency	Valid %
Gender		
Male	30	36.1
Female	53	63.9

Individual Education		
Less than secondary school	0	0
Leaving certificate or equivalent	16	19.3
Postsecondary non-degree award	26	31.3
Bachelor's degree	35	42.4
Master's degree	6	7.2
Professional or Doctoral degree	0	0
Maternal Education		
Less than secondary school	17	20.5
Leaving certificate or equivalent	27	32.5
Postsecondary non-degree award	21	25.3
Bachelor's degree	17	20.5
Master's degree	8	9.6
Professional or Doctoral degree	0	0
Parental income		
Less than €25,000	16	19.3
Between €25,000 to €34,999	8	9.6
Between €35,000 to €49,999	21	25.3
Between €50,000 to €74,999	15	18.1
Between €75,000 to €99,999	8	9.6
€100,000 or more	15	18.1

There were three continuous variables within the data set, Instagram usage, social media usage, and conspiratorial belief. The outcome of the descriptive statistics employed on these variables can be found in table 2.

Table 2: *Descriptive statistics for all continuous variables, N = 83.*

Variables	M [95% CI]	Median	SD	Minimum	Maximum
Instagram Usage	9.40 [9.07 - 9.53]	9.68	1.52	3.00	12.57
Social Media Usage	34.09 [31.92 - 36.27]	34.00	9.96	6.00	56.00
Conspiratorial Belief	40.00 [36.44 – 43.00]	40.00	15.01	15.00	74.00

Inferential Statistics

Research Question One

Before conducting a correlation, a preliminary analysis was conducted in the interest of making sure there was no violation of the assumptions of normality, linearity, and homoscedasticity. The relationship between Instagram usage (measured by the IIS) and conspiratorial belief (measured by the GCBS) was investigated using a Spearman correlation coefficient due to the Instagram usage scale being heavily skewed to the left (-1.83) indicating a skewness to the negative values within the scale. There was a significant weak positive correlation between both variables (r = .23, n = 83, p < .03), indicating that both variables share a 5.2% of the variance. The results show that there is little overlap between both variables and there is a small indication that a higher amount of time spent on Instagram increases a person's levels of conspiratorial belief.

Research Question Two

A further Pearson's correlation coefficient was conducted on social media usage (as measured by SNAIS) and conspiratorial belief (measured by GCBS) which found a significant weak positive correlation between both variables (r = .33, n =83, p< *.02),* with 10% of the variance shared between both variables. The results indicate that a longer amount of time spent on social media is associated with an increased level of conspiratorial belief.

Research Question Three

Before conducting a one-way between-groups ANOVA, the preliminary analysis looked to assess the histograms and Q-Q plots within the data set to ensure our dependent variable (GCBS) were normally distributed. Our skewness value (.13) indicated our data was moderately skewed to the right, with a kurtosis value of (-.53) indicating high tails in relation to the peak of the distribution, however, no outliers were detected. Homogeneity of variance found a non-significant score of .59 representing equality of variance between groups. A one-way between-groups ANOVA was conducted to determine whether an individual's parental income affects their levels of conspiratorial belief. Participants were divided into six conditions according to their parent's yearly income before taxes (Less than €25,000, €25,000 to €34,999, €35,000 to €49,999, €50,000 to €74,999, €75,000 to €99,999, €100,000 or more). There was no statistically significant difference in levels of conspiratorial belief for the six income conditions, F (5, 77) = .63, p < .68.

Research Question Four

A one-way between-groups ANOVA was conducted to establish if parental education influences an individual's levels of conspiratorial belief. Participants were once again divided into six conditions (Less than secondary school, Leaving certificate or equivalent, post-secondary non-degree award, Bachelor's degree, Master's degree, Doctoral or Professional degree). There was no statistically significant difference in levels of mother's education on an individual's level of conspiratorial belief, F (4, 78) = .76, p < .56.

Research Question Five

A further one-way between-groups ANOVA was to establish if individual education affects one's level of conspiratorial belief. Participants were divided into the same six conditions as research question five (Less than secondary school, Leaving certificate or equivalent, post-secondary non-degree award, Bachelor's degree, Master's degree, Doctoral

or Professional degree). The results found there to be no statistically significant differences in an individual's level of education on their levels of conspiratorial belief, F (3, 79) = 1.32, p < .27.

Discussion

The current aim of this study was to explore whether a young adult population's social media and specifically Instagram usage, personal and maternal education, as well as family household income influence an individual's adoption of conspiratorial belief. Prior findings have shown that Facebook, Twitter, and YouTube are associated with an increase in conspiratorial belief, showing the more active an individual becomes on each platform, the propensity to adopt conspiratorial belief increases. (Stecula., 2021; Bantimaroundis., 2020; Enders., 2021; Visentin., 2021; Tufekci., 2018; Jamieson & Albarracin., 2020; Stempel., 2007.). Instagram, however, with limited studies have found an association with the adoption of conspiratorial beliefs as well finding a similar positive correlation as the previously mentioned social media platforms. (Quinn., 2021; Jensen., 2021; Massey., 2020; Baker., 2022; Amobi., 2021). Education, maternal or individual, as well as family income, have all been linked directly or indirectly in prior research to the adoption of conspiratorial belief with some findings stating a negative correlation within education, meaning the higher one's maternal and individual education increases the propensity to adopt conspiratorial belief decreases (direct) (Douglas et al., 2015; Van Prooijen, Krouwel, & Pollet, 2015), while also finding that one's family income and maternal education to correlate with an individual's academic achievement (indirect) (Alexander., 1993; Duncan., 1994; Pianta., 1990; Zill., 1995), affecting their ability to think analytically, an important capability in order to avoid conspiratorial thinking (Aarnio & Lindeman, 2005; Gervais & Norenzayan, 2012). Therefore, prior research has guided the formulation of the following five hypotheses to address the aims of this research.

It was first hypothesized, from the previous literature, that (H1) young adults who spend more time on Instagram will have higher levels of conspiratorial belief. This hypothesis was investigated using a non-parametric version of the Pearson's correlation analysis (Spearman correlation); which found there to be a significant weak positive correlation between Instagram usage and conspiratorial belief levels. The finding is consistent with other recent studies which found there to be a relationship between Instagram and conspiratorial belief (Jennings., 2021; Quinn., 2021). Although prior research and the current research has found significant findings, Quinn (2021) did not explore Instagram usage but rather sought to identify themes of conspiracies throughout the platform by investigating particular hashtags. This is an important methodology distinction as individuals who may be more prone to conspiratorial thinking may seek out specific hashtags on Instagram in order to re-affirm their beliefs or to connect with a like-minded community (Terren., 2021). Therefore, using hashtags to gauge Instagram as a place of spreading conspiracies does not give an understanding of how people who may be less conspiratorial in their thinking, may adopt conspiratorial beliefs by using the platform.

For H2, a further Pearson's correlation analysis was conducted to investigate whether young adults who spend more time on social media will have higher levels of conspiratorial belief. A weak positive correlation was found between social media usage and conspiratorial belief levels. This finding is consistent with previous research, indicating that the more people use social media, the greater their level of conspiratorial belief (Bantimaroundis., 2020; Stecula., 2021; Enders., 2021; Sharma., 2017).

Furthermore, H3 looked to inspect parental income (household income) to see if it has an impact on an individual's level of conspiratorial belief. A one-way between-groups ANOVA was employed to measure the hypothesis, which found no significant findings. This was both consistent and inconsistent regarding previous literature, as previous findings are

somewhat inconclusive (Bantimaroundis., 2020; Mpofu., 2000; Alexander., 1993; Duncan., 1994; Pianta., 1990; Zill., 1995). Recent research suggests that the higher one's household income, the lower their conspiratorial belief levels, which may explain our non-significant finding, with 23 out of the 83 participants' household earnings appearing between €75,000 to €100,000 or more a year. Taking this into consideration our non-significant finding would be in line with the most recent research (Duplaga., 2020; Bantimaroundis., 2020; Cordonier., 2021).

Moreover, H4 looked to establish whether parental education (maternal) influences an individual's level of conspiratorial belief. A further one-way between-groups ANOVA was performed to measure the hypothesis, finding a non-significant finding indicating no relationship between parental education and conspiratorial belief levels. Our non-significant findings could be further explained by examining our data set in relation to past literature. The participant's maternal education was high, with 46 out of the 83 participants' maternal education obtaining at least a post-secondary non-degree award to as high as a master's degree. Previous literature has indicated that high levels of maternal education are negatively correlated with the adoption of conspiratorial beliefs (Bornstein.,2013; van Prooijen., 2017; Freeman., 2017). Previous research has stated that low maternal education is associated with low IQ and academic achievement within their offspring (Eriksen., 2013; Ye., 2018; Awan., 2015), as our maternal education is relatively high, indicating a well-educated participant group, this may explain why we found no relationship with conspiratorial belief.

Lastly, H5 looked at individual education to establish whether it affects an individual's conspiratorial belief levels. A final one-way between-groups ANOVA looked to investigate this hypothesis, which found there to be no significant findings. The findings within this study are in contrast with the previous literature, yet again, this can be understood further through assessing the descriptive statistics within the study. It is evident that this

sample is well educated with 41 out of the 83 participants gaining at minimum a bachelor's degree, with 6 of the 41 participants obtaining a master's degree. Previous research has pointed out that as individual education increases the propensity to adopt conspiratorial beliefs decreases (Douglas et al., 2015; Van Prooijen., 2015), which may explain why we did not find any significant findings. Based on the findings above, hypotheses 1 & 2 can be accepted, and hypotheses 3,4,5 can be partly rejected.

It is somewhat unsurprising to find social media and Instagram usage to correlate with conspiratorial belief levels, not only due to multiple previous studies finding the same correlation, rather there seems to be a lack of trust within western society, regarding how news is presented through the legacy/traditional media perspective which may give context to our findings. Recent statistics have shown a distrust growing within certain western countries in relation to traditional media sources, with the US, France, Hungary, Slovakia all falling to the bottom of the list regarding trust in traditional media, with the US at the bottom with a 29% trust rate (Watson.,2019). Why our finding is somewhat unsurprising is that the lack of trust toward legacy media narratives, although Ireland ranks high in regards to trust, with a 53% trust rate, globally, Ireland included, trust towards these media outlets have fallen within the last five years from one in three saying they trust traditional media to one in six today, with nearly half of Americans (45%) trusting less than they did five years ago (*prior written consent of Ipsos*., 2019).

This lack of trust toward legacy media can be explained further by looking at the landscape in which conspiracy theories have changed throughout the last decade. The shift in focus surrounding more modern-day conspiracies has been a fundamental change in how conspiracies have perpetrated western society. Conspiracies dating back to the 1950s focused their attention on demonised groups such as the Jewish communities and communists as the conspirators. These groups were the prime focus, based on the reasoning that they somehow

"threaten society", therefore it was imperative to keep boundaries between "us and them" (Goldberg., 2001). This shift from conspiracies about "others" in society to the institutions within our society formed the conspiracy landscape today. No longer was there paranoid thinking about real or imagined threats amongst our society, but rather a paranoia surrounding the institutions and a threat of an enemy within, collapsing the borders between "us and them". Knight (2000) explains that this transition can be further understood as a movement from a "secure paranoia" to an "insecure paranoia".

Auspers (2012) looked to strengthen this argument by stating that post-modernism has laid the social foundations for these insecure paranoid conspiracies to thrive, while further backing up his point that the discourse surrounding conspiracies has changed dramatically over time. The change of focus from "other" to "internal" has provided a lens and a focus on internal enemies within society. In contrast, Wood (2012) takes a different stance on the matter, stating that the belief in conspiracy theories is in fact just a stance taken against any form of information from "official sources". In this context, conspiratorial belief is not necessarily a belief in alternative news or theories but rather consistent disbelief of whatever the "official" narrative is (Woods., 2015). Although Wood's stance is backed by previous literature with findings from Husting and Orr (2007) suggesting the source of the claim is where the credibility is judged, rather than the theory itself. This still does not explain where the growing distrust in traditional media among western society is manifesting itself.

Interestingly, the relationship between conspiracies thriving and post-modernism laying the social foundations for its occurrence has been attributed to the changing nature of scientific discourse. Coser (1992) explains that in order for science to progress, it was promoted during the 20th Century to be sceptical while taking a critical analytic approach when disseminating evidence, however, given post-modernism claims that "truth" in questions is a social construct that is instantiated in ideology and power games, scientific

knowledge is therefore no longer the only form of knowledge that one can draw from. Within this context, conspiratorial beliefs are cultural and social responses to the emergence of post-modernism within the western world. This "response" can be seen as a strategy to alleviate anxieties that are present surrounding "explicable accounts for seemingly inexplicable forces" (Auspers., 2012: 28). Moreover, the popular disbelief is fuelled further by people's previously explained lack of distrust with traditional media, turning people's attention to alternative agendas (Wagner., 2020). This lack of distrust is further amplified with the internet and social media as they provide people with the ability to express their personal beliefs without needing to provide validation of said claims. People can now offer their doubts and provide their preferred version of reality, generating a hybrid form of information, that is somewhat personal and somewhat mediated (Nelson., 2019). Further research could look at asking participants when assessing conspiratorial belief and social media, their trust levels toward traditional media as sources of information. Controlling for this could have explained why such an educated, high-income sample within this study, still found a significant correlation to conspiratorial belief, as previous literature would have suggested that a well-educated high-income sample would have low levels of conspiratorial belief. Although future research should interpret our findings with caution due to our small sample size, generalising findings from such a small sample would not be appropriate, as our power analysis suggested this research to obtain a sample of 146 participants (see appendix VIIII).

Our findings in relation to education and conspiratorial belief were in contrast with most existing literature (Georgiou.,2019; Enders., 2019; Bornstein., 2013), however, our non-significant findings are in line with samples from African Americans (Parsons., 1999) and a collection of samples from Muslim countries (Gentzkow., 2004). Within these studies, no relationship was found between education and conspiratorial belief which brings up possible mediating factors that could explain its findings that may also relate to our findings. Feelings

of victimization and group marginalisation have been felt by both African Americans in the US for decades, as well as many Muslim countries expressing feelings of marginalisation by western countries (Crocker., 1999). Why group marginalisation is an important factor within these studies is due to previous literature highlighting that identification with a perceived group that is under threat is a predictor of conspiratorial belief (Van Prooijen & Van Dijk, 2014; Kramer.,1998; Swami., 2012). Conspiratorial belief is more prevalent amongst marginalized groups which are backed by group think/group ideology (Crocker., 1999). Therefore, if an individual believes they're part of a marginalised group, this may increase their conspiratorial belief levels. Consequently, there may be a mediating process that needs to be explored in future research between education and conspiratorial belief. This may explain why we found a non-significant finding in relation to education, as education levels may not be able to diminish a feeling of group victimisation.

The same critique of not controlling for perceived threats within an individual's group affiliation can be attributed to our non-significant income findings. Based on previous income and conspiratorial belief literature individuals who come from a low-income family tend to feel a lack of control within their lives (through external threats), while also receiving less education than other social classes (Mao., 2020; Uscinski., 2016). What's different once again with our study is that our sample was from a higher social class yet we found no significant findings. This could be explained by examining an individual's level of perceived control as this once again could be a mediating factor that explains our findings. If an individual feels a lack of control the propensity to adopt conspiratorial belief increases (Whitson.,2019; Stojanov.,2020; Douglas., 2017). Further research could look at income across multiple social classes while controlling for perceived threats within an individual's group affiliations and a perceived lack of control.

There is an argument to be made which could guide further research regarding groupthink among Instagram users that may have acted as an extraneous variable within this research. Groupthink was a term coined by Irving L. Janis (1972), explaining that groupthink leads to poorer decision making, due to a lack of opposing views, therefore not analysing alternative ideas. It can be characterised as symptoms of peer pressure, censorship, stereotyping, conforming, or illusion of unanimity (silence seen as consent). Although speculative, depending on the nature of the thinking process of an online group, this could exacerbate group feelings of marginalisation etc. Therefore, the very way in which individuals engage with Instagram could lead to conspiratorial thinking styles. Groupthink could be therefore incorporated into a regression model that includes perceived feelings of control, perceived threat, feelings of group marginalisation, groupthink (Baptist.,2015), socio-economic background, and education as predictors of conspiratorial belief.

Strengthens and Limitations

One major strength within this study was our significant findings in relation to social media and Instagram on conspiratorial belief levels, within a well-educated high-income sample. In contrast with similar studies, it gives future studies opportunities to explore previously mentioned mediating variables that could explain such a finding, possibly giving a broader understanding of conspiratorial belief. Another strength of this study was our young adult population, as 84% of adults between the ages of 18-29 state they use all social media platforms, with 71% of 18-29-year-olds being the majority age group using Instagram (Auxier., 2021). Therefore, if social media and Instagram affect conspiratorial belief levels it would be discovered within this sample age range. The use of well-validated measures which have demonstrated high reliability help strengthen our findings, due to them being

administered in prior research of conspiratorial belief and within this current research sample. (Sigerson., 2018).

While there are many strengths to this study, there are also many limitations. An initial evident limitation is our analysis used. It may have been more appropriate to run a regression analysis rather than an ANOVA, looking at our independent variable as predictors, may have given a better understanding of which factors contribute the most to conspiratorial belief and how they influence each other. Although a strength, our self-report measures may also be a limitation. As individuals may feel embarrassed about having beliefs in conspiracies or may be in denial about certain beliefs which may have affected how they answer certain questions. This is somewhat speculative but may guide future research to control for "mood" when assessing conspiratorial belief. As mentioned previously our sample size was under the required sample size that was generated by using a G* power analysis, therefore it is not appropriate to generalise our findings more broadly. Lastly, the use of convenient sampling may have provided a biased sample. Due to using a personal social media account to advertise the study, it is possible that this sample comes from friends of the researcher which may be somewhat like-minded in their thinking, this is of course speculative but could give further understanding to the findings.

Conclusions

Overall, the findings within this study contribute to the growing literature that social media and Instagram usage does affect conspiratorial belief levels, strengthening prior findings. Our significant findings have been found within a well-educated high-income sample which is in contrast with prior literature, however, this guides certain implications regarding research and policymaking. Future research could look to investigate mediating factors as to why a well-educated high-income sample would still find a relationship between social media usage and conspiratorial belief levels. An experimental or longitudinal design

may be desideratum in further research. Tracking an individual's belief formation while tracking their media consumption may explain if a lack of distrust in certain media outlets is causing further conspiratorial belief. Policymakers have already begun to try and discern between information and misinformation particularly on Instagram (Mena., 2020), while this research would encourage this to continue it may be helpful to consider an online campaign that helps promote trust in governmental institutions. Previously The House of Lords Democracy and Digital committee published recommendations to the UK government to reform their trust online, this type of initiative could help gain some governmental trust back in Ireland (Unit., 2020). There is also a possibility that labelling information online as "misinformation" may fuel paranoid thinking that the government is colluding with big tech to suppress alternative theories or agendas. This possibility, although speculative, could persuade social media to halt campaigns to discern between information and misinformation and to focus on gaining people's governmental trust prior to campaigns that focus on deterring misinformation.

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Appendices

Appendix I:

Demographics Questionnaire

1. What is your gender?
A. Male
B. Female
C. Other (please specify)

2. What is your age?

3. What is the highest level of education you have completed so far?

A. Less than secondary school.
B. Leaving certificate or equivalent.
C. Post-secondary non-degree award.
D. Bachelor's degree.
E. Master's degree.
F. Doctoral or professional degree.

4. What is the highest level of education your parents have completed so far?

A. Less than secondary school.
B. Leaving certificate or equivalent.
C. Post-secondary non-degree award.
D. Bachelor's degree.
E. Master's degree.
F. Doctoral or professional degree.

5. What is your parent's income before taxes during the past 12 months?

A. Less than €25,000
B. €25,000 to €34,999
C. €35,000 to €49,999
D. €50,000 to 74,999
E. €75,000 to €99,999
F. €100,000 or more

Appendix II:

Instagram Intensity

The Instagram Intensity scale is used to measure Instagram usage beyond simple measures of frequency and duration, incorporating emotional connectedness to the site and its integration into individuals' daily activities.

Scale Items

1. Instagram is part of my everyday activity
2. I am proud to tell people I'm on Instagram
3. Instagram has become part of my daily routine
4. I feel out of touch when I haven't logged onto Instagram for a while
5. I feel I am part of the Instagram community
6. I would be sorry if Instagram shut down
7. Approximately how many TOTAL Instagram followers do you have? *
8. In the past week, on average, approximately how much time PER DAY have you spent actively using Instagram? **

Response categories range from 1 = strongly disagree to 5 = strongly agree, unless otherwise noted.

*Can be asked as an open-ended (as in Ellison et al., 2007) or closed-ended question. If asked as an open-ended question, Total Instagram followers must transform by taking the log before averaging across items to create the scale due to differing item scale ranges. If asked as a closed ended question, a ten-point ordinal scale may be used (e.g. 10 or less, 11–50, 51–100, 101–150, 151–200, 201–250, 251–300, 301–400, more than 400). You may wish to adjust these response categories depending on your population, etc.

**Can be asked as an open-ended or closed-ended question. If asked as an open-ended question, Instagram minutes should be measured by having participants fill in the amount of time they spend on Instagram. Then the item should then be transformed by taking the log before averaging across items to create the scale due to differing item scale ranges. If asked as a close ended question an ordinal scale may be used (e.g., 1= 0-14min, 2=15-29 min, etc). Again, response categories may differ based on population means.

Computing the Scale

The Instagram Intensity score is computed by calculating the mean of all the items in the scale.

Appendix III:

SNAIS SCALE

terms

How often have you performed the following online social networking activities in the last month?

Social Function

1. Sent messages to friends on message board.

2. Chatted with friends via instant messaging function.

3. Replied to comments made by social networking friends.

4. Commented on friends' status, logs, and photos.

5. Shared/Forwarded content.

6. Browsed others' logs/photos/statuses/albums.

7. Updated self-status.

8. Posted photos/videos on personal web profile.

9. Wrote logs/weibo.

10. Decorated personal web profile.(changed image/contact information/privacy setting)

Entertainment Function Use Intensity

11. Surfed entertainment/current news.

12. Watched video/listened to music.

13. Played games/applications.

14. Bought/gave virtual goods. (e.g. birthday gifts)

Note. Items are on a 5-point scale: 0 (never), 1 (few), 2 (sometimes), 3 (often) and 4 (always).

Appendix IV:

Beliefs About the World

There is often debate about whether or not the public is told the whole truth about various important issues. This brief survey is designed t assess your beliefs about some of these subjects. Please indicate the degree to which you believe each statement is likely to be true on th following scale: Definitely not true; Probably not true; Not sure/cannot decide; Probably true; Definitely true

1. The government is involved in the murder of innocent citizens and/or well-known public figures, and keeps this a secret
2. The power held by heads of state is second to that of small unknown groups who really control world politics
3. Secret organizations communicate with extraterrestrials, but keep this fact from the public
4. The spread of certain viruses and/or diseases is the result of the deliberate, concealed efforts of some organization
5. Groups of scientists manipulate, fabricate, or suppress evidence in order to deceive the public
6. The government permits or perpetrates acts of terrorism on its own soil, disguising its involvement
7. A small, secret group of people is responsible for making all major world decisions, such as going to war
8. Evidence of alien contact is being concealed from the public
9. Technology with mind-control capacities is used on people without their knowledge
10. New and advanced technology which would harm current industry is being suppressed
11. The government uses people as patsies to hide its involvement in criminal activity
12. Certain significant events have been the result of the activity of a small group who secretly manipulate world events
13. Some UFO sightings and rumors are planned or staged in order to distract the public from real alien contact
14. Experiments involving new drugs or technologies are routinely carried out on the public without their knowledge or consent
15. A lot of important information is deliberately concealed from the public out of self-interest

Appendix V:


Are you:
Between the ages of 18-25
Do you:
Use at least one of the following social media sites: Facebook, Instagram, Snapchat, Reddit, Twitter.
We are looking to investigate time spent on social media in relation to ones belief in conspiracies.
Please feel free to contact me should you have an inquires about the current research being conducted.
Steven Whearity
National College of Ireland
X19758755@student.ncirl.ie
National College of Ireland
Participants needed for study!
Investigating the effects of Social Media usage on levels of Conspiratorial Belief.
SOCIAL MEDIA
FAKE NEWS
Participation involves filling out a set of questionnaires. Study Link:
https://forms.gle/DzwVRJ6FgpBPhSor7
Or you can scan the QR code!!

Appendix VI:

Participant Information Leaflet

Investigating the effects of Social Media usage on levels of Conspiratorial Belief.

You are being invited to take part in a psychology undergraduate research study in the National College of Ireland. Before deciding whether to take part, please take the time to read this document, which explains why the research is being done and what it would involve for you. If you have any questions about the information provided, please do not hesitate to contact me using the details at the end of this sheet.

What is this study about?

I am a final year student in the BA in Psychology programme at National College of Ireland. As part of our degree, we must carry out an independent research project. The current study aims to investigate time spent on social media, with a specific aim looking at Instagram use on levels of conspiratorial belief in young adults.

With social media providing a landscape of alternative news outlets & theories and the ever-growing distrust of established media institutions increasing (Rojecki, 2016) While conspiracy theories are gaining more and more interest online, this study would like to examine whether social media usage influences a person's level of conspiracy belief. If you choose to participate and proceed (below), there will be further information and a consent form to respond to (no names needed). My research has been approved by the National College of Ireland's ethics committee. This means that the committee's evaluation of this ethics application has been guided by the standards of research ethics set by the Psychological Society of Ireland and the National College of Ireland's ethics guidelines.

The supervisor on this research project is Dr Michelle Kelly (D.Psych.BAT) Board Certified Behaviour Analyst. Doctoral Level BCBA-D).

What will taking part in the study involve?

If you decide to take part in this research, you will be asked to complete four different questionnaires. Participation in this study should take between 5-10 minutes in order to complete. You will be first presented with a demographic's questionnaire regarding your age, gender, parental and individual education, and parental income. You will then be asked the Social Media Networking Intensity scale (SNAIS) in order to measure your social media usage. You will then be presented with the Instagram Intensity scale which measures your Instagram usage levels, and finally you will be presented with the Generic Conspiratorial Belief scale which measures your levels of conspiratorial belief.

Who can take part?

You can take part in this study if you are between the ages of 18 -25 and use at least one of the following forms of social media, Instagram, Facebook, Snapchat, Twitter and/or Reddit. This study is looking at a young adult population as this population has yet to be studied in regards to conspiratorial belief and social media usage. This is an important sample to study as young people make up 67% of social media usage (Duggan, 2012).

Do I have to take part?

Participation in this study is completely voluntary and no one is required to take part. If participants wish to withdraw from the study, they can do so at any point of the study without any consequences, disadvantage, or explanation. Due to the nature of this study, participants must answer all demographic questions in order to proceed with the study. This is necessary as the statistical analyses required for this study can only be conducted if all questions in the demographic's questionnaire are answered. If there are some questions within the social media intensity scale, the Instagram intensity scale, or the Generic Conspiratorial belief scale, in which participants feel uncomfortable answering then you are not required to answer them, you have the option to proceed to the next question. Due to the participant information gathered in the study it is not possible to withdraw your data after the completion of the study, as the researcher does not have the ability to identify which data belongs to who.

What are the possible risks and benefits of taking part?

There are no direct benefits to you for taking part in this research. However, the information gathered will contribute to research that helps us to understand more about the topic of conspiratorial belief, as well as providing us with evidence of possible predictors of conspiratorial belief.

There is a small risk that some of the questions contained within this survey may cause minor distress for some participants, surrounding the topic of dependency and addiction. If you experience this, you are free to discontinue participation and exit the questionnaire. Contact information for my college email and my supervisors email if further information is required from any participant.

Will taking part be confidential and what will happen to my data?

All participants in this study will remain anonymous and all information provided by you will not be directly linked to you. We plan on securing participants anonymity by password protecting and encrypting the google form which holds all the questionnaires for this study. Therefore, no one will be able to access the data but the researcher. No personal information will be taken from participants that is identifiable. Neither me nor the supervisor will be able to identify what data belongs to who. After participants submit their responses, the data from the google from sheet will be transferred into an excel spread sheet containing all participants responses, this spread sheet will be under the supervision of the researcher and nobody but the researcher will have access. The data will then be transferred over to IBM SPSS in order to perform statistical analyses on the data. Once participants have submitted their answers, participants will not be able to withdraw their own data as the researcher has no way of knowing what data belongs to who. The data that is gathered for this research will be retained by the researcher for up to 5 years as this is the data retention policy in the National College of Ireland.

What will happen to the results of the study?

The results of this study will be presented in my final dissertation, which will be submitted to National College of Ireland. The study will also be presented to my peers within the National College of Ireland.

Who should you contact for further information?

Researcher – Steven Whearity. Email – X19758755@student.ncirl.ie

Supervisor – Michelle Kelly. Email – Michelle.kelly@ncirl.ie

Appendix VII:

Consent Form

(1) I voluntarily agree to participate in this research study. (2) I have read and understood the information sheet provided above. (3) I understand that all information provided will remain confidential. (4) I understand that I can withdraw from this study at any time. (5) I am over the age of 18. If you agree and consent with participating in this study and the above statements, tick the following box.

Appendix VIII:

Debriefing Sheet

Thank you for participating in this study it is greatly appreciated. This study is concerned with investigating social media usage on the levels of one's conspiratorial belief. This study holds great importance as social media is a big part of todays society and with the ever rise of conspiracy theories throughout these new forms of communication, it is important to examine if there is a relationship between both phenomena. I would like to remind participants again that their data is completely anonymous and neither I not the supervisor will be able to identify a participant's data back to the person. Social media and conspiratorial belief may be a sensitive topic to some individuals. If you have any distress from participating in this study, participants can contact me at my email about anything regarding the study. Email – X19758755@student.ncirl.ie or my supervisor Michelle.kelly@nicrl.ie.

Appendix VIIII: