



**The Effects Of Polarisation On Consumer Psychology And Purchasing Behaviour.**

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## **Abstract**

Many people across the globe interact in the world of social media on a daily basis. The platforms have now become a regular occurrence providing social change and innovation to how we communicate and interact with one another. This study aims to determine how the spreading of misinformation online can lead to the development of polarisation within social media platforms and how these platforms can affect consumer psychology and purchasing behaviour. In order to uncover this information key themes and attitudes will be studied from a sample population of respondents.

To test the hypothesis that polarisation can have an effect on consumer psychology and purchasing decision an online survey was distributed to social media users around Ireland. Respondents were randomly selected and asked to respond to multiple choice questions relating to their social media behaviour online. The results showed an effect in line with the hypothesis. A change in participant's behaviour in relation to information spreading online can be identified when making purchasing decisions online.

The results suggest that the development of polarisation within online communities can lead to a change in consumer purchasing behaviour. This behaviour results in the sharing of information online from social media users. On this basis, the concept of polarisation should be taken into account when targeting online communities and driving sales through social media platforms. Furthermore, the results indicate that the current social media environment is rapidly changing, which in turn calls for a more in-depth study into the topic of polarisation and the direct impact that it has on the purchasing behaviour of consumers.

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## **Introduction**

Have you ever wondered about how social media platforms have affected us as individuals and as a society? With the rapid expansion of social media popularity and everyday use, questions into the effects it has on human psychology must be asked. One of the issues faced by the use of social media platforms is the development of polarisation within communities on social media. Polarisation has emerged as social media platforms have become a large part of society. Polarisation uses persuasive technologies to pair individuals together to create communities on social media platforms. While having seemingly harmless objectives polarisation can lead to negative consequences. An example of these problems is the lack of information seeking it leads to within individuals. These individuals then cannot develop a greater understanding of certain subjects due to the restrictions placed by polarisation. The research conducted will address issues that can be developed through polarisation and persuasive technologies. Such issues include an individual's ability to seek new information on social media platforms. Additionally, further issues such as consumer purchasing behaviour and psychology within these social media platforms will be addressed within the research.

## **Research Objective**

The objective of this research is to analyse the effects that polarisation and persuasive technologies have on consumer psychology and purchasing behaviour. Additionally, the research will focus on aspects that have contributed to the development of these technologies and how they can have a greater impact on society. Finally, the research will determine the aspects of social media that affects the individual's behaviour while interacting with social media platforms. The research will look to address questions that arise from social media use such as, the factors that affect the consumer purchasing decision through social media platforms. A deeper understanding of social media user's psychology while interacting on social media platforms.

## **Importance of research**

The research paper will allow the development of further studies. Such studies include social media behaviour and social media information and spreading within online communities. The research can provide an overall overview of these areas and acts as a stepping stone for further studies. Additionally, the research allows for a deeper focus on specific issues such as individual platforms used, and topics found in the research paper. The research ultimately helps the development of social media marketing as a whole. The research can provide specific behaviours and interactions that participants have had on social media platforms. Leading on from this, the paper also opens up opportunities for marketers within this field as the paper provides insight into how individuals use social media for purchasing. The industry can also use the research paper to identify key trends or topics that may arise. This could lead to specific target markets being identified when conducting market research.

## **Previous Research**

A considerable amount of research has been conducted and published on social media usage and interactions. Research conducted by Yuxi Wang focuses on misinformation and disinformation on social media platforms and how it can have consequences that may not have been taken into account. BJ.Fogg identifies the use of persuasive technologies and gives context to the development of such technologies being used by social media platforms. Fogg being the creator of the term "Captology" which is referenced throughout the research paper.

Fogg further investigates the psychological cues within these technologies and its impacts. Orji and Moffat also investigate persuasive technologies with a focus on individual health. “Persuasive Technology (PT) are interactive systems designed to aid and motivate people to adopt behaviours that are beneficial to them and their community while avoiding harmful ones. The use of PT, aimed at bringing about desirable change by shaping and reinforcing behaviour and/or attitude is growing in virtually all areas of health and wellness” (Orji and Moffatt, 2016). Dominic Sphor further justifies Fogg's research with further studies into persuasive technologies. Sphor further goes on to state the consequences of polarisation in terms of communities and how these online communities are generated. The research conducted identifies aspects of technologies used and the consequences that follow from the use of them, however, this research paper identifies a gap in the research. The research identified a lack of further research into the consumer psychology. This research aims to fill this gap and to identify aspects of the consumer psychology that can be drawn from and applied to social media platforms and expand on the effects it has on society as a whole. Furthermore, the research also aims to provide context to the field for any further research.

### **Importance of Previous research**

Current research is important as it firstly gives context to the research paper. Such context includes the identification and definition of terms. These terms act as a starting point and reference to the research paper. Furthermore, the current research is critically important in identifying trends in various aspects of the field. Previous research acts as a reliable source to give credibility to the research and also helps identify any gaps within previous research.

### **Thesis structure**

The research paper will consist of six chapters. One being the introduction to the research paper. In chapter two the literature review contains an overview of the factors that impact the consumer's psychology and behaviour on social media platforms. In this chapter, the review covers the issues created by persuasive technologies and the direct effects of the mainstream use of these technologies on society. Chapter three outlines the methodology used to complete the research used as a basis for this Thesis. The research used a quantitative approach by developing and issuing a detailed survey. The survey consists of a broad demographic to gather a wide range of responses into how the participants interact with social media platforms. The survey will consist of various questions relating to consumer psychology and purchasing behaviour. Chapter four will consist of the findings and open the discussion into the responses of the surveys and categorise the findings into various headings. Finally, in chapters five and six a discussion into the findings and conclusion of the research will close out the Thesis.

This chapter began by describing a brief introduction to the research topic. It further progressed by describing and acknowledging previous research that was conducted. Furthermore, gaps in the research were identified and goals and questions were presented which will be tackled in the research. Additionally, the importance of the previous research was stated to provide context to the current research conducted. To conclude this section a detailed description of the overall structure of the thesis was presented

## **Literature Review**

### **Introduction**

The growth of social media has almost become an explosion over the past decade. Users from current generations to older generations have adopted the online platforms to stay more connected to individuals and loved ones. According to Jeff Bullas (2014), Facebook's daily active users reached to over 665 million people. Furthermore, Bullas (2014) states that "Facebooks monthly active users reached to over 1.1 billion users and of those 751 million people were mobile users". Similarly, Akram and Kumar (2017) further define the reach of social media: "Instagram is a visual online networking stage. The site has more than 400 million dynamic clients and is possessed by Facebook". The interaction that social media platforms facilitate is unmatched and allows for more responsiveness and engagement for companies. According to Perrin (2015), over 90% of young adults spend time each day on social media. This compares to a rate of only 12% in 2005. It is this drastic expansion of social media that acts as the purpose of this study. Social media has become a regular occurrence for consumers on a daily basis. Consumption of social media content begs the question of what ways companies have adapted to the digital environment and how can it influence the decision-making process and people's opinions, even without them realising.

### **Persuasive technologies**

According to Wright (2019), persuasive technology can be described as the use of technology to change people's habits or attitudes towards a certain activity or behaviour. This form of persuasion can be linked back to B. F. Skinner (1938) and his studies into operant conditioning that showed how a person's behaviour can be "controlled by consequences" (Staddon and Cerutti, 2003). The power of social media allows for the magnification of techniques of persuasion. Social media platforms are designed to entice and to draw in consumers. Persuasive technology has shifted in recent years towards focusing on individual and personalised persuasion. Kaptein et al., (2009), believes that persuasive strategies can become more effective through the use of a personalised approach rather than a one-size-fits-all approach. Ruijten and Zhao (2017), also provide insight into the use of Captology by stating that "it is also believed that using an individual's personality to adapt persuasive messaging or techniques to can increase the technology's impact".

Persuasive technologies as stated by BJ. Fogg (1997) can be physical and technological. Persuasive technologies can play a massive part in modern day society. "Persuasive Technology are interactive systems designed to aid and motivate people to adopt behaviours that are beneficial to them and their community while avoiding harmful ones. The use of persuasive technology, aimed at bringing about desirable change by shaping and reinforcing behaviour and/or attitude is growing in virtually all areas of health and wellness" (Orji and Moffatt, 2016). The technology could be used to promote overall good health and motivates mental health behaviour. "Physical activity promotion based on persuasive technology appears to have great potential and promise in effectively promoting physical activity on a large scale" (de Kort et al., 2007). Persuasive technology itself is not unknown to the field of physical activity research and promotion. Two examples that have been around for a long time are pedometers and heart rate monitors. Very recently, internet, GPS/GIS, cell phone, and multisensory-based technologies have been used as persuasive technology for physical activity promotion. Devices such as Nike+, iPod shoes and Dance Revolution (DDR) have gained the attention of the media and the public (de Kort

et al., 2007). Further technologies developed to have positive effects on people is the introduction of my fitness pal and the Fitbit. These applications on mobile devices promote the tracking and maintaining of physical health through exercise and dietary tips. It is the use of these technologies that has led to the term “Captology” being used to refer to these technologies. However, persuasive technology has both utopian and dystopian effects.

An example of a persuasive technology that is physical would be gambling machines. “Simply having physical characteristics is enough for a technology to convey social presence. But it seems reasonable to suggest that a more attractive technology (interface or hardware) will have greater persuasive power than an unattractive technology” (Fogg, 2002). Fogg further states the impact psychological cues from computing products can have on consumers stating that they can “lead people to infer, often subconsciously, that the product has emotions, preferences, motivations, and personality—in short, that the computer has a psychology” (Fogg, 2002). These cues can be subtle in the technology or else blatant so that the user understands the technology and feels more comfortable with it. An example of this is Apples Siri voice over or the original Macintosh computer which was revolutionary at its time. To many people social media marketing is the most effective way of targeting and communicating a brand image to consumers. It has not only changed marketing but continues to have a psychological impact on individuals and society itself. Andrew T Stephen (2016) identifies consumer digital cultures in his work and defines various aspects of this research as understanding how consumer’s identities and self-concepts extend into the digital world. The research proposes the adaptation of identities into the known digital world. Further research conducted by David John Hughes suggest that personality traits online effects online information and socialising. Research also indicated a difference in personality traits is dependent on a certain social media platform. (Hughes et al., 2012). Similar to persuasive traits that may be evident in individuals, persuasive technologies can have an influence on consumer’s attitudes. B.J. Fogg, an authority in Captology, has defined persuasive computers in his paper as “the computing systems, devices, or applications intentionally designed to change a person’s attitudes or behaviour in a predetermined way” (Fogg, 1997). Persuasive emphasises the change in attitudes or behaviour in a planned manor bringing B.J Fogg’s definition of persuasive computers and technology to relevance in today’s society. This research into persuasive technology can be further backed up by Ran Cheng as she proposes that “Captology, as a relatively new research area, should adopt or borrow the existing persuasion theory from other fields such as psychology, communication, media and so on” (Cheng, 2004).

## **Captology**

Persuasion through computers can be labelled Captology. Captology describes the area where computing technology and persuasion overlap. “Simply put, a persuasive computer is an interactive technology that changes a person’s attitudes or behaviours. This definition works well in many cases, but a more thorough definition gives a better understanding of persuasive computing” (Fogg, 1998). Sears and Jacko also define Captology as “the study and design of computers as persuasive technologies” (Sears and Jacko, 2009). At its core Captology focuses on the planned persuasive effects on computer technologies and subsequently people’s psychology. Sears Goes further on to state that Captology is relevant to systems designed for many facets of human life. These include promoting commerce buying and branding via the web. Captology can have many more effects on consumer’s psychology. One of these is a consumers “environment simulators. This includes the creation of situations that motivate people to target a specific behaviour. It facilitates the exposure to

new perspectives for consumers and to impact on their everyday normal life. (Sears and Jacko, 2009).

Many papers have identified the possible ethical issues with the use of Captology and persuasive technologies. Berdichevsky and Neuenschwander propose that “Persuasive technologies also take advantage of information about their target users. They can collect this information themselves or glean it from other sources, such as the Internet”. (Berdichevsky and Neuenschwander, 1999). They further go on to state that such practices can manipulate sensitive information about users. Fogg expands on this concept further by assessing the designing process of these machines. Psychological cues from a computing product can lead people to infer, often subconsciously, that the product has emotions, preferences, motivations, and personality—in short, that the computer has a psychology. Psychological cues can be simple, as in text messages that convey empathy or onscreen icons that portray emotion. “Designing psychological cues into computing products can raise ethical and practical questions. Some researchers suggest that deliberately designing computers to project psychological cues is unethical and unhelpful. They argue that psychological cues mislead users about the true nature of the machine “it’s not really having a social interaction with the user”. (Fogg, 2011).

### **Misinformation and fake news**

Due to the popularity and size of social media and the users it has accumulated in today’s society, various people on social media platforms consume various types of information that may not be credible or reliable. The term “fake news” attracted substantial media and scholarly attention. The term overlaps with other forms of misleading information, and especially misinformation and disinformation, all conveying messages, stories, theories, or opinions that spread rapidly through social contacts or online media. They differ primarily with respect to intent and mode of spread (Wang et al., 2019). Other scholars defined misinformation as cases in which people’s beliefs about factual matters are not supported by clear evidence and expert opinion” (Bode and Vraga, 2017). The definition of misinformation is widely agreed upon with most definitions sharing the idea that it is the unintentional spread of information that is not supported by expert opinion or by verifiable evidence (Tandoc Jr. et al., 2017; Thorson, 2016). However, many experts struggle with determining if the spread of false information was intentional. When intentionally false information is shared it can be described a disinformation (Freelon and Wells, 2020). Many definitions of disinformation associate the reason of intention to be for political gain or profit (Hameleers and Minihold, 2020).

Misinformation can be extremely damaging to society for many reasons, one of these reasons is the risk of damaging a person’s health through false information. This can be applied to the current conditions that we have faced within the Covid-19 global pandemic. The advising of the application of facemasks and general hygiene maintenance that was crucial in the prevention of spreading the virus. However, many questions had been asked about how such actions should be taken even with the input from credible sources such as the World Health Organisation or the HSE. The formation of these false beliefs online can create communities within social media platforms. An example of this formation of groups that were persuaded by misinformation is the development of anti-mask protestors during the Covid-19 pandemic. “More recently, the rise of “anti-mask” protests has seen disparate groups from antivaccine activists to 5G protesters to alternative health advocates unite under a single banner” (Grimes, 2020). Grimes goes on to further put into perspective the number of

supports that derived from these wild social media conspiracies about Covid-19. “These are not insubstantial gatherings. August 2020 saw more than 17,000 protestors take to the streets of Berlin alone, with thousands more in London, Dublin, Madrid, and elsewhere” (Grimes, 2020). Grimes also suggested that all social media platforms must take a collective responsibility but states that “Whatever the reason, it is clear is that we cannot rely on social media giants to self-regulate their platforms, despite their implorations to the contrary. Wang also identifies such groups and links misinformation through social media to polarization. Wang explains that active users are more likely to span a range of categories, and that online groups promoting conspiracy theories tend to exhibit polarization (Wang et al., 2019)

Another aspect of misinformation affecting behaviour during the Covid-19 pandemic is the false information on the Covid-19 vaccines. While some accusations about the vaccine can be laughed off the spreading of this misinformation can have a lasting effect if enough people are influenced. Van der Linden et al., (2021), describes the difficulty in addressing any of the claims. “A common method to combat vaccine misinformation involves debunking false claims. Though seemingly intuitive, research has found that this approach can exacerbate, rather than correct, the negative effects of misinformation. This is because corrections directly refuting misinformation can trigger the continued influence effect, whereby people continue to retrieve misinformation from memory even when acknowledging the correction”. Due to pressure from social media users Van der Linden et al., (2021), states that even addressing the issue that has been misinformed or has come from an un reputable source can cause even more attention to the claims even if debunked in today society. The effects of misinformation clouds over real credible information when presented due to polarization and a lack of an open mind due to social media algorithms. It is because of this cycle that people are inhibited from learning new information for themselves that would allow them to try and change their views that they would have had in a collected group. Linden perfectly illustrates this by applying a U.S example. “For example, with public attitudes toward a COVID-19 vaccine becoming politically polarized, particularly in the U.S., misinformation corrections might be ineffective or potentially backfire among hesitant audiences, thus making vaccine misinformation even more influential in decision-making” (Van der Linden et al., 2021).

Furthermore, polarization can have consequential effects on society. “Polarization is the loss of diversity of opinions and arguments” according to Dominic Spohr (2017). Additionally, Zuiderveen Borgesius (2016), argues that personalised technology and advertising to people can have an effect on people’s beliefs and decisions stating that “in a democratic society people need to come across opinions that differ from their own opinions, to develop themselves fully”. Dominic Spohr identifies that algorithms developed by social media platforms that personalise user’s online experience can create a bubble around a person. Spohr (2017) stated that “algorithms which are intended to customize and personalize the user’s online experience place the user in a bubble where he or she is only presented with information that matches with previous consumption behaviour”. Zuiderveen continues to state that gaps in knowledge may be present in society due to these filter bubbles. “First, many media users take advantage of the abundance of media outlets to avoid political information altogether. Hence, these users lose an important information source to form political opinions. Second, if media users select political information that is attractive to them, they will be better motivated to process the information they encounter”. (Zuiderveen Borgesius, 2016).

## **Polarisation**

“Being exposed to various topics and different points of view is central to democracy, but new technologies run the risk of making its users more prone to fragmentation and polarisation, which could in turn lead to difficulties in understanding non-likeminded and extremism, as well as distorted understanding of issues” (Gunnarsson Lorentzen, 2014). With the rise in social media platforms in today’s society, the consumption of news has changed. With social media becoming a daily occurrence in today’s society the consumption of news can be altered with the rise of fake news and misinformation through polarisation. Kelly, Fisher and Smith (2005), warn about the effects of group polarization online. They characterize the internet as a kind of “anticommons” that allows citizens to consume information and affiliate with others on the basis of shared values and interests only. Whereas individual preferences are held in check by public institutions in the world around us. Information “commons” can be found in areas such as public parks or the mainstream mass media, in which citizens are exposed to a range of viewpoints they would not otherwise encounter, the Internet can be less public (Kelly, Fisher and Smith, 2005).

“Because we live in a world where most information comes not from direct experience but through mediated messages, newspapers, television shows and online information sources become places where exposure to ideologically cross-cutting content does or does not take place” (Spohr, 2017). Spohr’s ideology proposes that consumption of online media and news can lead to polarization due to a lack of a shared base of information. “The fact that there is no shared base of information between different political groups has led to ‘citizens developing highly polarized attitudes toward political matters’”. These groups have led to the term of filter bubbles being popularised by Eli Pariser. “Every technology has an interface, Stanford law professor Ryan Calon told me a place where you end, and the technology begins. And when the technologies job is to show you the world it ends up sitting between you and reality like a camera lens” (Pariser, 2012). Pariser continues to state that “there are lots of ways for it to skew your perception of the world and that’s precisely what filter bubbles do” (Pariser, 2012)

Frederik J. Zuiderveen Borgesius et al., (2016), states that “in contrast to self-selected personalisation, pre-selected personalisation is not a result of a user’s direct choice - but of a choice that is determined by algorithms”. Filter bubbles are a result of algorithms that restrict the extent to what people can take in. The separation of people to access this information is what leads to the creation of polarisation. The formation of personalised algorithms and filter bubbles leads to the closing off of the options of furthering information seeking and can also close off groups of people from gaining new opinions and beliefs. An example of this situation becoming extreme was seen during the 2021 riots against the Capitol building in Washington DC. The tension between the two groups of people reached a boiling point as Americans violently protested leading to individuals being injured. A key factor in this incident was the lead up to the storming. The groups became highly opinionated due to polarization resulting in the strong beliefs in one party and the close mindedness to see or seek information on other parties. Polarisation has been seen within sensitive issues such as political with Levy and Razin stating that polarisation “has been suggested that the increased polarisation of American politics and institutions is a result of the increasingly polarised nature of voters’ political values. Political actors are motivated to accommodate their voters’ preferences in order to be re-elected, resulting in a polarized Congress’ (Levy and Razin, 2020).

Frederik et al., (2016), continues to state that gaps in knowledge may be present in society due to these filter bubbles. “First, many media users take advantage of the abundance of

media outlets to avoid political information altogether. Hence, these users lose an important information source to form political opinions. Second, if media users select political information that is attractive to them, they will be better motivated to process the information they encounter". (Frederik J. Zuiderveen Borgesius et al., 2016)

### **Effects of social media on consumer psychology**

Using the internet, social media, mobile apps, and online communication has become a massive part of people's daily lives. The rise in time spent online has been fuelled by the development of social networking and media sites. "It is interesting to see how the various informational and social characteristics of digital/social environments, such as being exposed to other consumers' opinions (e.g., reviews) or choices (e.g., bids in online auctions), or even just to friends' lives through social media, can impact subsequent behaviours". (Stephen, 2016). Stephen went on to further investigate the effects that closer friends' groups have on an individual's decision making processes. These decisions consisted of health and lifestyle options. "They found that when exposed to closer friends on Facebook, consumers subsequently exhibited lower self-control in choices related, for example, healthy behaviours (e.g., choosing a healthier snack over an unhealthy option). This was only for people who were exposed to closer friends on Facebook". (Stephen, 2016).

Stephens focus on Facebook and the negative effects on individual influence can be closely related to other works. Growing concerns about social media's effects on mental health are growing within communities. "Many who are concerned about social media use point back to a 2011 report by the American Academy of Paediatrics (AAP) who claimed Facebook Depression could develop among youth who used social media too long". (Berryman, Ferguson and Negy, 2017). Other behaviours attributed to social media can be stress or anxiety. "A link between social media and compulsive behaviour has been reported by various studies. It has been found that forty five percent of British adults feel restlessness when they are not able to access their social networking sites. (Bashir and Ahmad Bhat, 2017). Further research into the impacts of social media was conducted by (Akram and Kumar, 2017). They focused on the impact that social media can have on students and whether it affected their psychological wellbeing. Their results showed that social media can have multiple effects on students such as the reduction in real human contact, loss of motivation in students, time wastage, and reduced learning and research capabilities. Finally, the research focused on the effects on health on students. "The unnecessary use of these sites has an effect on the mental as well as physical health. Students do not take their meals on time and take proper rest. The abuse of these destinations once a day has many adverse impacts on the physical and psychological wellness of students making them lazy and unmotivated to make contact with the general population face to face". (Akram and Kumar, 2017).

Although social media can have negative effects on consumer psychology (Akram and Kumar, 2017) also propose positive effects that the use of these sites can have such as connectivity and access to new information. Other research suggests that young people are increasingly using social media for emotional support to prevent and address mental health issues. "The use of social media to form online digital communities which others who share similar characteristics can be extremely powerful. Young people from minority groups are able to become global citizens this reducing isolation". (Stones, 2020). Stones goes on to further his points by stating that "such groups can reduce feelings of loneliness and support the development of a positive, personal identity" (Stones, 2020).

## **Summary**

The literature review undertaken identifies the issues that are faced due to the development of persuasive technologies. The literature review sheds light on how the adaptation of these technologies within social media platforms can affect consumer's behaviours. It also suggests that the development of these technologies within social media platforms can create false information online which can have greater effects on consumers

## **Research question**

The aim of this paper is to find how the spreading of information through social media platforms can affect consumer purchasing behaviour. The aim of this research is to identify key trends and themes within the population. Additionally, the research will aim to gather further insight into how information is gathered and spread throughout social media platforms and the validity of the information that is shared. Finally, the research will attempt to find a correlation between social media platforms and the effect that it has on consumer purchasing psychology. In order to answer the research question addressed the research broke down the question into three sections. Firstly the process in which social media users gather their information online was explored. Such questions ranged from sourcing of material and the trustworthiness of content. Secondly the research focused on the spreading of this information. Like the information gathering process the information spreading process was analysed. The questioned asked consisted of current social media activities, the consequences of spreading false information online and personal experience with the sample population. Finally a deeper understanding of consumer psychology and purchasing behaviour was focused on. Past purchasing habits were questioned within the section. Additionally, questions relating to current psychological factors were also asked in order to gain a better understanding of the sample population. Based on these questions we believed we gained a greater knowledge of the subject and answered the research question proposed.

## **Methodology**

### **Introduction**

The methodology approach chosen was to help answer how the spreading of information through social media platforms can affect consumer psychology. The aim of the methodological approach was to find a correlation between purchasing behaviours online and the development of polarisation caused by the spreading of information online. A quantitative approach was the best form for the methodological approach as it gave us a larger scope to uncover correlations and make interpretations from a larger data pool. The method used can be seen as common practice within social media investigations. The quantitative approach allowed for the interpretation of the data statistically in order to uncover key characteristics within the data. The use of a quantitative approach also allowed for a much larger pool of data to process, interoperate and analyse. The quantitative approach allowed for the reach of a higher sample size. The use of quantitative research also allowed for an efficient response time. The benefits of a quicker more efficient response proved crucial in a data centric research approach.

### **Methods of data collection**

The form of research method included a qualitative approach. Data collected is usually represented in words. Qualitative research can be conducted in smaller samples in opposite to quantitative approaches where larger collections are needed. Other forms of research include primary and secondary research. Primary research being data collected by an individual specifically. The researcher has control over the sampling and research methodology. Secondary research consists of information that has already been collected by other researchers. Such examples could be the government census. The research also considers descriptive and experimental data collection. Descriptive research being data collected without intervening in the process. Whereas experimental research the researcher systematically intervenes in the process.

### **Methodology procedure**

The research instrument used in the research consisted of survey research. The questions focused on the relationship that participants have had when using social media platforms. In this section, the research conducted focused on a quantitative approach. The data that was collected was a primary search and did not include any secondary research papers. The goal of using a qualitative approach was to gather a wide range of accurate answers that could be cross referenced and analysed. Additionally, surveys would also allow the research to understand the general characteristics of a population. Such data consists of opinions, behaviours, experiences, and demographic characteristics.

### **Sampling**

The research that was conducted followed a sample approach rather than a population approach. The sampling used probability sampling methods. These included simple random sampling. This method was used in order to avoid any sampling bias. Simple random samples were conducted to represent the characteristics of a larger population. The sample used consisted of a wide range of participants aged between 18 – 50 years of age to provide a representation of all users on social media platforms. The sample included a wide range of educational levels and a balanced gender level. The sample also consisted of a wide range of fields of work. The survey was conducted over a weeklong period in order to give time for the participants to complete it. Pilot testing was conducted on the data collection tool in order

to gain an understanding of how the data is interpreted and stored. The pilot test also allowed for further changes to be made to the survey to help improve the participant's experience.

### **Data collection process**

For gathering data responses, a google forms format was created and used (Appendix 1). The data was collected over two weeks in June 2021. The sample was given two weeks to ensure enough time for responses to be fulfilled and returned. Reminders after one week were scheduled if responses did not return or were not received. The experiment was designed between subjects. This meant that all subjects could test the same condition rather than within the subject's experiment design. Using the Google forms system had many positives that enabled an effective data collection process. Firstly, the data base used was free of charge making it widely acceptable for all users. Secondly, live updates were recorded as survey responses returned. The live updates prove crucial as any changes made are done efficiently without affecting the previous data. The survey was conducted online with 71 total respondents of those respondents 39 were male and 32 were female. During the data collecting process, there were 43 questions faced by the sample population. The format of these questions consisted of multiple choice answers with an option of further descriptive answers if needed. The goal of these questions was to understand the attitudes actions and mindsets of the individuals in relation to the research question. Questions included answers to which the population felt that they related to the most. Sections of the questions included 'other' which gave the sample population a chance to express further information on the questions if needed. The data included basic background including age and sex. The data then set out to understand how the sample population gathered their information online and spread this information. This method showcased the attitudes and behaviours of the sample population in relation to the research question. Finally, the data collected looked at the relationship of social media purchasing with the sample population. The profile data, which included all data collected were then stored manually into a time format in relation to the time of when the survey was completed.

### **Data analysis**

The survey responses were manually analysed. Following the groupings, responses were categorised and placed into percentages. It was noted that a system must have been developed in order to categorise any answers that opted to fill in more detail. These sections were firstly cross referenced with previous answers to categorise them into the correct section. Further cross referencing discovered a common theme found within some responses. These responses contained a neutral point of view. These views were then categories as neutral and placed separately from the prefilled data. Charts were created and used to visually analyse the data and to begin to map out common themes, relationships, and attitudes between the sample population. The goal of the survey was to establish the effects that information spreading has on consumer purchasing behaviour. As well as this there were other factors within the survey that contained valuable information. Examples of this is, the survey included asking the sample population if they believe that social media is an effective way of learning new information. The question doesn't directly answer the research question; however, it does give insight into the relationship that is had with gathering this information and the eventuality of this information spreading. Other questions also included if the sample population felt that social media alters the behaviour of themselves and others around them. By asking these questions we can interpret the data to find correlations between the sample population's psychology. By doing this we can help gather the maximum amount of data to help in answering the research question.

When relating the data back to the research question subheadings were developed to help characterise the data. These sections included the background of participants, social media use, the gathering of information online, the spreading of information online, and finally the consumer purchasing behaviour online. The data for each section was broken down per question with each corresponding section having a set number of questions. Section one's background contained six questions of multiple choice. Social media use was broken down into six questions as well. The information gathering process and spreading of information section consisted of fifteen questions with the final section on consumer purchasing behaviour containing sixteen multiple choice questions. The design for each section was in relation to the research question. Each section is believed to contain elements that all contributed to the research question and objective.

### **Limitations**

The limitations to the research may be identified within the sample. Simple random sampling relies on the quality of the researchers performing the work. Simple random sampling must endure the same overall disadvantage that every other form of research encounters, poor method application will also result in inferior information. Simple random sampling may require a sample size that is too large. Simple random sampling works best when you can manage a small percent of the overall demographic. If researchers use a structure that is too small, then the margin for error will rise significantly. Effectively making the data unable to be used. Simple random sampling does not provide that the data conclusions will be accurate. The method cannot remove intentional bias from the data collection process. There is no guarantee that participants in a simple random sampling will provide authentic information to use. Respondents could lie on a survey and give dishonest data. The experiment conducted was organised domestically meaning any conclusions may not be of a global perspective. Further studies may apply the same principles of the research to a broader sample size and other countries outside of Ireland to increase knowledge gained from the research and to learn different attitudes and behaviours from a wider range of cultures and countries. However, for the purpose of the paper, it is believed that the sample and the research were enough to answer the research question asked.

## Analysis and Findings

### **Introduction**

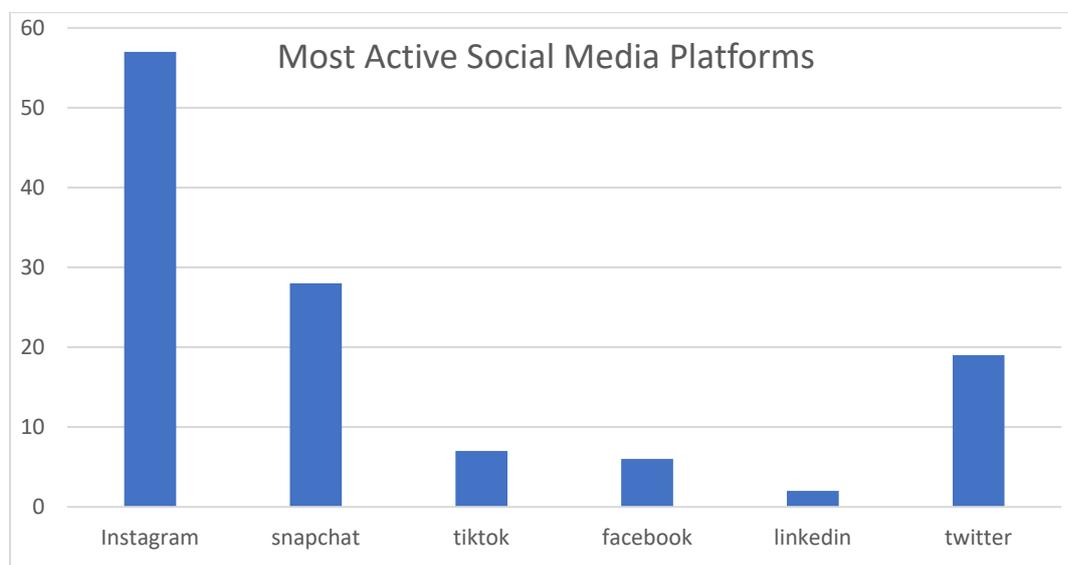
The results were broken down into four categories when interpreting the data. These sections included social media usage, information gathering process, information spreading through social media, and finally purchasing behaviour online. The results indicated that the participants of the survey contributed to the spreading of false information online. These behaviours also included the interpretation that social media may be a reliable source of information. The results also go on to show the differences among participant's behaviour when exposed to potential data in relation to purchasing through online social media platforms. The results also uncovered key trends that showed up consistently within the data. These themes can be present throughout the four stages of the results and provide insight into the attitudes and activities of the participants online.

Firstly, participants were asked basic information to provide background and more detail when analysing the data. The survey consisted of a wide range of ages groups categorised in ranges of 20-25, 25-30, 30-35, 18-20 and 50 plus. The survey was nearly evenly split between males and females. 54.9% of participants were male while the remainder of 45.1% consisted of female participants. Other questions that were used to determine the participant's background included the level of education. The most common answer ranged at level 8. Level 8 made up 60% of the participants with the second highest option being level 5 at 14.3%. Other results consisted of level 5 and 6's, with master degrees also appearing in the results. The survey also wanted to establish a deeper understanding of the sample population by asking about the employment status of the sample population. 92.9 percent of the sample population stated that they were currently employed with the remainder of the sample stating that they were currently unemployed.

### **Social media usage**

Instagram is the most commonly used social media platform amongst all respondents. These results were consistent across all demographics such as age, education level, and employment status. Figure 1. shows the relationship of usage between different social media platforms.

*Figure 1. Most active social media platforms*



The mode number of social media platforms used by respondents totalled at five with over 90% of people surveyed spending between 2-5 hours a day on social media platforms. The data collected highlights the high levels of activity on Instagram on a daily basis in comparison to other forms of social media platforms.

To gain a better understanding of the extent to which the survey population used social media platforms questions relating to social media presence and usage were conducted. The results showed that 54.9% of the survey population were on social media platforms between 5 and 10 years. Additionally, 36.6 percent of the sample stated to be on social media platforms for more than 10 years. With the remainder of the answers being between 1-5 years. The sample population was further questioned on the total number of social media platforms that they were on. Results showed that nearly 48% of the sample were on 5 platforms. Other answers included 3-4 platforms making up the majority of the sample. Social media usage was further explored within the survey and participants were asked how often do they use social media platforms. All of the sample population agreed to have used social media every day. Following this question, the results showed that of this daily usage 42.3 percent of people spend between 3-5 hours a day on social media platforms. 49.3 percent of the survey stated that they spend between 2-3 hours a day on the platforms and the final 7 percent spending one hour a day on the platforms.

### **Information Gathering**

The research conducted identified that social media platforms can be an effective way of learning new information. However, the research also identifies that said respondents did not conduct background research on these social media platforms questioning the credibility of information gathered. Also, in contradiction, survey participants believed that the information offered on social media platforms to be mainly made up of false information. When asked if they trust the opinion of people they follow on social media 67.1% of survey responses said no. 22.9 percent of the sample population however agreed with the statement and said that they did trust the opinion of the people they follow. The remainder of the results conducted were made up of split opinions from the population. The analysis also found that 65.7% of the sample population believed that social media is an effective way of learning new information. 17.1% of the responses however disagreed. An interesting correlation in the data arose when a comparison is made between those who think that social media is an effective way of learning new information and those who think that news shared on social media is reliable. When asked if they trusted the validity of news that was shared via social media platforms over 39.15 of survey responses disagreed. 29% of people however believed the news shared via social media platforms was trustworthy. The remainder of the responses argued against the source and stated that it depended upon the circumstances.

Figure 2. Information gathering and research

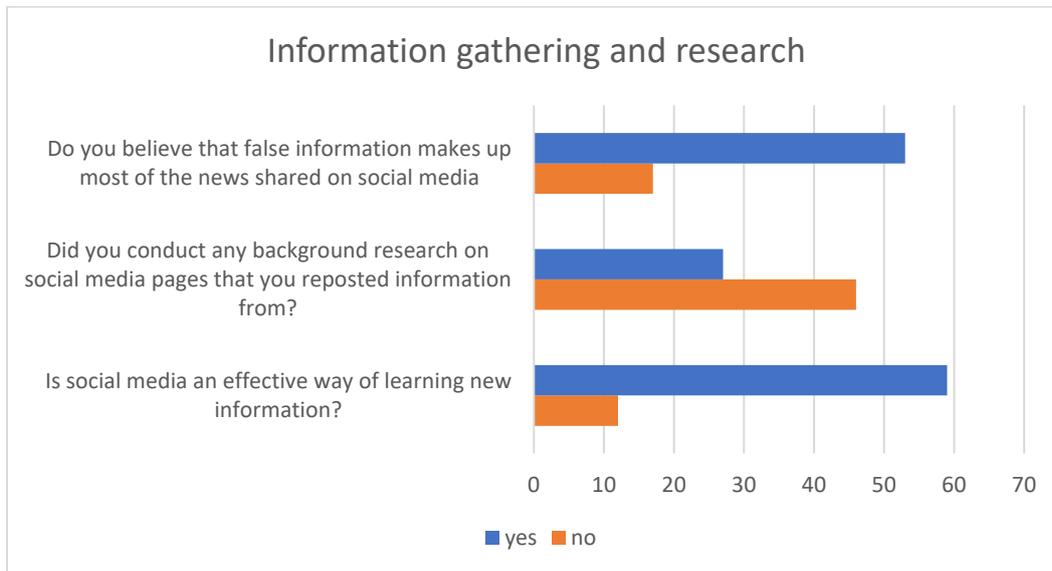


Figure 2 shows the gathering of information taken by participants in relation to social media activity. With over 70% of respondents believing that false information makes up the majority of the news shared on social media and a further 58.9% of respondents not conducting background research. Respondents still believe that social media platforms are an effective way of learning new information with 66.7% of respondents agreeing with the statement. Figure 2 shows us that the participants believe that social media news or information is false, yet the participant conduct no background research and still believe that social media is an effective way of learning new information. These behaviours show that either participants know that information may be false and yet they do not place an emphasis on the validity of the information that they intake or that the participants are fully convinced and believe that news and information online is genuine and trustworthy.

### Information spreading through social media platforms

Research conducted into the aspects of information spreading through social media platforms identified the lack of credibility and misleading of information. 100% of respondents believed that the spreading of information on social media platforms can be misleading. In contradiction, respondents also stated that they have posted sensitive information on their platforms such as posts containing political or health information. With over 50% of respondents posting their political information online believing that information spreading can be misleading on social media.

To gain a better understanding of the spreading process participants were asked about the severity of such actions. All respondents agreed that the spreading of information online can be misleading. Of these participants, 70% also stated that they agree that false information makes up most of the news that is shared on social media platforms. 24.3% of the survey population sample disagreed, with the remainder of the answers being neither for nor against. The analysis also stated the knowledge of such actions that is aware by the sample population. When asked if misinformation on social media platforms can have negative impacts, 100% of the sample population agreed. A further investigation into the implications

of misinformation online lead to the identification of past experience within the sample population. When asked if they have ever witnessed or experienced the consequences of misinformation on social media platforms over 74.6 percent of survey responses said that they have. Further investigation into the effects of misinformation throughout social media platforms continued. The analysis discovered that 31.4 percent of the sample population agreed to have shared or reposted information online that may have lacked research or not have been reputable. This data provided a key piece of information as in the previous question, survey participants were asked if they believe that the spreading of misinformation on social media platforms can affect a person’s behaviour, with 100% of participants agreeing it does. The survey also questioned participants on their actions before reposting or sharing information online. The survey asked if any of the participants conducted background research on social media pages before reposting their content. 59.2% of responses stated that they did not conduct background research before sharing this information with their followers. To finish off this stage of the survey participants were asked if they thought social media news was a reputable place for information. 62.9 percent of responses stated that they do not think social media news is a reputable place for information.

Figure 3. Information spreading

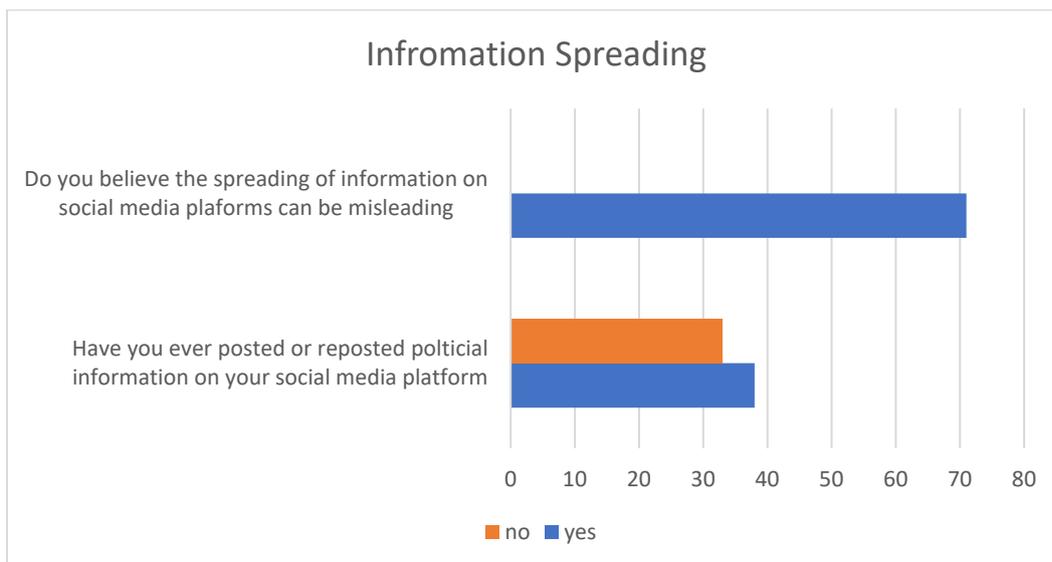
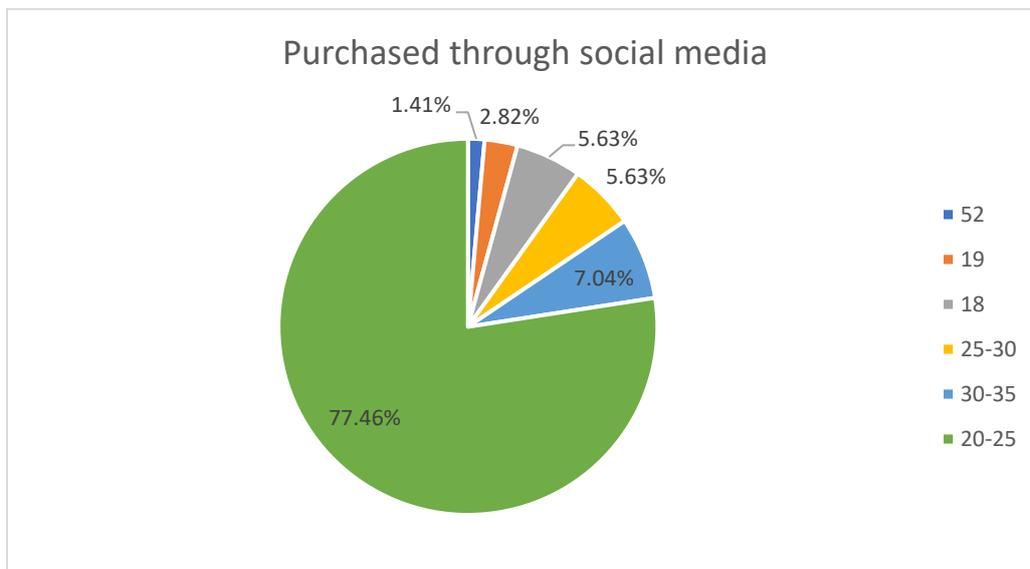


Figure 3 shows a visual representation of survey answers based on the spreading of information online. Much like in the information gathering process participants fully believe and are aware of the consequences of this false information being spread. This similar pattern showcased shows the willingness of participants to spread data online. The sample also has stated twice that they think this information is false and know the consequences. With this knowledge and process participants are still willing to share information online without any form of research into the context and background in which it is being posted or in fact who is posting the information. This process shares very similar characteristics as to those in which allow for polarisation to occur. The development polarisation can be justified with the results from the survey.

## Purchasing through social media

The research conducted identified that the majority of respondents that have purchased items through social media platforms ranged between the ages of 20-25. Figure 4 also identifies the total number of purchases made for each demographic. Other demographics such as 30-35 years of age make up seven percent of the findings. Further research identified similar results in certain age brackets such as 25-30 years of age and 18 years of age both contributing to 5% of the data. A number of questions relating to social media influencers were asked. The goal of these questions was to establish the behaviour and interactions between social media users and influencers. When asked if they believed that they truly know social media influencers 98.6% of participants said that they do not. Participants were also asked if their awareness of a product increased when they saw an influencer either use or promote the product. 47.9% of survey responses said yes. 14.1% of the responses said that they strongly agreed with the statement. 28.2% of the sample population said that they were neutral with the remaining answers being disagree and strongly disagree. 40.8% of participants stated that they have used discount codes provided by influencers through social media platforms. The analysis also showed how reliable social media users believe influencers to be. When asked if they think social media influencers are a reliable way of gaining product information 68.6% of participants said no. Surprisingly, only 25.7% of people agreeing with the statement, and the rest of the responses arguing about the trustworthiness of the influencers that puts them off.

Figure 4. purchased through social media



The survey also focused on spending behaviour throughout social media platforms. When asked if you look for purchasing inspiration through social media platforms 47.1% said that they agreed. 69% of participants also stated that they have purchased through a social media platform. The survey also asked how likely a participant was to purchase a product that was recommended online. 56.3% of participants stated that they would be very likely to purchase a product recommended by a close friend. 40.8% of participants also stated that they would somewhat likely purchase a product if it was recommended by a close friend. Finally, when asked if they were less likely to purchase through social media if a product is more luxurious and expensive over 67.6% of people agreed.

The research conducted identifies the most frequently used social media platforms. The research allows for an in-depth analysis of the platforms used by participants. The analysis showcased the background of the sample population in order to gain a better understanding of individuals and allow for the interpretation of data. The study also identified how this information was gathered by the participants and the process taken by the individuals. These questions consisted of the process individuals undergo to gather information online. Similarly, the research shows how information is spread by participants in order to get a greater understanding of the content used and the views of the participants. Finally, the research conducted focused on psychological factors such as the purchasing history of survey participants. These consumer behaviour patterns showing the survey participant's ability to purchase through social media platforms were then correlated with the identification and development of polarisation.

The analysis and findings show us that social media has firstly become a daily regiment for individuals. Based on the findings most participants feel the need to use social media on a daily basis. The findings also showed that many of these individuals spend multiple hours a day on these platforms exposing themselves to everything that is shared and reposted by their following. The surveys identified the lack of background research undertaken by participants when spreading information online. The results came back as a surprise to us as many of the actions taken by the sample population were in direct actions against their own statements in relation to social media misinformation consequence's and behavioural change. The findings also show consumer behaviour change in relation to close friends and social media influencers. Results showed a rise in potential product purchasing when recommended or shared by a close friend online. Furthermore, potential product purchasing intentions dropped when social media influencers were mentioned in the survey. To conclude the analysis and findings of the research presented it was clear to see the changes in behaviour to individuals caused by the spreading and gathering of information online. The information that was then collected with little or no research had a greater effect on closer friends to that individual. Additionally the spreading of this information and the trust between individuals and followers increasing, points towards the development of polarisation within the findings.

## **Discussion**

### **Summary of key findings**

The result's indicated a strong relationship between the respondents and Instagram. The social media platform outweighed all of the other platforms with over 80% of respondents claiming to be the most active on that platform. These findings suggest that participants may face more options in terms of purchasing's through social media platforms while being on Instagram in comparison to other platforms such as LinkedIn or Twitter. These platforms also see a reduction in the targeting of consumers resulting in purchasing through the platforms becoming less common. With a total mode of the use of 5 social media platforms, users are constantly checking social media platforms every day. The study conducted found that over 90% of participants spend between 2-5 hours a day on social media platforms. With the other 10% logging on to social media daily but spending less than two hours per day online.

The research also suggests and identifies how consumers reach out and gather their information online. It also looks at how that information is spread throughout the participant's social media platforms. Finally, the research looked at the purchasing intent through social media platforms from participants. The study demonstrates a correlation between the use of social media platforms in order to attain information and an overall effect on consumer purchasing decisions. The research suggests that the way in which participants use social media platforms is having an impact on them without them realising.

### **Interpretations**

#### **Information gathering**

The results conducted suggest a similar theme identified by (Grimes, 2020). With grimes identifying the formation of false beliefs with the lack of background research can create communities on social media platforms. He suggested groups that have developed during the Covid-19 pandemic such as anti-maskers and anti-vaccine groups developed from social media platforms. In line with his hypothesis, the results indicated that the information seen online to be false. With participants stating that they feel that false information makes up most of the information that they see online. Additionally, the findings also show that over 90% of participants believed social media platforms to be an effective way of learning new information yet knowing that most of this information may be false participants still find it an effective information source. These results solidify Grimes (2020) hypothesis of developing online communities to create false beliefs. Furthermore, the research might suggest the development of polarisation within these groups of participants furthering. The research also mirrors Spohr (2017) theory that consumption of online media and news can lead to polarization due to a lack of shared base of information. The participants also stated that even though they believed that social media was made up of fake news and that they believe it is an effective way of learning new information over 70% of the participants did not conduct any background research on the pages. This is a significant finding in terms of information gathering and research throughout social media platforms. The results gathered from participants suggest a contradiction within the use of social media, however, the information suggests a development of polarisation as early as the information gathering stage of using social media.

The research continued with a further investigation into the behavioural aspects of social media. The results that were found came back very surprising. The research question asked if the participants believed that social media alters other people's behaviour and also does social media alter your own behaviour? The results showed that over 95.9% of participants believed that social media affects other people's behaviour around them. The surprising aspects however came from the individual question. With 78.1% of participants believing that social media alters their own behaviour. This information was surprising in relation to the main fact that the majority of these participants use social media up to 2-5 hours daily yet believe it's altering their own behaviour. These findings might even suggest that social media platforms are having a bigger effect than realised. The research found has a similar correlation in what (Akram and Kumar, 2017) identified. Akram and Kumar (2017) identified the potential impacts on students within social media platforms. Their results showed that social media can have multiple effects on students such as the reduction in real human contact, loss of motivation in students, time wastage, and reduced learning and research capabilities. The information gathered suggests an overall change in participant's behaviour. This information is known to the participants but almost ignored and even accepted by the social media users. Even with a belief that social media alters their own behaviour and that the information that they receive from these platforms is to be believed false, users still maintain a daily interaction with these platforms.

The data collected in the initial survey suggest a number of correlations amongst the participants when gathering information online. The information gathered suggested that participants did not conduct background research on social media pages. This suggests that the participants acknowledged that these pages may contain false information and are still willing to consume the information. One could argue that social media users believe that all news could be true. Taking this into account and comparing the statement to the data suggest otherwise in that argument. As stated from the survey, over 70% of participants believed that false information makes up most of the news shared on social media. With this information, a correlation between the development of false information and social media can be found with the unwillingness to develop information further and the continuous use of social media amongst participants. The analysis gives further insight into the psychology of the participants and social media users. Similar findings have been acknowledged in other academia to suggest these correlations. Ghulam Shabir , Yousef Mahmood Yousef Hameed , Ghulam Safdar , Syed Muhammad Farouq Shah Gilani conducted an investigation into the impact of social media on youth. Their case study focused on the Bahawalpur city. In their research, they asked participants "if they believed that social media is beneficial for youth in the field of education?". Their research found that over 43.45% of participants agreed with the statement and a further 36.65% of participants strongly agreed. While 12.8% of respondents were uncertain about the statement. 3.4% disagreed and 1.7% was strongly disagreed with the statement. (Shabir et al., 2014). When cross referencing the data collected with the research conducted by Ghulam Shabir , Yousef Mahmood Yousef Hameed , Ghulam Safdar and Syed Muhammad Farouq Shah Gilani it can be concluded that a correlation between social media and information gathering is present. With further research into the psychology of participants in the study, the correlation is made even more prominent.

## Information spreading

The experiment continued to focus on all aspects of the information that is processed by participants. The investigation also focused on the spreading of information online. As established there is a correlation between information seeking and a high social media presence within participants. The research moved on to interpret how this information is used and managed by social media users. When asked about the effects of information spreading through social media platforms 100% of participants agreed that the spreading of information on social media platforms can be misleading. What followed up further was surprising as over 53.5% of participants stated that they have reposted or posted political information to their social media platforms, however, being completely aware and agreeing that this information may be misleading. Participants showed the ability to repost sensitive information such as political beliefs knowing the implication that it could lead to as stated from the hypothesis. It is from this information that we can gain better knowledge of the psychology of the social media user.

Similar to research conducted by Shalini Talwar who focused on ‘why do people share fake news’, Shalini hypothesis aspects that drive people to spread information through social media. Talwar identifies three aspects of the social media user’s psychology that has a factor in the spreading of false information. These included online social comparison, fear of missing out and social media fatigue. “Social comparison theory argues that individuals possess an intrinsic desire to gauge themselves through social comparisons and they also tend to make comparisons with others who seem similar”. (Talwar et al., 2019). Online social media platforms have allowed for the drive of social comparison. Talwar et al., (2019), also suggest that societal and social acceptance drives social comparison. This could lead to the development of false information spreading as the seek for social acceptance online could lead an individual to share false information to fit in. Such information could be political and lack research as stated from the survey results.

Another aspect identified within (Talwar et al., 2019) study is the “fear of missing out” (FOMO) for individuals. The individuals using of social media can be driven by their need to be relative. Talwar’s study summarises that the “increased use of social media, heightened vulnerability and recklessness due to FOMO can be expected to cause users to share fake news. Furthermore, decreased self-regulation is less likely to motivate them to make any effort to authenticate news before sharing. Consequently, it is likely that users with high FOMO may not authenticate information before sharing and share fake news”. (Talwar et al., 2019). The investigation also supports Talwar’s hypothesis as the lack of background research and the sharing of information to trusted close friends may suggest a correlation between the fear of missing out and social comparison to the development of fake news and therefore spreading of false information. Further investigation revealed that 100% of the participants agreed that social media misinformation can have negative impacts or consequences. Similar to the information gathering process the results came back not as expected. With all of the participants agreeing that misinformation can have negative impacts, the research suggests that this did not stop the spreading of information online. Furthermore, a total of 72.6% of participants stated that they have witnessed the consequences of misinformation on social media platforms. With this information, the participants show a relationship with social media posting whether it is authentic or false information. This drive to post knowing the consequences and even experiencing it themselves can be caused by Talwar’s hypothesis of social comparison or fear of missing out.

## **Purchasing through social media**

In relation to the research objective, it was imperative to gain a better understanding as to the purchasing behaviour of the participants of the survey. The structure used wanted to form a connection between the information gathered on social media and how that information can affect purchasing behaviour. When asked what influences your purchasing decision 62.5% of participants stated that word of mouth to be the most influential. Social media came second with 29.2% of participants agreeing that it is most influential. With commercials being the final factor. Participants also stated that they were more likely to purchase products that have been recommended by close friends additionally 78.1% of participants stated that they were somewhat likely to purchase products that have been recommended online. This led the research to focus on the individuals associated with product information and the spreading of this information on social media platforms.

What was unpredicted in the research was the relationship influencers had with the participants due to the wide spread adoption of influencer marketing in recent times. Influencers supposedly having a positive impact on product awareness and a large following should be ideal for companies looking to gain followers and drive sales through social media platforms. However, when asked if they have ever used discount codes to purchase through online social media platforms 56.2% of participants agreed but when asked if they have ever used influencer discount codes to purchase through social media platforms this number dropped to 39.7%. The feedback demonstrated a lack of trust or interest developed by the participants with influencers and this only continued with 58.3% of participants stating that they would not be inclined to click on links provided through influencers. Based on this research conducted it is clear to see a correlation between participant's interests and potential purchasing decisions and social media influencers. The relationship in the investigation is deemed negative. This pattern further continues when asked if participants think that influencers are a reliable way of gaining product information and information in general with over 70% of participants stating that they are not.

## **Themes identified within the study**

Throughout the study and from cross referencing the data collected common themes can be identified. The first theme identified within the study was the constant ignorance when it came to gathering information online. The research showed a lack of follow up from participants when gathering information online. Although the majority of participants stated that they believe false information makes up the majority of content shared online the statement did not change their information gathering process. In fact, the awareness was almost ignored as participants still believed that social media was an effective way of learning new information. This theme can also be identified further within the information spreading process. Participants again are willing to share sensitive information knowing that this spreading of false information may be harmful. With a majority of participants having experienced or witnessed these consequences the results became increasingly shocking. With the majority of survey responses agreeing that social media affects or alters the behaviour of people around them and affects the behaviour of themselves information is still spread.

Another theme identified within the research was the theme of trust. As seen in the information gathering and spreading of information survey participants acknowledged the fact that false information is ever present in social media. However, due to this fact, results showed that participants still reposted and were willing to even post sensitive information online. Therefore, placing massive trust on possibly unreliable sources via social media. This theme can also be found within participant's purchasing behaviour online. From the research collected over half of the participants stated that they were very likely to purchase a product recommended by a close friend and 42.5 percent of survey participants stated that they would be somewhat likely. When asked about social media influencers the survey showed that trust was a major factor in social media influencer's success. Information gathered showed a decrease in product interest when influencers are mentioned. The results show that participants were willing to purchase through social media but this interest drops when influencers become involved in the process. When asked are social media influencers a good way of sourcing new information for a product over 69% of survey answers came back as no. This result was unexpected as many of the survey participants stated that social media was a good way of sourcing information. This theme of trust is made more evident by the use of social media influencers, many survey answers stated that they truly did not know who influencers really are as a person. This mindset from participants creates a distrust and lack of authenticity towards social media influencers. The answers collected show a contradiction within participants. Individuals are willing to source and repost information that is perceived by them as potentially false or misleading to their followers however when asked about their purchasing behaviours this trust theme becomes more present.

## **Impact of research identified to the field of marketing**

The aim of the research was to identify how polarisation can have an effect on consumer psychology by focusing on key trends and themes within the population. The research conducted shows elements of polarisation within the population sample that have been backed by academic research. Furthermore, the identification of key themes gives a deeper understanding of how this information can be processed.

The data collected can be applied to the field in order to maintain social media presence and to target specific markets. Firstly, the data collected shows that individuals on social media are willing to process information seen on social media platforms to their page. Companies with aesthetically pleasing content may have a better chance of their content being reposted or reshared as very little background research was conducted. With very little research conducted images and slogans may appeal to social media users. The research suggests social media users to be visual learners. Backed up by their belief of social media being an effective way of learning new information and the majority of content online being visual this suggests a visual learning aspect in the sample population.

Marketers can use this data to understand the behavioural and ethical side of social media users. With participants willing to spread information and gather information online without background research knowing the consequences shows that very little of the sample population cared about the impacts of this process. Additionally, the research suggests that survey participants willingly ignored the morally right option and reposted information. This information gathered states that social media users are willing to gather repost and share information online without background research. This supports Wangs' claims to the key characteristics of polarisation. The increased polarisation within online communities would increase brand awareness and social media activity for companies.

The research also focused on the psychological side of purchasing through social media platforms. The data collected would be useful for marketers as the identification of trust as a key theme can gain insight for potential marketing strategies in the future. The research conducted also showed a lack of trust with social media influencers in terms of product information and awareness. The data stated a lack of authenticity within the majority of social media influencers. With a large portion of the sample population using social media as a form of product research and inspiration, this information came as a surprise. The majority of survey participants stated that the recommendation of products from close friends had a greater impact on them rather than social media influencers further supporting the key theme of trust within the study. The data also shows a change in psychological behaviour in participants when using social media platforms. Research shows that the majority of survey responses are aware of the effects of misinformation, however, the research can also suggest that participants may be using and spreading false information subconsciously. This is backed up by the research as many of the survey responses point out contradictions within participants rather than simply ignoring the implications of their actions.

The theory of spreading information subconsciously can be linked with Talwar's theory of social compliance. These actions can lead to social approval and to present to impress their social network. Social compliance could have become more subconscious from years of social media and activity. This could also be accelerated by trends especially in the age of influencers and with content becoming increasingly personal every day. Additionally, the constant daily use of social media platforms could explain the way in which this activity has become so normal in society. As Talwar states "However, the need for enhancing oneself

could blur the lines between reality and fiction” (Talwar et al., 2019). The research conducted adds to Talwar’s research by investigating the way in which these actions impact specific behaviours such as purchasing behaviour online. Additionally, the research also focuses on the development of polarisation from these online communities and how its impact affects the purchasing behaviour of social media users.

### **Limitations**

This study has some key limitations. One limitation is the presence of polarisation before the survey. One aspect of the results that cannot be seen is the presence of polarisation within participants before the survey. This limitation means that the presence of a polarised sample population who are already exposed and have faced it before may hinder the results. Results could come back biased from an already existing set of ideas that can be influenced by polarisation. Many participants would have little knowledge of the effects as evident from the results but a pre-existing exposure could cause results to be biased.

Results also cannot show the content reshared by individuals. The experiment focused on the intentions and behaviour of the participants, however, did not show in great detail what type of content was reposted. This limitation can be discovered further by other researchers in order to find common content that is shared online to help target the spreading of polarisation. The development of common content throughout social media users could give future researchers more insight into the common characteristics of the individuals who are more likely to spread this information. From there, future results could help marketers to target individuals in the hope of their content being shared and also give more insight into how users will progress within this information to hopefully purchase through social media. Although the limitations listed may hold research back the experiments conducted within the survey proved to answer the research question.

### **Conclusion**

This research aimed to identify the relationship between information spreading caused by polarisation and its effect on consumer purchasing behaviour through social media platforms. Based on quantitative analysis it can be concluded that polarisation and many key themes found within the study are important factors on consumer psychology and purchasing behaviour online. The results indicate the change in behaviour caused by social media platforms on an individual basis and a societal basis. Furthermore, the results indicate the implications of these behaviours and suggest that the changes in these individual’s behaviours affect and influence their likelihood to purchase through social media platforms. Based on the data collected from the surveys, it is clear to say that a change in personal behaviour occurred during many processes, such changes included a change of social media behaviours in relation to the spreading of information online and the authenticity that the information had. The results show that many of the sample population portrayed characteristics that have led to the development of polarisation. Additionally, these individuals willingly shared and reposted information online to various social media platforms. It is this willingness to share information that may be false and lack very little background research that can lead to the rise in polarisation within these online communities.

## **Reflections of research**

This research clearly illustrates the relationship between the information gathering process and the information spreading process and how ultimately it affects consumer purchasing behaviour online. While the information gathered answers the research question it also raised further questions relating to social media usage such as trust between friends and influencers online, what participants believed to be reliable and unreliable sources. The methodology approach allowed for further research into key factors that may have not been considered when conducting the qualitative approach. Furthermore, the methodology also opens up opportunities for further research with the identification of multiple factors. The research conducted opened up unexpected insights within the process. With many participants being aware of the effects of social media not only on others and themselves the research showed the effect it has on people. The use of social media becoming a daily occurrence for individuals regarding the negatives associated with the platforms. This allowed the research to open up further insights, not just into consumer purchasing behaviour but consumer and social media psychology. These psychological factors identified showed an almost acceptance of the environment that social media platforms have become. The identification of psychological factors opens up further investigations into how people interpret and use social media on a daily occurrence. These factors also allowed for another perspective when interpreting the data collected.

## **Recommendations**

To better understand the implications of these results future studies could address in more detail the psychological factors that can be caused by polarisation. By further investigating these factors researchers can piece together a better understanding of consumer behaviour. Practitioners should also consider the themes identified within the study and further investigate the relationship between these factors in order to have a better understanding of the research conducted. Additionally, further studies conducted may use a larger sample size when conducting further research. A larger sample size would give a better understanding into these relationships and provide greater data to find more correlations within the study. Further research into polarisation, for example, specific content to help gain a better understanding of the effects that polarisation can have on consumers and also give more insight into the personality of these users. This research could help to gain an understanding of what influences people to share false information and to get an understanding of the psychological factors that affect them. Further research into these effects could also give a better understanding of the subconscious actions of social media users. As witnessed from the results participants were aware of the consequences of their actions however, still spread the information online. Research into these psychological factors could uncover the factors that affect a person's actions online.

The research conducted attempted to understand the effects that polarization and persuasive technologies have on consumer psychology and purchasing behavior. The research conducted helped to solve this problem by firstly finding correlations between the development of polarization and consumer purchasing habits. By focusing on consumer psychology and aspects that arose during the methodological approach correlations and themes were found to help justify the problem statement. Furthermore, a focus on the information gathering and spreading process helped identify the development of polarization within social media. By focusing back on the literature review the investigation helped to identify a gap in the knowledge. It would also be beneficial for further research to be conducted on the prevention

of misinformation and the possible measures that should be put in place by social media giants and governments alike. The study conducted helped to show the effects that polarization can have on consumer purchasing behavior and placed an emphasis on the need for further studies under this topic.

### **Reference list**

Akram, W. and Kumar, R. (2017). A Study on Positive and Negative Effects of Social Media on Society. *International Journal of Computer Sciences and Engineering*, [online] 5(10), pp.351–354. Available at:

[https://www.researchgate.net/profile/Waseem\\_Akram27/publication/323903323\\_A\\_Study\\_on\\_Positive\\_and\\_Negative\\_Effects\\_of\\_Social\\_Media\\_on\\_Society/links/5ab1c064a6fdcc1bc0bfefef/A-Study-on-Positive-and-Negative-Effects-of-Social-Media-on-Society.pdf](https://www.researchgate.net/profile/Waseem_Akram27/publication/323903323_A_Study_on_Positive_and_Negative_Effects_of_Social_Media_on_Society/links/5ab1c064a6fdcc1bc0bfefef/A-Study-on-Positive-and-Negative-Effects-of-Social-Media-on-Society.pdf).

Bashir, H. and Ahmad Bhat, S. (2017). Effects of Social Media on Mental Health: a Review. *The International Journal of Indian Psychology*, 4(3).

Berdichevsky, D. and Neuenschwander, E. (1999). Toward an ethics of persuasive technology. *Communications of the ACM*, 42(5), pp.51–58.

Berryman, C., Ferguson, C.J. and Negy, C. (2017). Social Media Use and Mental Health among Young Adults. *Psychiatric Quarterly*, [online] 89(2), pp.307–314. Available at: <https://link.springer.com/article/10.1007/s11126-017-9535-6>.

Bode, L. and Vraga, E.K. (2017). See Something, Say Something: Correction of Global Health Misinformation on Social Media. *Health Communication*, 33(9), pp.1131–1140.

Bullas, J. (2014). *Jeffbullas's Blog | Internet Marketing*. [online] Jeffbullas's Blog. Available at: <https://www.jeffbullas.com/> [Accessed 16 Aug. 2021].

De Kort, Y., IJsselsteijn, W., Midden, C. and Eggen, B. (2007). Persuasive Technology.

- Fogg, B. (1997) 'Captology: The Study of Computers as Persuasive Technologies', p. 1
- Fogg, B. (1998). Persuasive Computers: Perspectives and Research Directions. *Persuasive Computers: Perspectives and Research Directions*.
- Fogg, B.J. (2002). Persuasive technology. *Ubiquity*, 2002(December), p.2.
- Fogg, B.J. (2011). *Persuasive technology : using computers to change what we think and do*. Amsterdam: Morgan Kaufmann.
- Frederik J. Zuiderveen Borgesius, Trilling, D., Möller, J., Balázs Bodó, Claes H. de Vreese and Natali Helberger (2016). *Should we worry about filter bubbles?* [online] Internet Policy Review. Available at: <https://policyreview.info/articles/analysis/should-we-worry-about-filter-bubbles>.
- Freelon, D. and Wells, C. (2020) 'Disinformation as Political Communication', *Political Communication*, 37(2), pp. 145–156. doi: 10.1080/10584609.2020.1723755.
- Grimes, D.R. (2020). Health disinformation & social media. *EMBO reports*, 21(11).
- Gunnarsson Lorentzen, D. (2014). Polarisation in political Twitter conversations. *Aslib Journal of Information Management*, 66(3), pp.329–341.
- Hameleers, M. and Minihold, S. (2020) 'Constructing Discourses on (Un)truthfulness: Attributions of Reality, Misinformation, and Disinformation by Politicians in a Comparative Social Media Setting', *Communication Research*
- Hughes, D.J., Rowe, M., Batey, M. and Lee, A. (2012). A tale of two sites: Twitter vs. Facebook and the personality predictors of social media usage. *Computers in Human Behavior*, [online] 28(2), pp.561–569. Available at: <https://www.sciencedirect.com/science/article/pii/S0747563211002457>.
- Kaptein, M. *et al.* (2009) 'Can You Be Persuaded? Individual Differences in Susceptibility to Persuasion', in Gross, T. *et al.* (eds) *Human-Computer Interaction – INTERACT 2009*. Berlin, Heidelberg: Springer (Lecture Notes in Computer Science), pp. 115–118

- Kelly, J., Fisher, D. and Smith, M. (2005). Debate, Division, and Diversity: Political Discourse Networks in USENET Newsgroups. *Debate, Division, and Diversity: Political Discourse Networks in USENET Newsgroups*.
- Levy, G. and Razin, R. (2020). Social Media and Political Polarisation. *LSE Public Policy Review*, 1(1)
- Orji, R. and Moffatt, K. (2016). Persuasive technology for health and wellness: State-of-the-art and emerging trends. *Health Informatics Journal*, 24(1), pp.66–91.
- Pariser, E. (2012). *The filter bubble : what the Internet is hiding from you*. London: Viking.
- Perrin, Andrew. (2015). “Social Media Usage: 2005-2015.” Pew Research Center: Internet, Science & Tech, Pew Research Center: Internet, Science & Tech, [www.pewresearch.org/internet/2015/10/08/social-networking-usage-2005-2015/](http://www.pewresearch.org/internet/2015/10/08/social-networking-usage-2005-2015/).
- Ruijten, P. A. M. and Zhao, T. (2017) ‘Computers and People Alike’, in de Vries, P. W. et al. (eds) *Persuasive Technology: Development and Implementation of Personalized Technologies to Change Attitudes and Behaviors*. Cham: Springer International Publishing pp. 135–147.
- Sears, A. and Jacko, J. (2009). *Human-Computer Interaction Fundamentals*. Crc Press.
- Shabir, G., Yousef Hameed, Y.M., Safdar, G. and Shah Gilani, S.M.F. (2014). The Impact of Social Media on Youth: a Case Study of Bahawalpur City. *The Impact of Social Media on Youth: a Case Study of Bahawalpur City*, 3(4).
- Skinner, B. F. (1938). *Beyond freedom and dignity*. New York: Knopf.
- Spohr, D. (2017). Fake news and ideological polarization. *Business Information Review*, 34(3), pp.150–160.
- Staddon, J. E. R. and Cerutti, D. T. (2003) ‘Operant conditioning’, *Annual Review of Psychology*, 54, pp. 115–44. doi: <http://dx.doi.org.dcu.idm.oclc.org/10.1146/annurev.psych.54.101601.145124>
- Stephen, A.T. (2016). The role of digital and social media marketing in consumer behavior. *Current Opinion in Psychology*, 10, pp.17–21.
- Stones, S. (2020). *Selected topics in child and adolescent mental health*. London: Intechopen.

Talwar, S., Dhir, A., Kaur, P., Zafar, N. and Alrasheedy, M. (2019). Why do people share fake news? Associations between the dark side of social media use and fake news sharing behavior. *Journal of Retailing and Consumer Services*, 51, pp.72–82.

Tandoc Jr, E. C., Lim, Z. W. and Ling, R. (2017) Defining “Fake News”: A typology of scholarly definitions: *Digital Journalism*: Vol 6, No 2. Available at: <https://www.tandfonline.com/doi/abs/10.1080/21670811.2017.1360143?journalCode=rdij20>

Thorson, E. (2016) ‘Belief Echoes: The Persistent Effects of Corrected Misinformation’, *Political Communication*, 33(3), pp. 460–480. doi: 10.1080/10584609.2015.1102187.

Van der Linden, S., Dixon, G., Clarke, C. and Cook, J. (2021). Inoculating against COVID-19 vaccine misinformation. *EClinicalMedicine*, 33, p.100772.

Wang, Y., McKee, M., Torbica, A. and Stuckler, D. (2019). Systematic Literature Review on the Spread of Health-related Misinformation on Social Media. *Social Science & Medicine*, 240, p.112552.

Wright, K. (2019) ‘A History of Persuasion: Part 1’. (Podcast:The Stakes).

## Appendices

### Appendix 1. Social Media Behaviour Survey

#### Social media behaviour survey

1. Name

---

2. Age

*Mark only one.*

20-25

25-30

30-35

Other:

---

3. Gender

*Mark only one*

male

female

Other:

---

4. Level of education

*Mark only one.*

level 5

level 6

level 7

level 8

Other:

---

5. Employment status

*Mark only one.*

Currently employed

Currently unemployed

Other:

---

6. Field of work

*Mark only one oval.*

- Retail
  - Hospitality
  - IT activities
  - Other:
- 

7. Approximately how many years have you been on social media platforms?

*Mark only one.*

- 0-1 years
- 1-5 years
- 5-10 years
- 10 years or more

8. How many social media platforms are you on?

*Mark only one.*

- 1
  - 2
  - 3
  - 4
  - 5
  - Other:
-

9. How often do you use social media?

*Mark only one.*

everyday

weekly

monthly

Other:

---

10. How many hours a day do you spend on social media platforms?

*Mark only one.*

1 hour

2-3 hours

3-5 hours

Other:

---

11. Which social media platforms are you most active on?

*Check all that apply.*

Facebook

instagram

snapchat

twitter

Other:  \_\_\_\_\_

12. Do you trust the opinion of the people you follow on social media?

*Mark only one.*

Yes

No

Other:

---

13. Is social media an effective way of learning new information?

*Mark only one oval.*

Agree

Disagree

Other:

---

14. Do you believe news that is shared via social media?

*Mark only one.*

Agree

Disagree

Other:

---

15. Do you believe that social media effects or alters your behaviour?

*Mark only one.*

Agree

Disagree

Other:

---

16. Do you believe that social media affects the behaviour of others around you?

*Mark only one.*

Yes

No

Other:

---

17. Have you ever posted or reposted political information on your social media platforms?

*Mark only one.*

Yes

No

Other:

---

18. Do you believe that the spreading of information on social media platforms can be misleading?

*Mark only one.*

Yes

No

Other:

---

19. Do you believe that false information makes up most of the news shared on social media?

*Mark only one.*

Yes

No

Other:

---

20. Do you believe that misinformation on social media can have negative impacts or consequences?

*Mark only one.*

Yes

No

Other:

---

21. Have you ever witnessed or experienced the consequences of false information on social media platforms?

*Mark only one.*

Yes

No

Other:

---

22. Do you think the spreading of misinformation on social media platforms can affect a person's behaviours?

*Mark only one.*

Yes

No

Other:

---

23. Have you personally ever reposted information online that may have not been reputable or lacked research?

*Mark only one.*

- Yes
- No
- Other: \_\_\_\_\_

24. Have you reposted or shared information about the current Covid 19 pandemic on social media platforms?

*Mark only one.*

- Yes
- No
- Other: \_\_\_\_\_

25. Have you ever shared information about Covid 19 vaccines or the use of masks on social media platforms *Mark only one.*

- Yes
- No
- Other: \_\_\_\_\_

26. Did you conduct any background research on social media pages that you reposted information from?

*Mark only one.*

- Yes
- No
- Other: \_\_\_\_\_

27. Do you think that social media news and information is a reputable place for information?

*Mark only one.*

Yes

No

Other:

---

28. Which of the following influences your purchasing decision the most?

*Mark only one.*

Word of mouth

Social Media

Commercials

Other:

---

29. Do you believe that you truly know social media influencers?

*Mark only one.*

Yes

No

Other:

---

30. How many social media influencers do you follow?

---

31. When you see a product promoted or used by an influencer your awareness of the product increases *Mark only one*

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

32. Do you look for purchasing inspiration through social platforms?

*Mark only one.*

- Yes
- No
- Other:

---

33. Have you ever purchased a product via social media?

*Mark only one.*

- Yes
- No
- Other:

---

34. How likely are you to purchase products that have been recommended online?

*Mark only one.*

- Very likely
- Somewhat likely
- Very unlikely
- Quite unlikely

35. How likely are you to purchase products that were recommended by close friends?

*Mark only one.*

- Very likely
- Somewhat likely
- Very unlikely
- Quite unlikely

36. How much have you spent on purchasing an item through social media?

*Mark only one.*

- 10-50 euros
- 50-100 euros
- 100-200 euros
- 200 euros plus
- Other:

---

37. Are you less likely to purchase through social media if the product is more luxurious and expensive?

*Mark only one.*

Yes

No

Other:

---

38. Have you ever used discount codes to purchase items through social media platforms?

*Mark only one.*

Yes

No

Other:

---

39. Have you ever used discount codes provided by influencers to purchase through social media platforms?

*Mark only one.*

Yes

No

Other:

- 
40. Do you feel more inclined to purchase items through social media platforms if a discount code is provided?

*Mark only one.*

- Yes
- No
- Other:
- 

41. Are you more likely to click on links provided by social media influencers?

*Mark only one.*

- Yes
- No
- Other:
- 

42. Have you ever purchased a product through an Instagram story?

*Mark only one.*

- Yes
- No
- Other:
- 

43. Do you think social media influencers are a reliable way of gaining product information?

*Mark only one.*

Yes

No

Other:

---

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