Motivated Ignorance and Social Identity Threat: The Case of the Flat Earth

Abstract

Belief in a conspiracy theory may, for some, provide a social identity. Because of the nature of many conspiracy theories, social identities associated with such beliefs may be subject to varied and considerable threats. Whilst various mechanisms for dealing with social identity threat have received widespread attention, this paper introduces an as yet unexplored strategy - that of "motivated ignorance" - as a further mechanism for social identity maintenance. This is a behavior where individuals actively avoid freely available and accessible information in order to protect a social identity from information that may be harmful to the existence of the broader social group, and thus the individual's own sense of self.

Using a netnographic approach, we explored motivated ignorance related to the social identities formed around beliefs in the Flat Earth. Data revealed two categories of motivated ignorance. Firstly, that of "poisoning the well", where ignorance was justified by derogating the perceived epistemic quality of the information. The second was more instrumental, through ad hominem attacks on the source rather than the epistemic quality of information. The study suggests that motivated ignorance may be used as a strategy that may be used to protect social identities that are under threat, adding a further mechanism to the literature on coping with social identity threat.

Keywords

Motivated ignorance, social identity, identity threat, Flat Earth, netnography

Word Count 7915 words

Introduction

The Social Identity Approach suggests that people's sense of who they are comes not only from how they self-categorise in terms of their personal characteristics (such as being "tall", or "intelligent"), but also from their membership of social groups, where identification allows a collective feeling of "we" rather than "I" as members of an in-group, contrasted to real, expected or imagined out-groups (Campo, et al., 2019). This may provide outcomes such as belongingness and positive evaluations of one's in-group, qualities that are important to allow individuals to make sense of the social world that they inhabit and assist people in creating and maintaining a positive self-image (Douglas, et al., 2019). Such membership may result in other positive outcomes such as improved mental health (Haslam, et al., 2016), self-esteem (Jetten, et al., 2015), social support (Häusser, et al., 2020) and social recognition (Kazimierczak, et al., 2019).

Conspiracy theories, such as those related to the Flat Earth, are prominent in the world (Brashier, 2022), with potentially serious consequences for society (Douglas & Sutton, 2022). People believe in them for a number of reasons, whether psychological, epistemic, existential or social (Douglas, et al., 2019), and belief may allow a social identity as a follower to be formed (Robertson, et al 2022; van Prooijen, 2022). For those who identify with the Flat Earth concept, for example, involvement is not "so much a belief that someone would accept or reject on the basis of experimental evidence, but instead an identity. It could give you purpose to your life, it created instant community" (McIntyre, 2021, p.16). Social identities related to conspiracy theories can, however, be subject to social stigma, with believers often seen as gullible, paranoid, or even suffering from mental health issues (Lantian, 2018), with Flat Earthers routinely persecuted for their views (McIntyre, 2021). This stigma may threaten the positive distinctiveness of the group and make group membership less appealing.

Whilst mechanisms for dealing with such threats to a social identity have received considerable attention in various contexts, these tend to examine how individuals cope with, rather than avoid the threat. This study examines a further strategy, that of motivated ignorance, a strategy which focuses upon threat avoidance, and which has yet to be examined in the context of protecting a social identity, in this case as a Flat Earther.

Coping with Social Identity Threat

Individuals generally strive for a positive social identity, that is a sense of belonging to groups that they see as "positively distinctive" (Scheepers & Derks, 2016, p.74) from outgroups, for example being an athlete in a successful team. Often, however, an individual's social identity will be challenged through negative intergroup status comparisons that result in what is termed an identity threat. An identity threat is an "experience appraised as indicating potential harm to the value, meanings, or enactment of an identity" (Petriglieri, 2011, p. 641). These threats are more likely to be relevant for those identities that are most central to the individual's sense of self. Thus, a sports team that consistently loses will result in identity threat for highly identified fans (Doyle, et al., 2017), or when females perform a physical activity stereotyped as masculine they may experience identity threat (Chalabaev, et al., 2022), whereas a less identified fan, or casual gym participant are unlikely to do so. The nature of conspiracy theories, however, with their members often portrayed in negative ways, and with their beliefs derided within the broader media lead to such social identities being subject to constant, and significant threat.

There are a number of strategies to deal with this identity threat. These strategies may be related to changing the dimensions of group belonging itself, referred to as social creativity strategies (Van Bezouw, et al., 2020). An example of this would be the sport fan who may

deal with the identity threat created through their team losing by focusing on a positive dimension of team identification, such as style of play. Other strategies may involve social mobility, such as changing allegiance to another group that had a greater sense of positive distinctiveness (Brown, 2019), for example the fan who changes their allegiance to a winning team. Alternatively, the Identity Based Model of Belief suggests that group members may use biased cognitive strategies to interpret the information itself that threatens their identity in ways that protect the broader group, especially if the information is a significant threat to the existence of the group (Van Bavel & Pereira, 2018). A further strategy is that of motivated reasoning, whereby people actively seek out information that reinforces their existing attitudes and assess such information more positively than information that contradicts their beliefs (Douglas, et al, 2019; Flynn, et al., 2017; Wright, 2022), which although used widely as an explanation, has limitations in terms of the study of misinformation (Van Bavel, et al., 2021).

These strategies examine how group members respond to experienced identity threat. What has yet to be systematically explored, however, is how group members avoid information that may result in such threats. This paper explores an additional, and as yet unexplored strategy, that of motivated ignorance. This is "a form of ignorance that is driven not by the costs of acquiring knowledge but by an active aversion to possessing it" (Williams, 2021a, p. 7809). This study explores the use of motivated ignorance as a strategy to protect social identities related to beliefs in the Flat Earth, and to examine how it can be used to maintain a positive sense of group belonging in an activity subject to numerous and varied "threats".

Motivated Ignorance

Some years ago, Smithson (1985) highlighted that the concept of ignorance was a neglected topic in the study of social life, and there has been relatively little development since (Hertwig & Engel, 2016). Whilst we can define ignorance in quite straightforward terms as the absence of knowledge (Stocking, 1998), this is problematic (Smithson, 1985). The concept is actually more nuanced than it might initially seem, with a number of different forms (Arfini & Magnani, 2021), fulfilling different functions (Smithson, 1985). Emerging from Festinger's (1957) concept of cognitive dissonance, and closely related to the idea of selective or defensive avoidance (Garrett, et al., 2013), motivated ignorance is a form of ignorance that is *actively* cultivated by individuals to avoid unwanted, but easily and freely available knowledge (Woomer, 2015), and is different to ignorance that occurs either through simply not being aware of the information, because the costs of acquiring the information are too high, or because we lack the time, resources, or intellectual capital to access such information. Thus, it is ignorance that "is motivated by the costs of *being* informed, not *becoming* informed" (Williams 2021a, p. 1). Thus it is deliberate, rather than accidental ignorance.

Not all behavior that could be defined as motivated ignorance is undertaken to protect a social identity. Williams (2021a) identifies a "crucial distinction" (p.7811) between personally motivated ignorance and socially motivated ignorance. Personally motivated ignorance is where an individual is motivated to avoid knowledge that may impact upon them personally, rather than the impact upon others, for example the individual who avoids the results of a health test, fearing bad news, or the student who avoids looking at their feedback in case of negative comments. This form of motivated ignorance may be used to protect personal rather than social identities, and hence it is the concept of *socially motivated ignorance* that has a role in social identity maintenance. Socially motivated ignorance

involves an appraisal of the potentially negative effect of knowledge on the group as a whole, for example where the beliefs, norms or values of that group may be threatened. As Williams (2021b, p.2) notes,

in many communities, beliefs come to function as signals of in-group identity and solidarity. To abandon such beliefs in the light of new evidence is not merely to change one's mind but to lose one's position within a valued community. Such incentives push us towards socially adaptive beliefs wrapped up with our identity and pride. When – as is often the case – such beliefs are unfounded, knowledge constitutes an active threat to this social adaptation.

Williams (2021a) identifies how socially motivated ignorance is driven by the concept of identity-protective recognition (Kahan, 2016), allowing such ignorance to act as a mechanism for coping with social identity threat. As a consequence, "identity protective cognition drives individuals who inhabit ideological communities ...to avoid acquiring any knowledge that might lead to exclusion or ostracism" (Williams, 2021a, p.7821), either through methods as simple as physically avoiding the information, to strategies involving questioning the epistemic authority of those providing the information, that is their perceived knowledge, expertise and trustworthiness (Kruglanski, et al., 2009).

For motivated ignorance to occur, firstly the individual has to be aware that the information exists in the first place, and secondly that they have free access to that information (Golman, et al., 2017). This is not just physical access, but also is dependent upon the intellectual capital of the individual. For example, scientific information may be freely available in an open access journal (an example of this would peer reviewed studies supporting the idea of

climate change). Theoretically, all that is needed is an internet connection to retrieve that information. Some, however, will lack the intellectual capital to access, understand and interpret what is provided (Field & Powell, 2001), and some will simply feel the information is not relevant. For those, the ignorance is not motivated ignorance. For those who are, however, able to access the information, both practically and conceptually, there is no need for them to be aware of its precise nature to motivate them to be ignorant. It is the *possibility* that such information may have a negative impact upon the group (and hence the individual's own) status that is important (rather than the actual content). So, for example, a music fan may avoid reading a review of their favourite band's latest work just in case it might not be entirely positive, even though they may have no actual evidence for that being the case.

It is clear that motivated ignorance has, at least, the potential to act as a mechanism by which social identities may be protected. However, given the lack of any investigation to date into this behavior, it seems appropriate to firstly examine its existence as an identity-protective strategy. Given the lack of existing work into the area, this study focuses on an "extreme case" to maximise the observability of the phenomenon (Elsbach & Cable, 2019), this being the Flat Earth Movement, and more specifically the online activities of those supporting the movement.

The Flat Earth Movement

Emerging from a combination of biblical literalism and conspiracy theorising but gaining traction as a contemporary movement through social media, especially through YouTube (Olshansky, et al., 2020) the Flat Earth phenomenon is a complex outcome of multiple influences, such as climate change denial, trolling and Russian propaganda (Paolillo, 2018) leading to a significant online presence, gaining huge popularity in recent years (Erlaine,

2020). Although most conspiracy theories seem to share similar broad characteristics¹, (such as being counter normative), it is the beliefs related to a specific conspiracy theory – in this case the belief that the Earth is a flat disk, surrounded by a wall of ice - that allow individuals to develop positive beliefs about the in-group and consequently negative beliefs about outgroup members (Sternisko, et al., 2020).

Despite the significance of this particular conspiracy theory (Olshansky, et al., 2020), with up to three per cent of people in the U.K. believing that the Earth is flat (YouGov (2019), limited work has been carried out on the Flat Earth movement, especially in terms of their relationship to media and social media, and the subsequent identity threats that members face. Landrum, et al. (2019) have explored the effects of personal differences upon how individuals perceived the strength of evidence for a flat earth presented on YouTube videos using the concept of motivated reasoning determining that it could be used to advocate more effectively for their pre-existing attitudes but did not explore the idea of motivated ignorance. In a review of some of the strategies used by Flat Earthers to "protect" their identities, Paolillo (2018) outlined a number of identity threat strategies, including the reference of religious/historical texts, reproduction of questionable video evidence, and *ad hominem* arguments, but again without specific reference to the concept of motivated ignorance. Other than this, no work has explored responses to identity threat within this particular community.

Materials and Methods

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¹ A detailed discussion of what a conspiracy theory is beyond the scope of this paper, however Douglas and Sutton (2022) provide a detailed overview of the key features.

To explore whether there was evidence of motivated ignorance within the online activities of the Flat Earth movement, we used a netnographic research design (Kozinets, 2020), following a similar approach to Delia's (2019) identity threat study, but with a more extended period of immersion. Such an approach is useful to observe interactions between community members in a naturalistic setting, where the unobtrusive nature of the data collection may be better in terms of understanding a situation whereby participants may be defensive or hostile to those with beliefs seen as "different" to their own, or where it may be difficult to negotiate access (Strand & Gustafsson, 2020), with those involved likely to be distrustful of research into conspiracy theories, and reluctant to take part (Douglas & Sutton, 2022), especially given that researchers may well adopt a *prima facie* approach that the beliefs are wrong, without an understanding that the worldview of participants may be in total contrast (Van Prooijen & Imhoff, 2022). The Internet is a particularly important site for such behaviors, especially for conspiracy theorists, where individuals can "find community only with those we want to find...and to only read and engage with information that supports their prejudices and ideologies" (Spracklen, 2015, p.112), for example those supporting the idea of the Flat Earth.

The study followed the four distinctive elements of netnography described by Kozinets (2020), specifically (1) A cultural focus, seeking an empathetic understanding of participants' viewpoints and behaviors, and their link to the broader cultural context within which they were enacted (2) A focus on *social* media (our italics), where active communication and interaction were important, in our case, through the interaction within the forums (3) Immersive engagement, passively becoming a member of the forums, getting to know and understand participants, and the culture of the groups as a whole and (4) Netnographic praxis, or an acknowledgement of the specific differentiation of the netnographic approach from

other methods, which guided the more pragmatic aspects of the data collection (for example the use of an "immersion journal" rather than field notes).

The netnographic process consisted of a period of immersion of approximately six months with three separate public forums (to gain institutional ethical approval, it was requested that these forums remain anonymised even though they were publicly accessible without any form of password protection) chosen on the basis of ongoing activity, and "richness" of data. Whereas a simple content analysis of relevant posts could have provided similar data, a more immersive process was adopted, reading material and conversations, and "getting to know" members of the community, albeit from a distance. Specifically, it allowed us to identify both "serious" members of the forum, as explored by length of involvement, and nature and number of posts, but also consistency in their arguments, which was important to identify any examples of "trolling", or deliberate attempts to argue, or antagonise forum members simply to gain a response (this was apparent with a number of group members, who were omitted from the study). All forums were read, and any relevant data were then noted as entries into the immersion journal (all entries were textual). Data were chosen on the basis that it was high quality, or "deep" (Kozinets, 2020) rather than collecting amounts of data that could be overwhelming. This allowed subsequent themes to be inductively generated, using a manual approach, following that of Cleland (2019) which were then discussed with a member of the research team playing "devil's advocate" to critically question the coding, and the conclusions drawn (Marshall & Rossmann, 1995).

Results and Discussion

All forums were highly active in terms of size of membership, current activity and interaction between members, with detailed discussions and interactions on a range of topics related not only to the idea of the Flat Earth, but also other contemporary topics, for example political discussions over Brexit, the Russian invasion of Ukraine, or other perceived conspiracy theories, most notably those concerned with climate change. Although almost all members were anonymised through usernames, it was clear that most were male (evidenced for example by choice of username or avatar). The anonymity of users itself should not be seen as problematic. As Spracklen (2015) points out, anonymity is not synonymous with guilt (for example in terms of behaviors such as trolling), perhaps it is more easily explained by the difficulty of publicly identifying as a Flat Earther (Olshanky, et al., 2020). It was clear that membership was not homogenous in either beliefs or behavior, and varying levels were evident based on Stebbins's (2020) categories of involvement. Thus the core devotee (where the activity seemed to be a central focus of their lives, involving regular detailed and highly researched postings), the moderate devotee (where substantial involvement was evident, but interactions tended to be more limited or irregular) and participant (with much more limited engagement, often "lurking" rather than posting) were all apparent. Some went beyond even the engagement of core devotee and were clearly what Scott and McMahan (2017) call "hard core", enacting "extraordinary commitment that is directed toward an "authentic" style of social world activity" (p.570), with extreme levels of commitment and dedication evident (some of the moderators of the forums would clearly fall into this category). There were also many regular posters who were explicit that they did not have any beliefs about a flat Earth, and such members were tolerated, and indeed in many cases this allowed a greater depth of interaction and argument, although they were clearly seen as an out-group.

It was clear that information that could potentially "harm" the group was posted on a regular basis by both supporters and non-supporters, and thus formed a chronic threat to a positive social identity (Branscombe, et al., 1999) even though each individual piece of information

was in itself a short-term threat. This is important as Steele, et al. (2002) note, the longer a threat exits, the more likely it is that members will respond with behaviors to protect their identity, especially for hard core, or core devotee enthusiasts, where the salience of being part of the Flat Earth community would impact upon need to protect that identity (Lock & Heere, 2017).

Given that much motivated ignorance is difficult to identify as the simplest method is simple physical avoidance (which leaves no online trace), the actual extent of the behavior is difficult to ascertain, however it was clearly evident that a number of group members adopted the strategy, making explicit posts acknowledging their avoidance of, and their reasons for avoidance of information that could be seen to be threatening to the group, for example it was stated by one forum member that *I will ignore further attempts to make me believe the earth is spinning*. As a result, it was clear that what Golman, et al. (2017, p.97) refer to as *active information avoidance* was present, whereby two conditions need to be satisfied – firstly, the individuals needed to be aware that the information existed, even if the specific content was unknown, and secondly that the information was freely available. This was the case with all of the instances identified, where posts about the information were clearly signposted, and access to the information was, in the vast majority of cases, freely available via *YouTube* (by far the most popular medium for communicating ideas in this area).

The avoidance of certain information was also noted by a number of out-group members who posted on the forum, which does provide some reinforcement for the existence of motivated ignorance. It was noted by one that "most FE people ignore observations or walk away from debate entirely". Similarly, many studies were posted on the forums, receiving, according to

non-believers, low levels of attention from members if they failed to support the Flat Earth hypothesis:

The ones that result in seeing things that should be over the horizon are the notable ones and wind up getting all the attention and have been researched and documented. The ones that don't are quite unremarkable and are generally ignored.

Interestingly, FET is actually quite a good hypothesis, in that it is readily falsifiable... The problem, I think, is that many FET proponents simply ignore anything that might falsify the hypothesis

This was also noted by those more ambivalent to the idea:

I am relatively new to Flat Earth theory and to be honest, I don't think we have answers to everything. In fact, neither does the globe earth model have real satisfactory answers to everything. What I have noticed is that many people argue conveniently, meaning, when they encounter something they cannot explain, they simply ignore it and rather put forward a more plausible argument based in something that is easier to explain.

As well as suggesting the existence of motivated ignorance, a number of rationalizations were also identified, and the thematic analysis of the online data firstly demonstrated that social competition strategies were dominant, rather than social creativity or social mobility focused strategies (Doyle, et al., 2017), thus focusing on negative aspects of the out-group as a means to justify non-engagement with the material. Hence either the broad nature of the source itself as "untrustworthy" was cited, or specific individuals were identified as lacking credibility.

Secondly, they also demonstrated both instrumental and epistemic (ir)rationality from group members, hence justifying strategies instrumentally in terms of enhancing the status of the ingroup members (i.e. members of the Flat Earth community) as well as epistemically, through questioning the epistemic quality (in terms of the actual "truthfulness") of the information, even though in many cases this was through what would generally be considered high quality sources of data (such as peer reviewed data, or data from NASA). The epistemic authority of individuals providing the information was also questioned in terms of their knowledge or qualifications. Such epistemic questioning has become increasingly apparent within a post-truth context (Kienhues, et al., 2020), and was highly evident as a strategy employed by forum members.

Overall, two broad types of strategy were identified. These were strategies that involved questioning the quality or trustworthiness of the information provided ("poisoning the well'), or, less commonly, direct *ad hominem* attacks on the individual providing the information, where the quality of information itself was not considered. These two broad strategies will each be examined in turn.

Poisoning the Well

A social competition strategy that was dominant throughout member interactions was the epistemological strategy (Smithson, 1985) of "poisoning the well", a term first used by Newman in 1864. Essentially, this is a social competition strategy whereby the out-group member is discredited or ridiculed with the intention of diminishing the credibility of the subsequent information that they may provide. This can either be distrust of the source itself (generally the mass/social media), or individual agents which then provides a rationale for ignoring the material.

Distrusting Science and the Media

McIntyre (2021) highlights how flat earthers maintained that their beliefs were based on evidence, rather than faith, and as such the perceived quality of evidence is important to members. Group members are likely to resist information from out-groups if that information threatens the group identity (Van Bavel & Pereira, 2018). Golman, et al. (2017) note that individuals will tend to denigrate the quality of evidence from such groups if it is likely to contradict their beliefs, either in terms of the science itself, or the credibility of media reports of the science. If the sources are credible, then, as Williams (2021a) suggests, such knowledge avoidance can be sustained in various ways, including "downgrading" those who assert views inconsistent with member's social identities, using various rationalizations for ignoring material that contrasts with their beliefs, most notably in in terms of presenting a lack of trust in the institution. Lobato, et al (2014) have determined that there was a tendency to accept epistemically unwarranted beliefs related to conspiracy theories, and here the converse was found, in that there was also a tendency to refute more epistemically warranted beliefs, especially given that mistrust in governments (Rauh, 2021), the mass media (Fawzi, et al., 2021) and authorities and experts (Hardin, 2013; Rutjens & Većkalov, 2022) is increasing. This was evident on the forums

I haven't paid attention to mainstream news since I quit watching television 20 years ago, so MSM news has been out of the picture for quite a while. Once 9/11 happened and it became immediately obvious that the official story was false, I began researching everything I could about it and, like many others on this site, I realized that any moderately interested researcher would have to recognize that there are so many holes and so much fiction concocted around the event, that if anyone refused to acknowledge

that the official story was a huge lie, then one should be highly suspect of any information disseminated by them on their blog or site, especially as time passed

During the Cold War we faked the moon landing. Shortly after they realized the reason they could not reach the moon was due to the flatness of the Earth. They were stuck in a lie, and had to continue it or lose legitimacy of our governments. Even today we would still hold onto this lie due to role Science plays in our ruling government.

After lurking for a while, I'm always unclear whether they actually believe what they post, or if they are just having some sort of sarcastic fun. I know that mainstream crap is not going to post anything truthful, so I don't even bother considering any of them respectable anymore.

The limited evidence required to refute claims from institutions such as the government, or the mass media was evident, supporting McIntyre's (2021) suggestion that for flat earthers, "in their epistemology, to question a belief is sufficient for concluding that it must be false" (p.4).

Sternisko, et al. (2020) have discussed how those that belong to such a movement as the Flat Earth Society are more likely to have such a conspiratorial mind set, and in light of this, the work of Imhoff, et al (2018) is useful in terms of exploring the relationship between having a conspiratorial mind-set and levels of trust, in that such trust is generally lower with those with a propensity to have such beliefs. Forum members often used alternative media, whose content generally contrasted to the mainstream media (such as that promoting climate change denial, or the existence of UFOs). It seems likely that this erodes trust in more mainstream

media (Kim & Cao, 2016), Subsequently, even organizations such as NASA are not fully trusted in terms of their communication (Joyce, et al., 2008) and thus denigrating the media becomes a readily available strategy to protect group membership within this context through maintaining the "positive distinctiveness" associated with the Flat Earth identity when compared to "the gullible folks who watch the mainstream news" (Spracklen, 2015 p.111). Additionally, as Williams (2021c) argues, the seemingly epistemic irrationality of maintaining such seemingly absurd beliefs in light of the available evidence may actually be a means by which to signal commitment to the group itself, even if the evidence overwhelmingly suggests otherwise, and thus distrust in the source may be a consequence, rather than a cause of identification.

Viewing the source as "controlled opposition"

Whereas denigrating sources of information relates to a more general distrust of the science or the media, sometimes information was perceived as specifically discrediting the Flat Earth movement, as a form of "controlled opposition", defined as the use of disinformation to discredit genuine information or legitimate claims (Neuwirth, 2021), as for example, evidenced by the Snowden leaks which highlighted how various intelligence agencies did actually contribute false material to internet forums with the aim of discrediting them (Lupton, 2015). The history of Flat Earth has long involved a belief about a global network of deception and subterfuge (Garwood, 2007), hence comments such as the following were evident:

I feel that it needs to be pointed out that XXXX is not a genuine researcher with different views, he is a paid Government agent who is only making videos in order to destroy and discredit the movement that you are working so hard towards spreading. If

he were genuine, then I would accept that he had a different view, but he is not genuine, and he proved this when he said that there is "no evidence that the Earth is flat".

Have you ever heard of the terms "gatekeeping" or "controlled opposition"? That is exactly what XXXX is

This is a social competition strategy, in that by diminishing the status of the out-group member, the integrity of the group (and hence the associated social identity) is maintained, even if the broader evidence (i.e. that the Earth is indeed round) contradicts the beliefs of the group. As well as identifying specific agents as controlled opposition, a more generalised view of those holding opposing beliefs was evident:

There's so much controlled opposition out there finding genuine researchers is like finding a needle in a hay-field

I've been wondering the same thing. I've been seeing that my usual news sources are controlled opposition too, and I don't know what to go to anymore.

Please don't be distracted by the hordes of self-righteous "debunkers". They're best ignored, unless you're looking for some cheap amusement.

Spracklen (2015) notes the trend towards corporations attempting to make profits from people's digital activity, and this phenomenon gave one basis for motivated ignorance. A number of sources of information were identified as "shills" – those benefitting (often

financially) from placing information that conflicts with the group's views. As a consequence, "shill shaming" (Paolillo, 2018) was evident within the forums:

I agree, XXXX needs to step his game up or I think I'll just pop him in my "probable shill basket" - the FE facts are too important to ignore, and if anything it helps blow the lid off the whole "game" that is being run on us. Once FE and fake space became clear to me, it has become so easy to distinguish what is truth and what is bullshit... real eyes see real lies.

but people like that are painfully obviously paid to do it they're not worth even considering

I'm starting to get a bit alarmed at all the shills out there, on YouTube anyway. I'm quite used to them on Facebook

he is simply paid to obfuscate our research and drive people away with his less than scientific answers

This emerges within a changing context within which information is shared over the Internet, from being initially more of a leisure activity, to the contemporary situation where there are now over 100,000 YouTube professionals (Neibler, 2020), able to post material without any form of review or fact-checking (Allcott & Gentzkow, 2017). In addition, there are other, non-financial motives for posting material, such as the potential of increasing the prominence of their creators, or simply the thrill of "going viral" (Mohammed, 2019). Through using a social competition strategy, by categorizing information posters as shills, a cognitive bias

occurs whereby such information is seen as less trustworthy compared to in-group members (Hilary & Dumebi, 2021).

Direct Ad hominem attacks

As Walton (1998, p.xi) notes, "the Ad Hominem or personal attack is frequently the immediate defensive response to any new and powerfully upsetting argument...especially when interests are threatened", and are effective ways to reject an argument. Direct *Ad Hominem* attacks differ from the strategies related to "poisoning the well" in that they make no reference to the information itself, for example in terms of its source or epistemic credibility. The use of attacks, whereby the source of information was attacked personally, rather than the information itself being critiqued was evident within the forums, with no supporting evidence provided. These could be attacks on the out-group as a whole, such as:

Given that only about 16% of the human race is atheistic, and generally the stupider 16%, I think we can ignore their opinions safely.

Or focused on individuals:

but if you read his Twitter timeline since covid, you'll see it's the ramblings of an antiscience madman

but apparently Mr. XXXX has just been arrested for child harassment for his little stunt with the kids

Who listens to the suggestions of the devil? Now you are going to place where you deserved and accustomed

These types of attack were noted by out-group members, for example

Interesting. Doesn't seem like you ever got a response that was able to explain it. I'm honestly trying to keep an open mind about this stuff and listen to what these flatearthers have to say but its really hard when they just deflect or ignore every argument or they just resort to personal attack

Ad hominem attacks are, in some ways, the simplest form of justification for motivated ignorance, by drawing attention to a personal characteristic or behavior, there is no need to have a substantive focus on the actual scientific issue, or to even demonstrate the flaws in the information. Indeed, the complexity of much of the information means that individuals may not feel they have the ability, the time or the resources to make a reasoned evaluation of the source, (which would, by our definitions earlier, not be *motivated* ignorance). Alternatively, they may simply be either an "easy" way to justify ignorance, without the need for complex reasoning (Magcano, 2013), or an example of out-group derogation, whereby out-group members are negatively evaluated, often as a means to enhance the positive distinctiveness of the in-group.

Conclusions

This paper has demonstrated firstly that motivated ignorance does exist as a strategy by which individuals may protect their sense of group membership within a freely chosen activity, protecting their sense of "truth" through actively avoiding information that may threaten that truth. The strategies evident for this group were justified on the basis of general mistrust, viewing the information as a form of controlled opposition, or through *ad hominem* attacks.

It would also be useful to explore how the proactive nature of motivated ignorance relates to

the more reactive mechanisms to identity threat briefly outlined in the paper, such as social

mobility and social creativity. It seems unlikely that those highly identified with an activity

will adopt an "either or" strategy, and it seems realistic to suggest that motivated ignorance is

simply part of a suite of identity maintenance tools.

Finally, the concept would appear to have a broad number of applications to other fields and

disciplines. It could certainly be used to explore the increasingly important debates around

misinformation, and how individuals choose not to trust more epistemically valid sources of

information, often, it would seem irrationally. It may also have applications in certain health

contexts, ranging from how information is sought (or more accurately, not sought) regarding

pandemics or health conditions, to how individuals continue to adopt health practices that

have been cited as questionable in terms of efficacy (for example homeopathy).

Declaration of Interest:

Conflict of Interest The authors declare that they have no conflict of interest

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