The Power of Perspective: Analysing the Human Experience Within Macro and Micro Social Structures

Editorial

The Power of Perspective: Analysing the Human Experience Within Macro and Micro Social Structures

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I am very excited to present the first edition of *Reinvention* for 2023 – *The Power of Perspective.* As an assistant editor for the past two years, I have had the privilege of witnessing the growth and development of this journal first-hand, and I am honoured to now take on the role of editor. *Reinvention* has always been dedicated to showcasing interesting and interdisciplinary research, and I am committed to continuing this tradition by seeking out new and diverse perspectives as well as showcasing the remarkable capabilities of our undergraduate authors. This year, we look forward to pursuing new avenues of outreach to engage an ever-more diverse author and audience base. We are also working on increasing avenues to encourage engagement and share learning in research through our 'Writing for Publication' workshops. We will continue working with our talented team of student contributors and reviewers to publish high-quality articles that spark important conversations.

One of the many challenges when putting together a new issue is to create a titular theme that can encapsulate all the pieces together. This is normally a collaborative process within the Editorial team, although an unexpected contributor may become more commonplace within the workplace in the near future. So far, 2023 has brought with it many exciting new research advancements and perhaps controversial obstacles to the world of academia. Notably, artificial intelligence (AI) tools have recently taken centre stage in their ability to competently summarise information at the touch of a button. Therefore, in our technologically advancing landscape, I thought it appropriate to ask this new technology for a suggested theme for our issue: the title of this issue, 'The Power of Perspective', is in fact a ChatGPT suggestion! ChatGPT is an advanced language AI model that can generate human-like responses quickly and efficiently.

As we look to the future of academic writing, technology will evidently play an increasingly important role. AI tools can help us to summarise information already uncovered, but they cannot replace the human experience, novelty and natural curiosity that is essential to advancing meaningful research. The power of a human perspective remains a vital contribution. As we integrate these tools into our work, we must remain vigilant to the ways in which they shape our thinking and analysis but also embrace how these new tools can enhance our development and learning.

Reinvention issue 16 volume 1 delves into a range of topics that highlight the complexities of social structures and their impact on human experience. From machine-generated fake news to individual childhood experiences impacting mental health, the articles presented here demonstrate the breadth of interdisciplinary research being conducted today by our outstanding undergraduate authors.

Firstly, we have 'Beyond the Nuclear Ideal: A Qualitative Analysis of Forum Posts by Single Mothers by Choice'. Martha Dean-Tozer's thoughtful research explores a woman's choice to start what has been considered a non-traditional family and the support received by online forums. This research is ever more important in a world where we have outgrown a one-size-fits-all view of families and where digitised and accessible support becomes the first port of call for so many.

'You Had Better Check the Facts: Reader Agency in the Identification of Machine-Generated Medical Fake News' by Barbora Dankova explores our ability to distinguish machine-generated medical fake news. Post-pandemic, public health information and education are at the centre of conversation. Within a rapidly developing artificial intelligence field, this paper is particularly relevant. Dankova conducts original research to assess how a person's level of English language impacts on an individual's ability to ascertain machine-generated fake news against already-existing headlines in the medical field.

Our third paper explores understanding the UK Government's response to the COVID-19 pandemic in the first few months of the outbreak. In her paper 'The Conflict Between Public Health And Civil Liberties: The Initial UK Government Policy Response to the Covid-19 Pandemic', Minaa Mujib tackles the difficult consolidation many of the public faced between freedom and isolation in the interest of public health during the pandemic through the lens of government policy. This interesting paper encapsulates the theme of the issue by exploring how individual values can be collective within a community and how this influences wider decision making.

'How is Sociological Knowledge Possible? Influences of Kantian Epistemology in Max Weber's 'Verstehende Soziologie' and the Problem of Objectivity' by Ümit Ege Atakan explores the problem of objectivity within sociological research as discussed in Max Weber's 'Verstehende Soziologie' with consideration of the influences of Kantian epistemology. This exploration of how knowledge becomes possible breaks down a complicated philosophical narrative and discusses the conflicts between the two ideologies.

Carissa Samuel and colleagues' paper considers 'The Impact of Adverse Childhood Experiences on Mental Health Statuses of Students Across Various Ethnic Identities'. This original research attempts to dissect the triangular relationship between adverse experiences in youth, ethnic identity and mental health outcomes. Such research may help guide interventions in the future to ensure it best serves our diverse population.

'An Appraisal of the Work of Gustave Le Bon Within the Case Studies of Fascist Spain (1936–1975) and Nazi Germany (1933–1945)' is our penultimate piece in this issue. Benjamin Galbraith explores the work of the French sociologist in the context of historical propaganda campaigns in Spain and Nazi Germany. Furthermore, this piece questions whether we can quantify propagandistic success. Galbraith's piece is a fascinating read (one of our fastest accepts at editorial review) and provides a balanced criticism of le Bon's work and application within this case study.

Our final piece this issue, '*Radical Landscapes* at the Mead Gallery Addresses the Topic on Everyone's Lips', is an exhibition review conducted by Kate Laister Smith carefully exploring *Radical Landscapes*, which was shown at Warwick Arts Centre Mead Gallery Coventry UK in early 2023. Kate takes us through a tour of different artistic interpretations of rural landscapes and connections between land, ownership and our own bodies.

Reinvention has grown in many ways this year, and we look forward to moving forward with new students to showcase their capabilities. Special thanks go to our assistant editor Yit Wong for his work developing 'Writing For Publication' workshops to engage students and assist them with preparing their work for dissemination. I would also like to thank our marketing coordinator, Ines Robledo, for her continued hard work managing our online presence and for creating new and thoughtful pieces such as our interviews published on our blog.

Finally, I would like to acknowledge all our incredible team who work hard to process all the submissions to our journal: Ines, Yit, Molly, Naomi and Osamu – thank you.

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Beyond the Nuclear Ideal: A Qualitative Analysis of Forum Posts by Single Mothers by Choice

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Abstract

In 2018, 3.2 per cent of all fertility treatments were undertaken by single patients. Despite this prevalence, there is limited research that explores the experiences of single mothers by choice through sperm donation. Previous studies have highlighted the value of online forums, in terms of accessible support and information sharing with others who have similar experiences. This paper aims to offer an insight into women's experiences and concerns, and the advice they offer and receive when pursuing this pathway to motherhood. A thematic analysis of an online fertility forum of 39 forum posts by 28 different forum contributors was undertaken. Three themes were identified: 'Making the choice', 'the challenges of becoming a single mother by choice' and 'support provided by the forum'. Women seeking solo motherhood through sperm donation appeared to carefully consider this decision, and plan for the potential future challenges. Furthermore, the use of online forums provided a sense of belonging and validation that created a safe space to share experiences. This enabled women to receive support that was presented as a crucial element in their journey to motherhood.

Keywords: Single mothers by choice, Support forums and donor-conceived children, Sperm donation and single mothers, solo motherhood, choice mothers

Introduction

Any discussion of 'single mothers by choice' requires an understanding of a number of key issues relating to reproduction, family organisation and changes in relational practices, as well as understanding the wider social pressures that those seeking solo motherhood face. In this section, I will outline the historical and societal context surrounding solo motherhood before moving on to discuss how this study will help contribute to existing literature.

Background

This study explores single women who choose to become a mother through methods of assisted reproduction. Donor insemination (DI) is a form of third-party assisted reproduction that uses donor sperm to enable individuals or couples to conceive (Zadeh *et al.*, 2016). This type of fertility treatment involves injecting donor sperm directly into the womb and is most commonly accessed by women with no fertility problems who need donor sperm (HFEA, 2021a). In Vitro Fertilisation (IVF) is an alternative and more invasive method of assisted reproduction where eggs are collected and mixed with sperm in a laboratory. If fertilisation is successful, an embryo is transferred into the womb (HFEA, 2021b). Recent years have seen an increase in the number of patients with no partner seeking parenthood through assisted reproduction. In 2016, of all patients using DI, 17 per cent were unpartnered, which demonstrates an increase of 8 per cent since 2014 (HFEA, 2018). Similar patterns have been found among patients accessing IVF treatment – which has become the main treatment type for all single patients (HFEA, 2020). The increase in single women

utilising sperm banks has also been observed in other countries, demonstrating the growing prevalence of this route to motherhood (Russel, 2015).

The clear increase in the use of Assisted Reproductive Technologies (ARTs) among single mothers has raised debates about the legislation in considering who ought to be permitted access to fertility treatments in the UK (Zadeh and Foster, 2016). 'Single mothers by choice' are women of any sexual orientation who actively decide to become mothers without the involvement of a partner. These women are also referred to as 'choice mothers' and 'solo mothers' (Graham, 2018; Jadva *et al.*, 2009). It has been cited that this sub-group of single women are typically aged mid-to-late thirties, European or American, middle-class and well-employed (Bock, 2000; Mannis, 1999; Mattes, 1994; Morrissette, 2008; Weinraub *et al.*, 2002). Most women who actively seek out solo motherhood do so through attending fertility clinics for donor sperm (Jadva *et al.,* 2009). This pursuit of motherhood has raised wider questions about both the structure of the family and how this family is created (Graham, 2018). Psychological literature has found that solo mothers, and their children, are well-adjusted and categorised by positive mother–child relationships (Golombok *et al.*, 2016). Despite these positive outcomes, disapproval has been voiced by politicians (McCandless and Sheldon, 2010), fertility professionals (Lee *et al.*, 2014) and the UK media (Correia and Broderick, 2009; Michelle, 2007; Zadeh and Foster, 2016) who have challenged the damaging effects of destabilising the nuclear family. Researchers (Zadeh and Foster, 2016) have observed how critics position the marital unit as the best possible framework to raise children. However, factors related to negative outcomes for children in single-parent families (parental conflict, economic hardship, disruption of family relationships) do not apply to single mothers by choice (Jadva *et al.*, 2009). Moreover, debates have questioned whether women could actively choose single motherhood yet still act as a 'good mother' (Graham, 2018) and whether women are putting their needs above their child by condemning them to a fatherless life (Weathers, 2007). These views highlight the stigma attached to single mothers by choice who are exposed to prejudice and potential discrimination (Krajewska, 2015).

Online forums are often used by parents for emotional support or advice regarding physical and social aspects of parenting concerns (McDaniel *et al.*, 2012). These forums may challenge stigma by providing a unique source of social support and a space for women to seek advice anonymously (Moore *et al.*, 2016). Communication in specialist forums can be used by single mothers by choice, or those considering this option to share information, experiences and support. It has been noted that the popularity of these forums heavily relies on their convenient accessibility and the anonymity offered (Hanna and Gough, 2018), which provides users with the opportunity to discuss 'taboo' topics without the perceived need to be 'politically correct' (Coulson, 2005). Online forums provide naturally occurring 'conversational' data as a useful tool to capture raw opinions, experiences and advice (Arden *et al.*, 2014). Moreover, forum users are more genuine and open in their responses than in data elicited from more traditional means, such as interviews, focus groups and questionnaires (Gosling *et al.*, 2004).

Existing studies have suggested that the factors of age, decreasing fertility and failure to find an available partner contribute to women considering becoming a single mother by choice (Bock, 2000; Graham, 2018; Hertz, 2006; Jadva *et al.*, 2009; Mannis, 1999; Murray and Golombok, 2005). Jadva *et al.* (2009) explored the motivations and experiences of 291 'solo mothers' through online questionnaires. Choice mothers were well-educated women who did not experience any marked financial difficulties in choosing this route to motherhood. They made practical changes to facilitate their decision and felt that it was important to have and maintain a male role model for their child (Jadva *et al.*, 2009). This confirms findings from previous studies with smaller and less-diverse samples (Bock, 2000; Klock *et al.,* 1996; Leiblum *et al.*, 1995; Mannis

1999; Murray and Golombok, 2005). Jadva *et al.* (2009) also found that women continued to identify with, access and participate in the 'single mother by choice' community, which shows the significance of intra-community support among these women. Similarly, Graham (2018) found that solo mothers believe that they are capable of fulfilling the requirements of being a 'good parent' and negotiating the risks involved in a single-parent family structure. Graham (2018) drew on the narratives of 23 choice mothers through interviews, finding that women were aware of the possible consequences of their decision, including the judgement from others. However, ultimately it was accepted that solo motherhood would have to be considered to pursue their deep-rooted desire to become a mother (Graham, 2018).

Despite the growing number of single women seeking solo motherhood through sperm donation, there is minimal knowledge about those who consider this pathway (Weissenberg *et al.*, 2007) and limited literature exploring their unique experiences relating to intra-community support. This research paper seeks to address this gap in the literature by offering an insight into women's experiences, concerns and the advice they offer and receive when pursuing solo motherhood. This exploratory research hopes to provide a unique contribution to existing studies by utilising forum posts. The conversational data derived from these peer interactions will offer a new insight into the experiences of these women.

Methods

This study analysed data from an online forum that focused on becoming a single mother by choice through sperm donation. The data was gathered from 'Netmums';[1] the UK's biggest parenting website, which offers support and local information primarily for women. Netmums self-reports having a comparatively greater number of users from low-income families (Russell, 2006), compared to 'Mumsnet', which has a demographic skewed towards older, well-educated, middle-class women (Pedersen and Smithson, 2010; Pedersen and Smithson, 2013). Messages were collated from the most recent forum thread titled 'single mothers with donor-conceived children', dated from October 2017 to November 2019.

The forum thread incorporated 39 posts by 28 different contributors and reflected the perspectives of women who were either already single mothers by choice or considering this. Of these posts, 21 were publicised as a direct reply to existing posts made by forum contributors. The average length of posts in the thread was 115 words, ranging between 6 and 524 words. Only messages written by women who were discussing becoming a solo mother via sperm donation were selected for analysis.

Forum posts were considered using thematic analysis to establish the recurring themes and patterns present throughout the data. Thematic analysis was carried out with reference to Braun and Clarke's (2006) guidelines. The first phase of analysis involved the author examining the data on a semantic level through repeated reading and establishing recurring patterns. The second phase was concerned with generating initial codes to highlight the information of interest and further organising this into larger meaningful groups. With reference to the previous notes and codes, themes and sub-themes were agreed with the supervisor of the project to embody the overarching definitions and patterns in the data. The analysis was done manually without the use of software to aid the immersion of the researcher within the dataset itself.

This study followed the British Psychological Society's (BPS) guidelines for internet-mediated research (British Psychological Society, 2013). Due to the open nature of online forums, ethical approval and informed consent were not required. Forum users of 'Netmums' are made aware of the publicity of forum threads upon registration for the site. While contributors did not use their full name on the site, usernames and any other identifying information were anonymised. Participants' usernames were replaced with pseudonyms.

Findings

Three key themes were identified from the data: 'making the choice', 'the challenges of becoming a single mother by choice' and 'support provided by the forum'. Each theme relates to several sub-themes that embody the experiences of the women. Themes and sub-themes are presented below with illustrative quotes

Theme 1: Making the choice

<u>Motivations for choice motherhood</u>

There were a range of motivating factors involved in choosing solo motherhood that were shared among the posters. One woman talked of her experiences conceiving her son after a failed relationship:

> I couldn't put my dream of motherhood on hold any longer and, like many have said, I did not see the point in looking for a relationship based on having a child. I was living with my parents (still am) and, in the end, it was my mum who said 'I think you should pursue having a child on your own as I can't bear you to miss out on motherhood'.
> — (Eve)[2]

Eve highlights her strong desire to become a mother and states that she did not want to waste time actively looking for a relationship to conceive a child. This sentiment was echoed by other women, who also spoke about their choice to seek solo motherhood in the context of not finding a partner to settle down with:

> I'm in my early mid 30s, always wanted children and have decided to go it alone after not meeting 'the one'.
> — (Sarah)

> I'm a 33 year old woman who for many reasons, have failed to find 'the one'.
> — (Emma)

These posts display concern about not finding 'the one' to have children with. The use of this language indicates that women had hoped to seek their perfect 'one and only' partner to fulfil their destiny of having a child. This shows the high levels of pressure women place on themselves to find the ideal partner to achieve motherhood. Both women also highlight the factor of age within their concerns over their partnership status. These interlinked factors indicate that many women's choice to seek solo motherhood was based on being unable to find their ideal partner within the limitations of age and the notion of the 'ticking time bomb'. Christina spoke of her anxieties regarding her fertility and conceiving naturally as she is getting older:

> I always knew I would have trouble conceiving naturally, and being single in my 30s, I had it set in my mind that it wasn't going to happen for me. At 35, I started to think about going it alone. I considered it on and off for a couple years, then all of a sudden it clicked. This is what I wanted/needed in my life.
> — (Christina)

Similarly to other women, Christina cites her increasing age as a dominant reason to seek solo motherhood. Moreover, the time Christina spent considering her options suggests that she seriously reflected on the possible implications of solo parenthood. For other women, their choices were shaped by concerns about being able to conceive naturally due to their gynaecological health conditions:

> I was diagnosed with premature ovarian failure at the age of 34 years and decided to 'go it alone' in the face of some daunting statistics about my likelihood of ever conceiving, even with IVF.

— (Jane)

> I have just come out of a relationship where the guy didn't want children. So I have decided to go it
> alone as it's all I've ever wanted! I am 33 and have polycystic ovary syndrome.
> — (Judy)

The posts presented in this sub-theme suggest that seeking solo motherhood is based on a deep desire to experience motherhood, but not being in the position to do so within a traditional partnership. The factors of age and fertility health exacerbated women's urgency to conceive within their limited fertile time frame. This suggests that the motivations of choice motherhood are primarily based on circumstances, rather than single motherhood being the ideal and preferred option.

Gratitude for making the choice

The second sub-theme highlights women's triumph over adversity in choosing solo motherhood. One woman spoke about her struggles, but expressed gratitude in choosing this pathway to motherhood:

> I feel continuously blessed to have my girl, and although, without a shadow of a doubt, it has been the
> most overwhelming thing I have ever done, it has also been the most life-affirming experience and I
> would not change a second of being a single mother by choice.
> — (Jane)

Jane reflects that seeking solo motherhood was the right decision, despite the challenges and unpredictable nature of becoming a solo mother. Many women clearly related to this experience and expressed similar feelings:

> Nothing ever prepares you! But it's totally worth it :-D My little baby is the best thing that's ever
> happened to me!
> — (Alice)

> Having my son in my life has made me the happiest I have ever been.
> — (Christina)

These posts reflect the women's strong appreciation for their child after seeking solo motherhood. This indicates that the choice to become a solo mother was affirmed after experiencing motherhood and meeting their child. Moreover, these women may be more reflective on what life would have been like having not pursued this pathway and potentially missing out on becoming a mother altogether.

Theme 2: The challenges of becoming a single mother by choice

The posters identified a number of challenges involved in becoming a solo mother, which covered a range of social aspects, including the fiscal realities of raising a child alone, the ethical dimensions of having chosen motherhood, extending the family again through sperm donation, and the views and opinions of others.

Financial strain

Several women highlighted the fiscal reality of seeking solo motherhood and looked to the forum for guidance on the financial implications:

> And another worrying side is financial. My company is only offering a six-week fully paid maternity
> leave; the rest is statutory pay of about £500–£550 per calendar month. How does one deal with this

in this country, when nursery is £20,000+? I'm flat sharing at the moment and even though I could afford to rent by myself, this would take about 50% of my income and I'm not sure how much I could afford the rest – childcare, and my own expenses.
— (Jade)

Jade highlights the financial burden of becoming a single parent and the reality of raising a child alone. Posters used the forum as a safe space to share concerns and seek clarification on the financial challenges of solo motherhood, while other women discussed the financial setbacks of fertility treatment:

So I am now thinking about going to a fertility clinic instead, but I've been told the costs are huge?
— (Emma)

My costs for the IVF are only around £6,000 (in addition to the IVF, a donor from my clinic, drugs for my treatment plan, four counselling sessions and 1 year storage if I freeze my eggs).
— (Annette)

These posts highlight some women's lack of knowledge on the fiscal reality of single parenthood and fertility treatment, and how this has affected their experience of pursuing this pathway. These extracts also demonstrate the practical factors involved in becoming a single mother by choice. It is clear that women looking into solo motherhood place emphasis on planning ahead for the financial practicalities.

<u>Parenting donor-conceived children – disclosure, identity and emotional well-being</u>

Women discussed parenting outside of the nuclear family model and the challenge of disclosing this to their donor-conceived children. One woman spoke about supporting her children in coming to terms with being a donor-conceived child:

I'm approaching the teen years at speed and one of the concerns/thoughts of my children is 'coping' with the differences of being donor children…especially having a single mum as a sole parent.
— (Erin)

Erin discusses her concerns around how her children will cope with living within an alternative family model and being different to their peers. Erin's post indicates that she does not want her children to feel as though they have missed out due to being brought up by a single mother. Christina cited similar concerns:

I guess I am going to have to prepare him for school and kids asking about his daddy. Do you ladies explain the donor situation to your little ones, or leave it as you don't have a daddy? At almost 4, it's tricky to know what he will understand.
— (Christina)

Both women use the forum to share and discuss ways that they can protect their children from feeling confused or uneasy about being a donor-conceived child. Women are facing the reality of not having a partner, and foresee the impact this may have on their children, which highlights the ethical dimensions of becoming a solo mother via sperm donation.

<u>Choosing to have a second</u>

Women who were already solo mothers spoke about their choice to extend their family for the second time through sperm donation. One woman expressed concerns about having another child and the impact this could have on her family:

> I am torn as I would love for her [my daughter] to have a sibling and to have the experience of having another baby, but at the same time, I'm worried that it might backfire! But then again it might not, and could be the best decision I ever made and make our lives amazing… It's so hard isn't it?!
> — (Olivia)

Despite Olivia's desire for another child, she presents her reservations in making this decision because of the uncertainty that surrounds being a single mother by choice and working through this decision-making process for the second time. Another woman also shared her conflicting feelings about having another child through sperm donation:

> I just wonder if I am being selfish to risk everything I have with my beautiful girl. I have always told her how much she was wanted and that she was all I ever needed, and I worry that having a second would upset our dynamic and potentially leave her questioning whether she really was enough for mummy.
> — (Jane)

> It's definitely an issue I struggle with on an almost daily basis. I know that I would never regret having another child but I am aware that I will probably regret not having tried.
> — (Jane)

Jane expresses her fears of changing the family dynamic if she were to have a second child, and of the impact this could have on her and her daughter's relationship. However, similar to first-time single mothers by choice, Jane also indicates that she does not want to regret *not* making this decision. These posts highlight the internal conflict that these women experience when they consider extending their family, despite already having gone through the process of solo motherhood. It could be assumed that seeking solo motherhood for the second time is easier due to their previous experience and familiarity with the process. However, women were more apprehensive to choose solo motherhood again, which could be attributed to the reality of fertility treatment and single parenting.

<u>Others' perceptions:</u>

Solo mothers discussed the challenges in managing others' perceptions of them. One woman explained that her friends overlook the hardships of solo motherhood:

> I don't think they have a real depth of understanding of the emotional and physical toll of fertility treatment or the reality of being a single parent, which, although amazing, is bloody tough at times.
> — (Jane)

Other people may misunderstand and underestimate what is involved in becoming a solo mother because of the unique challenges and hardships that this brings. Jane articulates the difficulty in managing these unrealistic perceptions of solo motherhood, which could place increased pressure on the family unit and a strain on close relationships. Another woman posted about the controversy and judgement that surrounds becoming a single mother by choice:

> I started a similar thread a while ago but closed it after a mum wrote a very nasty comment about women choosing sperm donors being selfish.
> — (Sophia)

Sophia's post illustrates the negative perceptions that other people hold towards solo mothers, depicting them as self-serving and individualistic. This suggests that single mothers by choice are required to manage

not only their own internal conflict but also the conflicting views and opinions of wider society. Both posts demonstrate the misinformation and stigma that surrounds solo motherhood and the negative impact that this can have on women pursuing this unique pathway.

Theme 3: Support provided by the forum

<u>Exchanging experiences and advice</u>

All women utilised the online forum to communicate with others who have similar and relatable experiences. One woman posted about the challenges of seeking solo motherhood without peer support:

> I don't know anyone else personally who has done this, so it would be great to have people to chat to about the challenges that arise.
> — (Christina)

Christina's post reflects the unique and potentially isolating experience that these women go through. The forum provided a powerful opportunity for women to connect with others who were also pursuing this unique journey to motherhood. This is shown through other women's posts who sought advice through the forum thread:

> It would be nice to find someone in the same position as me so we could share our experiences.
> — (Emma)

> I've just started to look into the whole sperm donor option, but it is all quite overwhelming so I'm hoping anyone on here that has gone down this route could give me any advice please. Thanks.
> — (Heather)

These posts highlight the uncertainty of solo motherhood and the need to connect with others because of the complex and individual process of fertility treatment and single parenthood. This indicates that many women have felt isolated as a consequence of their unconventional choices. The validation and sense of belonging that 'Netmums' has offered has opened up communication for many women who may have otherwise felt alone in their decisions and experiences.

<u>Hope</u>

The findings also suggest that women experience the forum as a source of hope:

> Thanks for sharing your story. It gives me hope.
> — (Emma)

> I was super happy to find this thread and to see so many of you being happy mums to donor-conceived children.
> — (Jade)

These posts reflect the appreciation for the forum that has enabled them to communicate with people who have positive experiences of solo motherhood. The forum has provided hope for women and a space where they feel comfortable to share their concerns and apprehensions. The safety provided by the forum is in stark contrast to women feeling judged and stigmatised by others. This highlights the lack of information and accessible support available for women to talk to others who are considering solo motherhood.

Discussion

The purpose of this study was to explore the experiences, concerns and advice offered and received by women pursuing solo motherhood via sperm donation by analysing messages posted on a parenting support forum. The current study contributes to the literature by broadening the understanding of how women use online forums to share their experiences and perspectives on becoming a solo mother, and providing an insight into their experiences.

Findings showed that making the choice to become a single mother was based on individual circumstances and the overwhelming desire to conceive a child rather than this being the ideal option. Women spent extended periods of time contemplating this choice, which involved factors of a deep desire for motherhood, partnership status, age and fertility health. Similarly, Murray and Golombok (2005) found that although most women were happy to be single mothers, over half of participants would have preferred to conceive in the context of a relationship. These motivations to become a single mother by choice were also found in a number of existing studies (Bock, 2000; Graham, 2018; Hertz, 2006; Jadva *et al.*, 2009; Mannis, 1999; Murray and Golombok, 2005). Ultimately, this theme emphasised the careful consideration of solo motherhood that was present in both first-time mothers and in mothers wanting to extend their family further. Furthermore, this contradicts the wider societal view that single mothers by choice do not fully consider the impact of their decision (Zadeh and Foster, 2016).

Becoming a single mother by choice is a complex process that generates its own unique challenges and obstacles. The current study's findings present the financial demands of conceiving through sperm donation and the emotional stress this can cause. Jadva *et al.* (2009) found that 38 per cent of solo mothers by choice reported having some financial difficulties. This was also present in the current study, which showed women planning for the financial challenges that could arise through fertility treatment and raising a child alone. Financial stress is common in relation to all fertility treatment, and some patients report having to rely on financial support from their family to secure their preferred treatment options (Hanna and Gough, 2020). Bock's (2000) findings concluded that high-technology infertility treatments are an option primarily for the well-insured or wealthy. However, Graham (2018) found that, although single mothers by choice acknowledged the importance of financial stability, women were able to cope even if they were not highly affluent. While financial burden was an area of concern for many women in the present study, this was a factor that was well-facilitated and carefully thought out when planning for solo motherhood.

The perceptions of single mothers by choice was discussed in the forum among posters. Negative opinions expressed by others pose as an obstacle in women's experiences of pursuing solo motherhood and feed into the stigmatising attitudes perpetuated by the UK media. Zadeh and Foster's (2016) study observed that single women who use donor sperm are labelled as 'socially deviant' and having 'digressed from traditional reproduction'. These perspectives highlight the ethical dimensions of becoming a single mother by choice and the internal conflict that arises from women who fear being judged and branded as 'selfish' for conceiving a child without a father (Graham, 2018). Furthermore, the projections of negativity from others could lead to feelings of shame among women if they feel that they are falling short of what is expected of them as a 'good mother' (Goffman, 1963). Previous research suggested that women feel as if the lack of a father needed to be compensated for by going above and beyond for their child (Graham, 2018). Similarly, in the current study, many women expressed concern around how their child will feel about being donor conceived and wanted to protect them from feeling 'less than'. These findings relate to the internal and external conflict that surrounds making the choice to become a solo mother. The stigma surrounding solo motherhood also demonstrates the importance of intra-community support through online forums, which offer 'freedom' to discuss aspects that might otherwise be hidden from social view.

In the current study, the online forum provided encouragement and strong intra-community support for those pursuing solo motherhood. Women expressed their appreciation to be able to talk to others going through similar experiences and being able to relate to them through each step of the process. This demonstrates the value of online support to this group of women, who may have otherwise felt unconnected and isolated. Exchanging experiences and advice through the online forum instilled confidence in group members and allowed them to feel accepted, which opened up further discussions and conversation. These findings offer a unique contribution to existing literature by exploring intra-community support among women who may not ordinarily be recruited for research. Hanna and Gough came to similar conclusions when exploring men's accounts of infertility through online forum discussions. Findings showed that the online forum offered a space to share experiences, which helped men manage the difficulties of infertility and the impact this had on their relationships (Hanna and Gough, 2017). This highlights the importance of online forums and how this relates to fertility issues more broadly.

Despite the contribution of this study, it is important to address its limitations and possibilities for future research. The findings in this study only relate to the specific forum threads analysed, which subsequently restricts the research from making wider claims regarding the experiences of all choice mothers. It is possible that forum users represent a specific group of choice mothers who are more likely to proactively seek support and advice online. It would be beneficial to examine a larger spread of data among different forums and websites, or to conduct one-to-one interviews and focus groups to explore the wider perspectives of single mothers by choice. In addition, future research should focus on gaining a more rounded perspective through interviews and focus groups by addressing the improvements to inform healthcare practices, particularly in facilitating and enabling intra-community support.

Conclusion

This study has provided new insight into how online forums may constitute a source of inspiration, hope and support for solo mothers. This research has addressed the gap in the literature regarding intra-community support and has offered a unique insight into the use of online forums among women who have chosen an unconventional pathway to motherhood. Findings showed that decisions on becoming a solo mother were shaped by a deep desire for motherhood, partnership status, age and fertility health. Moreover, women carefully planned for the potential challenges and used the online forum as a space to share experiences, concerns and advice. This research has highlighted the stigma attached to solo mothers and the need for further support. Future research should continue to investigate solo motherhood, and employ various sampling techniques to gain a broader insight into choice mother's experiences and concerns.

Acknowledgements

Endnotes

[1] https://www.netmums.com/

[2] Spelling and grammar have been corrected for all quotations used in this study. Additionally, abbreviations have been removed and replaced by their lengthened alternative. Content and meanings have been left unchanged.

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Glossary

Assisted reproductive technology (ART): Any treatment that is used to enhance fertility.

Donor-conceived child: A child conceived using donated sperm, donated eggs or donated embryos.

Donor insemination (DI): When donor sperm is injected directly into the womb to achieve fertilisation and pregnancy.

In Vitro Fertilisation (IVF): When an egg is fertilised outside of the body. Eggs are removed from the ovaries and fertilised with sperm in a laboratory. The fertilised egg (embryo) is then returned to the womb to grow and develop.

Single mothers by choice: Someone who decides to become a mother knowing that they will be the sole parent of the child.

Sperm donation: A procedure in which a man donates semen, which contains sperm, that is used to help an individual or couple to conceive a baby.

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You Had Better Check the Facts: Reader Agency in the Identification of Machine-Generated Medical Fake News

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Abstract

During the COVID-19 pandemic, much fake news emerged in the medical field (Naeem *et al.,* 2020: 1). Nowadays, computers can generate text considered to be more trustworthy than text written by a person (Zellers *et al.,* 2019). This means that laypeople are able to produce disinformation; however, they may not understand the implications. This study revealed the most reliable clues as guidance to spot machine writing. While natural-language processing (NLP) research focuses on L1 speakers, studies in second language acquisition demonstrate that L1 and L2 speakers attend to different aspects of English (Scarcella, 1984; Tsang, 2017). In this study, social media users completed a Turing-test style quiz, guessed whether news excerpts were machine generated or human written (Saygin *et al.,* 2000) and identified errors that guided their decision. Quantitative analysis revealed that although both L1 and L2 speakers were equally able to defend themselves against machine-generated fake news, L2 participants were more sceptical, labelling more human-written texts as being machine generated. This is possibly due to concern about the stigma associated with being fooled by a machine due to lower language levels. However, factual errors and internal contradictions were the most reliable indicators of machine writing for both groups. This emphasises the importance of fact-checking when news articles prioritise exaggerated headlines, and NLP tools enable production of popular content in areas like medicine.

Keywords: Natural-language processing, detection of fake news, fact-checking of articles, machine-generated medical fake news, natural-language generation, manipulation

Introduction

Fake news can be defined as misleading stories (Gelfert, 2018) intended to attract attention in order to secure monetary or political profit (Frank, 2015). While many people believe that mainstream sources would not publish false stories, even established media companies may find themselves broadcasting inaccurate information. Readers should therefore not blindly trust online news without fact-checking (Gatten, 2004). Research shows that young people consume news on social networks rather than traditional broadcast media (Allcott and Gentzkow, 2017), which enables quick access to information, but lends itself easily to the spread of fake news (Aldwairi and Alwahedi, 2018). As was seen in the recent public health crisis caused by the COVID-19 pandemic, it is important to recognise the rise of fake news in the medical field (Naeem *et al.,* 2020: 1).

In 1950, Alan Turing described an imitation game in which a machine must convince an interrogator that it is a human being through written responses to the interrogator's questions, and he believed that at the turn of the twenty-first century, computers would be able to fool humans at least 30 per cent of the time. It is beyond the scope of this paper to review the historical developments in natural-language processing (NLP), but research in the field has evolved considerably, and today's language models use the statistical distribution of words to predict the next word in a text based on those preceding it.

News articles generated by state-of-the-art language models have been rated as more trustworthy than human writing (Zellers *et al.,* 2019), which has given rise to a complex discussion around the ethics of artificial intelligence (Radford, Wu, Amodei *et al.,* 2019). Although automatic systems are able to detect machine-generated text, it is crucial for individuals to learn to spot these (Gehrmann *et al.,* 2019). Therefore, more needs to be done to understand both the affordances and risks of natural-language generation technology in the production of news.

While most research in automated content generation focuses on improving the models' ability to approximate human writing as closely as possible (Carlson, 2015), previous research in digital journalism has examined how readers perceive software-generated news content in comparison to that written by human journalists (Clerwall, 2014). Similarly, the present study aims to find the most reliable clues that lead human readers to identify machine-generated fake news. Self-selected participants filled out an online questionnaire consisting of a Turing-test style text-annotation task (Saygin *et al.,* 2000) in which participants were asked to classify medical news articles as being either 'machine generated' or 'human written' and to identify predetermined error categories in the text that guided their decision. And while there are certain linguistic errors that help identify machine writing, it should be noted that, as training sets grow larger, language models are likely to approximate human writing closer and closer, making grammatical errors a temporary issue.

This study examines the factors that contribute to the performance of human readers on the task and their unconscious strategies when approaching the task. Previous research has not studied L2 English speakers or examined the effect of English proficiency. Research in TESOL, second language acquisition and studies of university students' writing have shown that L1 and L2 English speakers tend to focus on different aspects of the language in production and comprehension. While L1 speakers focus on vocabulary (Burt, 1975) and overall style (Scarcella, 1984), L2 speakers tend to rely on grammatical rules (Tsang, 2017). This study examined whether this is the case in the detection of machine-generated fake news.

As part of a larger mixed-methods study, this paper uses quantitative analysis to compare L1 and advanced L2 English speakers' performances on the basis of the F1 score (Goutte and Gaussier, 2005), which was selected as a measure of how well they can defend themselves against machine-generated fake news. The F1 score is a measure used in statistical analysis of binary classification and is further explained in the methodology section of this paper. The errors that the research participants identified in the test excerpts were analysed in order to identify the clues that most reliably lead to the identification of machine writing in everyday life.

Literature review

Fake news is often described as speculative and not based on evidence (Punjabi, 2017), with hyperbolic headlines intended to attract attention in order to secure monetary or political profit (Frank, 2015). Because of its novelty, fake news has been found to spread further and faster than true stories (Vosoughi *et al.,* 2018). According to Zakharov *et al.* (2019), many readers do not believe that mainstream news outlets would publish false stories. However, even established media companies may publish inaccurate information and should not be exempt from fact-checking (Gatten, 2004).

Research shows that in the UK and USA, young people increasingly use social media like Twitter and Facebook to consume news in place of traditional broadcasting organisations (Allcott and Gentzkow, 2017). This enables quick access to the news, but contributes to the spread of fake news (Aldwairi and Alwahedi,

2018). The medical field is particularly vulnerable to misinformation and, during the COVID-19 public health crisis, the World Health Organization declared that not only are we fighting a pandemic, at the same time, we are also 'fighting an infodemic' (Naeem *et al.,* 2020: 1) and urged health information professionals to help the general public detect false news.

Nowadays, products using text summarisation simplify academic articles (Yadav *et al.,* 2021), and automatic translation helps us overcome language barriers (Xaitqulov, 2021). Modern NLP techniques make our lives easier. However, they can also be misused to reword news briefings in order to fit a political agenda (Sharevski *et al.,* 2021). In recent studies, readers rated the style and trustworthiness of computer-generated propaganda as being more convincing than those of its human-written counterparts (Zellers *et al.,* 2019).

The algorithmic processes that convert data into narrative news texts with limited to no human intervention – such as those created by the companies Narrative Science or Statsheet Network – have been described as 'automated journalism' (Carlson, 2015), and Clerwall (2014) found that software-generated content produced by such tools was barely discernible from that written by human journalists.

Until recently, computers had to be trained for specific tasks. However, nowadays, transfer learning allows unsupervised systems to perform well on a variety of tasks without explicit programming (Radford, Wu, Child *et al.,* 2019). GPT-2 (Generative Pre-trained Transformer) is a publicly available large neural network model pre-trained on *WebText*, a dataset of over 8 million documents from the internet (Radford, Wu, Child *et al.,* 2019), which allows it to generate human-sounding text by predicting the next word in a passage based on all the preceding words. It is effective out of the box, but can be fine-tuned on texts that one wishes to emulate. The proliferation of open-source software and ready-to-go scripts that facilitate the fine-tuning and text-generation process, such as those created by Woolf (2019), have allowed laypeople with little to no coding ability and understanding of the societal implications to operate these on a mass scale. The research organisation OpenAI, which released GPT-2, drew attention to the issue of ethics in artificial intelligence by releasing the model gradually out of fear that it could be abused to generate misleading news articles (Radford, Wu, Amodei *et al.,* 2019). It is therefore imperative to instigate a conversation about disinformation threats created by machine learning and how to offset these (Zellers *et al.,* 2019).

Human judgements are frequently used to help language models emulate human writing (Resnik and Lin, 2010). However, more research needs to be done to help human readers identify machine-generated text. Ippolito *et al.* (2020) revealed the parameters that determine how the next word in a text is chosen and, therefore, how similar or dissimilar to the training data the output will be. On one side of the spectrum, the generated text is less diverse and closer to the original input text, as the model chooses words that commonly follow each other, making automatic statistical detection easier. This also produces fewer semantic errors, making the text more believable to humans. On the opposite side of the spectrum, the text is less predictable and uses uncommon words, which resembles human-written text to an automatic detector, but the frequent semantic errors reveal its machine-generated origin to human readers. While automatic discriminators rely on statistical distribution, humans check whether the presented evidence matches their model of the world (Zellers *et al.,* 2019). Therefore, humans must be kept in the loop to counter ethnic and gender biases encoded in training data, since the results produced by automatic systems can promote discriminatory decision making when accepted without questioning (Chang *et al.,* 2019).

Because of the global status of the English language, L2 speakers make up roughly two-thirds of English speakers in the twenty-first century (Pennycook, 2017). Most of the world's scientific research is in English, and the language is highly prominent in the media (Seidlhofer, 2004) and seen as valuable for education and

employment in today's world (Nunan, 2003). Many L2 speakers therefore need to be able to distinguish fake news in a foreign language. L1 and L2 speakers tend to focus on different features of the language, and previous research in the field has not taken this into account.

Studies that examined the syntactic complexity of the writing of L1 and L2 university students suggest that L1 speakers capture the readers' interest and help them identify the theme by using rhetorical devices, synonyms and lexical collocations (Scarcella, 1984). They can also adjust their language according to the task demands (Foster and Tavakoli, 2009), use more subordination and focus on fewer subtopics in more depth (Mancilla *et al.,* 2017), which they introduce using a variety of discourse markers (Ferris, 1994). In comparison, L2 writers have been shown to use less attention-getting devices and tend to over-specify the theme – failing to judge what their audience knows about the topic – and to use statements that downplay the importance of their exposition. L2 students also utilised clarifying devices governed by few syntactic and pragmatic constraints; they introduced more topics than L1 students in their papers, but more superficially (Scarcella, 1984), while using more explicit discourse markers (Ferris, 1994).

Additionally, Tsang (2017) found that in determining the countability of English nouns, Cantonese participants relied on grammar rules, whereas L1 English speakers gave more weight to semantics. Previous research on L2 English teachers shows similar tendencies. Like students, L2 English teachers paid attention to grammatical accuracy (Connor-Linton, 1995), word order and the organisation of essays (Shi, 2001), whereas L1 teachers focused on lexical errors, range of vocabulary (Burt, 1975), discourse context and overall quality of writing (Song and Caruso, 1996).

Based on previous research done in the fields of natural-language processing, digital journalism and TESOL, the following three research questions were identified:

1. Which errors are most reliable in helping readers identify machine-generated texts?
2. Do L1 and L2 English speakers achieve different levels of performance in detecting machine-generated texts?
3. Do L1 and L2 English speakers use different criteria in the identification of machine-generated text?

Methodology

This paper presents the quantitative results of a larger interdisciplinary mixed-methods study carried out in order to answer the research questions posed above.

A Qualtrics survey[1] was used to administer an online Turing-test style text-annotation task (Saygin *et al.,* 2000) to participants who were presented with seven potentially machine-generated texts and three questions (Figure 1). They were asked to classify each prompt as being either machine generated or human written and to identify errors from a list of predefined options.

The seven prompts consisted of three machine-generated texts, human-written texts and one control text (Figure 2) in random order to minimise ordering effects on participants' perception (Schwarz, 2007). To ensure that participants were engaging with the task and not answering randomly, they were asked to classify the control prompt as *definitely machine generated* and all responses that failed this check were excluded from further analysis.

Previous research indicates that machine-generated texts frequently present problems with grammar, meaning that they include morphosyntactic errors , such as the use of incorrect verb forms or word order

(Stahlberg and Kumar, 2021). Machines frequently struggle with entailment where a text negates (i) its claims made within the excerpt (Saikh *et al.,* 2019), (ii) punctuation and (iii) formatting (Datta *et al.,* 2020). Much of machine-generated text can also be quite repetitive and predictable (Gehrmann *et al.,* 2019). Ippolito *et al.* (2020) also mentioned semantic errors and incorrect factual information (identified as NONSENSE in the quiz). Based on common errors identified in previous research, the predefined error categories can be seen in Figure 1. Operational definitions and examples of each error type were provided in the quiz instructions, and a short summary of each option was available to participants under every text.

Figure 1: Example machine-generated prompt and questions

The online quiz used gamification techniques to encourage participation (von Ahn, 2006). The first question under each text was scored using a simplified scoring system irrelevant to the results of the study. The final score was revealed to participants after they submitted their survey response, along with a short debrief and links to news articles relevant to fake news and natural-language generation for those interested in learning more.

Language models have been customised on video-game character biographies (Shane, 2019) and short stories (Fan *et al.,* 2018), as well as non-fictional language data, such as the news (Zellers *et al.,* 2019), Wikipedia articles (Liu *et al.,* 2018) and Reddit posts (Keskar *et al.,* 2019). This study used medical news articles for two reasons. Firstly, it is a topic that many participants may not have expert knowledge of, forcing them to rely on linguistic rather than content clues. Secondly, it is one of the fields where it is particularly important to think critically when consuming online content.

A publicly available corpus (Triki, 2020) of 1989 articles scraped from the online news outlet Medical News Today before September 2020 was used to fine-tune the GPT-2 language model and to randomly select human-written texts.[2] These informative articles are not time-sensitive, and the large amount of textual data used to fine-tune the model diminishes the chances that generated texts would closely resemble any one article.

A pilot study was run to determine the best number and length of prompts. All human-written and machine-generated texts ranged between seven and ten sentences in length to form paragraphs resembling news article previews encountered online. While language models can produce convincing short texts (Guo *et al.,* 2018), they face challenges with longer passages (Puduppully *et al.,* 2019). The prompt length was balanced to showcase longer machine-generated texts and maximise the survey completion rate by keeping the time needed under 15 minutes.

To elicit annotations on a wider range of materials and minimise the effect of individual prompt items on the final results, 21 machine-generated texts, 21 human-written texts and 7 control prompts were produced and randomised in the Qualtrics Survey Flow. To control for the effects of participants' demographic characteristics on their performance in the task, they were asked to provide their age group, gender, first language, level of English and level of education (Dörnyei, 2007) in the next section of the survey.

Figure 2: Example control prompt

The described survey was disseminated in social media groups on Facebook. Respondents self-selected to participate and gave informed consent. A total of 143 completed survey responses were recorded; 9 responses that failed the attention check were excluded from analysis. The following analyses are based on the remaining 134 respondents, who yielded a total of 804 annotations.

For analysis, the F1 score was used as a performance metric instead of the simplified scoring system from the quiz. The F1 score derives from the binary confusion matrix (Goutte and Gaussier, 2005) and is used as a measure of accuracy to compare the performance of diagnostic classification systems in machine learning (Swets, 1988). The F1 score derives from recall and *precision*, two metrics defined in terms of the four fields of the confusion matrix (Figure 3). The values of all three metrics range between 0 and 1. For the purposes of this paper:

- Positive condition (P) refers to all machine-generated texts.

- Negative condition (N) refers to all human-written texts.

	Guessed HW	Guessed MG
Truly HW	True Negatives (TN)	False Positives (FP)
Truly MG	False Negatives (FN)	True Positives (TP)

Figure 3: Confusion matrix (author's own graphic)

Recall, also known as the true positive rate (TPR), is defined as

$$TPR = \frac{TP}{TP + FN}$$

and indicates the number of items correctly identified as positive out of the total number of positive items (Buckland and Gey, 1994). In this case, it refers to how many machine-generated texts a participant can spot, and it ensures that participants do not fail to identify many machine-generated texts. The more machine-generated texts a participant successfully detects, the higher their recall.

Precision, also known as positive predictive value (PPV), is defined as

$$PPV = \frac{TP}{TP + FP}$$

and refers to the number of items correctly identified as positive out of all items identified as positive (Buckland and Gey, 1994). Here, it represents the number of truly machine-generated texts out of all the texts guessed as machine generated. This score ensures that participants do not simply guess every text to be machine generated to be safe.

Mathematically, the F1 score is the harmonic mean of recall and precision (Chicco and Jurman, 2020). The two scores work against each other and reward the ability to spot machine-generated texts while minimising false alarms. The F1 score is defined as follows:

$$F_1 = 2 \times \frac{precision \times recall}{precision + recall} = 2 \times \frac{PPV \times TPR}{PPV + TPR} = \frac{2TP}{2TP + FP + FN}$$

When either precision or recall is 0, the F1 score is also 0. When both are zero, it is impossible to define. To get a high F1 score, both precision and recall must be high. However, when one is high and the other is low, the F1 score will be lower. For example, when a participant correctly identifies all machine-generated texts

by guessing every text as machine generated, their recall is 1 and their precision is 0 (F1 = .67). When they only guess one to be machine generated, but do not spot the other two, their recall is .34 and their precision is 1 (F1 = .50).

In comparison to the regular accuracy score (arithmetic mean), the F1 score centres around the ability to identify the positive class, therefore participants score higher when they guess every text as machine generated (.67). However, those who believe every text to be human written receive an F1 score of 0.

The following section introduces specific hypotheses, describes performed analyses in detail and presents the results.

Analysis and results

The data analysis stage of the study aimed to compare F1 scores across three levels of English proficiency and to reveal participants' covert strategies employed in the task.

One of the participants' recall and precision scores were both zero, making their F1 score impossible to determine. This outlier data point[3] was excluded from all quantitative analyses, bringing the number of L1 speakers down to 88.

The following section examines the differences in performance scores between L1 (n=88), and advanced (n=40) and intermediate (n=5) L2 English speakers. Since the collected data did not follow a normal distribution (Shapiro and Wilk, 1965; Winter, 2020), non-parametric tests were used to compare the distribution of performance scores across proficiency levels.

According to a Kruskal-Wallis test, L1, advanced L2 (C1−C2) and intermediate L2 (B1−B2) English speakers differed statistically significantly in their F1 scores, z = 8.40, p < .05 (Figure 4). According to further analysis, the performance of intermediate speakers differed statistically significantly from both L1 and advanced L2 speakers. Due to their low number, they were excluded from subsequent analyses.
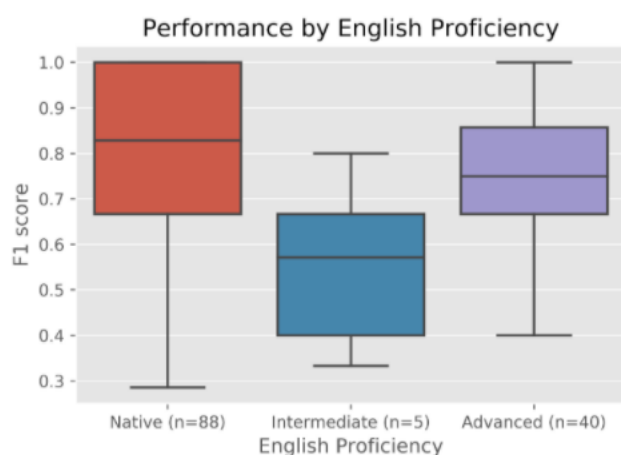

Figure 4: Distribution of F1 scores by English proficiency

A series of two-tailed unpaired Wilcoxon rank-sum tests was performed to examine the following alternative hypothesis by comparing the distribution of five metrics between L1 and advanced L2 participants: confidence, F1 score, accuracy, recall and precision:

- H_A: There is a difference in performance between L1 and advanced L2 English speakers.

Despite the statistically significant difference between participants' scores in the Kruskal-Wallis test, the F1 scores of L1 speakers (mdn = .83) were not statistically significantly higher than those of advanced speakers (mdn = .75, z = 1.75, p = .08). However, the difference in accuracy between L1 (mdn = .83) and advanced L2 speakers (mdn = .67) was statistically significant (z = 1.98, p < .05). Such results can be reconciled after a closer look at the individual components of the F1 score. While the difference between L1 and L2 participants in terms of recall was not statistically significant (z = 0.74, p = .46) it was in terms of precision (L1, mdn = 1.0, L2, mdn = .67; z = 2.33, p = .02). A detailed analysis of accuracy (Table 1) shows that L1 and advanced L2 speakers correctly identified a comparable number of machine-generated texts, 79.17 per cent and 76.67 per cent respectively. However, while L1 speakers also correctly identified 79.55 per cent of human-written prompts, advanced L2 speakers only identified 70.83 per cent. Advanced L2 speakers' lower accuracy on human-written texts and the individual components of the F1 score reveal that both groups have a comparable ability to spot machine-generated texts. However, advanced speakers labelled more human-written texts as being machine generated. The F1 score rewards the ability to spot machine-generated texts even at the cost of a few false alarms on the part of the advanced L2 speakers.

	L1 (%)	Advanced L2 (%)	Total (%)
Machine generated (%)	79.17	76.67	78.39
Human written (%)	79.55	70.83	76.82
Total (%)	79.36	73.75	77.60

Table 1: Overall accuracy by prompt type and proficiency

Next, participants' covert strategies (error categories identified by participants in the third question under each prompt) were analysed to test the following two alternative hypotheses:

- H_A: Specific error types contribute to the successful identification of a text as being machine generated.
- H_{A1}: The number of errors identified in each category in machine-generated texts differs between L1 and advanced L2 English speakers.

The stacked bar plots in Figure 5 (see Table B1 for exact counts) show how many times each error category was identified, whether it led to a true positive or a false negative, and the percentage of true positives out of the total number of identified errors. There was no drastic difference between the error categories flagged in machine-generated texts by the two groups. In both groups, factual errors (NONSENSE) and repetition were flagged most frequently. However, it was undoubtedly internal contradictions (ENTAILMENT; see Figure 1, Q6, and for other error categories discussed here) and factual errors (NONSENSE) that were the most reliable in the detection of machine-generated prompts. L1 participants identified slightly more grammatical errors, whereas advanced L2 speakers noticed formatting deficiencies more often. Repetition errors were mentioned slightly more by L2 speakers. In 5 to 20 per cent of the time, even prompts marked as NO ERROR were successfully identified as machine generated. OTHER errors included the same error categories phrased differently or alluding to specific words in the prompt by participants who were not sure how to categorise their annotation. A major part of these also commented on coherence.

Subsequently, a mixed-effects multivariate logistic regression model was fit to discover which of the five specific error types (excluding NO ERROR and OTHER) most reliably led to the correct identification of prompts as being machine generated. The model accounted for fixed effects of the five error types and controlled for random effects of response ID and prompt item (*n*=21). Table 2 shows a summary of the model variables. In the dataset, each observation refers to an individual annotation of a machine-generated text by a particular participant. Two separate models were fit for L1 (*n*=88) and advanced L2 speakers (*n*=40).

For L1 speakers, the logistic regression analysis confirmed that internal contradictions (ENTAILMENT) and factual errors (NONSENSE) most strongly predict the detection of machine-generated texts. The remaining three error types also more or less contributed to the probability that participants detect machine-generated texts correctly (see Table 3 for details). The model was checked for collinearity, and the VIF (variance inflation factor) score for all variables that fell below 2 (Tomaschek *et al.,* 2018).

Variable	Type	Description
correct (True or False)	dependent variable	Whether or not the prompt was identified correctly as machine generated.
grammar, repetition, entailment, formatting, nonsense (True or False)	independent variables, fixed effects	Whether or not a particular error type was identified in the prompt.
ResponseId (e.g., R_8qvhYV0sDJooptD), item (e.g., MG12)	control variables, random effects	ID numbers generated by Qualtrics identify responses by a single participant; item codes identify individual prompts.

Table 2: Logistic regression variables

Error type	Coefficient	p-value
ENTAILMENT	3.78	<.001
NONSENSE	3.29	<.001
REPETITION	2.70	<.001
GRAMMAR	2.03	<.001
FORMATTING	1.64	<.01

Table 3: Logistic regression results (ordered by coefficient value)

Although L1 and advanced L2 speakers agreed on the reliability of each error type leading to true positives, the logistic regression model for L2 speakers failed upon overfitting due to a lack of data points and, presumably, the large diversity of L2 participants' first languages, such as Arabic, Chinese, Dutch or German. Spanish, the most common first language in the dataset, was only represented by six speakers.
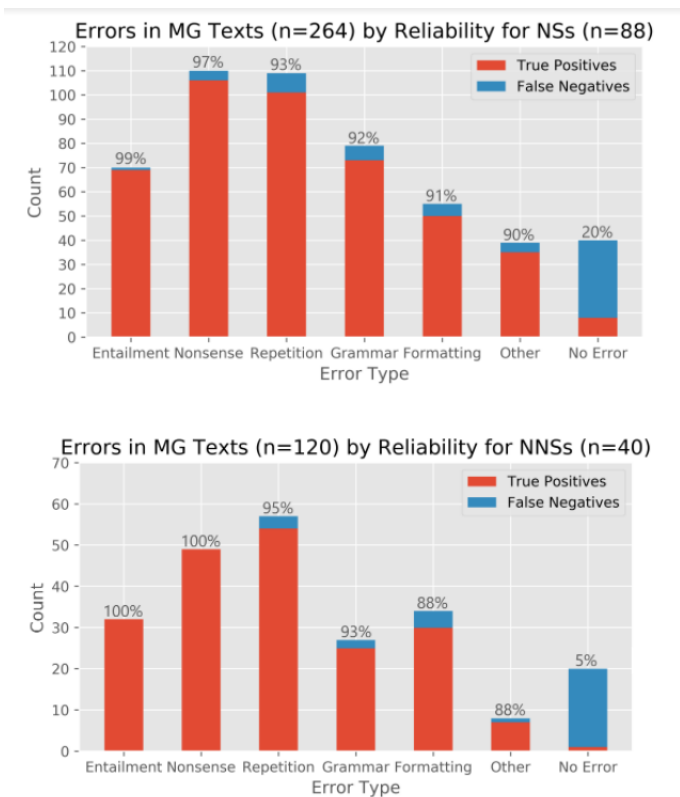
Figure 5: Error annotations in machine-generated prompts from L1 (top) and advanced L2 (bottom) speakers (categories ordered by reliability in descending order)

Discussion

While previous research mostly used human judgements to further improve existing content generation systems, the aim of this paper was to provide human readers with guidance on how to best defend themselves against machine-generated medical fake news. The study revealed that publicly available language models and data sets can indeed be used to produce believable machine-generated news articles on critical topics such as health and medicine. One in five machine-generated news article excerpts shown to participants in the quiz was guessed to be human written. Machine-generated fake news is still far from indiscernible from human writing. However, as natural-language generation techniques improve, fact-checking will become increasingly important.

Shortly after Google had rolled out Bard, their brand-new AI-powered service, domain experts pointed out a factual error in its very first demo (Vincent, 2023). Astrophysicist Grant Tremblay – who had pointed out the error – later tweeted that text generators, such as OpenAI's ChatGPT and Google Bard, are often 'very confidently' wrong, and the question remains whether language models will learn to fact-check the text they generate in the future (Vincent, 2023).

The F1 score (Goutte and Gaussier, 2005) was selected as an indicator of participants' ability to defend themselves against machine-generated fake news. Although L1 and advanced L2 speakers did not achieve significantly different F1 and recall scores, L1 speakers' precision was higher. Both groups were equally good at defending themselves against machine-generated news, but advanced L2 speakers were more sceptical and raised more false alarms by flagging human-written texts as being machine generated. This may be caused as much by the negative social implications associated with being fooled by a machine and the fear of being perceived as naïve as their generalised scepticism in their selection of news (Fletcher and Nielsen,

2019). In future research, a more precise proficiency evaluation measure would be beneficial in place of self-reporting when comparing L1 and advanced L2 (C1–C2 level) English speakers.

While there is a statistically significant difference between the F1 scores of intermediate L2 (B1–B2), advanced L2 (C1–C2) and L1 English speakers, this does not hold for the difference between L1 and advanced L2 speakers. This hints at a potential influence of participants' English proficiency on their performance in the task. Nevertheless, the study sample was too small to claim this with confidence. A larger sample of participants with lower proficiency could confirm or reject the hypothesis that highly proficient participants achieve higher scores in the classification task. However, as the aim of the study was to help English speakers of different levels critically evaluate whether they are reading machine writing, the likelihood is low that less proficient speakers rely on news in English to stay up to date.

The present study focused on the detection of machine-generated text based on linguistic errors. However, it did not consider how credibility is attributed to particular sources of news, which has been shown to influence readers' perception of news (Zakharov *et al.,* 2019). In agreement with previous research (Allcott and Gentzkow, 2017), some participants explicitly acknowledged that if they had encountered the study prompts on social media, they would have been less critical of the information. Quantitative results showed that a small number of human readers were accepting of factual errors in human writing, and some – more so L1 speakers – indicated that they would trust writing that they perceived as being machine generated. With the improvements in natural-language generation, it is possible that in the future, machine writing will not necessarily be seen as harmful, as long as the factual information is correct.

Conclusion

Fake news is on the rise, and can be particularly harmful in the medical field. Many young people consume news on social media rather than traditional news organisations, which enables them easy access to news but lends itself to the spread of fake news. It has been shown that today's computers can generate news articles that readers rate to be more trustworthy than articles written by humans, which sparked a debate around the ethics in artificial intelligence. To prevent abuse of such AI tools, human readers must learn to spot machine writing. This paper confirms the importance of fact-checking and being aware of current news – be they human-written or machine-generated texts – in an era when advanced language-generation technology is closely approximating human writing.

The findings revealed that advanced L2 speakers were as capable of defending themselves against machine-generated fake news as their L1 counterparts. However, they may have been more sceptical (Fletcher and Nielsen, 2019) of human writing to avoid being fooled by a machine. Factual and entailment errors most reliably identified machine-generated prompts across both groups. Future research should focus on sampling homogenous groups of L2 speakers to discover more nuanced differences.

A small sample of intermediate English speakers suggests an effect of proficiency on performance in the task. Further research may wish to explore performance patterns and strategies of less proficient L2 speakers; however, these are less likely to need to rely on the consumption of news in English in their daily lives.

While there are certain linguistic errors that help identify machine writing, natural-language generation techniques are improving, and it is fact-checking and spotting internal contradictions that are the most reliable at this point in time. Although many readers blindly trust the information published in mainstream sources of news, established media companies should not be exempt from fact-checking (Gatten, 2004).

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Endnotes

[1] Link to the Qualtrics survey: http://warwick.co1.qualtrics.com/jfe/form/SV_4Jh8XWfATDwuAXY

[2] The GPT-2 medium 355M language model was fine-tuned on an NVIDIA Tesla T4 with GPU RAM provided by the Google Colab service using the GPT-2-simple package (Woolf, 2019) to fine-tune the model for 2000 steps with the temperature parameter set to 0.7 by default. The temperature values range between 0 and 1 and determine how similar or dissimilar the resulting generated texts will be to the training data. The higher the temperature, the more 'creative' the generated text will be (or dissimilar to the training data).

[3] One L1 undergraduate woman aged 18–25 guessed all three machine-generated texts to be human written, causing her recall to be 0. Both texts guessed to be machine generated were truly human written, causing her precision to be 0 as well and rendering her F1 score impossible to define. This outlier data point was excluded from all quantitative analyses.

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Glossary

B1–B2 level English: Under the CEFR standard (Common European Framework of Reference for Languages), the B1–B2 level refers to intermediate and upper-intermediate users of the language who are able to communicate independently in most contexts.

Binary confusion matrix: In machine learning, the confusion matrix, also known as the error matrix, is a table visualisation of the performance of an algorithm. Each row represents the occurrences in an actual class, and each column represents the occurrences in a predicted class. In this paper, the matrix was used for the guesses of individual human participants rather than an algorithm.

C1–C2 level English: Under the CEFR standard (Common European Framework of Reference for Languages), the C1–C2 level refers to advanced and proficient users of the language who are often nearing native proficiency.

Entailment: Relationship between two claims where if one is true, the second must also be true for example, 'I see a cat' entails 'I see an animal'. However, in this context, machines will frequently assert the first and deny the second.

F1 score: The F1 score is a measure used in statistical analysis of binary classification. It derives from the binary confusion matrix (Goutte and Gaussier, 2005) and is used as a measure of accuracy to compare the performance of diagnostic classification systems in machine learning (Swets, 1988).

L1 English speakers: Those for whom English is their first language, native language or mother tongue. They are often described as native speakers.

L2 English speakers: Those for whom English is an additional, second or foreign language. They are often described as non-native speakers.

Morphosyntactic errors: Grammatical errors in word formation or word order; for example, 'he go to school'.

Mixed-effects multivariate logistic regression analysis: Formula that predicts the relationships between dependent and independent variables. It allows researchers to calculate the probability of a specific outcome depending on a number of variables. It is particularly common in the field of machine learning. A mixed-effects model is used to account for both within-person (several quiz prompts per person) and across-person (many participants in the study) variability.

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The Conflict Between Public Health And Civil Liberties: The Initial UK Government Policy Response to the Covid-19 Pandemic

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Abstract

This paper aims to illustrate the tension between public health and civil liberties through the case study of the UK government's emergency response to the Covid-19 pandemic. In the area of public health, this tension is predominantly approached by reference to two theories: liberalism and communitarianism. This paper studies these positions and how they are manifested in evidence-based policymaking by combining a study of public health policy with a study of public health ethics. The studies help demonstrate the UK government's framing of health policy relating to Covid-19 in terms of liberalism and communitarianism. The paper concludes that in the initial UK government response to Covid-19, the government discourse evoked communitarian values and framed its policies as being evidence-led and as prioritising public health. However, the policy measures themselves manifested liberal values: they had the underlying concern of not infringing excessively on civil liberties, and individuals were given autonomy of decision making within the measures that were taken. The article concluded that emergency times require a communitarian response based on preventative action. This article is the first to combine public health policy with public health ethics to demonstrate how values form a key part of decision making.

Keywords: Health policies and civil liberty, liberal values and Covid-19, liberal and communitarian conflict, public health ethics and evidence-based policy, public health policy and public health ethics during Covid-19 pandemic

Introduction

Civil liberty is a value that is at the heart of Western societies, manifesting within their democratic structures (Schmitter and Karl, 1991). However, in emergencies, governments may need to temporarily restrict this liberty (Orzechowski *et al.*, 2021). Due to the threat that the Covid-19 pandemic posed to civil liberties, many suggested that 'democracies were slower to react to the pandemic' (Cheibub, Hong and Przeworski, 2020: 20), and that countries such as the UK, Sweden and the US applied a libertarian response to the pandemic (Marginson, 2020; Lawrence, 2020; Fahlquist, 2020). Thus, the virus created a moral dilemma for liberal democracies: they sought to find the right balance between maintaining civil liberties and protecting public health.

It is often argued that, for Western democracies, public policy is evidence-led (Cairney, 2021; Williams *et al.*, 2020). While the UK government justified its decisions as being based on scientific evidence, this has been disputed (Reynolds, 2020). In the absence of definitive evidence at the early stages of the pandemic, scientific advice often varied, which resulted in the selective picking of evidence (Zaki and Wayenberg, 2020). Similarly, Lawrence contends that 'the diverse interpretations and responses of governments and public administrations confirm that "evidence-based policy" is a theoretical concept that is often not applied' (Lawrence, 2020: 587) Thus, governments' use of scientific evidence is analysed in this research article.

This paper aims to uncover the role of values in political decision making. This is explored through conducting a qualitative study of the UK government's response to the Covid-19 pandemic, considering the civil liberty–public health tension. Within public health, this tension is predominantly approached by two theories: liberalism and communitarianism (Brody, 1993; Childress and Bernheim, 2003; Parmet, 2003). This paper considers these positions and how they manifested in evidence-based policymaking. The paper combines the study of public health policy (PHP) and public health ethics (PHE) to explain the UK government's framing of health policy relating to Covid-19.

An interpretive policy analysis (IPA) was conducted to understand where the UK government lay on the liberalism–communitarianism spectrum and how this impacted resultant policies. Therefore, the research ontology is social constructionism, 'whereby the social reality is not singular or objective but is rather shaped by human experiences and social contexts' (Bhattacherjee, 2012: 103). The epistemological stance is interpretive to see how this democratic ontology was challenged by emergency measures taken during Covid-19. In this sense, the research paradigm is interpretive.

Thus, the paper focuses on the UK's public health discourse during the initial phase of the pandemic: from the identification of the virus until the imposition of the first lockdown at the end of March 2020. It demonstrates how values can play a fundamental role in decision making and argues that emergencies require acting preventatively, even if it infringes on fundamental freedoms.

The conflict

Civil liberties relate to citizens' rights that are protected by a country's constitution, 'such as freedom of movement, freedom of enterprise, and freedom of assembly' (Belin and Maio, 2020). Governments cannot interfere with these rights and have an obligation to protect them by law (Hickman *et al.*, 2020). This paper focuses on the civil liberties of freedom of movement and choice, given Covid-19's impact on fundamental freedoms through government-implemented non-pharmaceutical interventions (NPIs).

Public health, however, is concerned with the health of the entire population, as opposed to just individuals (Childress and Faden, 2002). Civil liberties and public health goals can often conflict – for example, regarding the 'right' to smoke. Thus, many PHE frameworks seek to define an approach for responding to conflicts that arise between civil liberties and efforts to promote or protect public health. This tends to focus on government approaches, because of governments' unique ability to construct a collective response (Cetron and Landwirth, 2005). Therefore, governments have specific responsibilities and powers in relation to public health concerns.

The PHE debate on the relationship between civil liberties and healthcare will broadly be divided into two approaches: liberal and communitarian.

Liberalism and communitarianism

Liberalism is based on the value of individual liberty and considers it a fundamental good, and thus the theory holds that strong justification is required when liberties are curbed by paternalistic government interventions (Faden, Bernstein and Shebaya, 2020). Communitarianism subordinates an individual's liberty to the welfare of the community and values paternalistic actions insofar as it promotes that welfare (Forster, 1982). These perspectives can be seen as the two opposite ends of a spectrum, but they are not mutually exclusive.

PHE often assumes a liberal approach. This is based on the argument that liberal values are fundamental to democracy and need to be prioritised (Myers, 2016). Other scholars add that there needs to be respect for individual autonomy. However, most liberals consider it justified to restrict liberties in accordance with John Stuart Mill's harm principle (Powers *et al.*, 2012): that is, liberties should be curbed if their exercise inflicts harm on others (Mill, 1859). Nonetheless, according to a liberal perspective, such restrictions should take the form of soft paternalistic measures, like nudging, with the primary responsibility for health resting on individual action (Baggott, 2010). Accordingly, Gostin and Hodge (2020) define a framework for evaluating public health responses based on such considerations, including the risk posed by individuals, the efficacy of the interventions, the least-restrictive means that can be applied, the proportionality of coercion and an assessment of the evidence used to arrive at the means.

In the literature, communitarianism is often presented as a counter to liberalism and does not have a distinct framework of its own. However, communitarian values help us to understand the approach to public health according to communitarianism. Forster argues that a communitarian response 'encourage[s] people to recognise their mutual dependencies, concern for the well-being of the community' (Forster, 1982: 161). For Petrini, 'in the communitarian perspective, the health of the public is one of those shared values: reducing disease, saving lives, and promoting good health are shared values' (Petrini, 2010: 193). Therefore, a communitarian view evokes values that prioritise the community's common good. It assigns responsibility to individuals to act in a manner that benefits the community.

A critical difference between the liberal view and the communitarian view is that liberalism values the conception of the good of each individual, whereas communitarianism values the good of the whole community higher than individual rights (Turoldo, 2009). Hence, a communitarian view takes a 'paternalistic' approach, developing a view of 'community' and encouraging responsibility towards the community. Paternalism here means that the primary responsibility for protecting public health lies with the government, while the community is obliged to follow whatever the government ordains, given the (espoused) benefit to the common good of the community (public health) (Baggott, 2010). Thus, in a communitarian view of public health, the primary responsibility lies with the government to create a collectivist response, even if that requires paternalism.

Overall, there is consensus that both the liberal and communitarian viewpoints allow limiting civil liberties in public policy responses to emergencies. However, the difference lies in the extent of that action, and justifying it.

The role of evidence in policy

To examine policymaking, a third approach to public health – beyond the ethical dilemmas – can be found in the PHP literature. There is debate within PHP regarding its approach to public health. While some argue that PHP is purely evidence-based (Brownson *et al.*, 2009; MacIntyre, 2011), others argue that it is in fact political- and value-laden (Fafard, 2015; Fischer, 2003; Leeuw *et al.*, 2014). Thus, a predominant debate is whether the policy process is evidence-led.

An evidence-based policy approach assumes a linear policymaking process in which experts give evidence, and the government makes policy based on what they deem to be the best outcome (Bambra, 2009). This approach aims to bridge the 'gap' between the political and the scientific (Cairney and Oliver, 2017; Smith, 2013).

However, many argue for the need to further develop research methods in PHP analysis because despite the presence of evidence-led policy, '[often] public health decisions [...] do not reflect the best available scientific evidence' (Fafard, 2015: 1129). There are two explanations for this: either the science itself is disputed, or politics plays a significant role (Baggott, 2015; Sisnowski and Street, 2008). Both explanations highlight the complexity of decision making, given that 'public health policy decisions often involve normative and ethical decisions which evidence alone cannot answer' (Smith, 2013: 69). Furthermore, often evidence only comes about after a policy has been implemented. Hence, PHP analysis should incorporate political science approaches to explain deviations from evidence and the policy process (Oliver, 2006).

This calls into question what other tools should be employed in efforts to understand policy. As Chadwick debates, 'should the [method] attempt to discern the "core elements" of an "ideology" (understood as a "system of ideas"), or understand it as a tension between two extremes, such as libertarianism and collectivism?' (Chadwick, 2000: 289). Bacchi contends that how a policy frames a problem reveals the values that are prioritised (Bacchi, 1999). As this paper is viewing which values are manifested within policy, Chadwick's method of exploring a tension seems to fit best. Therefore, the use of scientific evidence in policymaking can be contrasted with the discourse involved in the decision-making process in order to understand how the evidence is used and how issues are framed.

As PHP is a new field of research, no framework has yet been developed to assess the values that are prioritised in policymaking. To the author's knowledge, this is one of the first papers to combine PHP and PHE to assess the role of values in policymaking.

Methodology

This paper applies the IPA framework to explore the theoretical underpinnings of the UK government's approach to Covid-19. The study focuses on the UK as I experienced that country's response and formed a good understanding of what avenues the government was using and what information was available to the public.

Considering the research questions, IPA is the most appropriate analytical method for this paper as it 'often focus[es] on "puzzles" or "tensions" of two related sorts' (Yanow, 2000), which is what this paper aims to do: analyse the tension between civil liberty and public health. Understanding the discourse around a particular issue helps recognise the ideology that is being applied (Chadwick, 2000).

Yanow's framework for analysis entails the following steps:

1. identifying the artefacts;
2. identifying the communities of meaning that are relevant to the policy issue;
3. identifying the discourses;
4. identifying the points of conflict that reflect different interpretations.

This framework focuses on the expression of social meanings in terms of ideal values, beliefs and feelings. In this way, the events and actions, in relation to subjective meaning and the motives of the actors, can be understood (Fischer, 2003).

Data collection: Policy artefacts and communities of meaning

The artefact I studied was the language used by government officials in their public statements and policy documents, as language is value-laden. This consisted of statements, documents of government action plans and policy documents from the identification of the virus until the lockdown in March 2020. The community of meaning, or interpretive community, refers to 'the groups for whom the artefacts have meaning' (Yanow, 2000: 27). The interpretive community for the national policies was the public. Therefore, this article interpreted the policy artefacts from the public perspective.

The research's prime focus was on the government's approach to the pandemic; therefore, policy narratives were used as the main framework to identify the patterns and relationships to locate the issues in the reform agenda. Policy narrative framework until 2015 was taken as a quantitative and structured method of analysis (Gray and Jones, 2016). However, it is now viewed as a qualitative method to understand the underlying meanings hidden in the context. For this research, the main function was to understand the difference between what was said, how it was said and what was not said.

The policy themes were uncovered from the Scientific Advisory Group for Emergencies (SAGE) policy recommendations that the government implemented. Initially, the data was loosely categorised into as many clusters as was necessary, and only when this was achieved were the clusters with similar ideas grouped together. The clusters were formed based on the use of repeated words, which brought three broad themes into focus: nudging, national recommendations and lockdown (see Appendix 1). The process of identifying the broad themes was aligned with Yanow's interpretive analysis where 'the "data" of interpretive analysis are the words, symbolic objects and acts of policy-relevant actors along with policy texts, plus the meanings these artefacts have for them' (Yanow, 2000: 27). For analysis, a spreadsheet was prepared and the broad themes were put at the top.

Conceptual framework

IPA requires identifying points of conflict to reflect interpretations, which I did by drawing a timeline of the available evidence and government policy to interpret the policy discourse in terms of any conflict with scientific evidence. To do this, the analysis looked at including the scientific evidence from three major scientific bodies to see if the government followed the larger recommendations. This included the Scientific Advisory Group for Emergencies (SAGE), the World Health Organization (WHO) and the European Centre for Disease Prevention and Control (ECDC). The first was the consulted organisation by the government, the second was the global recommendations and the third was a respected body of countries with similar values to the UK. The scientific evidence was identified from the research publications of these organisations and, in the case of SAGE, from the minutes of the group's meetings as well.

This research added to the existing literature by focusing on government discourse to enable an understanding use of values through language justifying the decision making by comparing the evidence available at the time.

Validity and limitations

The paper conducts data triangulation for validity by including news sources in the analysis to uncover different interpretations of the government's policies. Four primary UK news sources (the BBC, *The Guardian*, the *Independent* and the *Daily Mail*) are used to find further statements and analysis of the

government's Covid-19 response to identify other interpretations of the response. These news sources each lay on different ends of the political spectrum; this eliminates the bias of looking at one perspective.

However, the article only focuses on behavioural and social interventions. Other measures such as policing, travel policies and vaccine passports are not within the timeline or scope of research under behavioural interventions. As the paper focuses on the initial emergency response, this research is not indicative of the entire UK response.

Findings and analysis

Covid-19 timeline

China first informed the WHO of a novel coronavirus on 31 December 2019. The UK government's first statement on the virus came on 22 January 2020, reporting that they were monitoring the disease and advised against travel to China. On 30 January, the WHO declared a Public Health Emergency of International Concern. On 11 March, the WHO declared Covid-19 a pandemic, three months after China had reported its initial cases (WHO, 2020a). On 31 January, two cases were identified in the UK; by 1 March, the cumulative cases identified numbered 69, and by 23 March (when a lockdown was announced), this had gone up to 12,638 cases (PHE, 2021). This is summarised in Figure 1 below.

Considering these events, the policy shifts are broken down into categories of 'nudging behaviour', 'forming national recommendations' and 'implementing a lockdown'.

Nudging behaviour

From 31 January to 15 March 2020, the UK government's policy was to nudge people's behaviour towards adopting hygiene practices like regular handwashing. Thus, while other countries (like Italy, Spain and New Zealand) imposed lockdowns during this time, the UK's policy to control the rising number of cases was non-intrusive.

Although the government seemingly prioritised public health and nudged behaviour, this action was limited compared to that taken by other countries. On 9 and 12 March, Johnson stated: 'I'm afraid it bears repeating that the best thing we can all do is wash our hands for 20 seconds with soap and water' (PMO, 2020b; PMO, 2020c). This implicit assumption about the limited efficacy of other actions undermined preventative measures.

Even when the government emphasised a community-centred outlook, much of this remained advisory in nature. On 9 March, for example, Johnson stated: 'we continue to look out for one another, to pull together in a united and national effort', and he emphasised the need to 'commit wholeheartedly to a full national effort' (PMO, 2020b). However, Johnson stressed that 'the vast majority of the people [...] should be going about our business as usual' (PMO, 2020a).
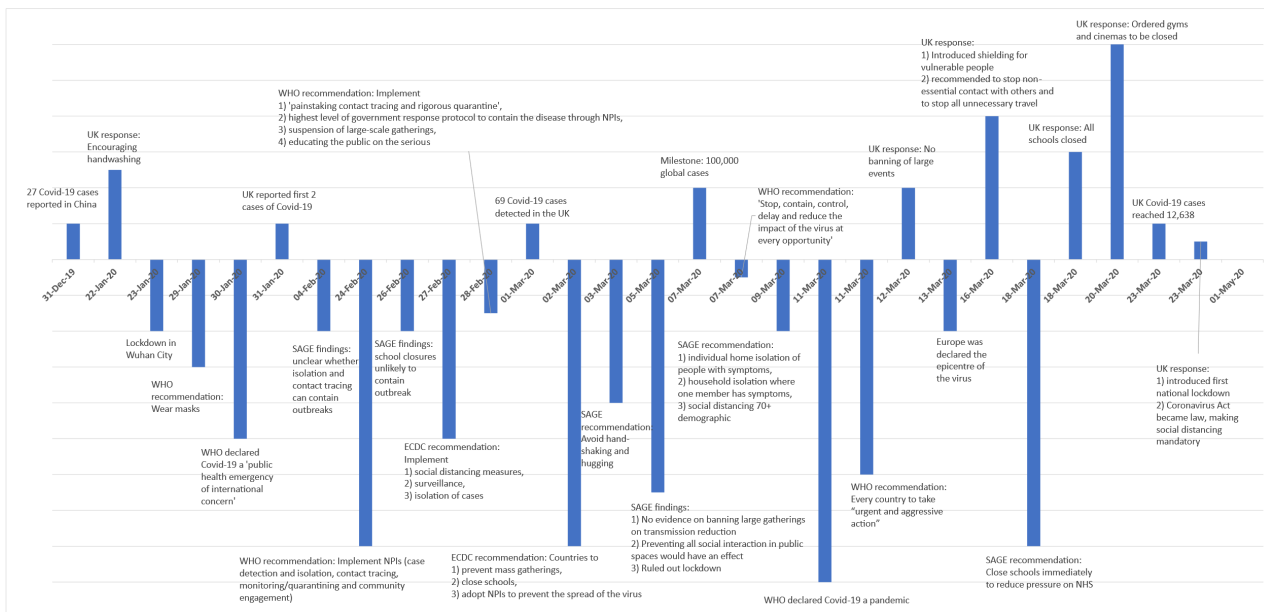
Figure 1: Timeline showing the time lag between the advice from WHO and the UK Government response

This inaction was in the face of varying (and limited) scientific evidence. Both the WHO and ECDC recommended that governments implement NPIs, such as preventing mass gatherings. On 28 February, the WHO released a mission report regarding all scientific information gathered on Covid-19 from China and the recommended country responses (WHO, 2020b). For countries with Covid-19 cases, the WHO's recommendations included 'painstaking contact tracing and rigorous quarantine', the suspension of large-scale gatherings, and educating the public on the disease. The ECDC published a report on 27 February recommending the implementation of social-distancing measures, surveillance and isolation of cases (ECDC, 2020a). On 2 March, the ECDC recommended NPIs to prevent the spread of the virus, including preventing mass gatherings and school closures for countries with clusters of cases (ECDC, 2020b). This became the recommendation for all European Union countries by 12 March (ECDC, 2020c). Meanwhile, on 11 March, the WHO categorised Covid-19 as a pandemic, and the organisation's Director-General called on every country to take 'urgent and aggressive action' to stop the spread of the virus (WHO, 2020a).

By contrast, SAGE meeting minutes on 5 March convey that 'there is no evidence to suggest that banning large gatherings would reduce transmission. Preventing all social interaction in public spaces, including restaurants and bars, would have an effect, but would be very difficult to implement' (SAGE, 2020b). This was contradictory: SAGE stated that there was no evidence about such matters, but it also suggested that preventing social interaction could be effective. Such a course would have been possible through strong government action, as was done in the Covid response in countries like New Zealand and China. SAGE also considered behavioural science evidence on whether coercing behaviour might lead to fatigue over time. Such a perspective assumed public autonomy in decision making and did not consider policing measures. Thus, SAGE rejected a lockdown and other NPIs as they feared a lack of public compliance.

Despite the limited evidence from the UK, government officials justified the government's policy by referencing scientific evidence. For example, on 9 March, Johnson emphasised: 'it's absolutely critical in managing the spread of this virus that we take the right decisions at the right time, based on […] evidence' (PMO, 2020b). The words 'at the right time' indicate an attempt to balance different considerations: thus, the government sought not to put excessive demands on people's liberties.

The UK Chief Scientific Officer Patrick Vallance created controversy by endorsing a herd immunity approach. Vallance argued, 'our aim is to try to reduce the peak, broaden the peak, not suppress it completely; also, because the vast majority of people get a mild illness' (Parker *et al.*, 2020). This was in opposition to Vallance's praise for China on an earlier date: 'the (WHO) has rightly responded quickly, and China has introduced strong public health measures' (DHSC, 2020).

These conflicting statements reveal the public health and civil liberty dilemma, in which the government leant towards a liberal approach with little government action. Without solid evidence, the government's reluctance to implement more decisive action fulfils the liberal understanding where curbing civil liberties is unjust without strong evidence (Flood *et al.*, 2020).

This interpretation is further validated by BBC's reporting of Johnson's statement on 5 March. He is quoted as stating: 'one of the theories is perhaps you could take it on the chin, take it all in one go and allow the disease to move through the population without really taking as many *draconian measures*. I think we need to strike a balance' (BBC, 2020a; emphasis added). The word 'draconian' is in stark opposition to an understanding of such measures as life-saving. The Prime Minister reinforced his aversion by suggesting the possibility of 'tak[ing] it on the chin' – a reference to the spread of the disease and the loss of life. This suggests that public health was not prioritised, in deference to a desire to maintain civil liberties.

Forming national recommendations

On 16 March, the UK government escalated its anti-Covid efforts by issuing national recommendations to the public, but these still relied on behavioural nudges. Measures included shielding, which meant that those living with vulnerable people needed to start social distancing. This change to actively advocate for social-distancing measures came following a shift in the evidence provided by SAGE, while the recommendations by the WHO and ECDC supporting restrictions had not changed.

The SAGE meeting minutes on 27 February did not give any recommendations to the government; instead, they listed the evidence (SAGE, 2020a), with the course of action left open to government interpretation. The evidence stated there was no proof of the efficacy of cancelling large events, but social distancing for over 65s effectively reduced deaths, not transmission. However, this evidence was hard to determine without applying restrictions and was in opposition to evidence available from countries such as China.

By 16 March, however, SAGE advocated for social-distancing measures to be introduced immediately and 'agreed that its advice on interventions should be based on what the NHS [National Health Service] needs […] not on the evidence on whether the public will comply with the interventions' (SAGE, 2020c: 2). Therefore, while there was no new decisive data from SAGE, there was a change in the approach of introducing government interventions based on the need for public health.

In the daily briefing on 16 March, the government repeated the same objectives as before, but it made more evident the rationale in terms of how it was prioritising public health, stating: 'our objective is to delay and flatten the peak of the epidemic by bringing forwards the right measures at the right time, so that we minimise suffering and save lives' and instructed individuals to change their behaviour: stopping non-essential contact with others (PMO, 2020d). Moreover, the Prime Minister again used the term 'draconian measures' when referring to these necessary recommendations. The language used was requesting, rather than instructing: 'if possible, you should not go out even […] If necessary, you should ask for help from others' (PMO, 2020d). The government was taking more action, but individuals retained primary autonomy.

This changed on 18 March as the cases further increased and the language changed from 'if possible' to 'everyone – everyone – must follow the advice to protect […] the wider public' (PMO, 2020e). On 22 March, Johnson gave further instructions and justified measures by evoking communitarian values but maintained reference to an evidence-led approach. 'The more we collectively slow the spread, the more time we give the NHS to prepare, the more lives we will save' (PMO, 2020g). The narrative changed from 'many people will die' to 'we need to save lives and the NHS'. Therefore, protecting public health became the primary justification but no enforcement policy was introduced. The statements evoked the harm principle, a key rationale for any liberal response (Powers *et al.*, 2012).

The lack of enforcement policy was picked up by many news sources as well. They reported that many found a lack of clarity on what the measures entail. The restrictions were deemed 'useless if they are undermined by mixed messages' (O'Grady, 2020). The concern of 'draconian' measures was also mirrored by many, reporting a lack of compliance. (Fielding and Allen, 2020; Kuenssberg, 2020a). On the other hand, some criticised the government for the delayed response, and others argued that it was still not enough just to 'advise' people (e.g. Chater, 2020; Steel, 2020).

The Prime Minister said in a press conference, 'most people would accept we are already a mature and liberal democracy where people understand very clearly the advice that is being given to them' (Peck, 2020). This highlighted the value of liberty in democracies and the responsibility assigned to them on an individual level rather than a paternalistic response. This was also followed by the government denying the 'herd immunity approach'.

In summary, the government discourse increasingly started justifying fundamental changes in social behaviour, using communitarian values, as well as the harm principle. The confused messaging by the government showed that, while community good was prioritised, individual liberty remained an important consideration. Therefore, while the discourse evoked communitarian values, the policy action remained libertarian.

Implementing a lockdown

On 20 March, the government ordered gyms and cinemas to be closed, and on 23 March, they announced a national lockdown. The closures came almost three weeks after the WHO's recommendation on implementing strong NPIs. The Coronavirus Act became the law, making social distancing mandatory. The lockdown came due to increasing pressure on the health system, with 938 deaths and 11,137 cases (UK Health Security Agency, 2022).

In announcing the closure on 20 March, Johnson stated, 'I know how difficult this is, how it seems to go against the freedom-loving instincts of the British people' (PMO, 2020f). Johnson even acknowledged that these measures went against 'the inalienable free-born right of people born in England to go to the pub' (Stewart and Walker, 2020). The statements made apparent how integral freedom was to the government's response despite a public health emergency.

Later, due to the rising number of cases and the increasing pressure on the NHS, the government took decisive action by including policing measures (PMO, 2020h). The government's justification for the response remained evidence-led.

However, there was still no decisive scientific data to base a policy on. On 18 March, SAGE discussed the implementation of social-distancing measures and concluded that the effects would only be known after a few weeks, depending on compliance (SAGE, 2020d). By 23 March, they concluded that the public had made significant behavioural changes; however, preventing the spread still required further measures to stop the NHS capacity from being overwhelmed (SAGE, 2020e). As the number of cases increased, SAGE recommendations for the response escalated.

Similarly, the ECDC emphasised the need for social-distancing measures by school and workplace closures, and so on. However, they emphasised that 'societal norms and values underpinning freedom of movement and travel will need to be weighed against precautionary principles and the public acceptance of risks' (ECDC, 2020d: 5). The quote indicates that there was always a concern to balance liberties with public health even within scientific research. This is as per liberalism, which attempts to do the same in this dilemma.

To convey the urgency, the framing of the policy response also escalated. The justification of the response became more hyperbolic as the virus now became 'the invisible killer' (PMO, 2020h). Furthermore, the coronavirus became 'the biggest threat this country has faced for decades'. Stopping hospitals from becoming overwhelmed became the primary justification, and the global threat was considered now with reference to the impact on the Italian health care system. These references were unlike the previous justifications, which only focused on the national impact.

The lockdown announcement involved the government providing concise statements on what the citizens were required to do. The language was of collective responsibility as the government created a core policy and the public was told: 'stay at home, protect the NHS, and save lives' (PMO, 2020h). The slogan was repeated in every following statement until the end of the lockdown.

These measures received a mixed response. Despite the lockdown, many criticised the lack of clarity in the rules for the public, and people remained confused with what the limits to their freedom were (Mason *et al.*, 2020; 'The Guardian view on lockdown...', 2020). Others were concerned about the restrictions on liberty, stating 'anyone who cares about democracy and civil liberty should not welcome such responses' (McDonald, 2020). Another headline lamented the 'End of Freedom' (King, 2020). Yet many praised the response as there were still many steps that the government was not using, such as 'curfews or travel bans' (Kuenssberg, 2020b). This was attributed to the deep concern for liberty, with many arguing 'while the instruction to stay at home was necessary, it went against the prime minister's deepest instincts', 'who is an optimistic liberal at heart' (BBC, 2020b).

To summarise, the government policy discourse was both liberal and communitarian when the government announced the lockdown. The concern for interfering with people's liberty, through repeated mentions, was evident, and the harm principle was evoked to justify curbing liberties. In this, however, the government took strong paternalistic measures, including policing. The discourse was community-led, but the action remained informed by strong liberal values.

Discussion and conclusion

The early response to Covid-19 across different countries involved a variety of approaches: many countries took swift and strict action, while others (e.g. Sweden) decided against immediate restrictions. This discrepancy in the responses poses questions regarding the importance of liberal values for democracies in

the face of public health emergencies. This paper explored the UK government's response to Covid-19 in terms of the emerging conflict between public health and civil liberties.

The analysis found the UK response to be strongly influenced by libertarianism. This may have also been motivated by other factors in decision making, such as economic considerations (although many link individual liberty to neoliberalism) or a political legacy. However, I am taking these as separate issues because of the importance of the value of liberty in democracies, whereby the paper aimed to uncover the role of ethical values given the dichotomy presented to nations during the emergency period. This dichotomy is best evaluated through a value-ridden lens.

Throughout the first few months of 2020, officials framed the UK government's policies as being evidence-led and emphasised the need to prioritise public health above all. However, in conducting an IPA, this paper has made clear that the scientific evidence available at this time was largely uncertain, with conflicting recommendations from scientific bodies. Furthermore, in both the Prime Minister's statements and the ECDC and SAGE documents, liberal social norms were an essential consideration in recommending strong measures. While the WHO urged stronger action throughout, SAGE advice was found to be conflicting and rapidly changing. The UK focused on national behavioural evidence and trends for the virus rather than taking global lessons into account. In its effort to conduct what it considered a proportionate response, the government did not impose strict measures until the healthcare system was near collapse.

Some studies have cited changing situation and evidence as the cause for a change in response (Cairney, 2021; Zaki and Wayenberg, 2020). However, through the analysis of policy against available evidence and the use of language, this paper demonstrates that values were a primary concern for the government. By the time the government imposed a lockdown and closed all social venues, it was increasingly evident that restricting liberties was a vital consideration, as the Prime Minister repeatedly mentioned 'freedom' and its essential place in British lives. As the pressure increased, the government stopped focusing on the compliance of behavioural nudges and had to implement social-distancing measures. This was opposed to a communitarian response – according to which, preventative measures can be implemented even when there is no definitive evidence for the betterment of the community. Furthermore, other European countries – for example, France and Spain – had even stricter measures than the UK (Nyamutata, 2020), despite ECDC reports calling for assessment of impact on liberal values and considering behavioural science. Thus, the qualitative analysis of speeches and the difference in response between liberal democracies considering similar evidence (behavioural science) demonstrates that the impact to liberty was a key consideration resulting in policy.

Given the liberal values influencing UK's inaction, this paper argues that communitarian values – that is, public health – should be prioritised over liberty in times of emergency. The UK Commons Health and Social Care, and Science and Technology parliamentary committees concluded hundreds of thousands of lives could have been saved if the UK imposed a lockdown a week earlier and called the response 'one of the most important public health failures the United Kingdom has ever experienced' (UK Parliament, 2021). In particular, the first three months were criticised for the government not acting on the precautionary principle considering limited evidence. This suggests that in times of emergency, the preventative principle needs to be applied rather than to wait for evidence.

To understand policy decisions further, future studies can explore how values play a role in policymaking of other countries and explore patterns within democracies. Within UK health policy, communitarian and liberal underpinnings can be explored in the vaccination and surveillance programmes. It is hoped that future studies in this direction will help us understand the theoretical underpinnings of policies.

List of acronyms

Abbreviation	Meaning
Covid-19 DHSC	Novel coronavirus Department of Health and Social Care
ECDC	European Centre for Disease Prevention and Control
IPA	Interpretive policy analysis
NHS	National Health Service
NPIs	Non-pharmaceutical interventions
PHE	Public Health Ethics
PHP	Public Health Policy
PMO	Prime Minister Office
SAGE	Scientific Advisory Group for Emergencies
WHO	World Health Organization

Appendices

Appendix 1: Example of thematic analysis applied

Artefacts	Community of meaning	Identifying the discourse	Identifying the conflicts	Emerging themes
Hand washing: 20 seconds	Protect others Avoid others	Testing is important Help the NHS	Avoid unnecessary gatherings	Nudging and preventative behaviour
Closing the school suggestions	Reaching the target of carrying out 25,000 test a day	Calling back the retired doctors	Shortage of doctors and help Unprecedented challenge	Forming national recommendations and implementing a lockdown

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Glossary

Civil liberty: Freedoms for individuals that are protected through the constitution.

Communitarianism: Defined in the article as a theory that values community welfare over individual liberty.

Draconian: The word draconian can be used to describe laws or rules that are really harsh, extremely severe and repressive. In ancient Athens, Draco was a legislator who made some extremely strict laws.

Harm principle: A central principle to liberalism conceptualised by politcal philosopher, John Stewart Mill, pertaining that individuals should be free to act as they wish unless their actions harm someone else.

Interpretive policy analysis: Dvora Yanow's method to research and analyse policies through interpreting situated meanings within context.

Liberalism: Defined in the article as a theory that values individual liberties as a fundamental good.

Non-pharmaceutical interventions: Behavioural interventions implemented during Covid-19 rather than the use of medicine to mitigate the virus.

Public health ethics: A study of ethics within public health.

Public health policy: A study of policy-making on public health through a political scientific approach.

Social constructionism: An epistemological position according to which human development is socially situated and knowledge is constructed through interaction with others.

How is Sociological Knowledge Possible? Influences of Kantian Epistemology in Max Weber's 'Verstehende Soziologie' and the Problem of Objectivity

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Abstract

Kant's 'Copernican Revolution' has caused a radical change in the common-sense theory of knowledge. The subject became the centre and the necessary premise for the validity of the objective world. This change in the understanding of knowledge has best manifested itself in Weber's 'Verstehende Soziologie'. Therefore, in order to understand the Weberian sociological method and to be able to detect the possible problems that may arise from his sociology, a better grasp of what Kantian epistemology is and in what ways it has influenced Weberian sociology is needed. Accordingly, this paper will firstly analyse Kantian epistemology with a special emphasis on transcendental idealism, and will expand and explain in detail Weber's 'Verstehende Soziologie'. Next, the paper will show how Weberian sociology relates to Kantian epistemology through the construction of ideal types. Before concluding, the focus moves to the objectivity claim of both Kantian epistemology and Weberian sociology and shows how objectivity arises from subjectivity through the establishment of causality. Finally, the paper will propose an objection to the objectivity claim of Weberian sociology and will argue that Kantian epistemology, when adopted as a method of sociology, becomes reflexive and threatens to deprive sociology of its objectivity claim.

Keywords: Kantian epistemology embedded in Weber's 'Verstehende Soziologie', Kant's 'Copernican Revolution' and transcendental idealism, Weberian methodology, Weberian ideal-type construction, Ideal types and understanding, ideal types and objectivity, causality in social sciences, the problem of objectivity.

Introduction

German idealism in general, and Kantian epistemology in particular, have haunted German sociology since the late-nineteenth and beginning of the twentieth centuries (Samples, 1987: 246). The epistemological shift from 'mechanical philosophy', where the subjective is defined in terms of the objective, towards a Kantian 'Copernican Revolution', where the objective is defined in terms of the subjective cognition, has found its reflections in the social sciences as well (Shalin, 1990: 2). The revival of Kantian epistemology in German social sciences has led to a new kind of re-enlightenment in which the individual became once more the focus of the sciences. Out of this epistemological transformation in German philosophy, the question 'How is sociological knowledge possible?' emerged. In a lively search for a response to this question, positivist Comtean sociology has been replaced by the interpretive sociology of Weber (Shalin, 1990).[1] It can be argued, thus, that this epistemological shift in German philosophy towards Kantian epistemology has constituted the building blocks of Weberian sociology. Therefore, in order to understand the Weberian sociological method and to detect the possible problems that may arise from his sociology, first and foremost, what is needed is a better grasp of what Kantian epistemology is and in what ways it has influenced Weberian sociology.

In the first section of the paper, transcendental idealism will be introduced as the Kantian 'Copernican Revolution' in epistemology that surpasses both rationalism and empiricism. In this section, the paper will aim to show how knowledge becomes possible in Kantian transcendental idealism. In other words, the paper will try to demonstrate what the mechanism is under the transcendental idealist construction of knowledge. In the second section, the paper will ask the question 'How is sociological knowledge possible?' It will expand on Weberian sociology and explain in detail what Weber's 'Verstehende Soziologie' is. While doing that, the paper will compare 'Verstehende Soziologie' with the Durkheimian sociological method with a claim that, since they constitute the exact opposite ways of approaching sociology, the comparison will make 'Verstehende Soziologie' more understandable. Later, in the third section, it will be argued that Weber's ideal types constitute the most Kantian character of his sociology. Accordingly, the paper will show how ideal types are used to relate Weberian sociology to Kantian epistemology. In the fourth section, the paper will focus on the objectivity claim of both Kantian epistemology and Weberian sociology. In this section, the paper will aim to show how objectivity arises from subjectivity in both Kant and Weber, with specific attention to causality. In the fifth and final section, the paper will propose an objection to the objectivity claim of Weberian sociology. In this section, the paper will argue that Kantian epistemology, when adopted as a method of sociology, becomes reflexive, relativises the sociological conduct and, thus, threatens to deprive sociology of its objectivity claim.

Kantian epistemology: The transcendental shift

> [T]he object, severed from the subject, is dead.
> — (Hegel, 1975: 303)

Epistemology witnessed an immense shift with the introduction of Kantian epistemology. This shift can be termed the 'transcendental turn in epistemology' (Kitcher, 1995: 286). Knowledge can no longer be possible either from a rationalist foundationalist perspective as one sees its most powerful manifestation in Descartes' 'clear and distinct perception' (Sternfeld, 1958: 49) or from an 'empiricist idealist' perspective that is manifested fundamentally in Berkeley's theory of knowledge.[2] Now, a new theory of the possibility of knowledge that surpasses both rationalism and empiricism is on the stage: Transcendental idealism. But what exactly is transcendental idealism?

One can argue that there are three fundamental claims of Kant's transcendental idealism: Firstly, things that appear to us (the phenomenal appearances of objects) and things in themselves (the noumena) are distinct;[3] secondly, one cannot have the knowledge of the things in themselves, but can only know what their appearances are; and thirdly, phenomenal appearances of objects are (mind-dependent) phenomenal representations of the objects cognised by the existing spatiotemporal innate structures (categories of sensation) of the mind, and thus, can only be perceived by the innate spatiotemporal categories of the mind (Allais, 2004: 656).[4] It should be emphasised here that the objects of our knowledge are the external world. That is, although we can only have access to their phenomenal representations in our minds, we still know that they exist mind-independently because, if we are able to cognise sensations, this implies that there must be something independent of ourselves that influences our 'sensibility'. Hence, being *representations* implies that they are the a priori abstractions gathered from the underlying noumena (the empirical reality) itself. in other words, appearances are in-mind representations of the objects existing outside us. On this point, Kant argues as follows:

I say, [...] that things are given to us as objects of our senses existing outside us [...] things which, though quite unknown to us as to what they are in themselves, we yet know by the representations which their influence on our sensibility creates for us.
— (Ariew and Watkins, 2019: 734–35 [Ak. 4:289]; emphasis added)

These being said, now, one can argue that Kant's transcendental idealism is idealist in the sense that it necessitates the 'forms of sensibility' (the mind-dependent categories of sensation – i.e. space and time) for the cognition of the sensation to occur but, at the same time, it is transcendental in the sense that it transcends the Berkeleyan type of idealism by rejecting Berkeley's assumption that 'empirically real objects exist merely as collections of mental states (organised according to a priori principles and a priori forms of intuition)' (Allais, 2011: 93), and by proposing the necessary existence of mind-independent external objects (which are responsible for the incoming stimuli) that can only be cognised according to the mind-dependent phenomenal representations of them.

Consequently, one can say that Kant's transcendental idealism, in a way, combines empiricism and rationalism. It firstly claims that we are dependent on the stimuli coming from the external world to be able to have an interpretation of something, and, secondly – more importantly for the purposes of this paper – that *we interpret* the world by relying on *our way of understanding* it, according to the inborn filters we have in our mind. Thus, we use abstractions, mind-dependent phenomenal representations to interpret the world, and so cannot directly know the empirical reality in its collective cohesion. This final point can be seen in one of Kant's most famous statements:

[T]here is *only one* way in which my intuition can anticipate the actuality of the object and be an a priori cognition, *namely if my intuition contains nothing but the form of sensibility that precedes in me as a subject all the actual impressions through which I am affected by objects.* For I can *know* a priori that *objects of the senses can be intuited only according to this form of sensibility.*
— (Ariew and Watkins, 2019: 731–32 [Ak. 4:282–83]; emphasis added)

It should be noted here that it is not the individual per se that 'understands' the world as if every individual has a different structure in her mind, but rather it is the universal structure of the human mind that understands and interprets. That is, the 'understanding' does not refer to the ensemble of particularities but to the 'human' mind whose particularity resides in its universality. In other words, the filters are universal yet particular to humans. Despite their universality, we say that they are particular because it is not the human mind that conforms to objects; rather, it is the objects that conform to the human mind (Kant, 1998: 110 [Bxiii]). They exist in the mind and serve to filter the world. Without them, objectivity cannot be established. This is the basis on which the Weberian methodology would establish itself. As will be seen, Weber, similar to Kant, puts the subject (or cognition, in Kantian terms) at the centre and considers the knowledge of the 'social' reality as conforming to cognition (or, in other words, as conforming to analytic constructs – i.e. to ideal types).

'Verstehende Soziologie': How is sociological knowledge possible?

[S]ubjective understanding is the specific characteristic of sociological knowledge
— (Weber, 1978: 15)

Now that the fundamental tenets of Kantian epistemology have been discussed, the crucial question that will eventually lead the paper towards Weberian sociology should be asked: 'How is sociological knowledge possible?'

This question has long been (and still is) a debate among sociologists. This debate is manifested best in the methodological differences between Durkheim and Weber. Hence, in order to understand Weber's methodology fully, a comparison between Durkheim and Weber will be useful.

Durkheim claimed that sociology should be established as an objective social science that focuses on *social facts external to the individual agents* (Durkheim, 1982: 52). In his study of *Suicide*, Durkheim discussed that, despite the different individual motivations for a person to take her own life (i.e. despite all the different feelings, thoughts and experiences individual agents go through, the statistical data/rates for suicide within a given territory and time interval always stays the same; Durkheim, 1951: 269). This is called the 'uniformity of effect' (Durkheim, 1951: 274), and it establishes the biggest evidence for Durkheim that suicide is not an individual phenomenon but a collective social fact. Hence, for Durkheim, even the very act of suicide is not psychological but a social phenomenon. It is a collective social fact that has various kinds of representations in the individual subjects. Therefore, Durkheim believes that if one wants to know the reason why any social phenomenon is happening, the first thing one should do is to identify the objective social facts externally from the individuals.[5]

Weber, on the other hand, positions himself on the opposite side of the spectrum and claims that it is through the *subjectively meaningful social actions* of the individuals who are constantly interacting with one another that the society is constructed (Weber, 1949). For Weber, the reality is 'the endless flux of the infinite multiplicity' (as cited in John, 1991: 245). Accordingly, sociology as a social science should aim to *understand* the social actions of these individuals where they constantly reconstruct their social environment with their subjectivity. He even gives a definition of it: 'Sociology [...] is a science concerning itself with the *interpretive understanding of social action*' (Weber, 1978: 4; emphasis added). It follows that, for Weber – contrary to Durkheim – the individual is the basis of society. The statistical data, or the 'uniformity of effect', says nothing about the complex subjective meanings the individuals attributed while engaging in social action; they are silent on the motivations lying behind specific social actions. For Weber, without the subjective interpretation of individuals' orientation towards specific social actions, the statistical analysis by itself is nothing more than what natural scientists do (Weber, 1978: 15), whereas a social scientist should worry herself with the individuation of the phenomena. Regarding this point, Weber criticises Durkheim (anonymously) in the following ways:

> There are statistics of processes devoid of subjective meaning, such as *death rates* [...] But only when the phenomena are meaningful do we speak of sociological statistics.
> — (Weber, 1978: 12; emphasis added)

> [I]t may be useful or necessary to consider the individual, for instance, as a collection of cells, as a complex of bio-chemical reactions [...] [T]he behavior of these elements, as expressed in such *uniformities*, is *not subjectively understandable* [...] For sociology [...] the object of cognition is the subjective meaning-complex of action.
> — (Weber, 1978: 13; emphasis added)

Above, it is obvious that Weber has Durkheim in mind because he specifically chooses the example of 'death rates'; he probably had read Durkheim's *Suicide* when it was published in 1897. Moreover, he uses the words Durkheim used, such as 'uniformities'. Also, here, he criticises Durkheim's organism analogies.[6] Now, consequently, it can be said that subjectively *understanding* and *interpreting* the complexities of individuals' motivations while they are engaging in day-to-day social actions is the key to Weber's methodology. He calls

this method the 'Verstehende Soziologie'. This is the Verstehen method of doing sociology. For Weber, sociological knowledge can only be gained through Verstehen.

Ideal types and understanding: Kantian influences in Weberian methodology

The next question that should be asked is how this understanding relates to Kantian epistemology? At this point, Weber introduces the most important methodological tool of his sociology – the ideal types (Eliaeson, 2000: 250; Ringer, 2002: 173). One can argue that the construction of ideal types is what makes Weberian sociology Kantian in its essence. They constitute the most fundamental Kantian character of his 'Verstehende Soziologie' (Oakes, 1987; Weber, 1949). In this section, the paper will try to show how Weberian methodology in general, and ideal types in particular, is related to Kantian epistemology.

Weber states that one cannot comprehend the complexity of the empirical reality in its collective cohesion. Instead, one must have ideal types (analytic concepts) that guide one in understanding the interactions between people and establishing causal relations between individual social phenomena (Weber, 1949). Now, what are the ideal types? It can be argued that the ideal types, for Weber, are the representations, analytic abstractions, from the totality of the empirical social facts that are used in order to form an understanding of the particular issue on point (Weber, 1978: 15). In *The Methodology of the Social Sciences*, Weber defines ideal types as follows:

> [O]ne-sided *accentuation* of one or more points of view and by the synthesis of a great many diffuse, discrete, more or less present and occasionally absent *concrete individual* phenomena, which are arranged according to those one-sidedly emphasized viewpoints into a unified *analytical* construct *(Gedankenbild)*. In its conceptual purity, this mental construct *(Gedankenbild)* cannot be found empirically anywhere in reality. It is a *utopia*.
> — (Weber, 1949: 90)

Here, one can think of the process of 'concrete individual phenomena' being subsumed under an 'analytic construct' as the process of abstraction from the concrete whole. At the end of this process of abstraction, it seems that one arrives at the 'mental construct', which for Weber is a 'utopia'. This means that the result is no longer the reality itself but only a representation of it. From that point on, it is these conceptualisations of the empirical reality (and the relationship of one concept with another) and not the reality itself that will guide one in her understanding of social phenomena. Does not this resemble what one sees in Kant? Similar to Kant, here, empirical facts are only interpreted through the evaluation, classification and representations of the ideal concepts in understanding. Weber argues as follows:

> If one perceives the implications of the fundamental idea of modern epistemology which ultimately derives from Kant; *namely, that concepts are primarily analytic instruments for the intellectual mastery of empirical data* and can be only that, the fact that precise genetic concepts are necessarily ideal-types will not cause him to desist from constructing them.
> — (Weber, 1949: 106; emphasis added)

As seen, Weber himself is associating his ideal types with Kant's epistemology, where the understanding is 'constructed' from concepts of the mind (hence, the 'interpretation'). So, both in Kant and Weber, understanding acts on the representations of the 'thing' that is unreachable. In both Kant and Weber, there is a difference between the understandable and the unreachable. Hence, we must rely on interpretations of the complexity, and ideal types serve exactly this purpose.[7]

Now, one can argue against the above-mentioned comparison between Kant and Weber by saying that although the process seems similar, they are of different categories: In this context, the 'empirical reality' for Weber and Kant is, indeed, of different kinds. When talking about externality, Weber is talking about the 'social' empirical reality – that is, the outside reality was not the reality described by the natural sciences but the social sciences. On the other hand, Kant's 'externality' is about the 'natural' empirical reality. However, one should not forget that the similarity that this paper argues is on an epistemological level. In both Kant and Weber, the paper argues, there is a similar approach to knowledge. It is the methodology that is put under comparison. Both argue that one cannot *know* things in their totality. Whether the 'things' are social facts or the noumenal objects do not matter, the epistemological method remains still. Abstractions from the totality and subjective interpretations of the phenomena by the mind are necessary for both Weber and Kant to know things.

Establishing objective and causal relationships from the subjective

Another claim one sees in both Kant and Weber is that, from subjectivity, the objective emerges. Now, one should ask how subjective *understanding* can create objectivity? What is the mechanism that somehow combines the understanding of the particular phenomenon with objectivity? Both in Kant and Weber, one sees a similar approach to the questions above: identifying the cause-and-effect relationship between events. The crucial point here is that both Kant and Weber claim that cause-and-effect relationships cannot be found in the empirical reality standing by themselves; rather, they are established by the active subjective interpretation of the phenomenon by the mind and, more importantly, it is this subjective interpretation that creates the objective validity of the phenomenon.

In *Prolegomena to Any Future Metaphysics*, Kant asks how we come to *know* the universal and necessary natural laws existing outside of ourselves. In other words, he wonders '[h]ow is it possible to cognize a priori that experience itself necessarily conforms to law with respect to all its objects in general?' (Ariew and Watkins, 2019: 738 [Ak. 4:296–97]). He continues that it is because the phenomenal representations of the sensible objects in the categories of sensibility subsumed under the specific *universal and necessary concept* of the understanding – cause and effect (Ariew and Watkins, 2019: 740 [Ak. 4:301]). That is, cause and effect is an innate a priori concept of the category of understanding. It is this necessary universality of the concept of cause and effect that gives the objective character to the phenomena that are being associated (Ariew and Watkins, 2019: 739 [Ak. 4:298]; Brand, 1979: 8). For instance, if one sees an event A associated with an event B at time *t,* what really happens for Kant is that both events A and B are phenomenally (and separately) represented in the sensibility and later subsumed under the specific universal and necessary concept of the category of understanding: cause and effect. At that point, the temporal association of events A and B occurred. Meaning that, causality is not something existing externally in things themselves, but rather is the product of the human mind. However, once the association occurs, one makes an objective claim: A caused B. [8] Whereas in reality, the objectivity of this observation comes from the subjective interpretation of the events processed by the mind.

Now, what about Weber? How does he conceptualise causality? For Weber, social reality consists of innumerable complex events that have innumerable causes (Wagner and Zipprian, 1986: 27). Hence, a causal attribution cannot be done without abstracting from the totality. It follows that, firstly, ideal types are created – that is, the social-empirical reality is represented in terms of abstract conceptualisations. Then, these conceptualisations will be used to infer causal deductions. In other words, 'causal "moments" are not

simply given in experience; they are constructs [...] we analyse the given into "components," "isolating" possible causes from the surrounding antecedent conditions' (Ringer, 2002: 166). Weber argues as follows:

> [W]e are helpless in the face of the question: how is the *causal explanation* of an individual fact possible – since a description of even the smallest slice of reality can never be exhaustive? [...] [T]here is nothing in the things themselves to set some of them apart as alone meriting attention.
> — (Weber, 1949: 78; emphasis added)

Here it is obvious that, for Weber, causality cannot exist in the complex, 'exhaustive' empirical reality in its totality (for he explicitly says that 'nothing in the things themselves'), but it must be abstracted from the 'social' reality (through the construction of ideal types) and should be interpreted in its context (May, 1998: 12). *Thus, for Weber, the objective causal explanation of the empirical social reality is subjectively derived* (Goddard, 1973: 12). Weber states as follows: 'The objective validity of all empirical knowledge rests exclusively upon the ordering of the given reality according to categories which are subjective' (1949: 110). That is, without abstraction from the totality through ideal types, without the conceptual representations of reality, causal deduction is not possible. Again, like Kant, it is through subjectivity that objective causal relationships are constructed.

Problematising the Kantian epistemology embedded in 'Verstehende Soziologie': Ideal types and objectivity

This paper has thus far demonstrated how the *knowledge* of the empirical reality is constructed similarly in Kant and Weber through subjectivity. While doing this, it has also shown how objectivity based on cause-and-effect relationships is created out of this subjectivity. However, although Kant's transcendental idealism explains how '*subjective conditions of thought* could have *objective validity*' (Ariew and Watkins, 2019: 801 [A90]), despite Weber's claim, can one say the same for his 'Verstehende Soziologie'? In this section, the paper will argue that Kantian epistemology, when adopted as a method of sociology, becomes reflexive, relativises the sociological conduct and, therefore, threatens to deprive sociology of its objectivity claim.[9]

It is mentioned in the previous section that Weber's objectivity claim comes from a Kantian perspective: the subjective understanding and interpretation (of social actions). This objectivity, which is derived from the subjective has a specific name in Weber's terminology: *Value freedom*. For Weber, although it is subjective, sociology should be value-free. That is, in its subjective understanding of the complexities of individual motivations towards social actions, it should have the aim of explanation and not the validation of the normativity of individual meanings and actions (Morrice, 1996: 143). As Weber puts it:

> When the normatively valid is the object of empirical investigation, its normative validity is disregarded. Its 'existence' and not its 'validity' is what concerns the investigator.
> — (Weber, 1949: 39)

Following this, one can ask, 'What about the selection procedure of the observer?' Weber anticipates this question and gives an answer to it. He claims that the selection of what to study can be subjective and calls it the *value relevance* of sociology: He says: '[T]he problems of the social sciences are selected by the value-relevance of the phenomena treated' (Weber, 1949: 21). Thus for him, sociology should be value-free, although it can be value-relevant. That is, it is subjective in its selection of phenomena to study but, once selected, it should be objective in its analysis: Hence, sociology is the objective study of people's normative subjectivity.

This being said, it should be emphasised that there still remains a crucial problem about the value freedom principle of Weber's sociology. How can a sociologist abstract herself from the one-sided analytical conceptualisations (ideal types) that are used to make adequate, objective causal deductions if, for instance, ideal types are biased? In such a case, how can a Kantian approach based on ideal-type construction (the *core principle* of Weberian methodology) yield an objective, out-of-oneself look towards the social reality? In other words, how can the sociologist *know* that the subjective understanding and interpretations of the complexities of individuals' motivations (Verstehen) have objective validity? After all, if this would be the case, ideal types will make the explanation-value dichotomy problematic, and the supposedly value-free explanation of the fact will be influenced by the observer's own subjectivity – because, as Guy Oakes (1990) also puts it, in 'Verstehende Soziologie', '[t]he principle that determines how far an explanation should proceed is [...] one of the desiderata that defines its validity' (1990: 148–49).

At this point, focusing on some of Weber's ideal types will be useful to show how he, as an observer himself, is very much influenced by his own conceptualisation of reality. For instance, consider the ideal types he has constructed while investigating the religions of the East. That is, 'inner-worldly asceticism', 'world-rejecting asceticism', and 'world-flying asceticism' (Weber, 1978). Now, from what source are these abstract conceptions derived? They are derived from the presupposition, firstly, that there must be a general category of 'ethic' that guides the behaviours of the people in the East and, secondly, that this 'ethic' must be evaluated in comparison to 'rationality' (Runciman, 2013: 219). And since ideal types are abstract representations of the social reality that will help the observer to identify possible objective causal relationships and, in this case, since they are based on 'rational ethic', it implies that this causality will be established on Western standards of rationalisation as well. Thus, the *explanations of the social actions* (facts) are based on the Western standards of rationalisation processes of countries (Buss, 1987: 272). Is this a value-free approach? On the contrary, this reveals the *Eurocentrism* embedded in the supposedly value-free observer. After all, how can the (religious) history of India, for instance, be explained without even mentioning Western colonial politics? (Schmidt-Glintzer, 2018: 108). One can argue against the paper here by saying that these ideal types reflect value relevance, and not necessarily a bias. However, this is not the case because they do not simply reflect a matter of 'choosing what to study'. It is one thing to choose to study the East and compare it with the West; it is completely another thing to base this comparison (and the evaluation) on an 'ethic' – and a very distinctive kind of ethic (i.e. a 'rational ethic'; Runciman, 2013). Why suppose actions are being guided by a specific category of ethic at all? Or why think of it in comparison to rationality? Hence, the construction of the ideal types to evaluate religious behaviour are *reflexive* and is based on the *bias* such that they *should be* categorised under some 'ethic', and that they *should be* investigated in comparison to Western rationalisation. As perfectly stated by Edward Said:

> Weber's studies of Protestantism, Judaism, and Buddhism blew him [...] into the very territory originally charted and claimed by the Orientalists. There he found [...] a sort of ontological difference between Eastern and Western economic (as well as religious) 'mentalities'.
> — (Said, 2003: 259)

Moreover, another example would be Weber's *characterisation* of the capitalist mode of production by taking the 'investment of private capital' as the analytic construct (the ideal type), the one-sided '"idea" of capitalistic culture' from which the objective explanation of the economic activity that is unique to the capitalist mode of production would proceed (Weber, 1949: 91). He argues as follows:

> [O]ne can delineate the utopia of a 'capitalistic' culture, i.e, one in which the *governing principle* is the investment of private capital. This procedure would accentuate certain individual concretely

diverse traits of modern material and intellectual culture in its unique aspects into an ideal construct [...] This would then be the delineation of an *'idea'* of capitalistic culture.
— (Weber, 1949: 91; emphasis added)

Now, here, we should ask that *if* 'investment of private capital' is taken as '*the'* 'governing principle', – that is, as *'the'* filter to understand the diverse *motives of* economic activity that are unique to capitalism – would not that make invisible the ways in which profits are made long before they are realised as investments in the market? That is, for instance, is it not necessary, also, to investigate the relationship between living labour and surplus creation in the production process as one of the governing principles of the capitalist mode of production in order to better understand the 'motives' of economic activity that are unique to the system? (Mészáros, 1972: 41). Here, it seems the *market transaction* is prioritised over the *production process* in explaining the subject matter. *Although it is not incorrect, some concrete and significant parts* of the causal explanation regarding the phenomenon (which are necessary for causal and objectively valid analysis) are omitted. Hence, it follows that, in this example, the analytic construct ('investment of private capital'), when taken as *the* '"idea" of capitalistic culture' (i.e. as the ideal-typical accentuation of *'the'* governing principle), again, threatens the objective, scientific and causal explanation.

Overall, as seen, reflexivism is embedded in the *most important and main* Kantian aspect of Weberian sociology – namely, the ideal-type construction. Therefore, the ideal-type construction – which Weber fundamentally formed by relying on Kantian epistemology and supposedly should serve for objective causal deductions – cannot, in the end, be used to objectively 'master the empirical data' because ideal types are themselves reflexive. That is, reflexive in the sense that even after narrowing the sphere of investigation to be able to establish causal relations within a world of innumerable events and innumerable causes, it is still not *always* possible to establish objective causal relations by using these one-sided analytical conceptualisations (ideal types) because – as the above examples demonstrate – they may, *if biased*, become 'the ends, and not the means of [scientific] [...] inquiry' (Kolko, 1959: 32). Hence, the Kantian approach to sociology – that is, the subjective understanding of the complexities of individuals' motivations in their engagement in day-to-day social actions (due to the structure of ideal types) – cannot *always* give objective causal explanations of the social reality. It follows that Kantian epistemology, as applied in the 'Verstehende Soziologie' through the construction of ideal types, gives rise to reflexivism, which *problematises* establishing objective sociological causal relations between events, and thus *threatens* to deprive sociology of its objectivity claim.

Concluding remarks

Before concluding, it would be very useful to once more address the following possible questions: Even if we accept Weber's ideal types as biased, why do we have to conclude that there is a methodological problem? Why should there be a relationship between methodology and bias in the first place? As pointed out before, *the decisive point here lies within the character specific to ideal types.* Like transcendental deduction being the key assumption for Kantian transcendental philosophy (i.e. just like the possibility of knowledge being causally dependent on the structures of the mind), the ideal type is the key assumption for objectivity in Weberian methodology. They are like the Kantian filters that make the empirical reality meaningful. The very need and purpose of the construction of the ideal types (their analyticity) are *to filter* the immense plurality of meanings and perspectives existing in social reality to arrive at an 'objectively possible' evaluation of the social phenomenon (Weber, 1949: 92). Now, it is precisely because of this that (the paper argued) biases become central to methodological assumptions. It follows that if, as Weber believes, ideal-type construction

is the way to go for the social sciences, then, it is also *necessary* that objectivity claims should directly take their *justification* from *how* the ideal types are constructed. As it is impossible for Kantian sensibility to perceive something outside of space and time (since the very structure is alien to other forms of objectivity), if it is biased, it is similarly not possible for the ideal type to arrive at an 'objectively possible' deduction because it is through this filter that the conceptualisation of social reality occurs and becomes meaningful to the observer. So, the 'social facts' or the 'social laws' it refers to – that which, for instance, a positivist may believe good representations of what things really are – will always be the reflection of the 'act of conceptualization' (Goddard, 1973: 18).

All being said, it should also be noted that the fundamental purpose of the arguments presented in this paper was neither to defend any of the methodological schools (the positivist or the hermeneutic, for instance) nor to elaborate on different methodological approaches in the social sciences, but rather to demonstrate specifically that it is the Kantian epistemological project embedded in the very nature of Weber's ideal-type construction that could deprive sociology of its objectivity claim. In short, the aim was to show that it is when Kantian ideal-type construction is taken as the core method of social sciences that the possibility of having 'objectively possible' evaluative statements becomes problematic. That is, to point out (and argue) that, in Weberian ideal-typically driven sociology, objectivity cannot be separated from biases (if there are any).

Finally, the reader should be aware that it is *not* the ideal-type construction as a method per se but its claim to arrive at 'objectively possible' and causally explained social facts that is problematised throughout the last section of the paper. It would be unfair, indeed, to generalise the criticism addressed here to the entire discussion of objectivity in social sciences, and this was not the intention of the paper. The relationship between *explanation* and *value* has always been problematic and mysterious (Oakes, 1990: 152). It is always possible to further delve into the critical philosophy of social sciences and to question the possibility of objective knowledge and *how* this possibility relates to different methodological schools of thought. Although such questions are beyond the scope of this paper, they definitely deserve more attention from the existing social-science literature.

Notes

[1] Interpretive sociology is not of course only consisted of Weber. There were also very important names such as Windelband, Dilthey or Rickert. Weber, for instance, in his methodology is highly influenced from Wilhelm Rickert. However, for the purposes of this paper, these other names are omitted. For a further comparison between Weber's and Rickert's sociological method, see Wagner and Zipprian(1986: 21–42).

[2] Here it should be mentioned that idealism versus materialism debate is a debate about metaphysics, and rationalism versus empiricism debate is about epistemology. Hence, they are not mutually exclusive. One can be an idealist as well as empiricist as in Berkeley's case.

[3] The debate on whether Kantian noumenal and phenomenal objects are of two different kind of metaphysical entities or whether phenomena is only an aspect of the noumena, hence whether they are the different aspects of the same metaphysical entity still goes on in Kantian literature. For more detailed discussion of the subject, see, for instance, Schrader, (1949: 30–44).

[4] These categories of sensation are called the 'forms of sensibility'. 'Forms of sensibility' are the categories of space and time. They are the structures through which the cognition of all sense experience becomes possible.

[5] Identifying is not enough of course. For Durkheim, finding causal relationships between the social facts, analysing what function these social facts serve and then classifying them are also needed. But expanding on them is beyond the scope of this paper.

[6] For detailed information on how Durkheim used organism analogies, see, Durkheim (1951: 287) and Durkheim (1982: 38–43).

[7] Apart from Weber's own statement, for a further investigation of the relationship between ideal types and Kantian epistemology, see also Barker (1980: 224–45), Oakes (1987: 434–46) and Shalin (1990: 1–29).

[8] It should be noted that this claim is objective not because it exist in the things themselves, but because the concept under which the association has occurred is universal and necessary for everyone; it is the structure of the mind that is universal. For a detailed discussion of how causality and objectivity are related, see, Ariew and Watkins,(2019: 737–48).

[9] Reflexivism, here, refers to the fact that reflectivity becoming the core structure of the relationship between ideal-type construction and bias of the observer that threatens the possibility of having adequate causal, objective deductions about social reality.

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Glossary

Berkeley's theory of knowledge: Refers to the theory of knowledge proposed by George Berkeley in the early-eighteenth century. It is a theory of knowledge which asserts that all knowledge comes from perception and all perception is the perception of ideas. A theory where the knowledge of the existence of sensible objects is determined by their being perceived by the mind. 'Esse est percipi'.

Durkheimian sociological method: Refers to the method of doing sociology fundamentally based on taking social facts as objective, external phenomena irrespective of individual agents performing them. Statistical analysis and generalisations rather than understanding and interpretation are preferred.

German idealism: A philosophical movement that originated mainly in Germany in the late-eighteenth and early-nineteenth centuries. It asserts that consciousness is the fundamental building block of reality. Nevertheless, idealists vary in their claims. Some argue that reality is entirely constructed by ideas and the mind, while others see reality as separate, yet think that reality is made comprehensible by the mediation of the mind. The most famous German idealists include Immanuel Kant, Johann Gottlieb Fichte, Friedrich Schelling, and Georg Wilhelm Friedrich Hegel.

Ideal-Type construction: Refers to the fundamental methodological tool of Weberian sociology. It is the method by which the sociologist abstracts from the totality of social empirical reality and comes up with analytical constructs in order to understand social phenomena and make causal explanations.

Interpretive sociology: Refers to the method of doing sociology best manifested by Max Weber, where the subjective understanding of the individual motivations behind social actions is the main purpose of sociological study. In order to understand the individual meanings attributed to social actions, sociologists use interpretations and not generalisations.

Kantian Copernican revolution: Refers to a radical change in the understanding of the relationship between the subject and object. Previously, it was believed that the subject should conform to the object in order for

the thing to be understood because the object in reality is a mind-independent object existing irrespective of the observer itself. Kant, on the other hand, argued that it is the object that should conform to the subject because understanding is a faculty of the mind, and irrespective of what the object really is in reality, it cannot be understood if it cannot be filtered through the structures of the mind. The word 'Copernican' is used by Kant himself. He draws similarities between him making the subject-object relationship upside down and Copernicus replacing the geocentric model of the cosmos with the heliocentric one, thus, reversing the relationship between the Sun and the Earth.

[Kantian Epistemology:](#) A theory of knowledge associated with the German philosopher Immanuel Kant. It claims that knowledge is established through the incorporation of incoming stimuli under the categories of understanding in the mind. It is a theory of knowledge that merges empiricist and rationalist traditions by claiming that both the external world and the human mind are necessary for the construction of knowledge.

[Mechanical philosophy:](#) A reductionist natural philosophy which claims that the natural world is determined by machine-like, atomic processes and that all phenomena can be explained through matter and motion. Mostly popular in the sixteenth and seventeenth centuries.

[Noumena:](#) A concept in Kant's theory of knowledge. It refers to the objects that exist in themselves. As opposed to phenomena, they are unreachable by the human senses. They cannot be cognised and cannot be perceived. They are unknowable.

[Positivist Comtean sociology:](#) Refers to the positivist method of doing sociology embraced by August Comte, where social facts are taken as scientific, objective empirical laws and generalised to society. Positivists believe that social sciences should proceed like natural sciences in which empirical evidence, experiments, and statistics are used for the betterment of societies.

[Reflexivity:](#) Refers to a situation in which social explanations do not go beyond reflecting what is presupposed in the beginning.

[Transcendental idealism:](#) A theory on the possibility and limits of knowledge proposed by the German philosopher Immanuel Kant. Firstly, it argues that there exists a mind-independent external world (things in themselves) as well as a mind-dependent world (things that appear to us). Secondly, it claims that all empirical objects that are cognised are mind-dependent (phenomenal) objects and that the mind-independent (noumenal) objects cannot be cognised by the human mind.

[Verstehen:](#) Meaning 'to understand in a deep way'; an approach in sociology where the researcher aims to understand another person's experience by putting him/herself in that person's shoes.

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The Impact of Adverse Childhood Experiences on the Mental Health Statuses of Students Across Various Ethnic Identities

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Abstract

Adverse Childhood Experiences (ACEs) are linked to an increased risk of health challenges. This study looked at a diverse sample of students at Ohlone College, a community college in the California Bay Area, to 1) analyse the ethnic groups with the highest ACEs scores and 2) examine the relationship between ACEs and indicators of mental health, including depression, substance-use disorders and self-worth. Using a unique approach to study ethnic identity by incorporating more distinguished ethnic groups, rather than broad categories, our survey found that the two ethnic groups with the highest average ACEs scores were the Afghan American (n = 226) and Native American (n = 229). These two communities, along with the Middle Eastern/North African (MENA) American (n = 228) community, were studied. Through comparison, individuals with high ACEs scores were found most likely to also have higher PHQ-9 scores, higher substance-use disorder symptoms and lower self-worth scores. We concluded that the various societal impacts of ethnic-identity groups must be prioritised as an important facet of mental health. If ethnic identity is included as part of early intervention in situations with abuse and neglect (diagnosis and/or prevention), it may greatly reduce the risk of mental illness.

Keywords: ACEs, Adverse Childhood Experiences, Ethnic identity and mental health, depression and ACEs, self-worth and ACEs, substance-use disorder and ACEs

Background

Distinct trends in mental health difficulties can be found within various ethnic-identity communities (Lee and Chen, 2017). One main driver of these trends is Adverse Childhood Experiences (ACEs) faced by individuals from various backgrounds. Understanding and analysing these trends can be crucial for developing better policies at all levels as well as identifying necessary policy and treatment reform with therapy more focused on past trauma. We found that three facts about these ACEs highlighted the importance of this study.

Firstly, ACEs are often undiscovered and untreated, particularly among specific ethnic groups. Secondly, limited studies have looked at distinct ethnic groups, especially minority groups, who have higher ACEs. These few studies demonstrated that ACEs disproportionately affect the well-being of certain ethnic groups due to factors such as culture, financial status and access to resources. Some of the most understudied groups include Middle Eastern/North African (MENA) American, Afghan American and Native American communities. We were unable to find any studies related to the MENA or Afghan communities but found four studies on PubMed considering Native American ACEs and mental health. Thirdly, there remains a smaller base of ACEs research regarding mental health, creating a lack of documentation on the extent of their impacts, especially when considering ethnic identity. Despite this, multiple studies have confirmed that ACEs do have a substantial impact on individuals, both for their physical and mental well-being (Anda *et al.*, 2002;

Assini-Meytin *et al.*, 2021; Crandall *et al.*, 2019; Dube *et al.*, 2001, 2002a, 2002b, 2003; Felitti *et al.*, 1998; Karatekin, 2017; Leza *et al.*, 2021; Merrick *et al.*, 2017; Sahle *et al.*, 2022). A few other studies have looked at specific ethnic groups, especially minority groups, who have faced more of these experiences, on average, as shown below.

Looking at these three ACEs characteristics, we hypothesised that studying ACEs scores could provide insight into how likely members of an ethnic group would be to experience high levels of depression, substance-use disorder and low levels of self-worth, focusing specifically on the Afghan American, Native American, and Middle Eastern/North African-American communities.

Historically, depression and substance-use disorder have both been associated with lower levels of mental well-being, while higher self-worth has been associated with higher levels of resilience and flourishing as shown in the studies below.

Adverse Childhood Experiences

With the CDC-Kaiser ACE Study, which ran from 1995 to 1997, the study of ACEs entered a new dimension. The study showed that early adversity has lasting impacts on the physical and mental health of individuals, including increasing the risk of lung disease, liver disease and suicide (Schilling *et al.*, 2007). Subsequently, many researchers like Nadine Burke Harris, the current Surgeon General of California, linked Adverse Childhood Experiences (or ACEs) to various health issues. Although there have been countless studies on ACEs after this initial study, there has been a gap in the literature in studying the impact of ACEs on college students' mental health, especially in regards to ethnic identity. To understand the past research conducted, a literature review was conducted.

Mental health and ACEs

ACEs do impact mental health outcomes across the population, particularly for young adults. Research shows that those who have experienced multiple ACEs are linked with a higher risk of substance-use disorder and depression levels. In a study by Mersky *et al.*, (2013), the researchers concluded that the impacts of ACEs on young adults quickly translate to long-term health concerns. Another study found that ACEs were associated with depressive symptoms, drug abuse and anti-social behaviour (Schilling *et al.*, 2007).

In conjunction, ACEs can lead to lower levels of self-worth in young adults due to a lack of attention from their caregivers (Oshri *et al.*, 2014). In comparison, adolescents with ascending self-worth scores showed positive growth and fewer substance-use disorder symptoms compared to those with descending self-worth. There are clear connections between the level of ACEs experienced and negative mental health outcomes – requiring a better, more nuanced understanding of ACEs.

Resilience and self-worth

Due to the differences in experiencing and responding to ACEs with differing environments, resources and support systems, there are inequities across various social groups (Thoits, 2010). This makes studying ACEs and their impacts more important, especially when considering the path towards creating equity at a systemic level. ACEs also reveal the necessity of resilience, which is the ability of individuals to respond positively to challenges they have faced in the past. Self-esteem or self-worth have long been shown to have

a positive intervening effect on adverse experiences (Marriott *et al.*, 2014). Examining self-worth measures alongside ACEs highlights this aspect of self-worth.

Ethnicity

The current literature around ACEs and ethnicity has several limitations, from the population focus to methods. For example, the CDC-Kaiser study only focused on a mostly White population. In the past decade, ACEs studies have evolved and have thus focused on specific ethnic groups. Some of these groups have been studied previously regarding their ACEs and mental health, such as the African-American population and the Native-American population (Brockie *et al.*, 2015; Mersky *et al.*, 2013; Mignon and Holmes, 2013). Although these are studies focused on minority groups, studies such as these are in the minority themselves and are still not holistic, considering multiple variables that may impact these populations. One of the studies on Native American populations focused on grandparents and their concerns about the impact of their culture and lack of resources on their communities' growing mental health crisis. (Mignon and Holmes, 2013) Another study focused on a specific reservation where they found that many ACEs corresponded to drug use and depressive symptoms, among other impacts. (Brockie *et al.*, 2015) These studies reveal the limited nature of the literature on ethnic groups and ACEs.

Certain ethnic groups have disproportionately higher amounts of ACEs. Despite this, there is a dearth of research focused on ACEs and ethnic groups. These studies have limited generalisability and reveal the lack of literature on diverse ethnic groups as well as the absence of comparisons between ethnic groups to understand the impact of ethnicity itself on ACEs and mental health. Two groups that have been grossly understudied are the Afghan MENA populations in the US (Awad *et al.*, 2019). This is mainly due to them historically having to self-identify as 'White' on surveys. As studies have shown, they are not perceived as 'White' nor do they perceive themselves as 'White'. However, this label has resulted in their data being masked and the issues that they face not coming to light (Awad *et al.*, 2022; Maghbouleh, *et al.*, 2022).

Considering the deep interlocking connections between ACEs, depression and substance-use disorder and, consequently, self-worth and resilience, it is clear that these areas need to be studied more. As we were from a community college where research is not usually done, we were able to survey a subsection of the population that is more diverse and less researched. To address the gaps in the literature, we investigated the impact of ACEs scores on depression, substance-use disorder and self-worth among historically under-researched Afghan American, Native-American and Middle Eastern/North African-American communities of a community college, and we hypothesised that different communities would experience ACEs and mental health struggles differently.

Methods

Study

Data was collected from 15 to 30 April 2021 using an anonymous online-administered survey system. This survey was conducted on the students of Ohlone College, a community college in California.

The original survey (see Appendix 3) had a total of 43 questions revolving around mental health and ethnic identity. Two questions asked for ethnic identity and its specifics, one asked for gender and sexuality specifics, while the other forty-one questions consisted of previously validated survey questions assessing

the following topics: Adverse Childhood Experiences (ACEs), depression, self-worth, substance-use disorder, anxiety, experience during the SARS-COVID-2 pandemic, disabilities, habits and education, self-esteem, perceived stress and suicidal thoughts. But after releasing the survey for about 24 hours, we realised that question 4, which asked about the specifics of respondents' ethnic identities, would be redundant as question 3 asked for ethnic identity in the form of checkboxes. Therefore, we decided to revise the questions and exclude question 4 while clarifying question 3 about ethnic identities even further. We ended up with a 42-question revised survey (see Appendix 4) with a question on ethnic identity, a question on gender and sexuality, and the other 40 questions regarding the previously mentioned topics.

However, for this research, the questions that were focused on were the ACEs, depression, self-worth and substance-use disorder questionnaires. For ACEs, the official CDC-Kaiser Permanente questionnaire was used and all ten questions were included in the survey. (Mueller *et al.,* 2016; Schilling *et al.*, 2007). Regarding depression, the nine official Patient Health Questionnaire-9 (PHQ-9) questions were used. (Kroenke *et al.*, 2001). For substance-use disorder, we utilised questions from National Institute on Drug Abuse (NIDA) Clinical Trials Network The Tobacco, Alcohol, Prescription medications, and other Substance (TAPS) Tool. (McNeely *et al.*, 2016). Self-worth was measured using selective questions from the Rosenberg Self-Esteem Scale (Rosenberg, 1965). (See Appendix 1 and Appendix 2 for a more visual representation of the questions.) These questions were selected by the entire research team based on which were deemed to be the most appropriate.

ACEs are scored with each negative experience adding 1 point to the respondent's score. The number of ACEs determines the score (out of 10 possible points/experiences).

The PHQ-9 questionnaire works in a slightly different format. With the score ranging 0–27, each of the nine questions has four options:

1. Not at all
2. Several days
3. More than half the days
4. Nearly every day

So, according to the option selected, the score will differ. Similarly, the options from the TAPS questionnaire ('Daily or almost daily', 'Weekly', 'Monthly', 'Less than monthly', and 'Never') give insight into the participants' substance-use habits. Finally, the Rosenberg Scale, like the PHQ-9 questionnaire, uses a method where a number that matches the option selected results in a specific score for each question. A higher score indicates higher self-esteem in individuals.

Since this study served as a way to gather information about diverse ethnic identities that are not primarily discussed, the ethnic identities were detailed in the following way to be clear. These identities were chosen by surveying multiple identity groups across various articles and updating these groups to encompass more diversity. The following identities were:

- White (e.g. German, Irish, English, Italian, Polish, French, etc.)
- Hispanic, Latino or Spanish origin (e.g. Mexican or Mexican American, Puerto Rican, Cuban, Salvadoran, Dominican, Colombian, etc.)
- Black or African American (e.g. African American, Jamaican, Haitian, Nigerian, Ethiopian, Somalian, etc.)
- East Asian (e.g. Chinese, Japanese, Korean, Okinawan, Taiwanese, Tibetan)

- Southeast A sian (e.g. Bruneian, Burmese, Cambodian, Filipino, Hmong, Indonesian, Laotian, Malaysian, Mien, Singaporean, Timorese, Thai, Vietnamese)
- South Asian (e.g. Bangladeshi, Bhutanese, Indian, Maldivians, Nepali, Pakistani, Sri Lankan)
- Other Asian (Afghan)
- American Indian or Alaska Native (e.g. Navajo Nation, Blackfeet Tribe, Mayan, Aztec, Native Village of Barrow Inupiat Traditional Government, Nome Eskimo Community, etc.)
- Middle Eastern or North African (e.g. Lebanese, Iranian, Egyptian, Syrian, Moroccan, Algerian, etc.)
- Native Hawaiian or Other Pacific Islander (e.g. Native Hawaiian, Samoan, Chamorro, Tongan, Fijian, etc.)
- Mixed Ethnic Identities
- Some other race, ethnicity or origin

For the question related to ethnic identity, the participants were allowed to self-report the answers by checking the ethnicities that they identified with, checking 'all that apply'. For 'Mixed Ethnic Identities', it is unknown whether participants checked multiple boxes with or without selecting the 'Mixed Ethnic Identities' box as well since the survey site did not keep track of this.

This survey was restricted to only students of Ohlone College and was incentivised. The survey was advertised where the first 200 participants would receive $5 Amazon gift cards. It was a completely anonymous study where the only optional information that was collected was about the individuals who were interested in the gift cards – these respondents choose to provide their email addresses to receive the gift cards. The service that was used to give out the survey blocked any IP addresses and made the server private so that no information was able to be breached.

Sample

TOTAL			Other Asian (Afghan)		American Indian or Alaska Native		Middle Eastern and North African	
TOTAL	n	%	n	%	n	%	n	%
Male	625	35.27%	38	16.81%	35	15.28%	34	14.91%
Female	647	36.51%	38	16.81%	37	16.16%	40	17.54%
Trans male	107	6.04%	36	15.93%	34	14.85%	31	13.60%
Trans female	86	4.85%	24	10.62%	30	13.10%	24	10.53%
Different identity	96	5.42%	28	12.39%	26	11.35%	24	10.53%
Gender nonconforming	112	6.32%	27	11.95%	38	16.59%	37	16.23%
Prefer not to say	98	5.53%	35	15.49%	29	12.66%	38	16.67%
Other (please explain)	1	0.06%	0	0.00%	0	0.00%	0	0.00%
Total respondents	1772		226		229		228	

Table 1: Demographics table

Table 1 shows the demographics of all the participants in the overall study and then specifically in the samples of 'Other Asian (Afghan)', 'American Indian or Alaska Native (e.g. Navajo Nation, Blackfeet Tribe, Mayan, Aztec, Native Village of Barrow Inupiat Traditional Government, Nome Eskimo Community, etc.)', and 'Middle Eastern or North African (e.g. Lebanese, Iranian, Egyptian, Syrian, Moroccan, Algerian, etc.)'.

Along with the information presented in Table 1, the survey received responses from individuals who identified themselves according to the options listed above. The responses were White (n = 696, 39.28%), Hispanic, Latino or Spanish (n = 362, 20.43%), Black or African American (n = 479, 27.03%), East Asian (n = 310, 17.49%), Southeast Asian (n = 285, 16.08%), South Asian (n = 275, 15.52%), Native Hawaiian or Other Pacific Islander (n = 229, 12.92%), Mixed Ethnic Identities (n = 231, 13.04%), and 'Some other race, ethnicity or origin' (n = 2, 0.11%).

According to Table 1, the transgender population makes up more than 10 per cent of the participants of the survey. This is significantly higher than the expected 0.7 per cent, based on US national data of 18- to 24-year-olds (World Population Review, n.d.). Multiple factors may have contributed to this over-representation. Since Ohlone College is located in the San Francisco Bay Area, which is extremely diverse, there may be a higher amount of trans-identifying students (An Equity Profile of the Nine-County San Francisco Bay Area Region, 2017). Continually, since underserved minorities tend to attend community colleges, more individuals from the trans-identifying minority community may be attending Ohlone. Lastly, due to the anonymous nature of the survey, where participants may feel more comfortable sharing their identities, there may have been more individuals who self-reported as trans. This may result in higher levels of mental health difficulties reported as previous studies have found that individuals who identify as transgender tend to face more difficulties throughout their lives (Mueller *et al.*, 2017; Strauss *et al.*, 2020). Overall, however, since our study is not focused on gender, this data does not impact the results significantly.

Examining data

To understand the relationships between the number of ACEs individuals experienced and their PHQ-9, substance-use disorder and self-worth scores, a statistical analysis was conducted. Keeping the number of ACEs as the independent variable, PHQ-9, substance-use disorder and self-worth scores were graphed as the dependent variables. The overall data was graphed by the number of ACEs by looking at the average scores for all three dependent variables among individuals with each ACEs score. The same procedure was repeated for each of the selected ethnic groups: MENA, Native American and Afghan.

Data analysis

The following is the analysis of ACEs and PHQ-9, substance-use disorder and self-worth scores.

Mental health and ACEs

To begin with, the number of respondents for each ACEs score was calculated. This was done by adding 1 point for each negative experience. The number of ACEs determines the score (out of 10 possible points/experiences). As shown in Figure 1, the number of individuals with an ACEs score of 10 was substantially larger than the number of individuals for any other score. This may be due to inaccurate survey responses or may be an actual estimate of the represented sample's experiences. Most likely, this may be a mixture of both inaccuracy and accuracy, with some survey respondents facing a lot of adverse experiences and others inaccurately representing their experiences. Regardless, the scores of 0, 1, 4 and 10 were most common. The scores of 7, 8 and 9 were the least common. The number of respondents with a score of 9 was very limited. This did impact other figures, as shown below.

Due to the abnormally large values of those with a score above 10, we decided to remove those with a score of 10 from the analysis of ACEs score to allow for more accurate data analysis. Before removing those with a score of 10, the MENA American community had one of the highest average ACEs scores. Although this score dropped considerably after the change, we decided to continue focusing on MENA Americans, especially considering the limited pre-existing research on that population.
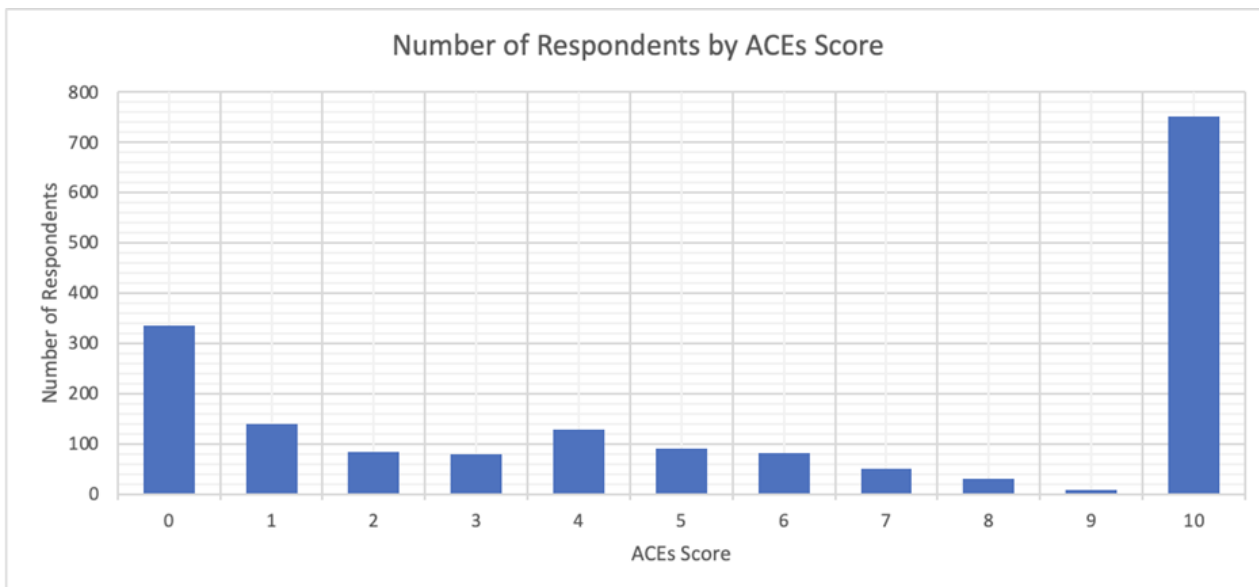
Figure 1: Number of Respondents by ACEs Score

Figure 1 shows the number of respondents for each ACEs score, which indicates the number of negative experiences that were a consistent part of their childhood and which was represented by each of the bars shown.

So, to analyse the impact of these ACEs scores on mental health, the average scores of indicators of mental health were calculated and plotted, as shown in Figure 2. Analysing the resulting curve, distinct relationships were observed. Firstly, with increasing ACEs scores, the substance-use disorder average score also increased while the self-worth average score decreased. In addition, PHQ-9 scores showed an interesting pattern with the highest PHQ-9 scores being found between an ACEs score of 4 and 6. After an ACEs score of 6, the PHQ-9 scores started decreasing. Although an ACEs score of 9 still had a higher PHQ-9 average score than an ACEs score of 0, this decrease impacted the relationship between ACEs and the PHQ-9, making the PHQ-9 slightly different from the other indicators of mental wellness.
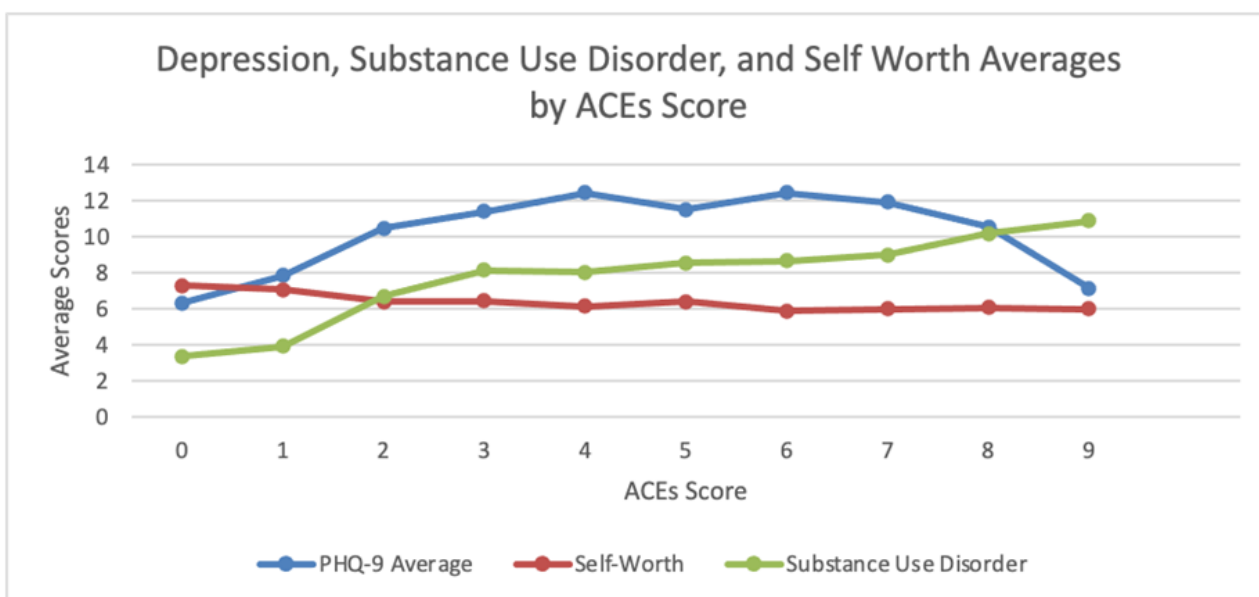

Figure 2: Depression, substance-use disorder and self-worth averages by ACEs score

Figure 2 shows the average scores associated with each ACEs score for depression (PHQ-9), substance-use disorder and self-worth. The blue line represents depression, the orange line represents self-worth, and the grey line represents substance-use disorder. ACEs scores of 10 are left out.

Ethnic-identity breakdown

To understand the role of ethnic identity in ACEs scoring, the average ACEs score for each ethnic identity was listed in Table 2. As shown below, respondents identifying as 'White' had the lowest average score, while members identifying as 'Afghan' had the highest average score, meaning that they had faced more ACEs.

Group	Average (out of 10)
East Asian	1.223
South Asian	1.446
Middle Eastern or North African	1.462
Southeast Asian	1.472
White	2.758
Black or African American	2.939
Hispanic, Latino or Spanish Origin	3.205
Mixed Ethnic Identities	3.25
Native Hawaiian or Other Pacific Islander	3.286
American Indian or Alaska Native	3.333
Other Asian (Afghan)	5.000
Overall	**2.594**

Table 2: ACEs average score by ethnic-identity groups

Table 2 shows the average ACEs score for each ethnic identity surveyed. The highest score possible is a 10. The averages were rounded to three decimal points.

Similarly, Table 3 lists the average substance-use disorder score by ethnic-identity group. Here, 'East Asians' had the lowest average scores while 'Afghans' again had the highest average score.

Group	Average (out of 16)
East Asian	7.429
Southeast Asian	7.99
White	8.07
South Asian	8.244
Hispanic, Latino or Spanish Origin	8.254
Black or African American	8.62
Middle Eastern or North African	9.504
Mixed Ethnic Identities	9.528
American Indian or Alaska Native	9.786
Native Hawaiian or Other Pacific Islander	9.812
Other Asian (Afghan)	10.053
Overall	**9.786**

Table 3: Substance-use disorder average score by ethnic identity groups

Table 3 shows the average substance-use disorder score for each ethnic identity surveyed. The highest score possible is a 16. The averages were rounded to three decimal points.

Table 4 lists the average self-worth scores by ethnic-identity groups. With self-worth, the scores are reversed since a higher self-worth score translates into a more positive response. Respondents who identified as 'East Asian' again have the most positive score (or the lowest score), meaning they had the highest self-worth while those identifying as 'Native Hawaiian or Other Pacific Islander' have the least positive score (or the highest score), meaning they had the lowest self-worth.

Group	Average (out of 12)
East Asian	6.411
White	6.404
Black or African American	6.261
Hispanic, Latino or Spanish Origin	6.261
South Asian	6.262
Southeast Asian	6.103
Mixed Ethnic Identities	6.07
Other Asian (Afghan)	6
Middle Eastern or North African	5.991
American Indian or Alaska Native	5.969
Native Hawaiian or Other Pacific Islander	5.895
Overall	**6.35**

Table 4: Self-worth average score by ethnic-identity groups

Table 4 shows the average self-worth score for each ethnic identity surveyed. The highest score possible is a 12. The averages were rounded to three decimal points.

Since the data showed distinct trends between ACEs scores, and substance-use disorder and self-worth scores, respectively, these three factors were analysed for each ethnic identity group. The top five groups with the highest ACEs score and highest substance-use disorder scores, and the lowest self-worth score were surprisingly almost the exact same: MENA, American Indian or Alaska Native, and Mixed Ethnic Identities, with the exception of MENA having a lower adjusted ACEs average score. To deepen the analysis, the two groups with the highest ACEs score along with MENA were further analysed. These groups were the: Afghan American, MENA American and Native American communities.

Specific ethnic samples

Figure 3 shows the data for the MENA sample. There is a similar shape to the data found for the overall sample. For depression, however, the MENA sample has a peak of 14.14 at an ACEs score of 6, which is substantially higher than the overall sample's peak at an ACEs score of 6 of 12.41. While the substance-use disorder values are similar to the overall sample, the self-worth values are all lower than those of the overall sample at each ACEs score.
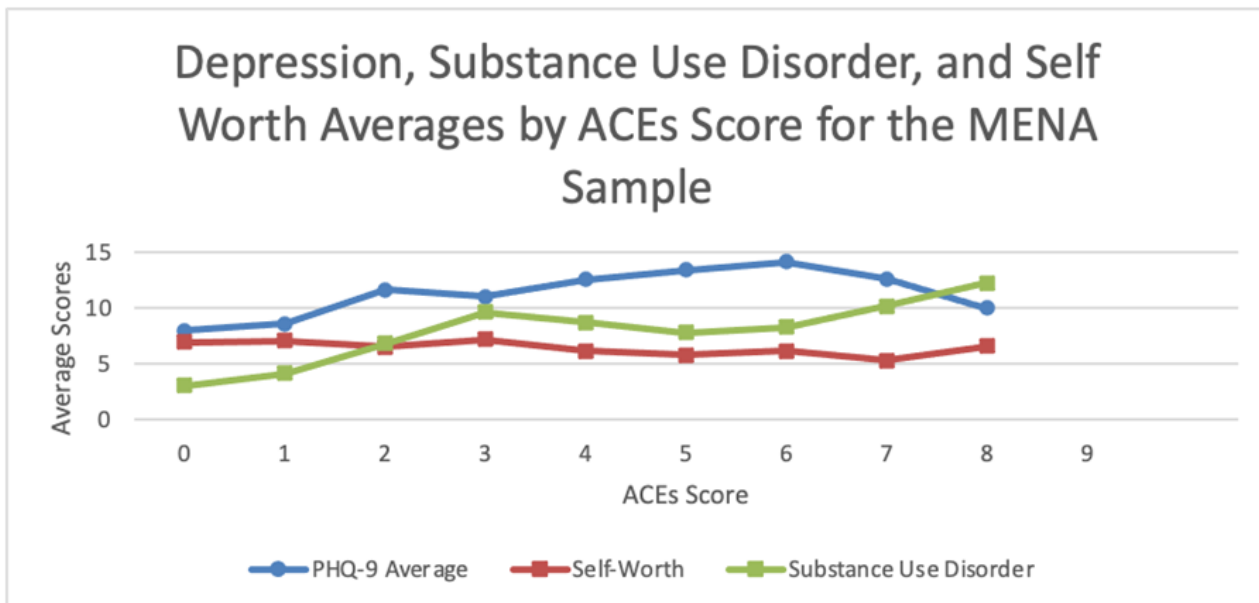
Figure 3: Depression, substance-use disorder and self-worth averages by ACES score for the Middle Eastern/North African sample

Figure 3 shows the average scores associated with each ACEs score within the MENA sample for depression (PHQ-9), self-worth and substance-use disorder. The blue line represents depression, the orange line represents self-worth, and the grey line represents substance-use disorder. ACEs scores of 10 are left out and no individuals had a score of 9.

Figure 4 shows the data for the Afghan sample. The PHQ-9 values, substance-use disorder values and self-worth values are similar to the overall sample, although this sample has the highest ACEs and substance-use disorder averages.
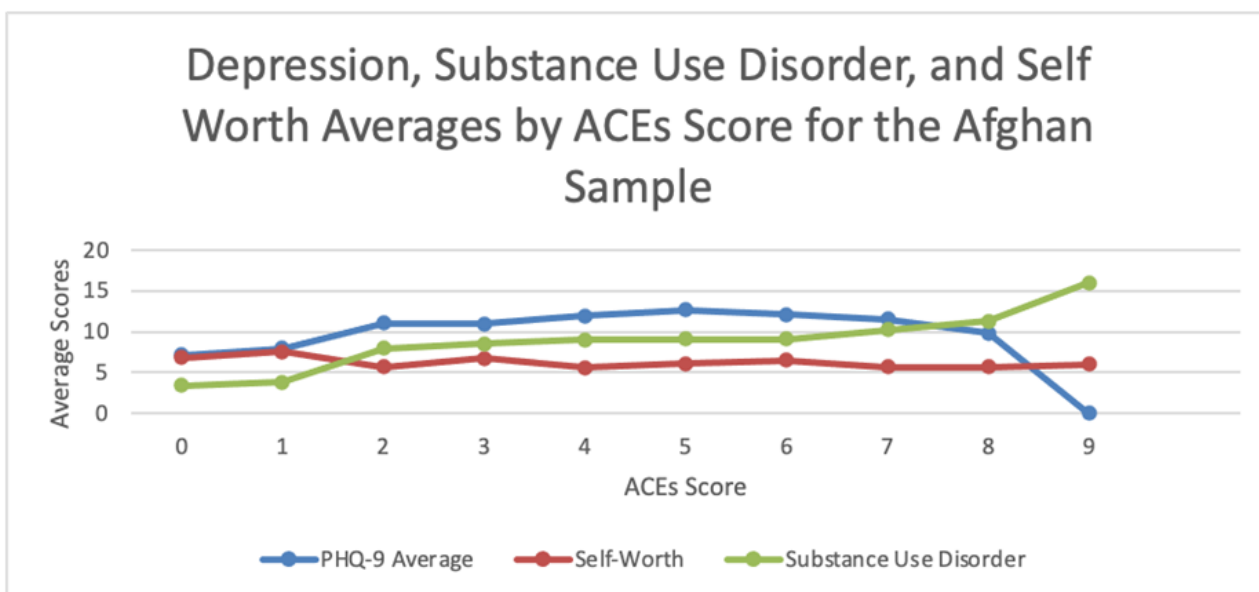
Figure 4: Depression, substance-use disorder, and self-worth averages by ACEs score for the Other Asian (Afghan) sample

Figure 4 shows the average scores associated with each ACEs score within the Other Asian (Afghan) sample for depression (PHQ-9), self-worth and substance-use disorder. The blue line represents depression, the orange line represents self-worth, and the grey line represents substance-use disorder. ACEs scores of 10 are left out.

Lastly, Figure 5 shows the data for the American Indian or Alaska Native sample. For depression, it has a peak of 13.78 at an ACEs score of 4, which is higher than the overall sample's peak at an ACEs score of 6 of 12.41. For self-worth and substance-use disorder, the scores were similar to the overall sample.
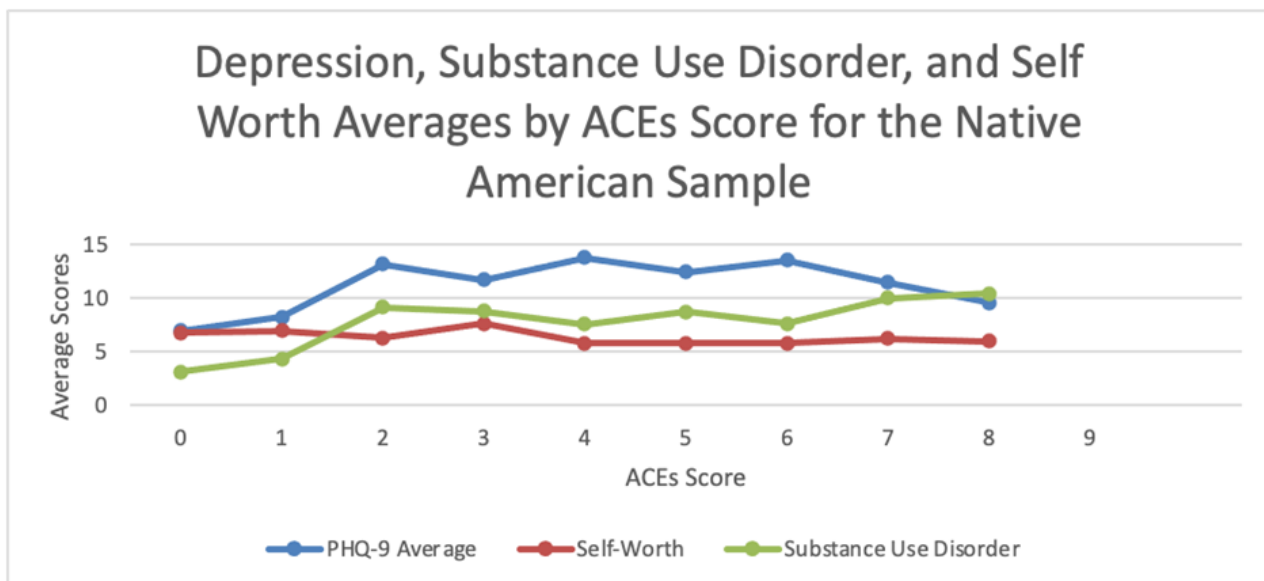
Figure 5: Depression, substance-use disorder and self-worth averages by ACEs Score for the American Indian or Alaska Native sample

Figure 5 shows the average scores associated with each ACEs score within the American Indian or Alaska Native sample for depression (PHQ-9), self-worth and substance-use disorder. The blue line represents depression, the orange line represents self-worth, and the grey line represents substance-use disorder. ACEs scores of 10 are left out and no individuals had a score of 9.

Discussion

Data

As the study demonstrates, there is a strong correlation between mental health and ACEs scores. Overall, mental health declined as ACEs scores increased. Higher ACEs scores correlated with higher substance-use disorders, lower self-worth and higher depression rates. The survey conducted showed that the represented ethnic identities of the Afghan American and Native American communities were the ones with the highest ACEs scores. These same communities, including the MENA American community, also had some of the lowest self-worth scores and highest substance-use disorder scores.

In regard to the depression rates, the PHQ-9 scores of the three samples were generally the highest among ACEs scores of 4–6 and the lowest among scores from 0–1. Specifically for ACEs scores, a score between 0–3 generally showed lower PHQ-9 scores, while scores of 4–6 was generally where the highest PHQ-9 scores lay (meaning the feelings described were felt more often, either nearly every day or every day) , and there was a decrease in the depression scores from 7 to 10 ACEs. Essentially, the graphs started low, peaked around the middle and then slightly decreased for all three samples.

The data also found that as ACEs scores increased so did substance-use disorder scores. And although self-worth was lowest among these communities, across ACEs scores, there was a very slight decrease in self-worth scores around an ACEs score of 4, which is similar to what previous studies predicted.

Native Americans

Research on the Native American population has indicated an extreme amount of historical trauma that is at the root of the mental health struggles faced by this community (McLeigh, 2010). Research has indicated that

Native American youth report significantly more depressive symptoms than non-Hispanic White youth, revealing the extent of the problem currently (Serafini *et al.*, 2017). Policies that have led to many Native American rights being infringed upon, resulting in a population that continues to face turmoil societally. This turmoil may play a major role in many Native Americans having high ACEs scores and thus multiple mental health struggles.

Afghan Americans and MENA Americans

West/Central Asia has historically been an unsafe region. In addition to the generational trauma caused by violence and instability in this region, research has indicated that the mental health of children and adolescents in this area has been deteriorating (El-Gilany and Amr, 2010; Mechammil *et al.* 2019). There is also a large refugee population from this region, specifically the Afghan American population in recent times. These struggles may be contributing factors in both Afghan Americans and MENA Americans having disproportionately high ACEs scores, especially since many of them may have immigrated recently or have family/friends in regions with considerable instability.

Ethnic identity

Without data on these minority communities, their struggles would never come to light. This paper emphasises the importance of targeting at-risk minority groups in research efforts and in prevention/treatment efforts. Disaggregating ethnic groups can result in key focus areas coming to light, such as the issues faced by the MENA community that are not faced by the majority of the White-identifying community.

This research discussed ethnic identities that are specifically differentiated into different categories that differ from traditional ethnic-identity grouping. Therefore, most of these groups are rarely ever discussed individually. For example, nearly all traditional ethnic labelling puts all Asian countries into one category. Those with mixed identities are also never fully given a chance to identify with their entire ethnic identity and usually have to choose a single identity to identify as. Since this study emphasised each individual having a chance to express their ethnic identity by what they believe, this makes this study unique.

But this uniqueness comes at the cost of not having many comparisons by which the results can be measured. Although many articles present beneficial information on well-known ethnic communities, not many discuss identities such as the Afghan community or the Middle Eastern and North African communities. This is why there needs to be more research done on these specific ethnic identities.

Conclusions

Learning about Adverse Childhood Experiences of individuals with different backgrounds can provide a unique perspective into how mental health can be impacted by the environment that an individual grows up in. Policy reforms and interventions stemming from this analysis may help counter the deleterious effects of ACEs. Previous studies have found that an ACEs score above 6 as being the range associated with shortened life spans of up to 20 years (Brown *et al.*, 2009). Interestingly, an ACEs score of 6 was found to be the score associated with the highest average PHQ-9 score in this study as well. Through obtaining such data, where the specifics on which community has high ACEs scores and what their mental health is characterised by is known, a step further can be taken by having individuals deal with their past traumatic experiences through

help from mental health professionals. Getting individuals in these communities the care that they need may allow them to have more time with their loved ones or even to heal from those past traumatic experiences.

Therefore, it is crucial that research on these communities, with ethnic identity being prioritised, be continued as these are the communities that are often overlooked. This research also presents an argument for early intervention in circumstances that deal with early childhood abuse, which will lead to the reduction of the risk of having a mental illness in the later years.

Limitations

This survey did have its share of limitations. Since this was an anonymous survey, we were unable to distinguish whether the answers given by participants were genuine or if the questions were answered randomly. However, since this is true of all surveys, it may not have had a large impact. The incentive of receiving a gift card for those who complete the survey first may have further promoted answering quickly without reading the questions. The incentive could also affect the motive of the individuals so that instead of answering to contribute to the research of mental health, they may have participated for the reward of the gift card. However, this is a common method used in survey research.

Due to the nature of these questions, participants may not have been completely honest about their answers. Even though the participants were reassured about the anonymity of their answers, there were many personal questions that the participants may have been hesitant to answer honestly due to a fear of having their answers revealed. However, the emphasis on anonymity may have meant that participants were not majorly impacted by this.

The accuracy of memory is another limitation. Many participants may not remember their childhood memories, or may even remember them incorrectly. And, since this survey requires the memory of traumatic events, the mechanism of 'repressed memories' is another limitation to take into context. Individuals who have endured abuse as children may store away these memories from consciousness as a way to shelter from the pain that they experienced (Paul, 2015). Many individuals who may have gone through traumatic childhood experiences may have repressed those memories and marked 'No' to questions regarding that event.

Another limitation depended on the outreach of the survey and flyer. Those students who were proficient with technology would be the ones who saw the flyer and were able to answer the survey. And, since we are Science, Technology, Engineering and Mathematics (STEM) majors, we reached out to other primarily STEM major undergraduate students and faculty to help advertise the survey. So, even though the survey was open to all students regardless of their major, it can be assumed that a large quantity of the students may have been primarily from the STEM category.

A final limitation to be listed is the specificity of the population and the sample that this research was measuring. Ohlone College is unique in having students from the Bay Area, a region with various immigrant communities. This resulted in students from a multitude of ethnic backgrounds participating in the survey. However, since this research is looking specifically at one community college, the population and sample are very specific. Therefore, even though Ohlone College has a very diverse student body, because of its specificity as a small community college in California, it would not properly represent the various ethnic identities that this survey attempted to look at.

This study is unique both with its novel and descriptive ethnic-identity categories and with applying ethnic identities to mental health and Adverse Childhood Experiences. Our findings about the ethnic-identity groups that are majorly impacted by ACEs reveal affinity groups that may be targeted in future intervention strategies. Future research on the reasons these populations face more ACEs and on strategies that may mitigate the impacts of ACEs on these communities would be necessary.

Acknowledgements

Appendices

Appendix 1: ACEs Questionnaire

Adverse Childhood Experience (ACE) Questionnaire
Finding your ACE Score ra hbr 10 24 06

While you were growing up, during your first 18 years of life:

1. Did a parent or other adult in the household **often** …
   Swear at you, insult you, put you down, or humiliate you?
   or
   Act in a way that made you afraid that you might be physically hurt?
   Yes No   If yes enter 1 _____

2. Did a parent or other adult in the household **often** …
   Push, grab, slap, or throw something at you?
   or
   Ever hit you so hard that you had marks or were injured?
   Yes No   If yes enter 1 _____

3. Did an adult or person at least 5 years older than you **ever**…
   Touch or fondle you or have you touch their body in a sexual way?
   or
   Try to or actually have oral, anal, or vaginal sex with you?
   Yes No   If yes enter 1 _____

4. Did you **often** feel that …
   No one in your family loved you or thought you were important or special?
   or
   Your family didn't look out for each other, feel close to each other, or support each other?
   Yes No   If yes enter 1 _____

5. Did you **often** feel that …
   You didn't have enough to eat, had to wear dirty clothes, and had no one to protect you?
   or
   Your parents were too drunk or high to take care of you or take you to the doctor if you needed it?
   Yes No   If yes enter 1 _____

6. Were your parents **ever** separated or divorced?
   Yes No   If yes enter 1 _____

7. Was your mother or stepmother:
   Often pushed, grabbed, slapped, or had something thrown at her?
   or
   Sometimes or often kicked, bitten, hit with a fist, or hit with something hard?
   or
   Ever repeatedly hit over at least a few minutes or threatened with a gun or knife?
   Yes No   If yes enter 1 _____

8. Did you live with anyone who was a problem drinker or alcoholic or who used street drugs?
   Yes No   If yes enter 1 _____

9. Was a household member depressed or mentally ill or did a household member attempt suicide?
   Yes No   If yes enter 1 _____

10. Did a household member go to prison?
   Yes No   If yes enter 1 _____

Now add up your "Yes" answers: _____ This is your ACE Score

Appendix 2: PHQ-9 Questionnaire

PATIENT HEALTH QUESTIONNAIRE-9 (PHQ-9)

Over the last 2 weeks, how often have you been bothered by any of the following problems? (Use "✔" to indicate your answer)	Not at all	Several days	More than half the days	Nearly every day
1. Little interest or pleasure in doing things	0	1	2	3
2. Feeling down, depressed, or hopeless	0	1	2	3
3. Trouble falling or staying asleep, or sleeping too much	0	1	2	3
4. Feeling tired or having little energy	0	1	2	3
5. Poor appetite or overeating	0	1	2	3
6. Feeling bad about yourself — or that you are a failure or have let yourself or your family down	0	1	2	3
7. Trouble concentrating on things, such as reading the newspaper or watching television	0	1	2	3
8. Moving or speaking so slowly that other people could have noticed? Or the opposite — being so fidgety or restless that you have been moving around a lot more than usual	0	1	2	3
9. Thoughts that you would be better off dead or of hurting yourself in some way	0	1	2	3

FOR OFFICE CODING ___0___ + _____ + _____ + _____

=Total Score: _____

If you checked off any problems, how difficult have these problems made it for you to do your work, take care of things at home, or get along with other people?

Not difficult at all	Somewhat difficult	Very difficult	Extremely difficult
☐	☐	☐	☐

Developed by Drs. Robert L. Spitzer, Janet B.W. Williams, Kurt Kroenke and colleagues, with an educational grant from Pfizer Inc. No permission required to reproduce, translate, display or distribute.

Appendix 3: Original list of survey questions

Q1 We will be focusing on a sample collected from a population of Ohlone College students. The data collected will be anonymous. There will be no names or other personally identifying information collected. All data will be used strictly by our group for research purposes only and raw data will not be released to the public. Items presented include only multiple-choice questions. There is no risk to subjects taking the

survey, however, some questions may be discomforting. If you no longer would like to proceed with the survey, you have the right to withdraw at any moment.

Answer Choices:

1. Yes, I have read and understood the informed consent and would like to proceed with the survey.
2. No, I have not read and/or understood the informed consent and would not like to proceed with the survey.

Q2 How would you describe yourself? If other, please specify.

Answer Choices:

1. Female Male Trans Female
2. Trans Male
3. Gender Nonconforming
4. Different Identity
5. Prefer Not to Say
6. Other (please specify)

Q3 Which category best describes you? Please click on the category.

Answer Choices:

1. White (e.g. German, Irish, English, Italian, Polish, French, etc.)
2. Latino
3. Black
4. East Asian
5. Southeast Asian
6. South Asian
7. Other Asian (Afghan)
8. Native American
9. MENA
10. Pacific Islander
11. Mixed Ethnic Identities
12. Other
13. Specifics

Q4 Please provide the specifics for the category you picked for question 3 in the comment section below. (e.g. Asian – half-Chinese, half-Korean OR Middle Eastern/North African – Egyptian)

Answer Choices:

Open-ended

Q5 I browse the headings, pictures, chapter questions and summaries before I start reading a chapter and I look for familiar concepts as well as ideas that spark my interest as I read.

Answer Choices:

1. Rarely
2. Sometimes
3. Often

Q6 I take notes, and rewrite them, as I read my textbooks and during class lectures.

Answer Choices:

1. Rarely
2. Sometimes
3. Often

Q7 I study where it is quiet and has few distractions; I take short breaks while studying for a long period of time, I set study goals, such as the number of problems I will do or pages I will read, and I use a 'to do' list to keep track of completing my academic and personal activities.

Answer Choices:

1. Rarely
2. Sometimes
3. Often

Q8 I quiz myself over material that could appear on future exams and quizzes and say difficult concepts out loud in order to understand them better. I also start studying for quizzes and tests at least several days before I take them.

Answer Choices:

1. Rarely
2. Sometimes
3. Often

Q9 I study with a classmate or group and when I don't understand something, I get help from tutors, classmates and my instructors.

Answer Choices:

1. Rarely
2. Sometimes
3. Often

Q10 In the last month, how often have you felt that you were unable to control the important things in your life?

Answer Choices:

1. Never
2. Almost Never
3. Sometimes
4. Fairly Often
5. Very Often

Q11 In the last month, how often have you felt confident about your ability to handle your personal problems?

Answer Choices:

1. Never
2. Almost Never
3. Sometimes
4. Fairly Often
5. Very Often

Q12 In the last month, how often have you felt that things were going your way?

Answer Choices:

1. Never
2. Almost Never
3. Sometimes
4. Fairly Often
5. Very Often

Q13 In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?

Answer Choices:

1. Never
2. Almost Never
3. Sometimes
4. Fairly Often
5. Very Often

Q14 I feel that I am a person of worth, at least on an equal plane with others.

Answer Choices:

1. Strongly Agree
2. Agree
3. Disagree
4. Strongly Disagree

Q15 I feel that I have a number of good qualities.

Answer Choices:

1. Strongly Agree
2. Agree
3. Disagree
4. Strongly Disagree

Q16 All in all, I am inclined to feel that I am a failure.

Answer Choices:

1. Strongly Agree
2. Agree
3. Disagree
4. Strongly Disagree

Q17 I wish I could have more respect for myself.

Answer Choices:

1. Strongly Agree
2. Agree
3. Disagree
4. Strongly Disagree

Q18 Which of the following are you experiencing (or did you experience) during COVID-19 (Coronavirus)? (check all that apply)

Answer Choices:

1. Being diagnosed with COVID-19
2. Fear of getting COVID-19
3. Fear of giving COVID-19 to someone else
4. Stigma or discrimination from other people (e.g., people treating you differently because of your identity, having symptoms or other factors related to COVID-19)
5. Personal financial loss; conflicts about finance or work/employment (e.g., lost wages, job loss, investment/retirement loss, travel-related cancellations)
6. Confusion about what COVID-19 is, how to prevent it, or why social distancing/isolation/quarantines are needed
7. Feeling that I was contributing to the greater good by preventing myself or others from getting COVID-19
8. Getting emotional or social support from family, friends, partners, a counsellor or someone else
9. Getting financial support from family, friends, partners, an organization or someone else
10. Conflicts about decisions about going out/having visitors to the home (e.g., on errands, to appointments, for visits)
11. Togetherness because of spending time together, showing emotional support, helping each other (e.g., hobbies, television, playing games, social media)

Q19 I feel more nervous and anxious than usual.

Answer Choices:

1. None or little of the time
2. Some of the time
3. Good part of the time
4. Most of the time

Q20 Before your 18th birthday, did a parent or other adult in the household often or very often swear at you, insult you, put you down, humiliate you or act in a way that made you afraid that you might be physically hurt?

Answer Choices:

1. Yes
2. No

Q21 Before your 18th birthday, did a parent or other adult in the household often or very often push, grab, slap, throw something at you or ever hit you so hard that you had marks or were injured?

Answer Choices:

1. Yes
2. No

Q22 Before your 18th birthday, did an adult or person at least 5 years older than you ever touch or fondle you, have you touch their body in a sexual way, attempt, or actually have oral, anal or vaginal intercourse with you?

Answer Choices:

1. Yes
2. No

Q23 Before your 18th birthday, did you often or very often feel that no one in your family loved you or thought you were important or special, your family didn't look out for each other, feel close to each other or support each other?

Answer Choices:

1. Yes
2. No

Q24 Before your 18th birthday, did you often or very often feel that you didn't have enough to eat, had to wear dirty clothes, had no one to protect you, your parents were too drunk or high to take care of you or take you to the doctor if you needed it?

Answer Choices:

1. Yes
2. No

Q25 Before your 18th birthday, were your parents ever separated or divorced?

Answer Choices:

1. Yes
2. No

Q26 Before your 18th birthday, was your mother or stepmother often or very often pushed, grabbed, slapped, had something thrown at her, sometimes, often or very often kicked, bitten, hit with a fist, hit with something hard, or ever repeatedly hit over for at least a few minutes or threatened with a gun or knife?

Answer Choices:

1. Yes
2. No

Q27 Before your 18th birthday, did you live with anyone who was a problem drinker or alcoholic or who used street drugs?

Answer Choices:

1. Yes
2. No

Q28 Before your 18th birthday, was a household member depressed or mentally ill, or did a household member attempt suicide?

Answer Choices:

1. Yes
2. No

Q29 Before your 18th birthday, did a household member go to prison?

Answer Choices:

1. Yes
2. No

Q30 In the PAST 12 MONTHS, how often have you used any tobacco product (for example, cigarettes, e-cigarettes, cigars, pipes or smokeless tobacco)?

Answer Choices:

1. Daily or Almost Daily
2. Weekly
3. Monthly
4. Less than Monthly
5. Never

Q31 In the PAST 12 MONTHS, how often have you had drinks containing alcohol in one day?

Answer Choices:

1. Daily or Almost Daily
2. Weekly
3. Monthly
4. Less than Monthly

5. Never

Q32 In the PAST 12 MONTHS, how often have you used any drugs including marijuana, cocaine or crack, heroin, methamphetamine (crystal meth), hallucinogens, ecstasy/MDMA?

Answer Choices:

1. Daily or Almost Daily
2. Weekly
3. Monthly
4. Less than Monthly
5. Never

Q33 In the PAST 12 MONTHS, how often have you used any prescription medications just for the feeling, more than prescribed or that were not prescribed for you? Prescription medications that may be used this way include: Opiate pain relievers (for example, OxyContin, Vicodin, Percocet, Methadone); Medications for anxiety or sleeping (for example, Xanax, Ativan, Klonopin); Medications for ADHD (for example, Adderall or Ritalin)

Answer Choices:

1. Daily or Almost Daily
2. Weekly
3. Monthly
4. Less than Monthly
5. Never

Q34 How often have you been bothered by the following over the past 2 weeks: Little interest or pleasure in doing things?

Answer Choices:

1. Not at all
2. Several days
3. More than half the days
4. Nearly every day

Q35 How often have you been bothered by the following over the past 2 weeks: Feeling down, depressed or hopeless?

Answer Choices:

1. Not at all
2. Several days
3. More than half the days
4. Nearly every day

Q36 How often have you been bothered by the following over the past 2 weeks: Trouble falling or staying asleep, or sleeping too much?

Answer Choices:

1. Not at all
2. Several days
3. More than half the days
4. Nearly every day

Q37 How often have you been bothered by the following over the past 2 weeks: Feeling tired or having little energy?

Answer Choices:

1. Not at all
2. Several days
3. More than half the days
4. Nearly every day

Q38 How often have you been bothered by the following over the past 2 weeks: Poor appetite or overeating?

Answer Choices:

1. Not at all
2. Several days
3. More than half the days
4. Nearly every day

Q39 How often have you been bothered by the following over the past 2 weeks: Feeling bad about yourself – or that you are a failure or have let yourself or your family down?

Answer Choices:

1. Not at all
2. Several days
3. More than half the days
4. Nearly every day

Q40 How often have you been bothered by the following over the past 2 weeks: Trouble concentrating on things, such as reading the newspaper or watching television?

Answer Choices:

1. Not at all
2. Several days
3. More than half the days
4. Nearly every day

Q41 How often have you been bothered by the following over the past 2 weeks: Moving or speaking so slowly that other people could have noticed? Or so fidgety or restless that you have been moving a lot more than usual?

Answer Choices:

1. Not at all
2. Several days
3. More than half the days
4. Nearly every day

Q42 How often have you been bothered by the following over the past 2 weeks: Thoughts that you would be better off dead, or thoughts of hurting yourself in some way?

Answer Choices:

1. Not at all
2. Several days
3. More than half the days
4. Nearly every day

Q43 Lastly, please provide your email address (Most preferably student email) to receive a gift card. Type in N/A if you do not want to receive a gift card.

Answer Choices:

Open-ended

Appendix 4: Revised list of survey questions

Q1 We will be focusing on a sample collected from a population of Ohlone College students. The data collected will be anonymous. There will be no names or other personally identifying information collected. All data will be used strictly by our group for research purposes only and raw data will not be released to the public. Items presented include only multiple-choice questions. There is no risk to subjects taking the survey, however, some questions may be discomforting. If you no longer would like to proceed with the survey, you have the right to withdraw at any moment.

Answer Choices:

1. Yes, I have read and understood the informed consent and would like to proceed with the survey.
2. No, I have not read and/or understood the informed consent and would not like to proceed with the survey.

Q2 How would you describe yourself? If other, please specify.

Answer Choices:

1. Female Male Trans Female
2. Trans Male
3. Gender Nonconforming
4. Different Identity
5. Prefer Not to Say
6. Other (please specify)

Q3 Which category best describes you? Please click on the category.

Answer Choices:

1. White (e.g. German, Irish, English, Italian, Polish, French, etc.)
2. Hispanic, Latino or Spanish origin (e.g. Mexican or Mexican American, Puerto Rican, Cuban, Salvadoran, Dominican, Colombian, etc.)
3. Black or African American (e.g. African American, Jamaican, Haitian, Nigerian, Ethiopian, Somalian, etc.)
4. East Asian (e.g. Chinese, Japanese, Korean, Okinawan, Taiwanese, Tibetan)
5. Southeast Asian (e.g. Bruneian, Burmese, Cambodian, Filipino, Hmong, Indonesian, Laotian, Malaysian, Mien, Singaporean, Timorese, Thai, Vietnamese)
6. South Asian (e.g. Bangladeshi, Bhutanese, Indian, Maldivians, Nepali, Pakistani, Sri Lankan)
7. Other Asian (Afghan)
8. American Indian or Alaska Native(e.g. Navajo Nation, Blackfeet Tribe, Mayan, Aztec, Native Village of Barrow Inupiat Traditional Government, Nome Eskimo Community, etc.)
9. Middle Eastern or North African (e.g. Lebanese, Iranian, Egyptian, Syrian, Moroccan, Algerian, etc.)
10. Native Hawaiian or Other Pacific Islander (e.g. Native Hawaiian, Samoan, Chamorro, Tongan, Fijian, etc.)
11. Mixed Ethnic Identities
12. Some other race, ethnicity or origin

Q4 I browse the headings, pictures, chapter questions, and summaries before I start reading a chapter and I look for familiar concepts as well as ideas that spark my interest as I read.

Answer Choices:

1. Rarely
2. Sometimes
3. Often

Q5 I take notes, and rewrite them, as I read my textbooks and during class lectures.

Answer Choices:

1. Rarely
2. Sometimes
3. Often

Q6 I study where it is quiet and has few distractions, I take short breaks while studying for a long period of time, I set study goals, such as the number of problems I will do or pages I will read, and I use a 'to do' list to keep track of completing my academic and personal activities.

Answer Choices:

1. Rarely
2. Sometimes
3. Often

Q7 I quiz myself over material that could appear on future exams and quizzes and say difficult concepts out loud in order to understand them better. I also start studying for quizzes and tests at least several days before

I take them.

Answer Choices:

1. Rarely
2. Sometimes
3. Often

Q8 I study with a classmate or group and when I don't understand something, I get help from tutors, classmates and my instructors.

Answer Choices:

1. Rarely
2. Sometimes
3. Often

Q9 In the last month, how often have you felt that you were unable to control the important things in your life?

Answer Choices:

1. Never
2. Almost Never
3. Sometimes
4. Fairly Often
5. Very Often

Q10 In the last month, how often have you felt confident about your ability to handle your personal problems?

Answer Choices:

1. Never
2. Almost Never
3. Sometimes
4. Fairly Often
5. Very Often

Q11 In the last month, how often have you felt that things were going your way?

Answer Choices:

1. Never
2. Almost Never
3. Sometimes
4. Fairly Often
5. Very Often

Q12 In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?

Answer Choices:

1. Never
2. Almost Never
3. Sometimes
4. Fairly Often
5. Very Often

Q13 I feel that I am a person of worth, at least on an equal plane with others.

Answer Choices:

1. Strongly Agree
2. Agree
3. Disagree
4. Strongly Disagree

Q14 I feel that I have a number of good qualities.

Answer Choices:

1. Strongly Agree
2. Agree
3. Disagree
4. Strongly Disagree

Q15 All in all, I am inclined to feel that I am a failure.

Answer Choices:

1. Strongly Agree
2. Agree
3. Disagree
4. Strongly Disagree

Q16 I wish I could have more respect for myself.

Answer Choices:

1. Strongly Agree
2. Agree
3. Disagree
4. Strongly Disagree

Q17 Which of the following are you experiencing (or did you experience) during COVID-19 (coronavirus)? (check all that apply)

Answer Choices:

1. Being diagnosed with COVID-19
2. Fear of getting COVID-19

3. Fear of giving COVID-19 to someone else
4. Stigma or discrimination from other people (e.g., people treating you differently because of your identity, having symptoms or other factors related to COVID-19)
5. Personal financial loss; conflicts about finance or work/employment (e.g., lost wages, job loss, investment/retirement loss, travel-related cancellations)
6. Confusion about what COVID-19 is, how to prevent it, or why social distancing/isolation/quarantines are needed
7. Feeling that I was contributing to the greater good by preventing myself or others from getting COVID-19
8. Getting <u>emotional or social</u> support from family, friends, partners, a counsellor or someone else
9. Getting <u>financial</u> support from family, friends, partners, an organization or someone else
10. Conflicts about decisions about going out/having visitors to the home (e.g., on errands, to appointments, for visits)
11. Togetherness because of spending time together, showing emotional support, helping each other (e.g., hobbies, television, playing games, social media)

Q18 I feel more nervous and anxious than usual.

Answer Choices:

1. None or little of the time
2. Some of the time
3. Good part of the time
4. Most of the time

Q19 Before your 18th birthday, did a parent or other adult in the household often or very often swear at you, insult you, put you down, humiliate you or act in a way that made you afraid that you might be physically hurt?

Answer Choices:

1. Yes
2. No

Q20 Before your 18th birthday, did a parent or other adult in the household often or very often push, grab, slap, throw something at you or ever hit you so hard that you had marks or were injured?

Answer Choices:

1. Yes
2. No

Q21 Before your 18th birthday, did an adult or person at least 5 years older than you ever touch or fondle you, have you touch their body in a sexual way, attempt, or actually have oral, anal or vaginal intercourse with you?

Answer Choices:

1. Yes

2. No

Q22 Before your 18th birthday, did you often or very often feel that no one in your family loved you or thought you were important or special, your family didn't look out for each other, feel close to each other, or support each other?

Answer Choices:

1. Yes
2. No

Q23 Before your 18th birthday, did you often or very often feel that you didn't have enough to eat, had to wear dirty clothes, had no one to protect you, your parents were too drunk or high to take care of you or take you to the doctor if you needed it?

Answer Choices:

1. Yes
2. No

Q24 Before your 18th birthday, were your parents ever separated or divorced?

Answer Choices:

1. Yes
2. No

Q25 Before your 18th birthday, was your mother or stepmother often or very often pushed, grabbed, slapped, had something thrown at her, sometimes, often or very often kicked, bitten, hit with a fist, hit with something hard, or ever repeatedly hit over for at least a few minutes or threatened with a gun or knife?

Answer Choices:

1. Yes
2. No

Q26 Before your 18th birthday. did you live with anyone who was a problem drinker or alcoholic, or who used street drugs?

Answer Choices:

1. Yes
2. No

Q27 Before your 18th birthday, was a household member depressed or mentally ill, or did a household member attempt suicide?

Answer Choices:

1. Yes
2. No

Q28 Before your 18th birthday, did a household member go to prison?

Answer Choices:

1. Yes
2. No

Q29 In the PAST 12 MONTHS, how often have you used any tobacco product (for example, cigarettes, e-cigarettes, cigars, pipes or smokeless tobacco)?

Answer Choices:

1. Daily or Almost Daily
2. Weekly
3. Monthly
4. Less than Monthly
5. Never

Q30 In the PAST 12 MONTHS, how often have you had drinks containing alcohol in one day?

Answer Choices:

1. Daily or Almost Daily
2. Weekly
3. Monthly
4. Less than Monthly
5. Never

Q31 In the PAST 12 MONTHS, how often have you used any drugs including marijuana, cocaine or crack, heroin, methamphetamine (crystal meth), hallucinogens, ecstasy/MDMA?

Answer Choices:

1. Daily or Almost Daily
2. Weekly
3. Monthly
4. Less than Monthly
5. Never

Q32 In the PAST 12 MONTHS, how often have you used any prescription medications just for the feeling, more than prescribed or that were not prescribed for you? Prescription medications that may be used this way include: Opiate pain relievers (for example, OxyContin, Vicodin, Percocet, Methadone); Medications for anxiety or sleeping (for example, Xanax, Ativan, Klonopin); Medications for ADHD (for example, Adderall or Ritalin)

Answer Choices:

1. Daily or Almost Daily
2. Weekly
3. Monthly

  4. Less than Monthly
  5. Never

Q33 How often have you been bothered by the following over the past 2 weeks: Little interest or pleasure in doing things?

Answer Choices:

1. Not at all
2. Several days
3. More than half the days
4. Nearly every day

Q34 How often have you been bothered by the following over the past 2 weeks: Feeling down, depressed or hopeless?

Answer Choices:

1. Not at all
2. Several days
3. More than half the days
4. Nearly every day

Q35 How often have you been bothered by the following over the past 2 weeks: Trouble falling or staying asleep, or sleeping too much?

Answer Choices:

1. Not at all
2. Several days
3. More than half the days
4. Nearly every day

Q36 How often have you been bothered by the following over the past 2 weeks: Feeling tired or having little energy?

Answer Choices:

1. Not at all
2. Several days
3. More than half the days
4. Nearly every day

Q37 How often have you been bothered by the following over the past 2 weeks: Poor appetite or overeating?

Answer Choices:

1. Not at all
2. Several days
3. More than half the days
4. Nearly every day

Q38 How often have you been bothered by the following over the past 2 weeks: Feeling bad about yourself – or that you are a failure or have let yourself or your family down?

Answer Choices:

1. Not at all
2. Several days
3. More than half the days
4. Nearly every day

Q39 How often have you been bothered by the following over the past 2 weeks: Trouble concentrating on things, such as reading the newspaper or watching television?

Answer Choices:

1. Not at all
2. Several days
3. More than half the days
4. Nearly every day

Q40 How often have you been bothered by the following over the past 2 weeks: Moving or speaking so slowly that other people could have noticed? Or so fidgety or restless that you have been moving a lot more than usual?

Answer Choices:

1. Not at all
2. Several days
3. More than half the days
4. Nearly every day

Q41 How often have you been bothered by the following over the past 2 weeks: Thoughts that you would be better off dead, or thoughts of hurting yourself in some way?

Answer Choices:

1. Not at all
2. Several days
3. More than half the days
4. Nearly every day

Q42 Lastly, please provide your email address (Most preferably student email) to receive a gift card. Type in N/A if you do not want to receive a gift card.

Answer Choices:

Open-ended

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Glossary

Adverse Childhood Experiences: Childhood events, varying in severity and often chronic, occurring in a child's family or social environment that cause harm or distress, thereby disrupting the child's physical or psychological health and development (Kalankis et. al, 2014).

CDC-Kaiser ACE Study: 'The CDC-Kaiser Permanente adverse childhood experiences (ACE) study is one of the largest investigations of childhood abuse and neglect and household challenges and later-life health and well-being. The original ACE study was conducted at Kaiser Permanente from 1995 to 1997 with two waves of data collection. Over 17,000 Health Maintenance Organization members from Southern California receiving physical exams completed confidential surveys regarding their childhood experiences and current health status and behaviors.' (CDC, n.d.).

Resilience: Resilience is the process and outcome of successfully adapting to difficult or challenging life experiences, especially through mental, emotional and behavioral flexibility, and adjustment to external and internal demands (American Psychological Association, n.d.).

Substance Use Disorder: A treatable, chronic disease characterized by a problematic pattern of use of substances leading to impairments in health, social function and control over substance use (CDC, n.d.).

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An Appraisal of the Work of Gustave Le Bon Within the Case Studies of Fascist Spain (1936–1975) and Nazi Germany (1933–1945)

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Abstract

In a bid to explore the work of French sociologist Gustave Le Bon on dissimulating specific beliefs within a populace, this article will localise the factors he purported to amount to propagandistic success within the case studies of Nazi Germany and fascist Spain. This will be done using a consideration of primary visual sources and qualitative data associated with the campaigns in which they were used. Additionally, this work will analyse whether one can quantify propagandistic success, and whether this is at odds with the academic bases of Le Bon's work. This research will ultimately provide a novel reading of Le Bon's theory, demonstrating how the work can indeed allow for interesting analyses of different propagandistic contexts while concluding that there are limitations with the means through which the factors he brought to the fore directly contribute to successful propaganda initiatives.

Keywords: Gustave Le Bon and propaganda, theories of propaganda, public persuasion in case studies, Nazi propaganda analysed, fascist Spain propaganda analysed, factors amounting to propaganda success

Introduction

Following the rapid development of mass-media technologies in the 1920s, propaganda has increasingly been harnessed by governments and non-state actors in order to influence individuals into acting in certain predefined ways. The best means to gain insights from this, however, remains yet to be seen, particularly due to a lack of scholarly consideration of this topic. Over the course of this work, propaganda will thus be defined as the following: 'a deliberate and systematic attempt to shape perceptions, manipulate cognitions, and direct behaviour to achieve a response that furthers the desired intent of the propagandist' (Jowett and O'Donnell, 2019: 267). This terminology allows us to consider the specific intentions of propagandists while remaining conducive to the careful and critical analysis of early theories on propaganda.

This research will focus on the work of Gustave Le Bon, one of the earliest scholars of state-based persuasive messaging campaigns, and his seminal work, '*Psychologie des foules*' [official English title translation: The Crowd], in which he explores in great detail the steps required for an effective state-based propaganda: *l'affirmation*, *la répétition* and *la contagion* (henceforth, affirmation, repetition and contagion)[1] (Le Bon, 1895: 55–56; 2007: 112–17). To best appraise Le Bon's work within the context of more contemporary propagandistic campaigns, each tenet of Le Bon's theory will be independently analysed to best understand how they interweave with greater societal trends. This will largely be facilitated by situating his work within the case studies of both fascist Spain (1936–1975) and Nazi Germany (1933–1945). Given that Spain has been unfortunately side-lined within academic discourses of propaganda, following the thorough appraisal of Le Bon's work, it will be independently considered to attempt to draw out unique insights. This paper concludes that while Le Bon's work is certainly a useful tool in critically evaluating propagandistic trends, and that a broader interpretation of his theory of contagion helps navigate certain pitfalls in his work, his

inability to clearly demonstrate factors to propagandistic success limit his work to that of a lens through which to perceive propaganda.

Literature review and methodology

In the field of propaganda studies, the diversity of methodologies and approaches result in some discrepancy as to how one might best categorise the success of such works. When one considers the collection and interpretation of quantitative data, academics such as Marshall Soules and Jacques Ellul, two of the most prominent scholars on this topic, have argued that one must have a great deal of nuance when using public-opinion polls within an academic study as (i) they are liable to manipulation, and (ii) in totalitarian contexts, citizens (and governments) may modify submitted answers out of fear of the possible consequences (Ellul, 1965: 25; Soules, 2015: 64). The more recent generation of scholars, however, praise modern data analysis and collection techniques as a novel and precise means through which the effectiveness of propaganda and its success can be measured (Evans, 2007: 54; Kershaw, 1994: 144).

To best exemplify why this work will be assuming the perspectives of the former, we can turn towards the public opinion survey completed by the Office of Military Government, United States (OMGUS). This little-considered document outlines how, in 1949, in the US-administered zones of partitioned Germany, 66 per cent of inhabitants voiced support for 'the *idea* of denazification' (OMGUS, 1949: 305, original emphasis). While supporters of data collection would uncritically sing the praises of such research, it takes little to recognise that the conventionalisation of publicly expressed opinions often results in the vast underestimation in support for varying schemes (Margoli, 1984: 64). From this basis, it is particularly challenging to undertake judgements on the degree of support that German citizens – from an inadequately small sample size of the population – given the high likelihood of self-censorship upon answering this questionnaire, and during the Nazi regime. An entire research project could be undertaken on the methods for evaluating the success of a propagandistic campaign, but given the lack of space allocated to this paper, it is optimal for us to consider a successful propagandistic campaign to be one in which the desired goals and objectives of the propagandist (in this case, the state) are achieved. This will allow for considerations of the degree to which the propaganda, per Le Bon's theory, was effective in influencing public attitudes, or whether other factors may need to be considered.

In turn, this work's methodology will focus on perceiving the case study of Nazi Germany through the lens of Le Bon's three main factors, and bring to light any academic inconsistencies that arise. Following these findings, Le Bon's work will be used practically on the Spanish case study to draw out key ideas from a hitherto neglected context, while providing potential groundwork for future applications of this style. The primary visual sources included within this piece have been selected either due to their lack of inclusion within broader academic spheres, or their particularly cogent summation of propagandist themes across different contexts.[2] Undertaking this, alongside secondary sources, a succinct appraisal of Le Bon's work within the age of early mass media will be able to be undertaken.

Analysis

Nazi Germany

Let us firstly turn our attention towards Nazi Germany, and consider each of Le Bon's factors within the broader remit of this context. Firstly, it bears mentioning that in *Mein Kampf*, Adolf Hitler explains how,

when attempting to counter certain ideas within a society, and consequently implant one's own, one must have 'definite spiritual convictions' that are consistently applied across all of society, and that only once two ideas are pitted against one another, can force be used to triumph over the other (Hitler, 1924: 149).[3] This will form the basis of this subsequent analysis.

If we are to pick apart the thematic bases of these 'definite spiritual convictions', one can generally see the following: unity, ethnic superiority, a fundamental need to destroy the enemies of the nation, and the cult of leadership (Welch, 1987: 410). Given that Le Bon's first stage in developing propaganda is predisposed upon messages being condensed into more digestible morsels of propaganda so as to make them more easily acquired by the population, the newly developed field of governmental visual propaganda –as seen in Figure 1 – is a good place to turn (Hoffman, 1934; Le Bon, 1895: 55–56).
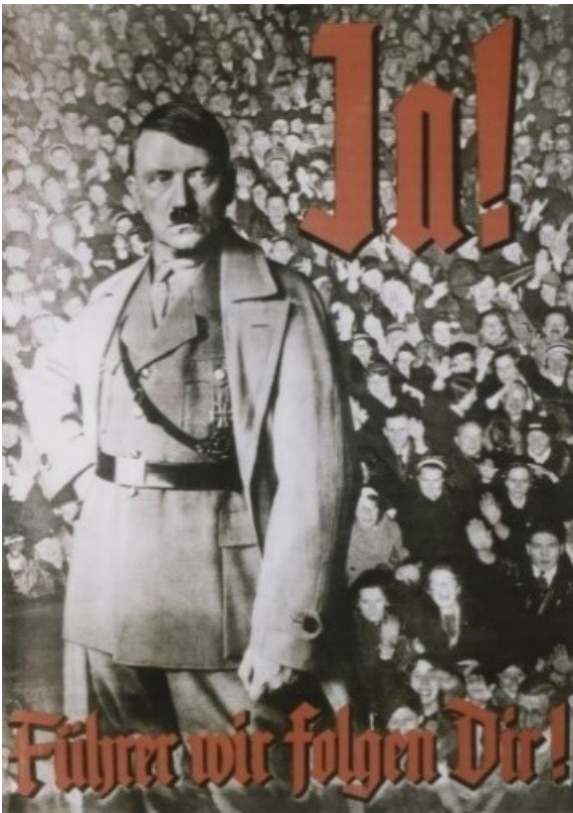

Figure 1: Ja! Führer wir folgen Dir!

We see Adolf Hitler, Chancellor at the time, standing in military uniform and proudly displaying his Iron Cross medal. Behind him are a crowd of people looking up in admiration to their leader, overjoyed with his position as a borderline divine figure who could unite them all as one people. Figure reproduced from the United States Holocaust Memorial Museum and is free of copyright restrictions.

Here, we see that, upon a backdrop of clamouring supporters, Adolf Hitler is looking at the reader, with the white text adorning the work stating 'Ja! Führer wir folgen Dir!' [author translation: 'Yes! Leader, we follow you!'] Contextually, this work holds its origins very early on in the rule of the NSDAP (*Nationalsozialistische Deutsche Arbeiterpartei* – the formal term for the German National-Socialist party) and sought to garner public support for a referendum that aimed to combine the Chancellery and the Presidency of the country. Crucially each part of this poster intended to draw the target audience (usually young men) back to the core themes of the NSDAP, with a particular focus being placed on establishing a *Volksgemeinschaft* [author translation: people's community]. This mix between implicit and explicit messaging, alongside the sustained use of core narratives, underlines the importance that affirmation held in German propaganda campaigns. It may certainly thus be proposed that this was a resounding success, given the astronomically high 95 per cent

of the estimated 40.5 million who turned out voting in favour of the ascension of Hitler to the post of *Führer* (Zurcher, 1935: 95). Let us, however, assume a more critical view of this matter. When one takes Le Bon's theory, a supposition is that the degree of persuasion, and thus success, should be demonstrated through these statistics. Yet this brings us to a striking problem: Le Bon fundamentally supposes that persuasion of the people is the only means through which propaganda may operate, neglecting to consider how individuals may act out of fear. This would, in turn, render it particularly challenging to accurately utilise these statistics as demonstrable proof that the factor of affirmation, in and of itself, can persuade, rather than pressure, individuals into the desired actions. To surmise, through the lens of affirmation, we are certainly able to gain a great deal of nuance in our understanding of propagandistic pieces, yet due to the lack of consideration within Le Bon's work on potential pressures applied to citizens, it makes it extremely difficult to accurately vindicate his work.

When we turn our attention towards the presence of affirmation within the anti-Semitic propaganda originating in Nazi Germany, we continue to see how the lack of theoretical nuance within Le Bon's work is cause for concern.

Figure 2: Hinter den Feindmächten: der Jude.

A stereotypical and anti-Semitic incarnation of Judaism stands partially obscured behind flags of each of the major Allies: the United States, the United Kingdom and the Soviet Union. With the figure dressed as a typical financier, there is a clear insinuation that members of Judaism support the 'enemy' against Germany. Image reproduced by kind permission of Richard Westenbrink at the Nationale Bibliotheek – Dienstverlening KB (KB Nederland) and Harco Gijsbers at the NIOD Institute for War, Holocaust and Genocide Studies.

Firstly, one ought to consider Figure 2, as this is a particularly useful means through which this theme can be considered (Hanich, 1940). This work of propaganda depicts the stereotypical, pejorative representation of Judaism in the shadows of the three great Allied powers: the United States, the Soviet Union and the United Kingdom. We can read text which states, 'Hinter den Feindmächten: der Jude' [author translation: Behind the Enemy: The Jew]. David Welch, a pre-eminent academic on Germany, describes how, during the 1935 Nuremberg Laws, little serious objection was raised by the Germans towards the deprivation of all Jewish

citizens of their rights, with many going so far as to support laws that prevented intermarriage with Jews (Welch, 1987: 415). Hitler had a profound desire to rapidly militarise the German people as a means to sustain a presumably global conflict, and that his 'definite spiritual convictions' often hinged upon cohesive unity, and it is perhaps not a far cry to suggest that the manipulation of messaging served to prepare the people for a rabid fight against the Allies, thus vindicating Le Bon's work (Welch, 1987: 410). Given that academics go so far as to suggest that '[w]ithout the silent, intimidated, ambivalent or, in some cases, enthusiastic conformity of an overwhelming majority of German society […] Hitler's regime would simply not have persisted from 1933 to 1945, much less been able to carry out its murderous policies', the lack of consideration of the role apathy plays renders Le Bon's work concerning (Mailänder, 2016: 400). If apathy was so key, and can be presumed to occur across different contexts, the sole consideration of the extreme of society – convincing people to become dogged supporters of a cause – lacks the nuance required to tackle the majority of the population who remain indifferent. For instance, within Figure 2, the categorisation of 'the Jew' as being tied to an enemy would possibly result in the fact that moderates within a population would justify the treatment of the Jewish people due to their seeming tie to individuals that appeared to wish harm to the state. Consequently, incentivising the perpetuation of apathy in society so as to prevent dissent was a tool expertly handled by the German state, yet is something that is not seen within Le Bon's work. To draw to an end this point on affirmation in Nazi Germany, one can certainly suggest that Le Bon's work does allow for the facilitation of some considerations of the Nazi propaganda machine; however, it fails to consider the importance that apathy can play in enabling the successful enactment of state goals, something that constrains its use today.

Moving onto repetition, the factor, as the name implies, is that of the mass diffusion of government messaging (Le Bon, 1895: 55). This is particularly notable within this appraisal of Le Bon's work as, given the advent of mass media during the 1920s and 1930s, as well as the now greater disposable income that facilitated the purchase of luxury items, numerous governments sought to innovate upon their domestic radio technologies (Soules, 2015: 63; Welch, 1987: 411). The consistent and repeated application across society, in accordance with Le Bon, is ideally suited to the inculcation of certain ideas and their normalisation. One particular means through which this was undertaken was through the radio. For instance, the *Volksempfänger* [author translation: lit. People's receiver] was a particularly cheap radio that, in 1941, could be found in 65 per cent of German households (Rentschler, 2003: 186). This is rendered all the more politically poignant when one considers that Joseph Goebbels (Reich Minister of Propaganda, 1933–45) repeatedly stressed that the only news that ought to consistently be diffused should be that which best served the immediate needs of the government (Soules, 2015: 131). When considered in conjunction with the point on apathy, it may be suggested that utilising such messaging systems to normalise the ideas and arguments of the state was ideally suited to end. This, however, brings to the fore an additional problem with Le Bon's work. The supposition that one can correlate radio ownership rates, and thus the broad capacity to distribute messages, to the potential success of a propagandistic campaign – whether it be to increase support or to normalise ideas – is one that is largely unable to be confirmed. Additionally, Germany's participation in the Spanish Civil War served its purpose to propagate anti-Soviet and anti-Marxist rhetoric across Europe, which facilitated its rapid re-armament in the face of 'Soviet/Bolshevik aggression' (Bernecker, 1992: 140–43). This very clear focus upon leftist movements may thus be suggested to have been an attempt to justify the casualties and costs associated with the conflict (around 300 soldiers would die over the course of the conflict), while also leveraging support from German Catholics, who were inclined to shirk away from NSDAP rhetoric (Thomas, 1977: 977; Welch, 1993: 4). If we look at the newspaper *Völkischer Beobachter*'s [author translation: The People's Observer], we see how the government-affiliated newspaper

would publish titles such as '*Moskau funkt: „Tötet alle Priester!"*' [author translation: Moscow Intercepted: 'Kill All Priests!'] and other increasingly polemic headlines as its circulation rates leapt from 100,000 in 1931, to over 1.1 million in 1941 (Anon, 1936a; Layton Jr., 1970: 362). Yet once again, through the lens of Le Bon's work, one struggles to find a direct correlation between each of these points, as one cannot comment in good faith on the success of such campaigns without any definitive correlation. This simply once again demonstrates, through a different form of media, how the repetition aspect of Le Bon's work – while definitely a pre-eminent part of the German propagandistic campaign, and which certainly facilitates the interesting political analysis of these sorts of initiatives – fails to provide an academically concrete means of determining the successes of such campaigns.

Finally, Le Bon asserts that contagion is the final step in creating successful propaganda, an argument that requires a more nuanced understanding of the constitutive parts of human psychology. This concept is predicated upon the belief that the sentiment of being excluded will ultimately, and inevitably, draw individuals to join social, cultural, religious or ideological groupings, whether these be run by the state directly or through third parties (Le Bon, 1895: 56). The logical progression of this argument is that the consistent membership growth of any kind of group will typically result in its exponential growth, which is related to the ever-increasing social expectation to join. While this is not always an easy process to perceive in practice, one can turn to the popularity of the Hitler Youth, and how its gradual militarisation created a near fanaticism for Hitler (Horn, 1979: 642–45; Kunzer, 1938: 346–49; Welch, 1993: 4). If we are to consider propaganda posters that fomented this attitude, we can turn to one that depicts a young Aryan boy stood looking towards the *Führer*, with the text emblazoning the work stating 'Jugend dient dem Führer – Alle Zehnjährigen in die HJ' [author translation: Youth serves the leader – all 10 year olds into the Hitler Youth] (Anon, 1941). The relative success of this idea, and thus Le Bon's argument, is slightly problematised when we consider membership figures of the group. In 1933, there were approximately 7,529,000 who formed part of the organisation, a number that would only increase to 7,728,259 in 1939. The consequence of this is that, in accordance with Le Bon's theory, one would expect an exponential rise in membership, yet this failed to take place, with most of these 200,000 or so boys only joining when governmental pressures began to reach their crux. While one is loathe to give too much credit to Hitler, given the aforementioned theories he espoused in *Mein Kampf*, he suggests that, at a certain point – when the assumption of ideas begins to stagnate within society – direct government force must be used (namely, suppressing dissidents directly, or forcing people to assume or accept ideas) (Hitler, 1924: 148–49). This does, given Le Bon's theory as a baseline, seem to add some nuance to his ideas within the framework of authoritarian regimes. Additionally, it may be suggested that a novel interpretation of Le Bon's work may well help resolve some of the aforementioned problems associated with localising the impact of societal pressure (and, therefore, fear) within his work. If we are to broaden our understanding of contagion beyond the concept of solely a draw to joining organisations due to exclusion to one of joining out of societal pressures, then Le Bon's work becomes far more intuitive. This would allow for us to thus understand the membership rates to be characterised by an initial phase of rapid joining from the activities and advantages provided to boys. Following this, not only would boys begin to join out of a desire to form part of this fraternal group, but some may join (or be encouraged to join by their parents) from the societal pressures and fears of being persecuted for not being a part of this grouping. It thus follows that from the moment that such membership rates begin to slow in adherence, the government steps in to continue this growth to suit its end of ideological manipulation. This more nuanced, and novel, view of contagion may then be suggested to render Le Bon's work far more pertinent to the current environment, and a more effective tool for studying propagandistic campaigns.

To conclude this preliminary section, Le Bon's work may well be interpreted as a sociological piece that is firmly located in its period of publishing. Because of this, and its inability to conceive of the capacity for the state to rely upon fear to ensure the success of its propagandistic campaigns, Le Bon's work suffers from solely focusing on the persuasive elements of propaganda. This can be countered, however, through a broader consideration of his point on contagion, as expanding it to include instances of pressure (usually fear) helps resolve several problematic aspects of his work. As well as this, his work, along with those more broadly in the theoretical propaganda sphere, ultimately fails at providing a proper means of demonstrating the success of a propagandistic campaign. For this reason, it may be proposed that Le Bon's work is far more suited to enabling the more precise evaluation of propagandistic campaigns through its three-step process. One may then suggest that Le Bon's work is of most use within the contemporary era when utilised as an analytical and descriptive tool, rather than as a methodological process through which to approach the successes of propaganda.

Fascist Spain

Having appraised Le Bon's work, and drawn out a novel reinterpretation of this, it will be particularly fascinating to consider the Spanish propaganda context both at a macro and micro scale so as to demonstrate the utility of his work while better understanding a relatively lacking sector of scholarly consideration.

Figure 3: *Por Una España Una, Grande y Libre.*

A strong man dressed in Falange uniform waves the party flag while wearing the military uniform of the time. We see the core aspects of Franco's ideology – notably the need for strong young men who would uphold traditional values. Figure reproduced in accordance with Accepted Non-Commercial Use Permissions, sourced from the Imperial War Museum.

Let us firstly turn back to affirmation. One slogan that epitomised Francisco Franco's idealised Spain is '*Una, Grande y Libre*' [author translation: One, Great and Free] (Pinto, 2004: 657). Figure 3 is an exemplary example of how such simple affirmations were ideally suited to being integrated into propaganda posters, an information-diffusion technology that had only just undergone rapid technological developments (Anon, 1936b). Within this work, the imagery itself helps to draw in the audience as – from the highly recognisable blue shirt of the *Falange* uniform (the extreme right-wing nationalist political party/coalition over which Franco presided[4]) to the anonymised man upholding his country's pride – both entice naïve viewers to identify themselves with the figure. This, in turn, interweaves a plurality of messages into one coherent narrative, ultimately drawing people against the enemies of the state through sacrificing individuality for the country and forming a newly unified Spain under the auspices of socio-economic conservatism. Such concise messaging is particularly compounded by the figure waving the *Falange*'s flag – one that holds a striking resemblance to that of Spain prior to the *Segunda República Española* (1931–1939) – the democratic government that had moved away from previous religious norms.[5] To any rational observer, one can understand that this poignant commentary depicted the future of Spain as being ultimately tied to the tradition that preceded the period of relative economic instability under democracy. One ought to also consider the fact that while the Nazi party had originally won elections, which meant propaganda largely

aimed to gain consent for the expansion of totalitarian power, Franco was forced to justify the unsuccessful Nationalist coup as well as the Spanish Civil War so as to legitimise his power, while also attempting to unify the country and consolidate nationalist ambitions (Cobo Romero, Ángel del Arco Blanco and Ortega López, 2011: 46). This would come to underpin the majority of the propaganda that could be seen in Spain, with the former propaganda piece being a striking example of this. This unity – whether within the family, or in Spain more broadly – became a tenet of the Spanish system. It is thus perhaps due to these promises and ideas, which were within the deliverance capacity of the state, that the potency of the *Falange*'s capacity to accrue ever greater support would develop. One has but to turn towards the membership figures of the organisation to see this perspective vindicated as – following the Spanish Civil War – its membership exploded to well over one million members, a colossal increase from the 10,000 or so prior to the war (Slaven, 2018: 235–39).

Of course, while one must have a strong message, it would be reductionist to posit that the membership figures exemplify the sole importance of affirmation in the governmental process. For instance, a striking problem with the utilisation of such propaganda posters, and the attempt to distribute political prospectuses to garner support for the Nationalist government, was the appallingly poor Spanish literacy rate. Recent studies outline how only 37 per cent of the population in the 1940s were literate, with this illiteracy particularly being among women and countryside dwellers (Gómez García and Cabeza San Deogracias, 2013: 107). As a consequence, and in contrast to Germany, Spain was forced to find new ways of distributing their propaganda messages. For instance, audio-visual technologies became all the more prominent – and important – in the consistent and perpetual diffusion of news and ideas, with films in particular being a key means of doing this. The film *Raza* is one of the most striking instances of propaganda within Spain at the time (Sáenz de Heredia, 1941). In and of itself, it was an elaborate Nationalist retelling of the Spanish Civil War and Franco's life, depicting hyper-masculinity, religion and the need for unity, all through a framework of hierarchy in which the viewer would situate themselves (Higginbotham, 1988: 19–20). For example, within the film, we see how the brother of the family (now commonly believed to symbolise Franco's own brother) turns his back on his country and family through his presumed support of the enemy. Given that it is now understood that a variety of social classes of the Spanish flocked to cinemas as a means of escaping the hardships of daily life, the government were thus provided with an ideal means of targeting a large and politically diverse domestic audience in its campaigns (Richardson, 2011: 101). Not only this, but the *Noticiarios y Documentarios* (NO-DO) [official translation: News and Documentaries] that appeared prior to all visual-media-presented biased news that aimed to monopolise the possible sources from which messaging could be repeated and subconsciously assumed by attendees. It may thus be suggested that this continual wearing down of the people within their leisure time proved to be the optimal location in which one could gradually wear down the resistance of the populous, and instil apathy within them. Within the framework of Le Bon's work, we are able to clearly see the means through which such repetition, particularly of the strikingly pertinent ideas held by the government, contributed to the stark jump in membership figures.

Considering the specific means through which incidental exclusionary tactics held a role in growing the support of women for Franco's Spain could also help us assess the importance of contagion in gaining a greater understanding of a propaganda campaign. Whereas women theoretically had the same legal rights as men during the German Weimar Republic (1918–1933), and 'chose' to cede them to the extremely conservative NSDAP, Spanish women were not in the same position.[6] Following the Second Republic and the Civil War, women – who had held the right to suffrage and (broadly) the same labour rights as men – involuntarily saw fundamental emancipatory legislation get repealed (Lannon, 1990: 213–14). For this

reason, Franco recognised that the *Sección Femenina* (author translation: Female Section) – a social club-cum-propaganda dispensary – could be used to parrot the state rhetoric on the importance of femininity and fascism in the creation of a 'perfect' woman, teaching skills that would serve to maintain the household (Ofer, 2005: 667–69). In a similar vein to the aforementioned Hitler Youth poster, we can turn to the magazine cover of the *Revista para la mujer nacional-sindicalista* (No.15; February 1939) [author translation: '*The Magazine for the National-Syndicalist Woman*'], a magazine designed and published by the *Sección Feminina* (Anon, 1939). Here, we can see three women, each one representing a distinctly feminine profession, with two of them presenting the fascist salute towards the left of the poster, while the third wears an apron emblazoned with the *Falange* symbol. This is of great interest to us, given that it helps to understand the purported notion that not only were there specific jobs intended for women (such as being a nurse), but that for a woman to be deemed a 'real woman', she was to embrace government within her day-to-day routines, which ensured her subservience to patriarchs. To add to this, women who dissented from typical societal norms were usually exiled, imprisoned or executed by vigilantes or the government (Lannon, 1991: 215). This allows us to suggest that, under the broader interpretation of Le Bon's contagion, the exclusionary nature of this group, coupled with the threats of violence and harassment, provided prominent push-pull factors for women to adhere to such groups. While membership figures are unfortunately unknown, the former statistics on membership research of the *Falange* allow for further consideration to take place. For instance, it is certain that the previously mentioned affirmation and repetition would have instilled either passion for, or apathy towards, the party, yet the group sentiment and unrestricted violence against non-adherents will have likely pushed some men to sign up. Additionally, it is not a far cry to suppose that some were obligated to do so following threats to their families, themselves or their local community. Thanks to this novel conception of Le Bon's work, it may certainly be proposed that this allows for greater nuance to be retained when considering the sociological factors affecting adherence to a group.

Conclusion

In conclusion, upon thoroughly deconstructing the ideas of Le Bon within the context of Nazi Germany, and drawing out both the relative advantages and disadvantages of his ideas, it has been possible to demonstrate the utility of his ideas within the context of fascist Spain. Over the course of this work, it has been demonstrated that utilising Le Bon as a theory of approaching propaganda provides a systematic tool through which to analyse these sorts of processes. This can facilitate the detailed consideration of propagandist intentions – as well as the sociological impact upon the people – by means of certain tools. Unfortunately, his work has struggled to maintain full pertinence within the contemporary environment, primarily due to the onset of systematic targeting of civilians within conflict and the suppression of dissident voices, thus requiring a new consideration of his point on contagion. Thanks to this novel reinterpretation of his work, one is able to include greater flexibility in the means through which one approaches the attitudes of the people, as both persuasion and the pressure they may feel can influence such decisions. Once this is applied to often-overlooked contexts, such as that of Spain, one has the ability to view the nuance of public reactions to propagandistic campaigns, drawing out new insights that may have been overlooked. A limitation of Le Bon, and studies on propaganda more broadly, is the inability to clearly demonstrate the success of a propagandistic campaign, primarily due to academically problematic opinion polls or inaccessible data. For this reason, one might suggest that Le Bon is better suited as a means of drawing insight from propaganda campaigns as a theory, rather than being used to quantify their successes. In the years to come, further academic study on the means through which one might critically evaluate the

successes of propaganda would reinvigorate the academic field and continue to provide insights into contemporary propagandistic campaigns.

List of figures

Figure 1: *Ja! Führer wir folgen Dir!*

Figure 2: *Hinter den Feindmächten: der Jude.*

Figure 3: *Por Una España Una, Grande y Libre.*

Endnotes

[1] It is worth noting that whilst Le Bon depicted these as stages, these are not to be considered as self-contained units, and may very well be used all at once, or vary in strength over time.

[2] For copyright reasons, not all could be included within this document, but remain worth consulting for purposes of clarity.

[3] This book formed the cornerstone of his beliefs, and remains important within fascist and neo-fascist groups as a vindication of the discrimination of other social and ethnic groups. Since its publication, it is now widely recognised that the text greatly embellishes Hitler's life, and exaggerates his military accolades as a means of justifying his sought after 'strong man' identity, coupled with convoluted theoretical rants.

[4] The agglomerated political groups that made up the *Falange* were plagued with divisions throughout its history, although remained the dominant far right political force in the country, going so far as to be subsidised by Italy's fascist regime. Whilst initially, Francisco Franco would not have direct engagements in the party, after seizing power in April 1937, he would forcefully unify the Falange with a Carlist party in a bid to create unity that would accentuate the success of the Nationalist's war effort, and would eventually become the only legal political party in Spain (under Franco's supervision).

[5] A stage of Spain's history characterised by the deposition of King Alfonso XIII in 1931. A (broadly speaking) politically progressive and democratic period plagued by economic turmoil (accentuated by outside pressures) and political instability. Extremely reformist in nature, the rapid changes between left and right-wing parties led to embitterment, sectarianism and political assassinations during this period. This vindicated the growing dominance of the military, who went on to fracture and eventually turn against the Republican regime at the time, leading to the Spanish Civil War and Francisco Franco's rise to power. The legacy of political controversy has continued to plague Spain's political discourse, and is a key component of the brutal crackdowns undertaken by Franco.

[6] For further reading on women and their rights under the Weimar Republic, and why they overwhelmingly voted for the NSDAP, I highly recommend Helen Boak's chapter 'Women in Weimar Germany: The "Frauenfrage" and the Female Vote"' in *Social Change and Political Development in Weimar Germany* (Bessel and Feuchtwanger, 2019).

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Glossary

Falange: The National Socialist, and later far-right conservative and traditionalist, party that was the amalgamation of a plurality of right-wing political parties, with the major mergers dating from 1934, and 1937, with its final official name being 'Falange Española Tradicionalista de las JONS' (FET y de las JONS).

L'affirmation: (Affirmation) The first 'step' required for the successful dissemination of ideas on the part of a state within a population. The first 'stage' of this process involves the utilisation of short, succinct messaging to provide an impact tailored to suit the targeted demographic. In practice, this would usually take the shape of slowly changing the messaging of propaganda to tailor public opinion, or inculcate desired ideas through presenting new themes that consolidate the ideals.

La contagion: (Contagion) The final of the three 'stages' of Gustave Le Bon. This stage is the hardest to measure, and relies upon the belief that 'herd mentality' – the movement of peoples towards large groupings to prevent exclusion – is a means of influencing a people. In practice, this would mean creating government-led groups and, over time, participation would (in theory) expand exponentially.

La répétition: (Repetition) The second of the three 'stages' proposed by Gustave Le Bon. The means through which a state would seek to establish mastery through the repeated promotion of the previously mentioned affirmations. This constant messaging would, in theory, allow for the populous to gradually absorb ideas; their normalisation would occur through media sources, education and common discourse.

Mein Kampf: Written by Adolf Hitler in 1925; an autobiographical account of his life, whilst featuring his musing on the world and the intended legitimisation of his views on the purported superiority of Germanic peoples.

Noticiarios y Documentarios (NO-DO): (Official translation: News and Documentaries) Newsreels that appeared before all films shown in Spain from 1943 until 1981. Developed by the government to bring to the fore the positive aspects of the news to the Spanish people, they predominantly focused on infrastructure projects, censored reports on international news, or the goings-on with the state.

NSDAP (*Nationalsozialistische Deutsche Arbeiterpartei*): (National Socialist German Worker's Party) Founded in 1920, Adolf Hitler assumed control in 1921, which led famous violent anti-government movements along alt-right lines of thought. These ideals manifested themselves in anti-Semitism, German pride (for instance, decrying the Versailles treaty), anti-Marxism, and a need for economic reform. In July 1932, they gained over one-third of the seats in the parliament, and Hitler became Chancellor the following year, establishing the Nazi government until the end of the Second World War.

Revista para la mujer nacional-sindicalista: (The Magazine for the National-Syndicalist Woman) Published between 1938 and 1945, this was a monthly publication created by the *Sección Femenina* that discussed all major topics that were deemed to concern women, (e.g. the best norms to follow to be the best wife or mother, or how to best sew).

Sección Femenina:(author translation: Female Section) Organisation known as the women's branch of the Falange; developed by the sister of Spain's former dictator, Pilar Primo de Rivera. It sought to instil traditional values and norms within women (such as teaching how to sew, how to be a good housewife, and how to best raise your children correctly). Unsurprisingly, the limited freedoms of women made this an appealing means through which to socialise with other women without requiring the husband's permission. The ability to get basic permits were dependent upon their participation in the group.

Völkischer Beobachter: ('_The People's Observer_') Newspaper published nationally as part of the NSDAP media-wing from 1920 until the end of the Second World War. Given its proximity to Nazism, and later the government, it became key in influencing public opinion and controlling the information that would reach broader society.

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Radical Landscapes at the Mead Gallery Addresses the Topic on Everyone's Lips

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The more sensitive viewer might not make it past the front door of the Tate's *Radical Landscapes* exhibition at the Mead Gallery, University of Warwick. One is immediately confronted by Jeremy Deller's *Cerne Abbas* (2019), a work of neon light, depicting the ancient land art of the same name. The giant, with its shocked face and particularly prominent phallus, certainly makes a statement. As the exhibition does not shy away from nudity (one comment in the visitor book simply says 'BOTTOMS!'), this historic nude figure ideally sets the tone for an exhibition that explores man's intimate relationship with the land.

Jeremy Deller, "Cerne Abbas" (2019)

Once further inside, those who have visited the newly refurbished Mead Gallery will find the place completely transformed. Bright lighting and spaces between hung artworks contribute to a typical white cube-style exhibition format. What was a large, open space for the exhibitions *Dappled Light* (January–March 2022) and *Prophecy* (May–June 2022) has become a progression of three distinct galleries, each focusing on different aspects of Britain's changing landscape. The first gallery explores land art, land ownership and the human (often female) body within the landscape. Gallery Two appears to focus on smaller parts of the natural world. A single tree, for example, or a close-up of some strawberries. The connection between nature, nation and Britain's colonial past is also explored. In Gallery Three, themes of protest, war and the climate crisis are introduced, providing ample fuel for further contemplation when one leaves the space.

The exhibition includes notable works such as Paul Nash's *Landscape from a Dream* (1936–38), Henry Moore's *Atom Piece* (cast in 1965) and Peter Kennard's *Defended to Death* (1983). Yet, for me, the gem of *Radical Landscapes* is not one of the most famous, nor is it one of the louder, bigger pieces. I was particularly drawn to Anwar Jalal Shemza's oil on hardboard *Apple Tree* (1962). Hung on its own on a small wall in Gallery Two, this painting drew me back multiple times. It is incredibly abstract, with simple geometric shapes forming the 'tree'. The red and orange apples pop perfectly against the complementary green. The rough texture of the background contrasts with the block colours of the tree. The small accompanying text tells me that Shemza combined modernism with Islamic aesthetics to depict rural Staffordshire, where he lived from the early 1960s. Gazing at the painting, one certainly gets a sense of this eclectic mixture through the contrast of the natural subject matter with bright complementary colours and simple shapes.

Paul Nash, "Landscape from a Dream" (2019)

Other works that caught my eye include Ithell Colquhoun's *Attributes of the Moon* (1947), a surrealist and moody piece that blends the human body with natural forms and shapes, and Sutherland's *Green Tree Form: Interior of Woods* (1940), an abstract close-up that could have been lifted out of one of his larger landscape works. Another favourite was a collection of interactive teaching models by Brendel & Co. These anatomical flowers were originally used by museums and universities, although artists did contribute to their creation. They take on a new artistic meaning in this exhibition setting, particularly as they are displayed behind perspex, away from curious hands. One could go on. The broad range of mediums and styles means every visitor is likely to find a piece that resonates with them.

Radical Landscapes is a timely series of observations on our landscape. In a time of climate crisis and activist groups lobbying for radical changes, this exhibition proves that art has a role to play. The very fact that the Tate has chosen to collate these works, to address the topic headfirst, confirms its commitment to furthering the conversation. This iteration of the exhibition at the Mead Gallery brings this message to Coventry, and asks locals to consider their own radical responses and solutions for our landscape.

Radical Landscapes also proves that the recently renewed Mead Gallery is a space that can be dramatically reconfigured to suit the needs of the exhibition. It certainly makes me excited to see how it will be reshaped for future shows.

Glossary

Land art: Art made directly in the landscape, often by sculpting the land itself.

Surrealism: A twentieth-century artistic movement that explored the workings of the mind by depicting illogical scenes.

White cube: A gallery space of square or rectangular shape, with white walls and a light source that evenly lights the whole space.

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