LUDOVIKA UNIVERSITY PRESS

Volume 12. (2024)
No. 1.

# KOME

An International Journal of Pure Communication Inquiry

ISSN 2063-7330 (online)

# KOME − An International Journal of Pure Communication Inquiry

Vol. 12. No. 1. 2024



Published by the Ludovika University of Public Service
Ludovika University Press
Ludovika tér 2. 1083 Budapest, Hungary
Responsible for publishing
Gergely Deli, Rector
Copy editor Zsuzsánna Gergely
Printed by the Ludovika University of Public Service
ISSN 2063-7330 (online)


LUDOVIKA
UNIVERSITY PRESS

# Contents

KOME – An International Journal of Pure Communication Inquiry Vol. 12. No. 1. (2024) • 3–17.
DOI: 10.17646/KOME.of.6

# Nicolescu's Transdisciplinary Logic: Inclusivity and Complexity

Sue L. T. McGregor*

* Professor Emerita, Faculty of Education, Mount Saint Vincent University, Halifax Nova Scotia, CANADA; Principal Consultant, McGregor Consulting Group (Seabright Nova Scotia, CANADA), www.consultmcgregor.com

This paper recounts the two pillars of logic Basarab Nicolescu developed when he formulated the logic axiom of his transdisciplinary methodology: inclusive logic and complexity logic. The paper starts with a distinction between complexity and simplicity and frames transdisciplinary actors as a complex adaptive system (CAS). After explaining traditional classical linear logic and three laws of thought (i.e. exclusive logic) and their inability to deal with complexity, the discussion turns to both inclusive and complexity logic as understood by Nicolescu (who drew on Stéphane Lupasco, and Edgar Morin, respectively). Nicolescu knew he needed ways to both a) not exclude anything that might be integral to addressing a complex, wicked problem; and b) weave emergent ideas into something new, ways that he respectively called inclusive logic and complexity logic. Used together, richer communications and inquiry are now possible amongst diverse minds increasing chances of confidently addressing complex, normative and wicked problems.

**Keywords:** transdisciplinarity, complexity, simplexity, inclusive logic, complexity logic, classical logic

## Introduction

Transdisciplinarity (TD) means simultaneously between, among and far beyond disciplinary knowing (Nicolescu, 2002). *KOME* (a journal of pure communication inquiry) is committed to transdisciplinarity and topics relevant for more than one special discipline of social sciences. Most communication (i.e. the transmission and exchange of information or meaning) depends on logic – reason, argumentation, judgement and inference (Dignum & Weigand, 1995). "Logic is an essential skill for anyone who wants to communicate effectively. By learning to think logically, we can improve our ability to persuade, resolve conflict, and learn from others" (Wilensky, n.d.-b, para. 2). Logic improves communication and inquiry "by enabling us to structure our thoughts, express ideas coherently, and construct persuasive arguments" (Wilensky, n.d.-b, para. 4).

Transdisciplinarity deals with wicked problems that are normative in nature (i.e. what *should/ought* to be done). Transdisciplinarity also involves sets of interacting agents each of whom has an agenda that can be manipulated by self and others *by using logic* (Dignum & Weigand, 1995). In his challenge to exclusive, classical linear logic (to be discussed), Professor Basarab Nicolescu (a theoretical quantum physicist) formulated two pillars of transdisciplinary logic: inclusive logic and complexity logic. Indeed, Nicolescu (2007) intentionally framed his seminal approach as *a formulation,* which means a) methodically creating or preparing something; and b) then expressing it in a concise and systematic way (Stevenson, 2011). His approach is not a theory, conceptual framework, model, or philosophy – it is a methodology, a new way to create knowledge (Nicolescu, 1994).

Nicolescu's (1985, 2002, 2014) novel approach to transdisciplinarity draws on the new sciences of chaos theory, quantum physics and complexity theory. He presented the culmination of his work as a *methodology* with its own set of philosophical axioms (i.e. reality, knowledge and logic – not axiology) that can be used to create new knowledge. His approach joins the company of long-standing conventional research methodologies (i.e. empirical, interpretive and critical methodologies) that each have their version of the four philosophical axioms (McGregor, 2018a, 2018b).

As an inquiry delimitation, although Nicolescu formulated three axioms (eschewing axiology), my paper concerns only the logic axiom while respecting the unarguable interconnections among all axioms; reality, knowledge, logic and values are interrelated (Nicolescu, 1985, 2002, 2014). Nicolescu (1985, 2002, 2009) knew he needed a way to both a) not exclude anything that might be integral to addressing a complex, wicked problem; and b) weave emergent ideas into something new, ways that he respectively called inclusive logic and complexity logic. To that end, to aid in his formulation, he chose Lupasco's (1951) conceptualisation of *inclusive logic* and Morin's (1974, 1984, 2005, 2008) conceptualisation of *complexity logic* over other approaches.

After distinguishing between complexity and simplicity as they pertain to normative wicked problems, and framing TD actors as a complex adaptive system (CAS) engaged in intense communication and inquiry, I describe traditional classical logic and laws of thought and discuss their inability to deal with complexity (Liang, 2017; Nicolescu, 2014). The paper concludes with a detailed overview of inclusive and complexity logic as formulated by Nicolescu (1985, 2002, 2014).

## Complexity and complex adaptive systems

Transdisciplinarity concerns the complexity of the issues humanity is facing and the messy dynamics of human thought around how to confront, communicate and address wicked problems (e.g. pandemics, alarming climate change, profound unsustainability and grinding poverty). Wicked connotes fearful, intolerably bad, relentlessly aggressive and distressingly severe (Rittel & Webber, 1973). Problems are wicked when they are "highly resistant to resolution" (Australia Public Service Commission [APSC], 2007, p. 1).

To continue, wicked problems are triggered when "serious disagreements among stakeholders are combined with complexity and uncertainty [wherein] we have crossed a threshold" (Head, 2008, p. 103). *Complex* wicked problems are context and situation unique, hard to define and very unpredictable. Many disparate stakeholders (with varying points of view, perspectives, interests, resources and power) are vying for a voice in their problematisation and resolution (Rittel & Webber, 1973; Stuart, 2018). They all agree *something* must be done, but what *is* that something?

The dynamics of answering this question are the crux of transdisciplinarity because wicked problems are extremely inclusive in nature. Multilemmas (polycrises – an array of disastrous situations) like pandemics in concert with climate change do not exclude anyone in the bigger scheme of things. Because everyone is affected in some way, it is imperative that all voices are heard rather than most being excluded. This imperative clearly highlights the non-simple nature of humanity's peril and the need for inclusion and a respect for complexity and what it *really* means.

## Complexity

To elaborate, lay notions of complexity have it as not simple – it is involved, dense and intricate (Anderson, 2014). But central to Nicolescu's (2002) TD methodology is the appreciation that complex is much more than not being simple (from Latin *simplus* 'comprising a single element; plain and uncomplicated in form, nature or design; not compound'). Complex is from Latin *complexus* 'plaited, interlaced strands, intertwined, surrounded, encompassed, embraced' (Harper, 2024) (see Figure 1, Microsoft Clipart used with permission). The opposite of complex is *not* simplicity (i.e. a few parts, or easy to understand). Instead, it is that which is *not woven.* Indeed, *noncomplex* means independent and not connected (Alvira, 2014).

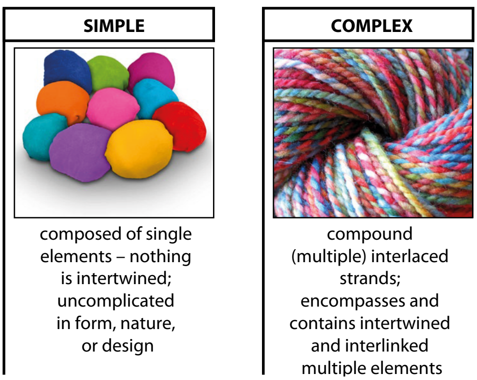


*Figure 1: Simple versus Complex*
*Source:* Compiled by the author.

Complexity is thus nonlinear (no straight lines), meaning the interwoven strands are defined in relation to what they are connected to instead of defined by their individual characteristics (Alvira, 2014). Per Figure 1, the simple individual strands of colour are twisted together to create variegated yarns, which are then connected to each other to become a skein (bundle) of yarn. Those skeins are then used to knit a sweater. Linearity means the whole is *equal* to the sum of the parts (e.g. the cost of yarns used to make the sweater). But nonlinearity (i.e. things are defined in relation to what they are connected to) means the whole is *different from* the sum of all the parts (e.g. respectively, the sweater made from knitting different yarns). Some phenomena exhibit both properties. To illustrate, the cost of buying 10 stocks equates to the total cost of all of them added together (linear). But the variation (difference) in those 10 stock prices is often chaotic and tumultuous (nonlinear) (Alvira, 2014).

## Complex adaptive systems and the edge of chaos

Herein, people engaged in TD work are conceived as a self-organising and self-regulating complex adaptive system (CAS) of many different actors and agents.

They are leaderless with no coordination, *yet* things still happen. Patterns emerge, *yet* no one was told or directed to make a pattern. They are governed by chance and randomness (stochastic), *yet* those involved trust that something will emerge. If any element of the system is altered, the whole system reacts and adapts. What is created has none of the traits of the contributing agents, *yet* they all created it (McGregor, 2020b, p. 3).

Their interaction and communication requires specific logic, so people can connect and *think* together in nonlinear fashion. CASs "are neither stable nor unstable [but] operate at the boundary between the two zones [...] on the edge of chaos" (Dann & Barclay, 2006, p. 22), which, in the new sciences, means order *is* emerging just not predictably.

The *edge of chaos* can be a space or a boundary. As a *space,* the very edge of chaos can be both a) physical (e.g. entering a region just hit by a tornado); and b) mental (i.e. people are at their highest level of adaptability and innovation – new order is ready to emerge). As a *boundary,* the edge of chaos refers to a place of emergence – a border where high turbulence and tensions exist with great potential (Liang, 2017). In a CAS, at the edge of chaos, people's ideas and thoughts can cross thresholds and transcend (i.e. climb up and over to a new space). In this process, both order and uncertainty can coexist as in a stock market. Many variables are constantly changing and moving toward some sort of temporary equilibrium, and they do so by themselves instead of being directed by an independent third party (Liang, 2017; McGregor, 2020b).

The ability to "maintain a balance between stability and turbulence [gives the system] dynamic stability" (Wang et al., 2015, p. 382). CASs that experience dynamic stability are "stable enough to maintain their structure, but sensitive enough to external changes that they can undergo rapid and unpredictable periods of change"

(Cleveland, 1994, p. 7). Good examples include stock markets, families, the Internet, weather systems, traffic flows, power grids and the human immune system.

In effect, Nicolescu (2002, 2014) called the edge of chaos the *zone of non-resistance* to others' Realities (i.e. the fecund included middle), which is mediated by the lubricating, mind-opening dynamic he called *the Hidden Third* (e.g. constituting art, drama, theatre, music, religion, the sacred and culture). This is the opposite of an outside third party controlling reorganisation; instead, in a CAS, the Hidden Third represents the unifying force operating in and emanating from the included middle where *two* or more contentious peoples and ideas are engaged, and each has a voice. Tensions and contradictions are natural and can be used to create something new. Morin (2005, p. 8) actually wondered whether the force that emerges among these relations is "a hidden force of nature, an intrinsic virtue" of complexity work.

Nicolescu (2014) was convinced that unique forms of logic are required to navigate the edge of chaos where new TD knowledge is both created from and contributes to complexity. These forms of logic are different from the long-standing traditional laws of thought (classical linear logic), which have governed human communications since Aristotle – for more than 2,000 years. Nicolescu (1985) formulated the new TD logic as inclusive logic and complexity logic, which are better understood when juxtaposed against exclusive logic (to be discussed). Inclusive logic deals with reconciling contradictory and antagonist ideas so new facts, thoughts and insights can emerge. People then use complexity logic to merge (weave) the emergent disparate strands of thinking into a complex new whole – new TD knowledge – to address the complex, wicked problem.

In short, inclusive means *including* integral elements whose absence would be notable, and complex means braiding those elements into something new to address the wicked problem (McGregor, 2018a). In that spirit, Nicolescu (2014) used the term *simplexity* to refer to the process of striving toward simple ends by way of complex means (simplexCT, 2013). Simplexity entails creating simplifying rules to reduce and improve one's understanding of complexity *without* altering the complexity of reality (Gélalian, 2018). Nicolescu commented that "in a paradoxical way, complexity is embedded in the very heart of simplicity" (2014, p. 100). "The new simplicity arises as an outcome from the process of many interdependent people working across many complex levels of Reality, achieved via simplexity" (McGregor, 2018a, p. 191).

## Traditional laws of thought and exclusive logic

Rational human discourse is based on fundamental rules called *laws of thought*. Three traditional laws of thought constitute classical linear logic: the axioms of a) identity (A); b) contradiction (non-A); and c) the excluded middle or exclusive logic (Hamilton, 1859; Russell, 1912). These three laws (i.e. rules of logical thought and reasoning) are commonly represented as A, non-A and the absence of a third **T** state that is simultaneously A and non-A (see Table 1).

*Table 1:*
*Comparison of Classical Linear Logic and Contemporary Nonlinear Logic*

| **Classical Linear Logic (Simplicity and Duality) *Logic of the Excluded Middle* Reinforces Tension between A an Non-A** | **Contemporary Nonlinear Logic (Complexity and Nondualism) *Logic of the Included Middle* Frees Tension between A and Non-A** |
|---|---|
| *Axiom of Identity:* A is A.<br>• Everything is itself.<br>• Whatever is, is. | *Axiom of Identity:* A is A.<br>• Everything is itself.<br>• Whatever is, is. |
| *Axiom of Contradiction:* A is not non-A.<br>• No thing having a given quality also has the negative of that quality.<br>• Nothing can both be and not be (e.g., be true and false at the same time). | *Axiom of Contradiction:* A is not non-A.<br>• No thing having a given quality also has the negative of that quality.<br>• Nothing can both be and not be (e.g., be true and false at the same time). |
| *Axiom of the Excluded Middle (Third):* There exists <u>no</u> third term **T** that is at the same time A and non-A. This **T** cannot exist in contradiction. No reconciling third possibility is logically foreseeable.<br>• Everything must <u>either</u> be <u>or</u> not be – dualistic (either mind or body).<br>• Everything <u>either</u> has a given quality <u>or</u> has the negative of that quality (e.g., it is either this or the other but not both). | *Axiom of Included Middle (Third):* There exists a third term **T** that is at the same time A and non-A. This **T** can coexist in contradiction, because when A is actualized, non-A is potentialized without either disappearing entirely – a reconcilable third is logically foreseeable.<br>• Things can remain distinct without being separate (mind and body) – nondualistic.<br>• Things can (a) <u>both</u> be this one <u>and</u> the other one or (b) <u>both</u> be <u>neither</u> this one <u>nor</u> the other one. |

*Source:* McGregor, 2020c.

Classical linear logic is predicated on linearity, simplicity and duality (Hamilton, 1859; Russell, 1912). Respectively, linearity (straight lines) refers to sequentialism and one dimensionality (Liang, 2017). Simplicity means uncomplicated, not compound (few parts), and easy to understand (Anderson, 2014). Dualism (i.e. divided into two opposing aspects) reflects *either/or thinking*. Again, respectively, things happen in a logical order or sequence, are relatively easy to comprehend and there is no room for gray areas or contradictions. Dualistic thinking means something cannot be both A and non-A at the same time (e.g. cannot simultaneously be true [A] *and* false [non-A]) (Nicolescu, 2002, 2014).

Nicolescu (2002, 2014) acknowledged *exclusive logic* and found it lacking. Exclude is from Latin *excludere* 'to debar from admission or participation; prevent from entering or sharing; to hinder' (Harper, 2024). When applying exclusive logic when communicating, people reason, for example, that there is no possibility for anything to be right and wrong at the same time (i.e. the logic of the *excluded* third). Even hinting at such a thing is illogical.

To illustrate, based on the premise that the body and mind are two separate things (dualism), Western medicine focuses on the body (empirical science and controlled experiments) with no room for the mind (spirituality or intuition). In his justification for transdisciplinarity, Nicolescu (2014) viewed this distinction as the huge divide between, respectively, technoscience and spirituality. While respecting them and their role in human communications, he blamed the classical laws of thought and exclusive logic for truncating human thought vis-à-vis complexity and complex, wicked problems.

To continue, exclusive logic assumes that ambiguity (i.e. unclear, undecided) cannot be tolerated. There is no middle ground (i.e. a standpoint or area midway between extreme or opposing positions) – thus the moniker the excluded *middle*: things *either* are, *or* they are not. From a TD stance, this logic assumes that knowledge cannot evolve *if* there are ambiguities or contradictions (Nicolescu, 2014). He held that this assumption is not necessarily wrong but is harmful, as it rules out too many ideas that may be fundamental (integral) to addressing complex, wicked problems. Worse, the potential to generate something new by using inclusive logic to resolve tensions between antagonistic ideas and contradictions is negated (Nicolescu, 2002). The creation of new TD knowledge is thus compromised, and wicked problems wreak havoc. Witness the lingering Covid-19 global pandemic, wherein resolutions to save humanity were compromised by seemingly intractable and non-reconcilable disparate perspectives (Al-Rodhan, 2021).

## Transdisciplinary Logic

"Very few would try to maintain that [traditional logic] is adequate as a basis for understanding [...] everyday reasoning" (Smith, 2017, para. 5). Nicolescu (1985, 2002, 2014) formulated transdisciplinarity to offset his perceived inadequacy of classical laws of thought and linear logic when it comes to complexity and TD CAS dynamics. Specifically, he took issue with the third element of linear logic's triadic structure – the excluded middle **T** (see Table 1). "Even Aristotle considered the law of the excluded middle somewhat shaky" (Rohmann, 1999, p. 236).

## Inclusive Logic

Nicolescu (2014) was convinced that the traditional laws of thought were "no longer valid in the quantum world" (p. 126). Thus, as part of his TD approach, Nicolescu (1985, 2000, 2002, 2009) formulated *inclusive logic* by drawing on Romanian philosopher Stéphane Lupasco's (1951) work related to the same construct. In classical logic, the **T** state cannot exist because contradictions are not accommodated. Something is either one thing or another but not both. Lupasco (1951) conceived instead that the **T** state *can* exist. It is neither *actual* nor *potential* but a resolution of the two contradictory elements at a higher level of reality or complexity than when the logical reasoning, communication and thought processes started (see Table 1).

For clarification, Nicolescu's (2002) ontology axiom comprises two levels of Reality: *TD Subject,* internal flow of perspectives and consciousness, and *TD Object,* external flow of facts and information. Movement among these realities to higher levels of complexity to create TD knowledge (epistemology) is mediated and lubricated by mind- and spirit-opening modalities such as culture, art, spirituality and religion (called the *Hidden*

*Third*). Richer details about his ontology axiom can be found at McGregor (2011) and Nicolescu (2009, 2016).

The adjective inclusive is from Latin *inclus* 'to enclose (contain, surround); to insert' (Harper, 2024). Inclusive logic holds that at the same time contradictions exist (A and non-A), a third **T** state *can* simultaneously co-exist (Nicolescu, 2002, 2104). This means that contradictions around ideas, thoughts, interests, perspectives and solutions are brought together and *can* coexist at the same table, *but* they do not merge, they do not exclude each other, and they never disappear (Desbois, 2012). Instead, while communicating about and addressing TD problems, any opposing ideas "cancel each other out" (Desbois, 2012, p. 95) thereby enabling the new **T** state to emerge. This idiom means that "both opposing ideas are equal to each other in force or importance but are opposite to each other and thus have no effect" ("Cancel each other," 2023). Any potential influence they may have had on addressing the problem is reduced because neither gains an advantage nor becomes privileged. They are equal but opposite.

But – and this *is* significant – the mere fact they *were* brought together to sit at the same table is why something new was created that would *not* have happened otherwise. Their juxtaposition in the new **T** state was made possible using logic that is conducive to inclusion (i.e. included, involved, added, taken in and encompassed). This logic holds that disparate people who do not normally work together concede something new can and will emerge from their reasoning, communication and thought processes, something bigger than themselves. This could be construed as TD altruism (i.e. temporary selflessness and a concern for humanity) (Blazer, 2011). This conciliation is temporary with the potential to become permanent (McGregor, 2017).

To continue, the struggle between opposites and contradictions during TD collaboratory work does not result in the two aspects being separated; they can remain distinct (clearly identifiable) without being separate (disconnected) (Desbois, 2012). They are connected by virtue of being on the table at the same time for consideration. When you think of it, they actually are inseparable because one cannot exist without the other – the existence of one idea means its opposite must also exist, which is very different from it is *either* one *or* the other (dualism) (Nicolescu, 2014) (see Table 1). Clear evidence of inclusive logic's ability to yield a temporary resolution of tensions is when a contradiction is resolved at a higher level of complexity than when the collaborative communication, thinking, reasoning and inferences started (Nicolescu, 2014).

As an example, consider a situation where Indigenous lands will be destroyed if corporate engineers build a dam. While the Elders are adamantly against the dam, the government (who sympathises with them) wants the dam because it will generate electrical power for the nation, including Indigenous peoples. Inclusive logic assumes they can reach a 'meeting of the minds', so the complexity of the situation can be respected and accommodated. This will require tense and contentious dialogue informed by all stakeholders and shaped by inclusive logic, which holds that people will not leave anything off the table because they assume something new can emerge *if* everyone keeps an open mind and nothing is excluded or privileged.

As a further caveat, I intentionally focused on Nicolescu's (2014) inclusive logic and his concern for noncontradictory rather than the overall constructs of contradictions and inconsistencies per se, which are an inherent part of logic. Transdisciplinary scholars interested in these constructs may want to explore possible synergy between Nicolescu's inclusive logic and paraconsistent logic, which deals with inconsistencies in a discriminating way. Paraconsistent logic can also be applied in situations where people hold opposing views (Fisher, 2007). But instead of excluding things, "paraconsistent logic accommodates inconsistency in a controlled way that treats inconsistent information as potentially informative" (Priest & Tanaka, 2022, para. 2).

When formulating his approach to inclusive logic, Nicolescu (2002) also drew on the quantum notion of *cyberspace time* (CST) (see McGregor & Gibbs, 2020). Mihalache (2002) explained that CST is a way to capture the phenomenon of a previously nonexisting space that emerges in the process of its development via communication (like when people are addressing a wicked problem and have a temporary, eye-opening meeting of the minds). CST "is an aggregation of places (sites), not a space waiting to be filled" (Mihalache, 2002, p. 293). Nicolescu (2002) thus considered CST a connecting principle bridging people's a) subjective perceptions and consciousness; and b) objective facts, information, evidence and statistics (i.e. TD Subject and TD Object, respectively) via inclusive logic.

This bridge helps make people's disparate contributions to the wicked problem more evident and amenable, as they communicate with each other intending for something new to emerge (Nicolescu, 2002). Per Table 1, Nicolescu (2014) posited that the actualisation of A (one idea) leads to the potentialisation of non-A (contradictory idea) and to a new **T** (third) state where contradictions can be temporarily reconciled. During this TD problem addressing process, people are "linked by a relationship of contradiction" (Nicolescu, 2014, p. 132), which can be mediated by using both the logic of the included middle and complexity logic.

Paradoxes (contradictions and inconsistencies) are part of TD work and tied to inclusive logic (Nicolescu, 2014). Paradoxes serve "to arrest attention and provoke fresh thought" by contrasting two normally unassociated ideas to create a provocative idea (Editors of Encyclopedia Britannica, 2020, para. 1) (e.g. 'Less is more'). Recognising that logic involves paradoxes (Cantini & Bruni, 2017), Nicolescu (2014) drew on the *quantum paradox phenomenon* when formulating inclusive logic. This paradox holds that each particle (A and B) is in an uncertain state; each is in multiple states at the same time *until* measured or observed (called *superposition*) (Nicolescu, 2014; Rouse, 2020). Particle A's state becomes certain *when* it is measured or observed. Because particles A and B are quantumly entangled, when A is measured, B knows what its state is *supposed* to be (Jones, 2019). This paradox is evident in Schrodinger's (1935) cat thought experiment.

Although this quantum process cannot be observed with the human eye, the consequences *can* be measured (Rouse, 2020) – much like the process that unfolds within the included middle using inclusive logic cannot be *seen,* but the results can. Activities and thoughts of TD stakeholders are in an uncertain state, until they are not. Until things change, many possibilities exist. Once they *do* change, something different exists – because actualised A helped potentialised non-A to emerge (Brenner, 2011). Inclusive logic is very relevant to addressing TD problems because with complexity, paradoxes "are widespread in contrast with the rigid logic of binary oppositions" (Marzocca, 2014, para. 7).

## Complexity Logic

If the role of classical logic is to prevent or remove contradictions in reasoning and thinking (Landauer & Rowlands, 2001), then the role of complexity logic is to acknowledge and accommodate contradictions in reasoning and thinking (see Table 1). Indeed, "complexity has its own logic" (Desbois, 2012, p. 94), which lets people creatively and coherently cross and connect different ways of knowing and perceiving (Nicolescu, 2000). Inclusive logic temporarily reconciles contradictions inherent in multiple actors, *and* complexity logic allows for their different ways of knowing and melded perspectives to be woven into new TD knowledge (Nicolescu, 2002, 2014).

To formulate the logic of complexity, Nicolescu (1985, 2002, 2005, 2008, 2014) drew heavily on Edgar Morin's work on complexity thinking, especially Morin's notion of *generalised complexity,* which Morin equated with "the generalized interdependence of everything and everyone" (Morin, 2005, p. 21). That is, when confronting complexity, people cannot create new knowledge *unless* they "try to comprehend the *relations between* [emphasis added] the whole and the parts" (Morin, 2005, p. 6) instead of the characteristics of the parts and of the whole (i.e. nonlinearity as previously explained).

To continue, Morin (1974) believed complexity logic entails thinking about opposites at the same time (i.e. holding both in your mind while you think) instead of just describing each one and setting it aside assuming they cannot occupy the mind at the same time because they push against each other. The application of complexity logic "takes place in the force field where the tension between differences is upheld, brought together and kept apart at the same time [thereby giving] the 'logic of complexity' a paradoxical character" (Preiser, 2012, p. 201).

Assuming complexity cannot be reduced to simplicity but that simplicity can be used to understand complexity, Nicolescu (2005, 2014) formulated three types of complexity: a) *horizontal* (within a single Reality, [e.g. economics]); b) *transversal* (across different aspects of a single Reality [e.g. different types of economics: classical, ecological, feminist, and behavioural]); and c) *vertical* (crossing several levels of Reality [e.g. economics, historical, social and political]). Max-Neef (2005) suggested that as people engage with these different types of complexities, they gain glimpses within that "generate reciprocal enrichment that may facilitate the understanding of complexity" (p. 15). In effect, they get to peek into each other's thinking and gain a deeper appreciation for how complex things *really* are.

In his formulation of complexity logic, Nicolescu (2010) further distinguished between *simplexus* (within one fold) and *complexus* (many folds, intertwined and knotted) (see Gélalian, 2018). Nicolescu (2010) equated each type of complexity or level of Reality as simplexus and then proposed, without explaining it, the term *transcomplexity* for their unification. Luna and Alfonzo (2016) later clarified that, with transcomplexity, people can break away from restrictive dominant ontological visions (e.g. traditional laws of thought, see Table 1). Transcomplexity thus pertains to multiple worldviews, multiple visions, and argumentative and propositional reciprocities (i.e. exchanging things for mutual benefit) (Bravo et al., 2020). With the logic of complexity, people can both a) have their models of the world, truths and knowledge; *and* b) challenge them, so they can reveal their limits, re-evaluate them with each usage, and reinvent them, if necessary. This process leads to transcomplexity – a state beyond the original levels of complexity (Preiser, 2012).

As with inclusive logic, Nicolescu also drew on CST to formulate complexity logic. Instead of viewing spacetime as smooth, CST views it as "*quantum foam* to describe the turbulence [and tension therein]" (Nicolescu, 2014, p. 67). "Dimensions unfurl and furl back in on themselves [...]. They blink in and out of existence like the bubbles in a freshly poured beer" (NASA Science Casts, 2015, 1:27–1:38; see also Wilczek, 2010). Instead of linearly (smoothly) moving through the problem-solving process, complexity logic has people moving through a complex and turbulent space comprising a mass of constantly reforming miniscule bubbles (i.e. foam).

Because CST is presumed to comprise many small, ever-changing regions, each of space, time and cyber connections (while communicating) fluctuate in a foam-like manner (Wilczek, 2010). These small bubbles of foam could represent the diverse mindsets within the TD CAS vying for a voice during complex communications and interactions. These interactions (i.e. voices coming and going over time) merit a *logic of complexity* because interpenetrating viewpoints generate inherent tensions that must be thought about using a different logic than linearity (Cillier & Nicolescu, 2012). "All views on the problem must be *included* and any contradictory positions must be temporarily reconciled so strategic and innovative solutions to the problem can be formulated, agreed to and implemented" (McGregor, 2018a, p. 194).

## Conclusion

Effectively and efficaciously addressing complex, wicked problems is an incredibly inclusive and complex process requiring inclusive logic and complexity logic. Appreciating this truth, Nicolescu turned to Lupasco's (1951) notion of the included middle (inclusive logic and the **T** state), and Morin's (2005) theory of generalised complexity. Through these lines of thought, Nicolescu (2002, 2014) articulated the logic axiom of his uniquely formulated TD methodology for addressing complex, wicked problems.

*Address* is the correct verb because complex TD problems cannot be completely *solved;* they can only be addressed (Stuart, 2018), which entails directing attention and resources to them to better understand them thereby preparing people to *begin* to deal with them (Anderson, 2014). Both types of TD logic are needed to communicate about, reason through and address problems that are inclusive, complex and wicked (Desbois, 2012; Liang, 2017; Nicolescu, 2002, 2014). Leaving out (excluding) people, ideas and perspectives because they might be antagonistic, or contradictory is not tenable. Too much is missed. Too much is at stake when facing complex polycrises.

The classical laws of thought (see Table 1) predicated on linearity, simplicity and dualism are not enough anymore. Basarab Nicolescu realised this and ruminated then formulated accordingly. When he first published his seminal work, Nicolescu (1985, 2002) was considered vanguard and a rebel – he was *way* ahead of his time. He himself commented on “the problem of formulating a new ‘quantum logic’” (Nicolescu, 2014, p. 122) and “the visceral fear of introducing the idea of the included third” (p. 123). Fortunately, people can now access his leading-edge formulations of inclusivity and complexity logic – and the world will be better for it. Richer communications and inquiry are now possible amongst diverse minds increasing chances of confidently addressing complex, normative and wicked problems.

## References


Al-Rodhan, N. (2021, March 29). A Neuroscientist Writes on AstraZeneca Fears. *Euobserver Newsletter*. Online: https://euobserver.com/opinion/151344

Alvira, R. (2014). *A Unified Complexity Theory. Comple[x]us.* CreateSpace Independent Publishing Platform.

Anderson, S. (Ed.) (2014). *Collins English Dictionary* (12th ed.). Harper Collins.

Australian Public Service Commission (2007). *Tackling Wicked Problems. A Public Policy Perspective*. Online: www.enablingchange.com.au/wickedproblems.pdf

Blazer, D. G. (2011). Moving Beyond the Nature/Nurture Distinction: Promotion of Transdisciplinary Research. In R. Sussman & C. R. Cloninger (Eds.), *Origins of Altruism and Cooperation* (pp. 417–425). Springer. Online: https://doi.org/10.1007/978-1-4419-9520-9_24

Bravo, A., Salazar-Torres, J., Madriz, D. & Vergel-Ortega, M. (2020). Trans-complexity: A Management Fad or a Mathematical Construct. *Journal of Physics: Conference Series,* 1671. Online: https://doi.org/10.1088/1742-6596/1671/1/012016

Brenner, J. E. (2011). *Essay: The Transdisciplinary Logic of Transdisciplinarity.* Metanexus Institute. Online: www.metanexus.net/essay/transdisciplinary-logic-transdisciplinarity

Cancel each other/one another out (2023). In *Merriam-Webster.com Dictionary*. Online: www.merriam-webster.com/dictionary/cancel%20each%20other%2Fone%20another%20out

Cantini, A. & Bruni, R. (2017). Paradoxes and Contemporary Logic. In E. N. Zalta & U. Nodelman (Eds.), *Stanford Encyclopedia of Philosophy*. Online: https://plato.stanford.edu/entries/paradoxes-contemporary-logic/

Cilliers, P. & Nicolescu, B. (2012). Complexity and Transdisciplinarity: Discontinuity, Levels of Reality and the Hidden Third. *Futures,* 44(8), 711–718. Online: https://doi.org/10.1016/j.futures.2012.04.001

Cleveland, J. (1994, March 27). *Complexity Theory: Basic Concepts and Application to Systems Thinking* [PDF file]. SlideShare. Online: www.slideshare.net/johncleveland/complexity-theory-basic-concepts

Dann, Z. & Barclay, I. (2006). Complexity Theory and Knowledge Management Application. *Electronic Journal of Knowledge Management,* 4(1), 21–30. Online: https://academic-publishing.org/index.php/ejkm/article/view/732/695

Desbois, L. (2012). Deal with Complexity and Risk in Professional Relationship: The Transdisciplinary Logic. *Transdisciplinary Journal of Engineering and Science,* 3, 87–116. Online: https://doi.org/10.22545/2012/00024

Dignum, F. & Weigand, H. (1995). Communication and Deontic Logic. In R. Wieringa & R. Feenstra (Eds.), *Information Systems, Correctness and Reusability* (pp. 242–260). World Scientific.

Editors of Encyclopedia Britannica (2020). Paradox: Literature. In *Encyclopedia Britannica online*. Online: www.britannica.com/art/paradox-literature

Fisher, F. (2007). *On the Philosophy of Logic*. Cengage Learning.

Gélalian, S. (2018). I@HoU (The Reflaction) [L'Information au coeur de l'Univers] (S. Gélalian Trans.). L'Harmattan. Online: www.researchgate.net/publication/328253063_IHoU_The_Reflaction

Hamilton, W. (1859). *Lectures on Metaphysics and Logic by Sir William Hamilton Edited by Henry L. Mansel and John Veitch* (Vol. 2, Logic). Gould and Lincoln. Online: https://doi.org/10.1037/12154-000

Harper, D. (2024). *Online Etymology Dictionary.* Online: www.etymonline.com/

Head, B. W. (2008). Wicked Problems in Public Policy. *Public Policy,* 3(2), 101–118.

Jones, A. Z. (2019, July 3). EPR Paradox in Physics. In O. Valdes (Ed.), *ThoughtCo.* Online: www.thoughtco.com/epr-paradox-in-physics-2699186

Landauer, J. & Rowlands, J. (2001). *The Importance of Philosophy.* Online: www.importanceofphilosophy.com/

Liang, T. Y. (2017). *Complexity-intelligence Strategy.* World Scientific. Online: https://doi.org/10.1142/10296

Luna, L. E. P. & Alfonzo, N. (2016). Conocimiento, educacion y transcomplejidad [Knowledge, Education and Transdisciplinarity] [Abstract]. *Educere,* 20(65), 11–20. Online: www.redalyc.org/pdf/356/35646429002.pdf

Lupasco, S. (1951). *Le principe d'antagonisme et la logique de l'énergie. Prolégomènes à une science de la contradiction* [The Principle of Antagonism and the Logic of Energy: Prolegomena to a Science of Contradiction]. Hermann & Co, Paris.

Marzocca, F. (2014, October 15). Creativity, Innovation and the Included Middle Logic. *Acrònico Blog*. Online: www.acronico.it/2014/10/15/creativity-innovation-and-the-included-middle-logic/

Max-Neef, M. A. (2005). Foundations of Transdisciplinarity. *Ecological Economics,* 53(1), 5–16. Online: https://doi.org/10.1016/j.ecolecon.2005.01.014

McGregor, S. L. T. (2011). Demystifying Transdisciplinary Ontology: Multiple Levels of Reality and the Hidden Third. *Integral Leadership Review,* 11(2). Online: http://integralleadershipreview.com/2011/03/demystifying-transdisciplinary-ontology-multiple-levels-of-reality-and-the-hidden-third/

McGregor, S. L. T. (2017). Challenges to Transdisciplinary Collaboration: A Conceptual Literature Review. *Integral Leadership Review,* 17(1). Online: http://integralleadershipreview.com/15402-challenges-of-transdisciplinary-collaboration-a-conceptual-literature-review/

McGregor, S. L. T. (2018a). Philosophical Underpinnings of the Transdisciplinary Research Methodology. *Transdisciplinary Journal of Engineering & Science,* 9, 182–198. Online: https://doi.org/10.22545/2018/00109

McGregor, S. L. T. (2018b). *Understanding and Evaluating Research.* Sage. Online: https://doi.org/10.4135/9781071802656

McGregor, S. L. T. (2019). Transdisciplinary Curriculum: Educational Philosophy and Rationale. *Integral Leadership Review,* 19(1). Online: http://integralleadershipreview.com/16751-transdisciplinary-curriculum-educational-philosophy-and-rationale/

McGregor, S. L. T. (2020a). Chapter 3 Sue L. T. McGregor. In P. Gibbs & A. Beavis (Eds.), *Contemporary Thinking on Transdisciplinary Knowledge* (pp.19–24). Springer. Online: https://doi.org/10.1007/978-3-030-39785-2_3

McGregor, S. L. T. (2020b). Emerging from the Deep: Complexity, Emergent Pedagogy and Deep Learning. *Northwest Journal of Complex Systems,* 2(1). Online: https://doi.org/10.22191/nejcs/vol2/iss1/2

McGregor, S. L. T. (2020c). Transdisciplinary Logics of Complexity. *Integral Leadership Review,* 20(1). Online: http://integralleadershipreview.com/17501-7-31-transdisciplinary-logics-of-complexity/

McGregor, S. L. T. & Gibbs, P. (2020). Being in the Hidden Third: Insights into Transdisciplinary Ontology. *Transdisciplinary Journal of Engineering and Science,* 11, 142–157. Online: https://doi.org/10.22545/2020/00139

Mihalache, A. (2002). The Cyberspace Time Continuum: Meaning and Metaphor. *Information Society,* 18(4), 293–301. Online: https://doi.org/10.1080/01972240290075138

Morin, E. (1974). Complexity. *International Social Science Journal,* 26(4), 555–582. Online: https://unesdoc.unesco.org/ark:/48223/pf0000011338

Morin, E. (1984). On the Definition of Complexity. In S. Aida (Ed.), *The Science and Praxis of Complexity* (pp. 62–68). United Nations University.

Morin, E. (2005, June 26). *Restricted Complexity, General Complexity* [C. Gerhenson, Trans.] [Paper presentation]. Colloquium Intelligence de la complexité: Épistemologie et pragmatique, Cerisy-La-Salle, France. Online: http://cogprints.org/5217/1/Morin.pdf

Morin, E. (2008). *On Complexity.* Hampton Press.

NASA Science Casts (2015, December 31). *Quantum Foam* [Video]. NASA Science. Online: https://science.nasa.gov/science-news/science-at-nasa/2015/31dec_quantumfoam

Nicolescu, B. (1985). *Nous, la particule et le monde.* Le Mail.

Nicolescu, B. (1994). The Charter of Transdisciplinarity. In G. Tanzella-Nitti (Ed.), *Interdisciplinary Encyclopedia of Religion and Science.* Interdisciplinary Documentation on Religion and Science. Online: https://inters.org/Freitas-Morin-Nicolescu-Transdisciplinarity

Nicolescu, B. (2000). Transdisciplinarity and Complexity: Levels of Reality as Source of Indeterminacy. *CIRET Bulletin,* 15. Online: https://ciret-transdisciplinarity.org/bulletin/b15c4.php

Nicolescu, B. (2002). *Manifesto of Transdisciplinarity.* SUNY Press.

Nicolescu, B. (2005, September 6–12). *Transdisciplinarity: Past, Present and Future* [Paper presentation]. Second World Congress on Transdisciplinarity, Victoria, Brazil. Online: www.tercercongresomundial-transdisciplinariedad.mx/wp-content/uploads/2019/08/Transdisciplinarity-past-present-and-future.pdf

Nicolescu, B. (2007). Transdisciplinarity: Basarab Nicolescu talks with Russ Volckmann. *Integral Review,* 4, 73–90. Online: https://integral-review.org/issues/issue_4_volckmann_nicolescu_interview.pdf

Nicolescu, B. (2009). *Qu'est-ce que la réalité?: Réflexions autour de Stéphane Lupasco* [What Is Reality? Reflections on Stéphane Lupasco]. Liber.

Nicolescu, B. (2010, June 16–9). *Disciplinary Boundaries. What Are They and How They Can Be Transgressed?* [Paper presentation]. International Symposium on Research Across Boundaries, University of Luxembourg. Online: https://vdocuments.mx/basarab-nicolescu-disciplinary-boundaries-what-are-they-and-how-they-can-be-transgressed.html?page=1

Nicolescu, B. (2014). *From Modernity to Cosmodernity*. SUNY Press.

Nicolescu, B. (2016). *The Hidden Third* [W. Garvin, Trans.]. Quantum Prose.

Priest, G. & Tanaka, K. (2022). Paraconsistent Logic. In E. N. Zalta & U. Nodelman (Eds.), *Stanford Encyclopedia Of Philosophy.* Online: https://plato.stanford.edu/entries/logic-paraconsistent/

Preiser, R. (2012). *The Problem of Complexity. Re-Thinking the Role of Critique* (Doctoral dissertation), Stellenbosch University. Online: www.academia.edu/2509675/The_problem_of_complexity_re-thinking_the_role_of_critique

Rittel, H. & Webber, M. (1973). Dilemmas in a General Theory of Planning. *Policy Sciences,* 4, 155–169. Online: https://doi.org/10.1007/BF01405730

Rohmann, C. (1999). *A World of Ideas.* Ballantine Books.

Rouse, M. (Ed.) (2020). Superposition. In *WhatIs.com Dictionary*. Online: https://whatis.techtarget.com/definition/superposition

Russell, B. (1912). *The Problems of Philosophy.* Oxford University Press.

Schrödinger, E. (1935). Die gegenwärtige situation in der quantenmechanik [The Present Situation in Quantum Mechanics]. *Naturwissenschaften,* 23(48), 807–812. Online: https://doi.org/10.1007/BF01491891

SimplexCT (2013, December 26). *Simplexity is the process by which nature strives towards simple ends by complex means. – Bruce Schiff* [Tweet]. X (formerly Twitter). Online: https://twitter.com/simplexCTnews

Smith, R. (2017). Aristotle's Logic. In E. N. Zalta & U. Nodelman (Eds.), *Stanford Encyclopedia of Philosophy*. Online: https://plato.stanford.edu/entries/aristotle-logic/

Stevenson, A. (Ed.). (2011). *Concise Oxford English Dictionary* (12th ed.). Oxford University Press.

Stuart, G. (2018, February 23). What Are Complex Problems? *Sustaining Community Blog.* Online: https://sustainingcommunity.wordpress.com/2014/11/06/complex-problems/

Wang, Y., Han, X. & Yang, J. (2015). Revisiting the Blended Learning Literature: Using a Complex Adaptive Systems Framework. *Journal of Educational Technology & Society,* 18(2), 380–393. Online: www.jstor.org/stable/jeductechsoci.18.2.380

Wilczek, F. (2010, March 4). *The J. Robert Oppenheimer Lecture: Anticipating a New Golden Age* [Video]. YouTube. Online: www.youtube.com/watch?v=914jzZ4LXcU&t=2887

Wilensky, G. (n.d.-a). The Crucial Role of Logic in Everyday Life. *Thought Academy Blog*. Online: https://thoughtacademy.com/reasoning-skills/the-crucial-role-of-logic-in-everyday-life/

Wilensky, G. (n.d.-b). The Importance of Logic in Effective Communication. *Thought Academy Blog*. Online: https://thoughtacademy.com/reasoning-skills/the-importance-of-logic-in-effective-communication/

This page intentionally left blank.

KOME – An International Journal of Pure Communication Inquiry Vol. 12. No. 1. (2024) • 19–34.
DOI: 10.17646/KOME.of.8

# Examining Trends and Effectiveness of Academic Institutions' Website Contents

Amare Tesfie Birhan*

* English Language Education, Bahir Dar University (Ethiopia), e-mail: amaretesfie@gmail.com

This research aimed to examine the trends in and effectiveness of website content on the websites of selected Ethiopian academic institutions. The data was gathered through content analysis and questionnaire and analysed through descriptive statistics (mean), One-Way ANOVA, and narration. The results confirmed that academic and research content were the strongest content categories compared to the other issues covered on the selected websites; and that program and office related content were the weakest ($\mu = 0.125$). According to the data, Addis Ababa, Hawassa, Bahir Dar and Harmaya universities respectively had better content management trends than the other universities. The data also demonstrated that there were significant statistical differences among the website content offered by different universities. Poor navigation systems, inadequate content, empty menus and sub-menus, inconsistent branding, spelling and grammatical errors, as well as untargeted content were some of the observed limitations of the selected website content. Moreover, the data confirmed that the majority of universities updated their websites infrequently. Thus, the study recommends that universities manage their websites well in order to enhance their visibility and reputation.

**Keywords:** effectiveness, communication, institutional promotion, trend, website

## Introduction

The advancement of Information Communication and Technology (ICT) has contributed to shifting paradigms in management style, communication, and organisational working culture, and has had an impact on the way we live, act, perceive, and observe the world. Various researchers (e.g. Peattie & Peters, 1997) mention that ICT has influenced organisations and their communication approaches, and contributed to information being disseminated to target groups in the easiest and most rapid ways. Mierzecka and

Suminas (2018) stated that the digital revolution has influenced the flow of information, making it a major cause of change in our lives (Adigwe, 2012).

Higher education institutions are among the organisations that have been impacted by the advancement of ICT. These institutions have been using various platforms, which include repository systems, journals, and magazines to disseminate research activities, facilitate teaching and learning processes, support community engagement activities, connect with their target audiences, and strengthen their partnerships. Currently, blogs, social media networks (Facebook, Telegram, Twitter, LinkedIn, Instagram, TikTok, and YouTube), websites, and professional networks are commonly used by higher education institutions to reach their target audiences. These platforms have also been used to support teaching and learning processes and to disseminate research projects (Delello et al., 2015; Csordás et al., 2014).

Websites are one of the technological platforms commonly used by experts and organisations to communicate their ideas, reach their target audiences, and attract partners, stakeholders, and other customers. They form the virtual face of institutes (Leite et al., 2016) and promote their identities and achievements (Birol & Hasan, 2014; Campoverde-Molina et al., 2021). It is also crucial to make informed decisions and to support and communicate the institute's missions, visions, and scholarship opportunities. Partners use websites to decide on partnership opportunities (Leite et al., 2016). Programs and faculties create websites to promote specific activities, initiatives, research projects, program educational objectives, student outcomes, services, and various types of engagements.

Websites are also used to earn the trust of partners and attract international and national students. It is understood that research based commercialization and partnership depend on the efficient flow of information. Accordingly, websites are labelled as the primary channel that higher education institutions have used to communicate with their audiences.

Currently, various kinds of websites are being designed and deployed by individuals and both governmental and non-governmental institutions, which use a variety of layouts, based on their interests, objectives, and target audiences. Some websites incorporate registrations, course management systems, and department selection information to make the processes easy and flexible. Likewise, other organisations use their website to enhance their credibility and help establish long-term relationships with their customers. This helps present a positive image and maintain a good reputation (Derani & Naidu, 2016), and is crucial in image-building and branding the institute's specific activities. According to Leite, Gonçalves, Teixeira and Rocha (2016), websites are important in understanding the needs of users and providing relevant information.

It should be noted, however, that having a website is not an end goal; institutions should attain their designed objectives, connect with their target users, and share their vision, mission, and values. To achieve the above-mentioned goals, website content has to be managed properly. Studies have indicated that there are a variety of contributors to an effective website, including the type of software that is used, the content, and its layout. According to Snell (2023), having high quality content, a clear purpose, simple and attractive design, easy navigation, fast loading, mobile-ready, and fresh content, and user-friendliness are some of the factors that determine a website's success or otherwise. Garett, Chiu, Zhang and Young (2016), on the other hand, indicated that navigation systems, graphical representations, content utility, purpose, simplicity, and readability determine the effectiveness of website content.

Among the above mentioned determinants, content is the major issue with a crucial role in the effectiveness of a website. In their research, Flavian, Gurrea and Orús (2009) stated that content should be clear, timely, and accurate, satisfying the information needs of customers. Moreover, the effectiveness of a website is also determined by visual consistency and language. Researchers, Merwe and Bekker (2003), Das and Turkoglu (2009) added that website content effectiveness is determined by usability, content quality, and navigation system (number of clicks). Besides this, Musante, Bojanic and Zhang (2009) also stressed that content includes all the features presented on the website. These proved that content uploaded on websites should be well-written and strategically managed. Content can also be deemed effective when it meets the information needs and expectations of the target group it is aimed at (Ford, 2011).

García, Carrillo-Durán and Tato-Jimenez (2017) have suggested that online communications should be handled strategically to reach the target partners and stakeholders. During the internationalisation period, universities have to handle their websites properly since they enhance visibility and reputation. Consequently, the aim of this research was to examine the trends of content coverage on the websites of Ethiopian public higher education institutions. It also focused on investigating the effectiveness of the content presented on various public university websites.

## Website content management

Content refers to anything that is uploaded to a website or other communication platforms. According to Barker (2016), "content is information produced through an editorial process and ultimately intended for human consumption via publication" (Barker, 2016, p. 35). It is modelled, authored, edited, reviewed, and approved by experts. Quality content helps to attract and retain customers. Elsayed (2017) also stated that content quality is more important than quantity. Therefore, it is suggested that content should be managed through a software package or manually. Public higher education partners strengthen their engagement and support based on information and activities that are disseminated through websites and other social media platforms.

Thus, it is believed that content needs to be planned, drafted, and edited, and particular attention has to be given to the corporate content that is designed and transferred (Taiminen et al., 2015). Thelwall (2000) also asserted that poorly managed website content gravely limits the usefulness of the website in question.

As stated above, various organisations create websites to promote their services and products. In Ethiopia, there are more than 50 public higher education institutions that have designed websites with the assumption they will reach their target groups; and recently, various public universities have been working towards internalisation visibility and program accreditation. It is believed that websites have a major role in disclosing the institutes' activities, program-level facilities, program educational objectives, and other related information.

Through the differentiation principle, universities are grouped into research, applied, comprehensive, technical and vocational, and technology universities. In their strategic document (2020) the Federal Democratic Republic of Ethiopia's Ministry of Education, formerly known as the Ministry of Science and Higher Education (MOSHE), stated that the differentiation of public higher education institutions was done to meet the growing and diversified needs, to minimise the duplication of efforts, and to enhance innovation and technological development through the creation of specialised centers of excellence. Accordingly, these differentiations have encouraged public universities to reach partners and other stakeholders more than previously, and allowed them to attract international and domestic students to enrol. Khwaja et al. (2020) indicated that websites impact applicants and fellowship programs. Hence, websites have an indispensable role in reaching their target groups and communicating institutional activities.

However, it was observed that most universities have not managed their website content well; the absence of targeted, reliable, and purposeful content has contributed to the shift of readers' attention to various social media platforms (Facebook, LinkedIn, Telegram, X [formerly Twitter], etc.), which create bad experiences for users as a result of various factors. Firstly, these platforms did not provide adequate information. Secondly, the content that was presented on social media was not trustworthy, nor did it fulfil various standards for high quality content. Most higher education institutions have used these social media platforms to make various announcements, and to share news and short articles.

Consequently, the researcher argues that these universities should carefully design their website content according to their mission, vision, and target groups. García, Carrillo-Durán and Tato-Jimenez (2017) also mentioned that the simple existence of a website does not guarantee that it will achieve any of the objectives. Difficulties in obtaining information about programs deter potential partners and stakeholders (Cheng et al., 2023). In Ethiopia, while the conceptions of the importance of websites have changed, gaps can still be observed; the designed content has not satisfied the information needs of the intended target groups. Jeong, Oh and Gregoire (2003) stated that information satisfaction was a major focus of attention for consumers, hence the shift in their attention to the social media platforms.

Accordingly, investigating the content that is embedded in websites and its effectiveness seemed crucial; and consequently, this research was aimed at examining trends in Ethiopian public higher education website content coverage. The research also examined the effectiveness of that content on the websites. Although recently, various researchers (e.g. Mueller, 2015; Elsayed, 2017; Kent et al., 2003; Gomez & Chalmeta, 2011) have investigated the effectiveness of website content; they did not observe the trends in coverage and the effectiveness of public university website content. This research, therefore, was conducted to add some ideas to the limited literature on content coverage trends and the effectiveness of Ethiopian public higher education website content.

With that objective in mind, this research attempted to answer the following research questions.

- Which content frequently occurs on Ethiopian public higher education websites?
- Was the content coverage on the universities' websites effective?
- Is there any significant statistical difference among the quality of the content on the websites of universities?

# Methodology

## *Research design*

The main aim of this research was to investigate the trends in content of public higher education institution websites. Additionally, the research examined the effectiveness of the content of those websites. Accordingly, cross-sectional design was used for the research in which data were gathered within a set period. Cross-sectional research design is used to collect current attitudes, opinions, and beliefs (Creswell, 2012), and is thought to describe the existence of certain conditions. Thus data were collected from university websites based on the information available at the time of the data collection.

## *Data source and instrument*

### Data source

As indicated above, university websites were the main sources for this study. Website contents were collected from 16 Ethiopian universities, and they were grouped into four categories based on their year of foundation: first generation, second generation, third generation, and fourth generation; as in the classification outlined by Manaze and Ford (2021), with first-generation universities having been established before 2007, second-generation universities in 2007, third-generation universities in 2011, and fourth-generation universities in 2016.

For each generation, four universities were selected through a random sampling technique. In addition, users (in this research, students) who were selected through the availability sampling technique were also used as a source of data for the study. Accordingly, 24 students (18 male and 6 female) were selected to review the sampled university websites and to reflect their views based on certain criteria (see the appendix section).

These students were taking part in various education programs while this study was being conducted. Participants were also oriented regarding the purpose of and procedures for reviewing the selected websites, and of the criteria used. The review was performed in the 2022–2023 academic years.

## Instrument

Questionnaire and content analysis were used as data-gathering instruments. The questionnaire was used to gather data regarding the effectiveness of university website content. This instrument was prepared through a five-point Likert scale ranging from 5 to 1 (5 strongly agree, 4 agree, 3 slightly agree, 2 disagree, 1 strongly disagree). This instrument focused on the navigation system, adequacy of content, branding consistency, availability of informative content, date contents are updated, presence of particular content, and so on.

The items were adapted from researchers such as Veríssimo et al. (2022) and Leite, Gonçalves, Teixeira and Rocha (2016). As stated above, the researcher gave a brief orientation to participants concerning the websites and the criteria they would use to evaluate the selected websites. In this research, the effectiveness of the websites was determined by the presence of adequate, precise, objective, recent, error-free, and downloadable content. Whether the websites included an easy navigation system and easily accessible information was also taken into account.

The second instrument was content analysis, which was used to examine the trends of website content coverage at Ethiopian public universities. Major trends were taken and coded into 1 or 0 in which 1 was given if a website included contents in the menu and sub-menus and 0 if the menus were empty (there was no content uploaded). Besides this, a code sheet was prepared to categorise items of content as adequate, consistent, and various other qualities.

## *Data analysis*

Quantitative data were analysed using descriptive statistics (mean) and One-Way ANOVA through IBM SPSS version 21. The mean was employed to investigate the significant trends in the website content and the frequency with which they occurred. First, the major website content categories were identified according to their occurrence. Second, a comparison of the selected content was made based on the generation of the university. The second data analysis technique was One-Way ANOVA. This test was used to analyse the effectiveness of Ethiopian university content. The qualitative data was analysed qualitatively. The qualitative data were familiarised, coded, thematized, and analysed through narration.

# Results and discussion

## *Results*

In this section, the results that were found through the questionnaire and content analyses are presented. The results are addressed based on the themes of major trends, and effectiveness.

## Major trends in Ethiopian university website content

The principle purpose of this research was to examine the major trends in website content. Table 1 indicates that university websites showed some elements of commonality, despite the inadequacy of the content coverage.

As can be seen in the table, *about us* (μ = 1) was the first content to be covered in the majority of university websites, which indicated that universities communicated their vision, mission, and values through their website. Similarly, *research* content was the other major trend (μ = 1) to be commonly implemented by universities. Universities used this menu to promote their thematic areas, ongoing projects, publications, and technology-transferred issues. Other content areas that occurred frequently were *news* (μ =.937) and *academics* (μ =.937). Based on these results, it can be inferred that universities gave much attention to communication activities, including events that were staged. The data also attested to the use of websites by universities to promote their extant colleges, institutes, and faculties.

*Table 1:*
*Major trends of content on university websites*

| Content | Mean (μ) |
|---|---:|
| **News** | **.937** |
| Announcements | .75 |
| **About us** | **1** |
| **Academics** | **0.937** |
| Program | 0.125 |
| Admission | 0.312 |
| **Research** | **1** |
| Service | 0.687 |
| Partnership | 0.4 |
| Library | 0.467 |
| Offices | 0.125 |
| Administration | 0.466 |
| Students | 0.1875 |

*Source:* Compiled by the author.

Moreover, the table confirms that the majority of the universities used their website for *announcements* (μ = 75) of various events and *programs*. The other trend that occurred frequently concerned *service* related content (μ = 0.687). This menu is used to help promote services (ICT, legal aid, registrar, etc.) that are offered by the universities. It can also be seen that universities had the lowest coverage of content in relation to *partnership* (μ = 0.4) and *admission* (μ = 0.312). This demonstrated that university websites paid less attention to promoting partnerships and admission criteria to enhance their reputation and attract customers.

Furthermore, contents such as *programs* (μ = 0.125), *offices* (μ = 0.125), and *students* (μ = 0.1875) had low mean values respectively. This showed that universities did not promote student facilities, support, and activities. Although universities are expected to promote program-related content, the websites pay less attention to promoting the specific educational objectives, expected outcomes, internship and career opportunities of programs.

The researcher also computed descriptive statistics to observe the trends in content among the universities of particular generations. Table 2 indicated that first-generation universities had better trends in *news* (μ = 1), *announcements* (μ = 1), *about us* (μ = 1), and *academic issues* (μ = 1); whereas, the second-generation universities had trends in *news* (μ = 1), *announcements* (μ = 0.5), the institute's *mission, vision,* and *values*: *about us* (μ = 1), and *academics* (μ = 0.75).

*Table 2:*
*Trends in university website content by generation*

| **Contents** | First-generation universities M | Second-generation universities M | Third-generation universities μ | Fourth-generation universities μ |
|---|---|---|---|---|
| News | 1 | 1 | 0.75 | 1 |
| Announcement | 1 | 0.5 | 0.75 | 0.75 |
| About us | 1 | 1 | 1 | 1 |
| Academics | 1 | 0.75 | 1 | 1 |
| Program | 0.25 | – | – | – |
| Admission | 0.5 | 0.25 | 0.25 | 0.25 |
| Research | 1 | 1 | 1 | 1 |
| Service | 0.75 | 0.75 | 0.75 | 0.5 |
| Partnership | 0.66 | 0.25 | 0.25 | 0.5 |
| Library | 1 | 0.66 | – | 0.25 |
| Offices | – | 0.25 | – | 0.25 |
| Administration | 0.25 | 0.5 | 0.33 | 0.75 |
| Students | 0.05 | – | 0.25 | – |
| Mean | 0.705 | 0.659 | 0.52 | 0.604 |

*Source:* Compiled by the author.

Regarding the third-generation universities, the table demonstrates that *news content* (μ = 1), *announcement* (μ = 0.5), *about us* (μ = 1), and *academics* (μ = 0.75) were the common trends. Concerning fourth-generation universities *news* (μ = 1), *announcement* (μ = 0.75), *about us* (μ = 1), and *academics* (μ = 1) content occurred frequently.

In these four content categories, first-generation universities had better trends than other-generation universities.

Another content category found on the universities' websites was *program* related content. However, as Table 2 indicates, this was only a trend at first-generation universities ($\mu = 0.25$). Likewise, concerning *admission,* first-generation universities had a better trend ($\mu = 0.5$) than second, third, and fourth-generation universities ($\mu = 0.25$). The table shows that universities had similar trends in research content management ($\mu = 1$). The other focus was content related to *services*. The result showed that apart from fourth generation universities ($\mu = 0.5$), all other generations (first, second, and third) had ($\mu = 0.75$), indicating that their coverage was similar for *service*-related contents.

Regarding *partnership,* first-generation universities ($\mu = 0.66$) and fourth-generation universities ($\mu = 0.5$) respectively had better content coverage trends. However, second-generation and third-generation universities had the lowest ($\mu = 0.25$) partnership content coverage. These showed that while universities had experience (related to foundation history), they did not give attention to content related to *partnership.* Concerning libraries, first-generation universities had a stronger trend ($\mu = 1$) than other-generation universities. Likewise, second-generation universities had ($\mu = 0.66$) trends that were better than fourth and third-generation universities. However, third-generation universities did not have any trend regarding *library*-related content.

With regard to promoting the *services* offered by universities, with the exception of second ($\mu = 0.25$) and fourth generation ($\mu = 0.25$) universities, the others did not show any trend. Contents related to *administration,* fourth generation universities had a more marked trend ($\mu = 0.75$) than second-generation ($\mu = 0.5$), third-generation ($\mu = 0.33$), and first-generation ($\mu = 0.25$) universities.

## Effectiveness of university website content

The other objective of this research was to examine the effectiveness of university website content. As indicated in the literature, currency, navigation system, consistent branding, language, adequacy of contents and so on, contribute to the effectiveness of the website content.

Table 3 revealed that Addis Ababa had mean values of ($\mu = 4.54$) which proved that it managed the contents more effectively than other first-generation universities. Next, Hawassa ($\mu = 4.22$) and Bahir Dar ($\mu = 4.19$) universities had the highest mean values respectively. Based on the descriptive statistics results, it is clear that selected first-generation universities managed more effectively than the universities of other generations. The One-Way ANOVA result indicated that ($F$ (3, 15.63) = 5.46, $p$ =.002) there was a significant statistical difference among websites in content management.

*Table 3:*
*One-Way ANOVA results of website content management*

| Items | Universities | Mean | Df | between groups | Within the groups | f | Sig. |
|---|---|---|---|---|---|---|---|
| First-generation universities | Bahir Dar | 4.19 | 3 | 15.63 | 80.1 | 5.46 | .002 |
| | Addis Ababa | 4.54 | | | | | |
| | Hawassa | 4.22 | | | | | |
| | Harmaya | 4.18 | | | | | |
| Second-generation universities | Samara | 2.97 | 3 | 5.19 | 73.5 | 2.25 | .088 |
| | Wollo | 3.59 | | | | | |
| | Jigjiga | 3.00 | | | | | |
| | Dire Dawa | 3.00 | | | | | |
| Third-generation universities | Wolkite | 1.81 | 3 | 16.9 | 73.1 | 6.48 | .001 |
| | Arsi | 2.91 | | | | | |
| | Assosa | 2.60 | | | | | |
| | Debre Tabour | 2.35 | | | | | |
| Fourth-generation universities | Werabe | 2.72 | 3 | 1.67 | 82.40 | .568 | .638 |
| | Injibara | 2.79 | | | | | |
| | Debark | 2.42 | | | | | |
| | Bonga | 2.74 | | | | | |

*Source:* Compiled by the author.

The content analysis also proved that though these universities had good content management trends, several gaps were found in the content on their websites. For instance, the following statement was found from one of the above mentioned universities, published in the latest news section: "*It was a big moment of togetherness finding big names of xxx at a wedding ceremony organized by one of their colleague. ....Some of them came from abroad and some from distant places for the event. Almost all of them have served xxxx for over 25 years diligently in upbringing qualified graduates at the former xxxx College and the latter xxx.*" In addition to the grammatical issues, it was also not significant enough to be put as a headline or as news.

Moreover, there were various outdated items of news that had been posted on the front page of the website in 2017, 2018, and 2019. Additionally, among the other failings observed were outdated content, an empty menu, inconsistent branding; repetitive, inadequate, and inappropriate content, and awkward navigation systems.

Concerning second-generation universities, the data showed that Wollo University ($\mu$ = 3.59) had the best content management trends among the selected universities. Jigjiga and Dire Dawa universities had similar mean values ($\mu$ = 3.00). In this category, Samara University showed the lowest *content management* mean ($\mu$ = 2.97). Based on these results, apart from Samara University, the other universities had moderate content management trends. However, the One-Way ANOVA results also showed that ($F$ (3, 1.67), = 2.25, $p$ =.088 there was no significant statistical difference between the universities.

The content analysis data also demonstrated that these university websites had various content coverage problems. The results confirmed that the selected universities had difficult navigation systems, empty menus and sub-menus, inappropriate (unfocused) messages, spelling and grammatical errors, unfocused and unarticulated content. In addition, it was also observed that the hyperlinks given in the websites were not working properly. The following excerpts are taken from the websites. Look at the following message which was taken from the university website.

Excerpt 1: *Sponcership* [sic] *application*

Excerpt 2: "*It is my gratitude to deliver my message in such historical and unforgettable graduation ceremony, as of which it is a special occasion when you see a sense of accomplishment mixed with no small measure of relief too...*" [sic]

This excerpt was labelled as a message from the academic vice president. However, they were not edited well and lacked proofreading.

Regarding third-generation universities, as can be seen in Table 3, Arsi University had ($\mu$ = 2.91) which was the highest of all the universities. Next, Assosa University had ($\mu$ = 2.60) which was the second highest mean. From this generation, Wolkite University and Debre Tabour Universities had the lowest mean values ($\mu$ = 1.81) and ($\mu$ = 2.35) respectively. It is thus evident that these universities had poor content management trends. It can be also seen that there was a great difference among the second-generation universities. The One-Way ANOVA results also showed ($F$ (3, 16.9), = 6.48, $p$ =.001 which confirmed that there was a significant statistical difference among these universities.

Concerning the content analysis data, the results revealed that the universities had very similar content management gaps, for example, inconsistent branding and a lack of adequate information about the educational objectives and outcomes of programs were observed on the Arsi University website. Besides that, admission and graduation criteria were not mentioned and some of the main menus (e.g. students) had no content. At Wolkite University, most of the main menus had no content; there were poor navigation systems and inadequate content. Most of the content was outdated, and the typeface used was inconsistent. The Debre Tabour University website had the same limitations. In general, these university websites were not effective in attracting users.

Related to the fourth-generation university websites, the table shows that three of them, Injibara ($\mu$ = 2.79), Bonga ($\mu$ = 2.74), and Werabie ($\mu$ = 2.72) had similar mean values. However, Debark University showed the lowest mean value ($\mu$ = 2.42) which demonstrates that the content was not effectively managed. The descriptive statistics also indicate that fourth-generation universities did not manage their websites well. The One-Way ANOVA results also indicated that ($F$ (3, 82.40), =.568, $p$ =.638 there were no significant statistical differences among the universities.

The content analysis also affirmed that university website content was inadequate, outdated, and irrelevant, and that various menus and sub-menus did not have any content. For instance, the Bonga University website had an inconsistent typeface, inadequate program-related content, an empty menu and submenus, and repetition of content. Likewise, untargeted and inadequate content, empty menus, and inconsistent branding were some of the gaps that were identified on the Werabe University website,

Whereas, the Injibara University website had inadequate, outdated, and mixed-up (*announcement* and news) contents, and lack of *searching box (option)* on the front page was the other identified gaps. The other website was Debark University website. This website could be accessed easily, but it had inadequate and outdated content like other university websites Most of the menus had no content. Based on the content analysis and questionnaire results, these universities did not manage their website contents effectively.

Furthermore, the researcher also ran the same test (One-Way ANOVA) to observe if there was any significant statistical difference between universities of different generations. Accordingly, Table 4 indicates that first-generation universities had a better mean value (μ = 4.089). Second, universities that are found in the second generation had the next highest mean value (= 3.14). The fourth- and third-generation universities had (μ = 2.64) and (μ = 2.35) had the lowest mean values respectively.

*Table 4:*
*One-Way ANOVA results for website content across different generations*

| Items | N | Mean | Df | Between groups | Within group | F | Sig. |
|---|---|---|---|---|---|---|---|
| First-generation universities | 22 | 4.089 | 3 | 34.221 | 38.205 | 31.260 | .000 |
| Second-generation universities | 22 | 3.14 | | | | | |
| Third-generation universities | 22 | 2.35 | | | | | |
| Fourth-generation universities | 22 | 2.64 | | | | | |

*Source:* Compiled by the author.

Based on the table, it is evident that first-generation universities managed their content more effectively than the others. Although the third generation had better foundation years and experience in teaching, research, and community service engagement, they managed content ineffectively. The One-Way ANOVA result also proved that there was a significant statistical difference ($F$ (3, 38.205), = .31.260, $p$ = .000) among websites of the different generations of universities.

## *Discussion*

The aim of this research was to examine the trends in the content coverage and effectiveness of Ethiopian public higher education institution websites. To achieve these objectives, data were gathered through a questionnaire and content analysis. Accordingly, the data confirmed that websites were covered by twelve (12) major content categories. Among these content items, those related to *mission, vision, values* (about us) and *research* were the most common trends on the public university websites. The other contents which had the highest mean values were *news* and *academics*. Based on these, it can be inferred that universities commonly promoted their institutions and academics (colleges, faculty, institutes, and schools) and gave coverage to new events.

In addition, only a few universities mentioned admission policies and criteria, and content related to partnerships and libraries were also below average. The data also revealed that universities rarely communicated detailed program objectives, outcomes, facilities, and offices. Besides this, the selected websites did not have an adequate trend in promoting student-related issues (clubs, extracurricular engagements, facilities, etc.). A study conducted by an institution called Hanover Research (2014) supported this finding and mentioned that content related to students was less effective. The findings of this research were also consistent with other research studies. For instance, Ford (2011) reported that among college websites included in that study, six websites had no navigation bars. The researcher also added that the majority of the websites presented general academic information. Manzoor et al. (2012) also reported that students were unable to access various items of information.

The other focus of this research was on comparing the content coverage trends among universities of different generations. As shown in Table 2, first-generation universities had better content coverage than other universities. With the exception of two categories of content (*administration*, *students*), universities which are found in this generation had better content coverage. The data also showed that second- and fourth-generation universities had very similar content coverage trends. However, the third-generation universities had the lowest content coverage trends. These findings were consistent with Katirci's (2016), who mentioned that websites belonging to different universities had different content coverage trends. Nevertheless, this result was inconsistent with Ertuğrul and Özcil's (2018) study in which they concluded that there was no differentiation between the universities.

Another aim of this research was to examine the effectiveness of website content. The mean values of third and fourth-generation universities proved that there was a lack of trends in controlling and managing website content. Nevertheless, universities that are found in the first- and second-generation university categories had relatively better website content management trends. The data also confirmed that there were significant statistical differences among universities belonging to the second- and third-generation universities. The findings revealed that inadequacy and outdated content, empty menu and sub-menus, unfocused content, spelling and grammar mistakes, and inconsistent branding were some of the gaps that were identified on the selected websites. In conjunction with this finding, university websites had discrepancies in their level of effectiveness (Manzoor et al., 2012). In a similar manner, other research (e.g. Katirci, 2016; Hasan & Abuelrub, 2013) studies also confirmed that university websites had comparable limitations.

Finally, this research had the following implications. First, this study showed that universities paid less attention to contents related to students, admission, and partnership. Consequently, it is recommended that higher education institutions pay attention to content that helps to attract national and international students. Second, there was an observable difference among website content at the various universities. Thus, it is suggested that universities should incorporate content that gives information about the given university's research, community engagement, technology transfer, and teaching-learning practices. The research also indicated a number of gaps in the universities' websites. This research therefore recommends that special attention should be paid to content, layout, and navigation systems because these contribute to the lack of visibility for universities.

Although various attempts were made to answer the research questions, the study had the following limitations. The first limitation of this study was that the sample size was small–the research was self-funded, and it was difficult to include additional students who enrolled at the selected universities. The other limitation was that this study did not consider website designers and other computer science experts. The nature of the website for which it is designed affects the effectiveness of a particular website's content. The researcher therefore recommends that other researchers consider the above limitations when conducting further research.

## References

Adigwe, I. (2012). The Impact of Information and Communication Technology on News Processing, Reporting, and Dissemination on Broadcast Stations in Lagos, Nigeria. *Library Philosophy and Practice (e-journal)*, 861. Online: https://digitalcommons.unl.edu/libphilprac/861

Barker, D. (2016). *Web Content Management: Systems, Features and Best Practices*. Sebastopol: O' Reilly Media, Inc.

Birol, B., & Hasan, G. (2014). The Using of the Websites of the Universities for Universities for Prospective Students for the Purpose of Institutional Promotion. In *Proceedings of the International Social Sciences Congress,* Hopa, Turkey, October 2014, 15–17.

Campoverde-Molina, M., Luján-Mora, S., & Valverde, L. (2021). Accessibility of University Websites Worldwide: A Systematic Literature Review. *Universal Access in the Information Society,* 22, 133–168. Online: https://doi.org/10.1007/s10209-021-00825-z

Cheng, B., Kim, A., Zhu, I., & Mirza, R. (2023). Characterizing the Accessibility and Content of Surgical and Medical Retina Fellowship Program Websites. *Journal of Vitreo Retinal Diseases,* 7(1), 43–48. Online: https://doi.org/10.1177/24741264221120138

Creswell. J. (2012). *Educational Research: Planning, Conducting and Evaluating Quantitative and Qualitative Research*. Boston, MA: Pearson.

Csordás, T., Markos-Kujbus, É. & Gáti, M. (2014). The Attributes of Social Media as a Strategic Marketing Communication Tool. *Journalism and Mass Communication,* 4(1), 48–71.

Das, R. & Turkoglu, I. (2009). Creating Meaningful Data from Weblogs for Improving the Impressiveness of a Website by Using the Path Analysis Method. *Expert Systems with Applications*, 36(2), 6635–6644. Online: https://doi.org/10.1016/j.eswa.2008.08.067

Delello, J., McWhorter, R. & Camp, K. (2015). Using Social Media as a Tool for Learning: A Multi-Disciplinary Study. *International Journal on E-Learning,* 14(2), 163–180.

Derani, N., & Naidu, P. (2016). The Impact of Utilizing Social Media as a Communication Platform during a Crisis within the Oil Industry. *Procedia Economics and Finance,* 35(4), 650–658. Online: https://doi.org/10.1016/S2212-5671(16)00080-0

Elsayed, A. (2017). Web Content Strategy in Higher Education Institutions: The Case of King Abdulaziz University. *Information Development,* 33(5), 479–494. Online: https://doi.org/10.1177/0266666916671387

Ertuğrul, İ. & Özçil, A. (2018). The Content Analysis of the Internet Pages of the University's Faculty of Economics and Administrative Sciences. *Journal of Internet Applications and Management,* 9(1), 58–74. Online: https://doi.org/10.34231/iuyd.406125

Flavian, C., Gurrea, R. & Orús, C. (2009). Web Design: A Key Factor for the Website's Success. *Journal of Systems and Information Technology,* 11(2), 168–184. Online: https://doi.org/10.1108/13287260910955129

Ford, W. (2011). Evaluating the Effectiveness of College Websites for Prospective Students. *Journal of College Admission,* (212), 26–31. Online: https://eric.ed.gov/?id=EJ939063

García, G., Carrillo-Durán, M. & Tato Jimenez, J. (2017). Online Corporate Communications: Website Usability and Content. *Journal of Communication Management,* 21(2), 140–154. Online: https://doi.org/10.1108/JCOM-08-2016-0069

Garett, R., Chiu, J., Zhang, L. & Young, S. (2016). A Literature Review: Website Design and User Engagement. *Online Journal of Communication and Media Technologies,* 6(3), 1–14. Online: https://doi.org/10.29333/ojcmt/2556

Gomez, L., & Chalmeta, R. (2011). Corporate Responsibility in U.S. Corporate Websites: A Pilot Study. *Public Relations Review,* 37(1), 93–95. Online: https://doi.org/10.1016/j.pubrev.2010.12.005

Hanover Research (2014). *Trends in Higher Education Marketing, Recruitment, and Technology.* Online: www.hanoverresearch.com/media/Trends-in-Higher-Education-Marketing-Recruitment-and-Technology-2.pdf

Hasan, L. & Abuelrub, E. (2013). Common Usability Problems on Educational Websites. In *Proceedings of the International Conference on Education and Educational Technologies,* 172–177. Online: https://doi.org/10.46300/9107.2022.16.5

Harrison, S., Barlow, J. & Williams, G. (2007). The Content and Interactivity of Health Support Group Websites. *Health Education Journal,* 66(4), 371–381. Online: https://doi.org/10.1177/0017896907080123

Jeong, M., Oh, H., & Gregoire, M. (2003). Conceptualizing Website Quality and Its Consequences in the Lodging Industry. *International Journal of Hospitality Management,* 22(2), 161–175. Online: https://doi.org/10.1016/S0278-4319(03)00016-1

Katirci, H. (2016). Comparison of the Content of Web Sites of Higher Education Institutions Providing for Sports Management Education: The Case of Turkish and English Universities. *Educational Research and Reviews,* 11(8), 562–572. Online: https://doi.org/10.5897/ERR2016.2698

Kent, M., Taylor, M., & White, W. (2003). The Relationship between Website Design and Organizational Responsiveness to Stakeholders. *Public Relations Review,* 29(1), 63–77. Online: https://doi.org/10.1016/S0363-8111(02)00194-7

Khwaja, A., Du, P., & Sherman, N. (2020). An Update on Foot and Ankle Fellowship Website Content and Accessibility. *Foot and Ankle Orthopedics,* 5(1), 1–6. Online: https://doi.org/10.1177/2473011420912957

Leite, P., Gonçalves, J., Teixeira, P., & Rocha, A. (2016). A Model for the Evaluation of Data Quality in Health Unit Websites. *Health Informatics Journal,* 22(3), 479–495. Online: https://doi.org/10.1177/1460458214567003

Macancela, J. (2019). Websites as Support Tools for Learning the English Language. *Journal of Science and Research,* 4(2), 13–20. Online: https://doi.org/10.5281/zenodo.3240648

Manaze, M., & Ford, A. (2021). Campus Climate for Diversity and Students' Sense of Belonging in Ethiopian Public Universities. *Educational Planning,* 28(4), 5–24.

Manzoor, M., Hussain, W., Ahmed A., & Iqbal, J. (2012). The Importance of Higher Education Websites and Its Usability. *International Journal of Basic and Applied Sciences,* 1(2), 150–163. Online: https://doi.org/10.14419/ijbas.v1i2.73

Merwe, R., & Bekker, J. (2003). A Framework and Methodology for Evaluating e-Commerce Web Site. *Internet Research,* 13(5), 330–341. Online: https://doi.org/10.1108/10662240310501612

Mierzecka, A., & Suminas, A. (2018). Academic Library Website Functions in the Context of Users' Information Needs. *Journal of Librarianship and Information Science,* 50(2), 157–167. Online: https://doi.org/10.1177/0961000616664401

Ministry of Science and Higher Education (2020). *Higher Education Policy and Strategy.* Addis Ababa, Ethiopia.

Mueller, C. (2015). Evaluating the Effectiveness of Website Content Features Using Retrospective Pretest Methodology: An Experimental Test. *Evaluation Review,* 39(3), 283–307. Online: https://doi.org/10.1177/0193841X15582142

Musante, M., Bojanic, D. & Zhang, J. (2009). An Evaluation of Hotel Website Attribute Utilization and Effectiveness by Hotel Class. *Journal of Vacation and Marketing,* 15(3), 203–215. Online: https://doi.org/10.1177/1356766709104267

Peattie, K., & Peters, L. (1997). The Marketing Mix in the Third Age of Computing. *Marketing Intelligence and Planning,* 15(3), 142–150. Online: https://doi.org/10.1108/02634509710165948

Snell, S. (29 May, 2023). Characteristics of a Good Website: Qualities of Effective Web Design. Vandelay Design. Online: www.vandelaydesign.com/characteristics-of-a-good-website/

Taiminen, K., Luoma-aho, V. & Tolvanen, K. (2015). The Transparent Communicative Organization and New Hybrid Forms of Content. *Public Relations Review,* 41(5), 734–743. Online: https://doi.org/10.1016/j.pubrev.2015.06.016

Thelwall, M. (2000). Effective Websites for Small and Medium-Sized Enterprises. *Journal of Small Business and Enterprise Development,* 7(2), 149–159. Online: https://doi.org/10.1108/EUM0000000006836

Veríssimo, F., Raposo, D., Barradas, V., Neves, J., Silva, J., Martins, N. & Brandao, D. (2021). A Checklist Proposal to Evaluate the Quality of University Websites. *Advances in Design and Digital Communication II. International Conference on Design and Digital Communication,* 134–145. Online: https://doi.org/10.1007/978-3-030-89735-2_12

KOME − An International Journal of Pure Communication Inquiry Vol. 12. No. 1. (2024) • 35–60.
DOI: 10.17646/KOME.of.10

# Exploring the Relationship between Consumer Knowledge and Skepticism towards Pro-Environmental Advertising: An Empirical Investigation

Jinhee Lee,* Hyuk Jun Cheong**

* School of Communication, Journalism, and Media, Central Michigan University, 1200 S Franklin Street, Mt Pleasant, MI 48859 USA

** Department of Media Communication, Inje University, 197, Inje-Ro, Gimhae-Si, Gyeongsangnam-Do, 50834 Republic of Korea

This study investigates the potential impact of consumer knowledge on inclination toward skepticism about pro-environmental advertising. Using the Persuasion Knowledge Model (PKM), the research explores the intricate interplay between three facets of consumer knowledge: persuasion, agent and topic knowledge, and consumer skepticism of pro-environmental advertising. The study also examines whether individuals' prior experience of pro-environmental advertising and eco-friendly products contribute to the development of the three dimensions of consumer knowledge. Researchers administered online surveys to a cohort of U.S. consumer panellists, and subsequently subjected the gathered data to structural equation modelling. The research found that consumers with a heightened acumen in persuasion, agent, and topic knowledge exhibit a notably diminished degree of skepticism toward pro-environmental advertising. Additionally, individuals' antecedent interactions with pro-environmental products enhance the depth of all three dimensions, whereas prior exposure to pro-environmental advertising appears predominantly to bolster persuasion knowledge alone.

**Keywords:** persuasion knowledge model, consumer knowledge, pro-environmental advertising, pro-environmental products, green advertising, advertising skepticism

## Introduction

Consumer skepticism towards pro-environmental advertising poses a significant challenge to companies wishing to promote their environmentally friendly products, including energy-saving, non-toxic, recycling/recycled and reusable products (Chang, 2011; Gleim et al., 2013; Johnstone & Tan, 2015). This skepticism stems from consumers' doubts about the trustworthiness of pro-environmental advertising messages and their negative perception of advertisers' motives in creating such ads (Mohr et al., 1998; Obermiller & Spangenberg, 1998); and leads to negative attitudes toward the advertised products and advertising itself, as well as reduced purchase intentions (Chang, 2011; Chen & Leu, 2011; Ktisti et al., 2022).

Using the Persuasion Knowledge Model (PKM), previous studies have attempted to explain why consumers are skeptical about various types of advertising, including pro-environmental advertising. The PKM explains how consumers use their persuasion-related knowledge, including persuasion, agent and topic knowledge, to evaluate a persuasive message and decide whether to accept or resist it (Friestad & Wright, 1994; Jain & Purohit, 2022; Voorveld et al., 2023). Research has shown that high levels of persuasion knowledge enable consumers to recognise inappropriate advertising tactics, such as manipulation and deception, and to identify the selling purpose conveyed in advertising (Brinson et al., 2023; Costa Filho et al., 2023; Dahlén, 2005; Jain & Purohit, 2022; Scott et al., 2013). Consequently, consumers with a high level of persuasion knowledge tend to view advertising messages with skepticism, especially regarding advertisers' motives and the trustworthiness of the message (Brinson et al., 2023; Costa Filho et al., 2023; Li-Shia et al., 2023).

However, it is important to note that consumers' persuasion knowledge may also encompass positive aspects of advertising, such as providing useful information (Isaac & Grayson, 2017; 2020). Some research has shown that consumers with high levels of persuasion knowledge may respond more positively to attempts to persuade, recognising credible tactics and genuine motives, which can lead to more favourable attitudes and subsequent purchasing behaviour (Isaac & Grayson, 2017; 2020). Furthermore, a recent meta-analysis found that persuasion knowledge does not necessarily suppress or reduce the effects of attempts to persuade (Eisend & Tarrahi, 2022). Thus, a more nuanced approach to understanding persuasion knowledge in the context of pro-environmental advertising is required, one which considers consumers' awareness of the positive aspects of advertising, such as educating consumers and introducing new products, to better understand how positive persuasion knowledge can influence consumer skepticism.

The principal aim of this scholarly investigation is to introduce an innovative approach to the study of persuasion knowledge, with a particular emphasis on its connection to skepticism concerning advertising, specifically within the context of pro-environmental advertising. Furthermore, this study incorporates the two additional facets of consumer knowledge, as conceptualised by Friestad and Wright (1994), namely agent knowledge and topic knowledge. It is posited that consumers deploy all three dimensions of persuasion-related knowledge in their efforts to navigate the complexities of advertising messages. Additionally, this research seeks to delve into the impact of consumers' exposure to pro-environmental advertising and their interactions with pro-environmental products at the levels of persuasion, agent and topic knowledge. It is noteworthy that these research domains have received relatively limited attention within the scholarly discourse, and the present investigation holds the potential to contribute substantial insights to the extant body of literature on the PKM and pro-environmental advertising.

In pursuit of these research objectives, the present study endeavours to investigate the following research questions:

> **RQ1:** What is the influence of an individual's persuasion-related knowledge of pro-environmental advertising on their skepticism of pro-environmental advertising and products?
> **RQ2:** How do pre-existing attitudes towards pro-environmental advertising or products affect an individual's agent, persuasion and topic knowledge of pro-environmental advertising?

Through its exploration of these research questions, this study may have both theoretical and practical implications. Firstly, the findings may enhance the existing literature on advertising effectiveness, brand attitudes and purchase intentions of pro-environmental products. Secondly, the results may also be useful to managers who are marketing pro-environmental products through advertising and other forms of marketing communication, including product placement and publicity, in their respective target markets. Moreover, the present research delves into the nuanced impact of individuals' heterogeneous degrees of persuasion knowledge on the reception and assimilation of persuasive messages. This inquiry is conducted through a meticulous examination of consumers' proclivity for accepting advertising, coupled with an intricate juxtaposition of the tenets of the PKM, alongside other foundational theoretical frameworks that underpin the domain of advertising acceptance. This distinctiveness not only demarcates the current research from extant investigations into pro-environmental advertising skepticism, but also imbues it with a palpable sense of novelty, thereby enriching the scholarly discourse within this field of study.

## Consumer skepticism in pro-environmental advertising

The phenomenon of consumer skepticism in the context of pro-environmental advertising has garnered considerable scholarly attention in recent years. According to Mohr et al. (1998) and Obermiller & Spangenberg (1998), consumer skepticism is characterised by a lack of trust in the credibility of pro-environmental messages, coupled with negative perceptions of the underlying motives of advertisers. In this regard, consumers often harbour doubts about the accuracy of general environmental claims (such as *eco-friendly*) and question whether such claims truly reflect the environmental benefits of the advertised products (Gong & Wang, 2023; Gleim et al., 2013; Kang & Atkinson, 2021; Luo et al., 2020; Mayer et al., 1993). Moreover, consumers are wary of potentially misleading or false information in pro-environmental advertising, which may lead them to overestimate the environmental benefits of the promoted brands (Gong & Wang, 2023; Ktisti et al., 2022; Newell & Goldsmith, 1998). This prevailing lack of confidence in the trustworthiness of advertising information contributes significantly to consumer skepticism of pro-environmental advertising.

Additionally, consumer skepticism extends to the underlying motives of companies engaging in pro-environmental advertising. As Romani et al. (2016) and Vries et al. (2015) note, the pro-environmental initiatives of companies may stem from either *self-serving motives* (such as profit maximisation) or *other-serving motives* (such as protecting the environment). However, some consumers perceive self-serving motives as the primary corporate objective, given that most companies seek to maintain their bottom line (Manuel et al., 2012; Yu, 2020). Thus, when companies highlight their other-serving motives in pro-environmental advertising, it can make some consumers uncomfortable, as they question whether the company is concealing its self-serving motives (Ktisti et al., 2022; Vries et al., 2015). This prevailing skepticism of the motives of companies in pro-environmental advertising adds to the negative perceptions of consumers and increases their distrust in pro-environmental advertising.

Consequently, consumer skepticism has a considerable impact on purchasing behaviour in the context of pro-environmental advertising. Chang (2011), Chen & Leu (2011), and Shrum et al. (1995) have found that high levels of consumer skepticism result in negative responses towards pro-environmental advertising, and this, in turn, leads to decreased purchasing behaviours. Consumers who exhibit high levels of skepticism are more likely to avoid pro-environmental advertising altogether, and even if they do encounter such advertising, they tend to have ambiguous attitudes towards pro-environmental products (Chang, 2011; Ktisti et al., 2022). Thus, high levels of skepticism among consumers have been found to reduce their willingness to purchase the advertised products (Kim et al., 2016; Kristi et al., 2022).

Regarding the question of who exhibits skepticism towards pro-environmental advertising, previous studies have utilised demographic, psychographic and behavioural factors for identification. For instance, Shrum et al. (1995) and Zinkhan and Carlson (1995) contended that consumers embracing pro-environmental products tend to be skeptical of pro-environmental advertising. This skepticism arises from their ability to discern misleading messages and uncover the hidden motives of advertisers based on their past experience of such products. On a different note, Yu (2020) suggested that men display more skepticism towards pro-environmental advertising compared to women. This difference is attributed to the psychological tendency of women to be more concerned about family and the environment. Similarly, Lee and Haley (2022) discovered that younger consumers exhibit higher levels of skepticism and more negative attitudes towards pro-environmental advertising than their older counterparts. This inclination is linked to the limited opportunities younger consumers have had to learn about the benefits of using pro-environmental products. In conclusion, consumer skepticism towards pro-environmental advertising varies depending on their demographics, psychographic characteristics and behaviours related to the consumption of pro-environmental products.

Skepticism towards advertising has also been a subject of rigorous examination from various theoretical perspectives. In the realm of conceptual dimensions, advertising skepticism is construed as an autonomous and multifaceted construct, exhibiting notable variability among individuals (Joireman et al., 2018; Obermiller & Spangenberg, 1998). This variability is contingent upon personal attributes, prominently including cynicism as a pivotal determinant. To elucidate, individuals harbouring a disposition characterised by heightened cynicism tend to manifest an elevated degree of skepticism towards the persuasive messages embedded within advertisements, in stark contrast to their less cynical counterparts (Mohr et al., 1998). This discernment extends to the context of green advertising, wherein individuals who display heightened environmental concern tend to exhibit a more skeptical stance towards commercial messages in general (do Paço & Reis, 2012; Mohr et al., 1998).

Personality traits also assume a significant role in shaping green advertising skepticism. Customers characterised by a proclivity for greater openness, defined as a propensity to embrace novel ideas and experiences, tend to exhibit a diminished degree of skepticism about advertisements in general (Srivastava et al., 2021). Moreover, individuals characterised by heightened levels of agreeableness, conscientiousness and openness demonstrate a reduced inclination towards skepticism in the context of green advertising and related products (Duong, 2022).

In addition to cynicism and personality traits, an individual's inclination towards advertising skepticism is influenced by their level of advertising literacy, which reflects their ability to critically analyse advertisements and discern their underlying motives and mechanisms (O'Donohoe & Tynan, 1998). This signifies that individuals possessing a heightened degree of advertising literacy tend to exhibit greater levels of skepticism towards advertising messages (Raziq et al., 2018; Shen et al., 2016). The impact of advertising literacy on advertising skepticism is particularly noteworthy, as the literature notes that consumers often grapple with the complexity of the green terminology that is often employed in environmentally friendly advertisements, including terms such as *biodegradable, carbon neutral* and *smart energy,* which are known to induce confusion among consumers (do Paço & Reis, 2012; Murphy et al., 2010).

Within the realm of attitudinal dimensions, advertising skepticism exerts a detrimental impact on the formation of positive consumer attitudes (Raziq et al., 2018). Specifically, harbouring doubts about the credibility of advertising messages leads consumers to perceive such messages as untrustworthy (Obermiller et al., 2005), ultimately prompting them to avoid advertising content (Baek & Morimoto, 2012). Raziq et al. (2018) establish that a negative association exists between skepticism towards advertising and consumers' attitudes towards brands. This association is mediated sequentially by variables such as brand image, the credibility of advertisements and consumers' attitudes towards advertisements. Furthermore, these attitudes towards the advertised brands, which evolve through this process, diminish customers' intentions to purchase the said brands (Chen & Leu, 2011; Joireman et al., 2018). This unfavourable pattern is particularly pronounced in the context of corporate social responsibility (CSR) campaigns, including green advertising initiatives (Yang & Hsu, 2017).

Unfavourable attitudes towards brands, stemming from customers' skepticism towards green advertising, may also be influenced by a multitude of factors. These factors encompass personal engagement with the issue of environmental protection (do Paço & Reis, 2012; Tee et al., 2022), prior experience of green products (DeLorme et al., 2009; Shrum et al., 1995), and pre-existing predispositions concerning environmental concerns (Sherif & Hovland, 1961). For example, individuals who demonstrate a heightened awareness of environmental issues and regularly engage in green consumer behaviour exhibit an enhanced ability to differentiate between brands that genuinely dedicate their efforts to environmental preservation by developing and marketing eco-friendly products and companies merely engaged in superficial *greenwashing* campaigns, which involve the dissemination of misleading or false environmental claims (Carlson et al., 1993). Furthermore, factors such as the perceived reputation of the company (Ho et al., 2017), the attractiveness and expertise of the advertising model (Anderson, 1971; Ohanian, 1990; 1991), and the framing of messages within advertisements (Yang & Hsu, 2017) also contribute significantly to the formulation of unfavourable brand attitudes within the context of green advertising skepticism.

## The impact of consumer knowledge on skepticism towards pro-environmental advertising

### *Persuasion knowledge*

Persuasion knowledge, referring to consumers' understanding of specific persuasive tactics, has been widely recognised as a critical factor in helping individuals detect and comprehend persuasive attempts in advertising (Jain & Purohit, 2022; Raska et al., 2015; Voorveld et al., 2023). Scholars have also acknowledged that individuals with higher levels of persuasion knowledge are better equipped to evaluate the appropriateness of advertising strategies and tactics compared to those with lower levels of such knowledge (Brinson et al., 2023; Costa Filho et al., 2023; Patwardhan & Patwardhan, 2016). For instance, individuals with higher persuasion knowledge can more effectively identify misleading or manipulative advertising messages and protect themselves against them (Friestad & Wright, 1994; Jain & Purohit, 2022; Li-Shia et al., 2023; Patwardhan & Patwardhan, 2016).

However, prior research has mainly focused on the role of persuasion knowledge in detecting inappropriate advertising tactics and its potentially negative effects (Rahman et al., 2015; Li-Shia et al., 2023). The PKM, on the other hand, emphasises that consumers' pre-existing knowledge of persuasion in general influences their decisions to accept or reject specific persuasive messages, including advertising (Friestad & Wright, 1994). This suggests that the impact of persuasion knowledge on consumer behaviour may vary depending on the type of advertising and the specific persuasion knowledge that consumers possess.

Recent studies have challenged the notion that persuasion knowledge leads to consumer skepticism of advertising, as the credibility of persuasive attempts can be enhanced when consumers perceive them as believable (Isaac & Grayson, 2017; 2020). Additionally, consumers may be more willing to purchase products promoted through advertorials, which provide necessary information, compared to traditional advertising, even when they recognise that both forms of communication are intended to sell (Attaran et al., 2015). Thus, the effect of persuasion knowledge on consumer skepticism of advertising is not a foregone conclusion.

In the context of pro-environmental advertising, the direction of persuasion knowledge, whether positive or negative, may play a critical role in shaping consumers' skepticism of such advertising. Specifically, consumers who possess positive persuasion knowledge may be less skeptical of pro-environmental advertising if they believe that such advertising provides useful information about the environmental benefits of the advertised product. Based on this reasoning, the following hypothesis is proposed:

**H1:** Positive persuasion knowledge of advertising reduces skepticism of pro-environmental advertising.

## *Agent knowledge*

Research has highlighted the crucial role of agent knowledge in enabling consumers to identify the sponsors behind advertising messages and in understanding their motives (An & Stern, 2011; Matthes et al., 2007; Swaen et al., 2004). Consumers with higher levels of agent knowledge are better equipped to recognise commercial agendas, even when information is presented in non-commercial sources like word of mouth (Bambauer-Sachse & Mangold, 2013; Brinson et al., 2023; Campbell & Kirmani, 2000; Costa Filho et al., 2023). They can also easily decipher a company's motive behind advertising as primarily aimed at increasing sales of their products (An & Stern, 2011; Brinson et al., 2023; Costa Filho et al., 2023; Matthes et al., 2007).

In the case of pro-environmental advertising, consumers' agent knowledge can help them differentiate between two types of company motive: self-serving and other-serving (Romani et al., 2016; Vries et al., 2015). A company with self-serving motives is primarily focused on selling its pro-environmental products to increase its profits. On the other hand, a company with other-serving motives produces and promotes pro-environmental products not just to make a profit, but also to protect the environment and pursue public welfare (Romani et al., 2016; Vries et al., 2015).

These distinct company motives that consumers recognise through their agent knowledge can impact their skepticism of pro-environmental advertising. Consumers who have a better understanding of a company's self-serving motives for promoting pro-environmental products are more likely to be skeptical of the advertising messages. Conversely, consumers' perceptions of other-serving motives can reduce their skepticism of pro-environmental advertising. Research has shown that consumers who perceive a company's intrinsic motives, such as its genuine social concerns, are more likely to respond positively to corporate social responsibility initiatives instead of being suspicious about such activity (Song et al., 2021). In other words, when consumers believe that a company's motives for promoting environmental protection through their products are genuine, they are less likely to doubt the reliability of the advertising information. Based on this, the following hypothesis was proposed:

**H2:** Positive agent knowledge decreases consumers' skepticism towards pro-environmental advertising.

### *Topic knowledge*

Consumers' ability to comprehend and evaluate product information relies on their topic knowledge, which involves understanding the product attributes and functions, and determining the information's validity (Lorenzon & Russell, 2012; Sayal & Pant, 2022). In the case of pro-environmental advertising in particular, topic knowledge pertains to consumers' knowledge of pro-environmental products. Through their topic knowledge of pro-environmental products, consumers can assess the environmental benefits of the advertised products and make informed decisions (Sayal & Pant, 2022; Xie & Kronrod, 2013; Zabkar & Hosta, 2013). Despite being exposed to multiple advertisements for similar pro-environmental products, consumers with high topic knowledge are less likely to be confused by the choice and more confident in evaluating both the advertised products and the messages (Chan, 2000; Sun & Wang, 2020; Xie & Kronrod, 2013).

As such, consumers with high topic knowledge of pro-environmental products are less likely to be susceptible to manipulation or deception by companies and their pro-environmental advertising. Moreover, their extensive knowledge can reduce their skepticism towards pro-environmental advertising. Therefore, the following hypothesis is proposed:

**H3:** Consumers with high topic knowledge of pro-environmental products are less skeptical about pro-environmental advertising.

## The role of previous experience of pro-environmental advertising and products

The theoretical framework of the PKM suggests that consumers' previous experience of advertising and the advertised brands enhance their persuasion, agent and topic knowledge (Friestad & Wright, 1994; Jung & Heo, 2019). Consumers who have greater exposure to a specific type of advertising, such as pro-environmental advertising, and have more experience of using the advertised products, tend to possess a higher level of knowledge about commonly utilised advertising appeals and strategies, sponsors and products (Friestad & Wright, 1994; Jung & Heo, 2019; Zarouali et al., 2021). For instance, older children exhibit a more nuanced understanding of persuasive messages and agents than younger children, as they have had more opportunities to be exposed to advertising messages, use advertised brands, and evaluate whether these brands have lived up to the expectations derived from the advertising messages (Boush et al., 1994; Feick & Gierl, 1996; Mallinckrodt & Mizerski, 2007; van Reijmersdal & van Dam, 2020). Similarly, Jung and Heo (2019) found that individuals frequently exposed to native advertising on social media tend to have a better comprehension of various social media advertising tactics and recognise native advertising more than individuals with less exposure.

Moreover, consumers' exposure to pro-environmental advertising and their prior experience of pro-environmental products may contribute to their acquisition of sophisticated persuasion, agent and topic knowledge. Pro-environmental advertising disseminates information about the advertised brands, and their environmental benefits and sponsors in particular (Xie & Kronrod, 2013; Sayal & Pant, 2022; Zabkar & Hosta, 2013). In being exposed to pro-environmental advertising, consumers can gain more knowledge about how the products contribute to environmental protection (Sayal & Pant, 2022; Zabkar & Hosta, 2013). Furthermore, by obtaining such information from exposure to pro-environmental advertising, consumers can understand the role of pro-environmental advertising in delivering valuable information to consumers.

Additionally, pro-environmental advertising communicates the environmental advantages of using the advertised brands, and consumers perceive the sponsors' other-serving motives for environmental protection as sincere. In the context of corporate social responsibility, when corporate marketing communications primarily focus on social benefits rather than self-benefits, consumers recognise that the company mainly employs the marketing communication to benefit society (Song et al., 2021). Consequently, consumers perceive that the company and its marketing communications possess other-serving motives rather than self-serving motives.

Therefore, it is reasonable to propose that individuals frequently exposed to pro-environmental advertising are more likely to gain knowledge about the benefits of using pro-environmental products (i.e. topic knowledge), the roles of pro-environmental advertising (i.e. persuasion knowledge), and the advertisers' other-serving motives (i.e. agent knowledge). Based on this reasoning, the following hypotheses are posited:

> **H4:** Exposure to pro-environmental advertising enhances a) persuasion knowledge, b) agent knowledge and c) topic knowledge about pro-environmental products.

Consumers' familiarity with pro-environmental products, such as recycled or recyclable products, can serve as a valuable educational tool, providing them with a clear understanding of how such products can benefit the environment. Keng et al. (2014) have identified three different means by which consumers acquire product knowledge: direct experience, indirect experience (e.g. advertising) and virtual experience, which they subsequently use to evaluate and compare different products. Thus, consumers' previous encounters with pro-environmental products can enhance their knowledge on this subject matter, enabling them to more accurately evaluate a product's environmental benefits and discern the company's underlying motivations.

In addition, the phenomenon of the PKM suggests that experienced consumers of pro-environmental products are particularly adept at recognising and interpreting the environmental benefits touted in advertising campaigns (Friestad & Wright, 1994). Expert consumers of a given product category are more likely to use intrinsic product information, such as characteristics, attributes and benefits in their decision-making process than novice consumers, while attaching less importance to extrinsic cues such as price, country of origin and advertising appeals (Chocarro et al., 2009; Hafer et al., 2018).

Therefore, it stands to reason that consumers' previous experience of pro-environmental products can increase their persuasion, agent and topic knowledge. Based on the aforementioned literature, we propose the following hypotheses:

> **H5:** Prior experience of pro-environmental products is positively associated with a) persuasion knowledge, b) agent knowledge and c) topic knowledge about pro-environmental products.

The present study's proposed hypotheses and the expected interrelationships among the study variables are delineated and visually represented in Figure 1.

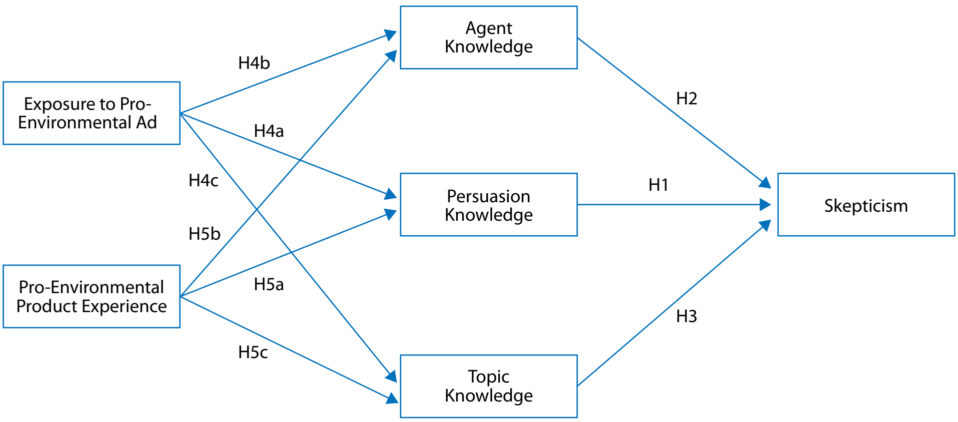


*Figure 1:*
*Conceptual Constructs and Research Hypotheses*
*Source:* Compiled by the authors.

## Methods

### *Survey procedure and participants*

To test the proposed hypotheses, a series of online surveys were administered to the participants. The surveys were designed to provide a clear definition and examples of pro-environmental advertising and products, which were intended to increase the participants' comprehension of the context and the objectives of the study. The survey took approximately ten minutes to complete, and participants received monetary compensation for their participation. The recruitment of survey participants was carried out through Amazon Mechanical Turk (MTurk). Only individuals over the age of seventeen who resided in the United States were invited to participate in the surveys (N = 200). To ensure data quality, only those with a task acceptance rate exceeding 90% and who had previously completed more than one hundred tasks were recruited for the survey. Typically, researchers leverage the approval rates and completed assignments of MTurk workers as a means of identifying qualified survey participants and gathering data of high quality (Peer et al., 2014; Shank, 2016). The approval rate, representing the percentage of submitted assignments that have been accepted, encompasses the total count of approved assignments. Through the utilisation of two distinct qualifications, researchers can engage with MTurk workers who possess extensive experience and consistently deliver high-quality work. The targeting of individuals with an approval rate exceeding 90% and a track record of over 100 approved assignments is advised for optimal collection of high-quality data (Kim & Pittman, 2016; Mason & Suri, 2012). Additionally, the survey participants' location was restricted to the United States by employing MTurk qualification criteria. This ensured that only individuals residing within the U.S. could access the survey, preventing participation from those outside the country. The study participants comprised a heterogeneous sample with respect to demographic characteristics. Among the participants, 59.1% were female (N = 110) and 67.7% were Caucasian (N = 126). In terms of educational attainment, 55% of participants had completed a two-year college degree (N = 20), a four-year college degree (N = 71), or a master's degree (N = 20). The age of participants ranged from 18 to 70 years, with an average age of 37.93 (SD = 12.27). The participants' household income was evenly distributed, ranging from below $20,000 to $90,000 or above.

## Measures

### *Exposure to pro-environmental advertising and products*

To evaluate the research participants' exposure to pro-environmental advertising across various media, a scale item developed by Huh and Becker (2005) was employed. The scale item measured participants' exposure to pro-environmental advertising in five different advertising media, including television, magazines, newspapers, the internet and social media, and was rated on a seven-point Likert scale ranging from *never* to *very frequently* (Cronbach's alpha = .67).

The participants' experience of pro-environmental products were measured using a four-item scale developed by Matthes and Wonneberger (2014) to assess their preferences for purchasing and using such products. The scale items were also rated on a seven-point Likert scale, with responses ranging from *strongly disagree* to *strongly agree.* The internal consistency of the scale was assessed using Cronbach's alpha, and the calculated value was. 84, indicating a high level of reliability.

### *Persuasion, agent and topic knowledge*

The study employed adapted scale items from reputable sources to measure the research participants' persuasion knowledge, agent knowledge and topic knowledge about pro-environmental advertising and products. To assess persuasion knowledge, the researchers adapted Evans and Hoy's (2016) seven-point Likert scale items to the research context. The scale items were found to be reliable, with a Cronbach's α value of .82. To measure agent knowledge, Gleim et al.'s (2013) seven-point Likert scale items was used, but the subscales were reverse-coded to ensure data quality. The Cronbach's α value for this scale was found to be 0.80. To evaluate the research participants' topic knowledge about pro-environmental products, three scales were adapted from Bian and Moutinho's 2011 study. The Cronbach's α value for this scale was found to be 0.83, indicating that the scale items were reliable.

### *Skepticism towards pro-environmental advertising*

The level of respondents' skepticism towards pro-environmental advertising was assessed using the nine scale items developed by Obermiller and Spangenberg (1998). The scale items were measured on seven-point Likert scales, ranging from 1 (strongly disagree) to 7 (strongly agree), and demonstrated high internal consistency (Cronbach's α = 0.96). Table 1 presents the complete list of the scale items employed in the study.

*Table 1:*
*Variables and Measures*

| **Variables** | **Scales** |
| --- | --- |
| Exposure to pro-environmental advertising | In the past 6 months, how often did you see, read, or hear any pro-environmental advertising via the following media? Please indicate 1 (Never) to 7 (Frequently)<br>• TV<br>• Magazines<br>• Newspapers<br>• The internet<br>• Social media |
| Pro-environmental product experience | • I make a special effort to buy products in biodegradable packages.<br>• I would switch from my usual brands and buy environmentally safe cleaning products, even if I had to give up some cleaning effectiveness.<br>• I have switched products for ecological reasons.<br>• When I have a choice between two identical products, I purchase the one less harmful to the environment. |

| | |
|---|---|
| Persuasion knowledge | • Pro-environmental advertising provides information about pro-environmental products.<br>• Pro-environmental advertising makes people like pro-environmental products.<br>• Pro-environmental advertising lets people know more about pro-environmental products. |
| Agent knowledge | • A company that produces pro-environmental products can be depended on to do what is right. *<br>• A company that produces pro-environmental products is competent. *<br>• A company that produces pro-environmental products can be trusted at all times. * |
| Topic knowledge | • I can give people advice about different types of pro-environmental products.<br>• I only need to gather very little information in order to purchase pro-environmental products.<br>• I feel very confident about my ability to tell the difference in quality among pro-environmental products. |
| Skepticism of pro-environmental advertising | • I cannot depend on getting the truth in most pro-environmental advertising.<br>• Pro-environmental advertising's aim is not to inform the consumer.<br>• I believe pro-environment advertising is not informative.<br>• Pro-environmental advertising is not generally truthful.<br>• Pro-environmental advertising is not a reliable source of information.<br>• Pro-environmental advertising is not truth well told.<br>• In general, pro-environmental advertising does not present an accurate picture of the product being advertised.<br>• I don't feel I've been accurately informed after viewing most advertisements.<br>• Most advertising does not provide consumers with essential information. |

*Note:* * Scale items measured reversely.

*Source:* Compiled by the authors.

## Data analysis

Prior to testing the proposed hypotheses, descriptive statistics analysis was conducted with six constructs. The results of mean and standard deviation are the following: persuasion knowledge ($M$ = 5.09, $SD$ = 0.96), agent knowledge ($M$ = 4.37 $SD$ = 1.29), topic knowledge ($M$ = 3.97, $SD$ = 1.28), exposure to pro-environmental advertising ($M$ = 3.49, $SD$ = 1.22), pro-environmental product consumption ($M$ = 4.66, $SD$ = 1.38) and skepticism ($M$ = 3.37, $SD$ = 1.29). The average scores for the six constructs fell either at the midpoint or above it, indicating that participants' knowledge and consumption levels surpass the average point on a 7-point scale. The standard deviation scores illustrated a positive distribution pattern for the six constructs.

Furthermore, a Pearson correlation analysis was conducted for the six constructs, revealing that 12 out of 15 correlations achieved statistical significance. The R scores ranged from −.68 to. 48. Notably, the correlation between skepticism and other constructs exhibited negative values, consistent with findings from previous studies. These results indicate meaningful relationships among all six constructs. The internal consistency of the measurement constructs was assessed using Cronbach's alpha tests (refer to Table 2 for the results). Additionally, the validity of the constructs and associated measurement scales was confirmed using a Confirmatory Factor Analysis (CFA). The proposed hypotheses were then tested using structural equation modelling (SEM).

*Table 2:*
*Mean, standard deviation and correlation*

| | ***M*** | ***SD*** | **1** | **2** | **3** | **4** | **5** | **Cronbach's α** |
|---|---|---|---|---|---|---|---|---|
| 1. Persuasion knowledge | 5.09 | 0.96 | | | | | | .82 |
| 2. Agent knowledge | 4.37 | 1.29 | .43** | | | | | .80 |
| 3. Topic knowledge | 3.97 | 1.28 | .23** | .28** | | | | .83 |
| 4. Exposure to pro-environmental advertising | 3.49 | 1.22 | .19* | .04 | .13 | | | .67 |
| 5. Pro-environmental product consumption | 4.66 | 1.38 | .3** | .28** | .48** | .09 | | .84 |
| 6. Skepticism | 3.37 | 1.29 | −.54** | −.68** | −.33** | −.07 | −.4** | .96 |

*Note:* $^{*}$ $p < .05$, $^{**}$ $p < .001$

*Source:* Compiled by the authors.

# Results

## *Confirmatory factor analysis*

A CFA was performed to assess the adequacy of the scales in measuring the proposed constructs. The findings indicated a satisfactory fit ($\chi 2 = 604.927$, df = 362, $p < .001$; CFI = .93, GFI = .82, RMSEA = .060), signifying that the scales accurately measured and explained the proposed constructs. Furthermore, the researchers conducted a single-factor modelling ($\chi 2 = 1552.010$, df = 377, $p < .001$; CFI = .652, GFI = .59, RMSEA = .130) and compared its fit to that of CFA, which revealed that the latter provides a superior fit and that the constructs demonstrated significant discriminant validity. Given the sound reliability and validity of the constructs and the measurement scales, SEM was utilised to analyse the survey data and verify the proposed hypotheses.

## *Hypotheses testing*

In this study, the relationships between consumers' prior experience, consumer knowledge and skepticism of pro-environmental advertising were examined by employing SEM. The adequacy of the proposed model was tested by evaluating the fit of the model, which was found to be satisfactory ($\chi2 = 633.100$, df = 367, $p < .001$; CFI = .92, GFI = .81, RMSEA = .063). This suggests that the model was appropriately designed, supported by theory, and empirically validated using the collected data at an acceptable level. The findings of the SEM are described in detail below.

Hypotheses 1, 2 and 3 were formulated to investigate the effects of persuasion, agent and topic knowledge on skepticism. The results indicate that consumers' persuasion knowledge negatively influenced their skepticism ($\beta = -.41$, $p < .01$). Consumers who believed that advertising provides information were less skeptical of pro-environmental advertising as opposed to those who viewed advertising as a tool to build brand image. In a similar vein, agent knowledge was found to reduce skepticism ($\beta = -.63$, $p < .01$). Consumers who believed that companies produce and promote pro-environmental products to protect the environment had lower levels of skepticism towards pro-environmental advertising promoting such products. Lastly, topic knowledge was found to have a negative relationship with skepticism ($\beta = -.13$, $p < .05$). Consumers who possessed topic knowledge of pro-environmental products were more confident in their ability to identify misleading advertising claims and, thus, were confident that such advertising could not manipulate their purchasing behaviours. These results provide support for Hypotheses 1, 2 and 3.

Hypothesis 4 proposed that exposure to pro-environmental advertising increases consumers' persuasion (H4a), agent (H4b) and topic knowledge (H4c). The results of SEM showed that consumers' exposure to pro-environmental advertising enhanced their persuasion knowledge ($\beta =.21$, $p < .05$) and topic knowledge ($\beta =.25$, $p < .01$). However, the relationship between exposure to pro-environmental advertising and agent knowledge was found to be non-significant ($\beta = .03$, $p > .05$). Consumers who were more exposed to pro-environmental advertising tended to be highly knowledgeable about the positive functions of pro-environmental advertising. However, exposure did not enable consumers to develop knowledge of advertisers' other-serving motives and pro-environmental products. Therefore, Hypothesis 4(a) and (c) were supported, whereas Hypothesis 4(b) was rejected.

Hypothesis 5 proposed that consumers' pro-environmental product experience is positively related to the three types of consumer knowledge, specifically persuasion (H5a), agent (H5b) and topic knowledge (H5c). The results of SEM showed that consumers' pro-environmental product experience increased their persuasion knowledge ($\beta = .22$, $p < .01$), agent knowledge ($\beta = .35$, $p < .01$) and topic knowledge ($\beta = .58$, $p < .01$). Consumers who had experience of buying pro-environmental products demonstrated a better understanding of the products' environmental benefits and believed that pro-environmental advertising promotes environmental benefits, as well as expresses companies' other-serving motives. Therefore, Hypothesis 5(a), (b) and (c) were supported.

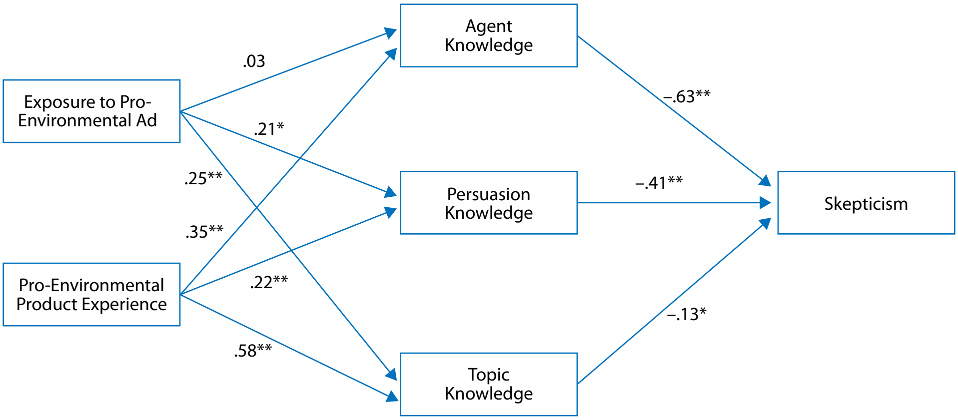


*Figure 2:*
*Hypothesis-testing and SEM*
*Source:* Compiled by the authors.

## Discussions

In this research endeavour, the investigators embarked on an exploration of two distinct research inquiries, namely (RQ1) investigating the relationships between three distinct categories of persuasion knowledge, specifically persuasion knowledge, agent knowledge and topic knowledge, and consumers' levels of skepticism toward pro-environmental advertising and the products being advertised. The second research question (RQ2) aimed to assess the extent to which pre-existing attitudes and knowledge, developed through exposure to pro-environmental advertising and experience of pro-environmental products, influence the structure of persuasion knowledge.

In the pursuit of these research questions, the investigators have unearthed several noteworthy findings. Firstly, the study underscores that all three forms of persuasion knowledge, encompassing persuasion knowledge, agent knowledge and topic knowledge, exert a negative influence on consumers' skepticism towards pro-environmental advertising and the associated advertised products. This discovery aligns with previous research, which suggests that consumers' possession of persuasion knowledge can enhance the credibility of persuasive messages, particularly when they are cognisant of the necessity for corporations to employ persuasive tactics convincingly (Isaac & Grayson, 2017). However, it is important to note that this finding diverges from prior research findings that posit a positive correlation between consumers' level of persuasion knowledge and skepticism towards advertising messages (Dahlén, 2005; Kirmani & Zhu, 2007; Su & Wayer, 2010). Given this discrepancy between the current research's findings and previous research, further investigations may be warranted to elucidate the intricate relationships between persuasion knowledge and skepticism of advertising messages.

Secondly, the present study illuminates that exposure to pro-environmental advertising and experience of pro-environmental products significantly impact all three facets of persuasion knowledge, with one notable exception: exposure to pro-environmental advertising has a limited impact on agent knowledge, specifically knowledge pertaining to advertisers. This finding contradicts the premise of the PKM, which posits that individuals accumulate structures of consumer knowledge through repeated exposure to persuasive communications, including advertisements (Friestad & Wright, 1994; Zabkar & Hosta, 2013). This result may be explained by the notion that consumers may struggle to comprehensively assess advertised products (i.e. the topic) and the companies marketing these products (i.e. the agent) without first-hand experience of the products themselves. The absence of this association warrants further scrutiny through future research, as it diverges from previous research on advertising exposure and its impact on brand attitudes, which suggests that an increased number of exposures to advertisements enhances viewers' knowledge and attitudes towards the advertised brands (Krugman, 1972; Vakratsas & Ambler, 1999).

Furthermore, the third finding of the present study underscores that prior experience of pro-environmental products significantly enhance all three subcategories of consumer knowledge, in contrast to the relationship between exposure to pro-environmental advertising and the three structures of consumer knowledge. It is posited that first-hand experiences may prove more effective in shaping knowledge than mere exposure to product descriptions and usage scenarios presented in advertisements. Certain product categories, particularly experience goods (i.e. goods that can be assessed through tactile and personal experiences), may necessitate hands-on engagement, rendering advertising exposure less effective in augmenting consumers' knowledge related to persuasion, agents and topics (Nelson, 1974). Future research endeavours may benefit from revisiting this research domain with different product classifications, such as search–experience goods (Nelson, 1974), as well as exploring the implications for high–low involvement products and think–feel products (Vaughn, 1980; 1986).

## Managerial implications

This study yields practical implications of significance for marketing managers and advertising professionals invested in the promotion of pro-environmental products. First and foremost, it underscores the pivotal role of direct product experiences and interactions with the company in cultivating a more comprehensive understanding among consumers concerning the company, its products and the associated marketing messages. Consequently, marketing practitioners are advised to contemplate the implementation of sampling promotions or exclusive events that offer potential customers the opportunity to engage with the product firsthand. This proactive approach assumes particular importance as it can effectively mitigate consumers' skepticism towards the company's endeavours to promote pro-environmental products, a critical facet for the efficacy of marketing communications.

Nevertheless, this study underscores the enduring significance of exposure to pro-environmental advertising. While direct product experience holds undeniable value, advertising campaigns serve as instrumental tools for building persuasion knowledge, ultimately contributing to a reduction in skepticism towards advertising. Moreover, consumers who exhibit lower levels of skepticism towards the objectives of pro-environmental advertising campaigns are more inclined to consider purchasing and experimenting with the products being promoted.

In terms of advertising media selection, the Pareto principle, also known as the 80/20 rule, comes into play, suggesting that advertising within media channels popular among environmentally conscious consumers, such as The Green Guide or the National Geographic Channel, proves highly effective. These media outlets attract a dedicated audience of pro-environmental product enthusiasts. However, alternative forms of marketing communications, such as public relations efforts (e.g. featuring a magazine article highlighting the company's environmental protection initiatives) and sponsorships (e.g. sponsoring events like "Tree Hugging Day" organised by organisations such as Greenpeace), can also serve as potent means of dismantling barriers to pro-environmental product purchases.

Lastly, the study underscores the potential efficacy of social media campaigns, particularly in capturing the attention of younger consumer segments like Generation Z and Millennials, who demonstrate heightened awareness of environmental concerns. When these individuals grasp the importance of environmental protection, they possess the capacity to evolve into loyal patrons of pro-environmental product brands. Therefore, advertising professionals are encouraged to strategically leverage social media platforms to effectively reach and engage with these environmentally conscious consumers.

## Limitations and suggestions for future research

The current study is not without its limitations. Primarily, the study's focus on the general structure of consumer knowledge regarding pro-environmental products and advertising campaigns might have created some confusion among survey participants who lacked prior exposure to the real-world examples of pro-environmental brands and campaigns. The authors, however, attempted to mitigate this limitation by providing operational definitions of pro-environmental advertising and products and explaining fictitious examples to participants before administering survey questions. Future research should consider incorporating real-world examples of pro-environmental products and advertising campaigns to prevent such misunderstandings when designing survey instruments.

Moreover, the current study employed self-administered online surveys to measure participants' exposure to pro-environmental advertising and experience of green products. While self-reporting is a commonly used research method in various academic fields, it may not always provide accurate information on participants' perspectives, opinions, or behavioural patterns concerning social phenomena. The self-reporting method may be affected by social desirability bias or recall bias (Althubaiti, 2016; Coughlin, 1990; van de Mortel, 2008). To minimise these limitations, the present study administered anonymous online surveys, which could decrease social desirability bias, and only the research team had access to the survey data. Future research could consider using non-self-reporting research methods, such as field observation or experimental research, to explore consumers' perceptions of green advertising and their past experience of pro-environmental products.

An additional constraint inherent in this study pertains to its reliance on a sample size comprised of 200 survey respondents. This quantum of participants, while not inconsequential, raises salient concerns about the study's generalisability and the veracity of its conclusions, echoing the sentiments articulated by Memon et al. (2020). Moreover, it is worth noting that this sample size falls markedly short of the widely acknowledged minimum benchmark of 384 prescribed by Krejcie and Morgan (1970) for research inquiries targeting populations of 1,000,000 or more. Nevertheless, in the context of SEM research, this sample size of 200 may yet merit consideration, in alignment with the framework expounded upon by Kline (2005), which deems a sample size of 100 as small, while characterising a sample ranging from 100 to 200 as of medium magnitude. Furthermore, the spectrum of acceptable sample sizes, as posited by Roscoe (1975) in the realm of behavioural studies, spans from 30 to 500, lending some contextual latitude to the present situation (Memon et al., 2020). Nonetheless, it is imperative to underscore that, given the ambitious aspiration of this research to represent the entire global consumer population, a sample size of 200 could be viewed as comparatively modest. Finally, the data collection for the study was carried out via Amazon Mechanical Turk (MTurk), an online research platform that enables researchers to recruit participants for tasks requiring human intelligence (Buhrmester et al., 2011). Despite the advantages of MTurk, such as cost-effectiveness and speedy recruitment (Follmer et al., 2017; McDuffie, 2019), the quality of survey data generated through this platform may not always be of the best quality. MTurk workers may not represent the general population of the United States, as they tend to be more educated, younger, less religious and less politically diverse. Additionally, the platform may not be accessible to those who have limited access to computers or the internet. Most MTurk workers reside in the United States and India (Goodman et al., 2013; McDuffie, 2019; Paolacci & Chandler, 2014). Although the investigators of the current study recruited participants through the MTurk platform based on their ratings and geographic locations, the study's findings may not generalise to the entire population.

## References


Althubaiti, A. (2016). Information Bias in Health Research: Definition, Pitfalls, and Adjustment Methods. *Journal of Multidisciplinary Healthcare, 9,* 211–217. Online: https://doi.org/10.2147/JMDH.S104807

An, S. & Stern, S. (2011). Mitigating the Effects of Advergames on Children. *Journal of Advertising, 40*(1), 43–56. Online: https://doi.org/10.2753/JOA0091-3367400103

Anderson, N. H. (1971). Integration Theory and Attitude Change. *Psychological Review, 78*(3), 171–206. Online: http://dx.doi.org/10.1037/h0030834

Attaran, S., Notarantonio, E. M. & Quigley, C. J. (2015). Consumer Perceptions of Credibility and Selling Intent among Advertisements, Advertorials, and Editorials: A Persuasion Knowledge Model Approach. *Journal of Promotion Management, 21*(6), 703–720. Online: https://doi.org/10.1080/10496491.2015.1088919

Baek, T. H. & Morimoto, M. (2012). Stay away from me. *Journal of Advertising, 41*(1), 59–76. Online: https://doi.org/10.2753/JOA0091-3367410105

Bambauer-Sachse, S. & Mangold, S. (2013). Do Consumers Still Believe What Is Said in Online Product Reviews? A Persuasion Knowledge Approach. *Journal of Retailing and Consumer Services, 20*(4), 373–381. Online: https://doi.org/10.1016/j.jretconser.2013.03.004

Bian, X. & Moutinho, L. (2011). The Role of Brand Image, Product Involvement, and Knowledge in Explaining Consumer Purchase Behaviour of Counterfeits: Direct and Indirect Effects. *European Journal of Marketing, 45*(1–2), 191–216. Online: https://doi.org/10.1108/03090561111095658

Boush, D. M., Friestad, M. & Rose, G. M. (1994). Adolescent Skepticism toward TV Advertising and Knowledge of Advertiser Tactics. *Journal of Consumer Research, 21*(1), 165–175. Online: https://doi.org/10.1086/209390

Brinson, N. H., Lemon, L. L., Bender, C. & Annika, F. G. (2023). Consumer Response to Podcast Advertising: The Interactive Role of Persuasion Knowledge and Parasocial Relationships. *The Journal of Consumer Marketing, 40*(7), 971–982. Online: https://doi.org/10.1108/JCM-01-2023-5819

Buhrmester, M., Kwang, T. & Gosling, S. D. (2011). Amazon's Mechanical Turk: A New Source of Inexpensive, Yet High-Quality Data? *Perspectives on Psychological Science, 6*(1), 3–5. Online: https://doi.org/10.1177/1745691610393980

Campbell, M. C. & Kirmani, A. (2000). Consumers' Use of Persuasion Knowledge: The Effects of Accessibility and Cognitive Capacity on Perceptions of an Influence Agent. *Journal of Consumer Research, 27*(1), 69–83. Online: https://doi.org/10.1086/314309

Chan, R. Y. K. (2000). The Effectiveness of Environmental Advertising: The Role of Claim Type and the Source Country Green Image. *International Journal of Advertising, 19*(3), 349–375. Online: https://doi.org/10.1080/02650487.2000.11104806

Chang, C. (2011). Feeling Ambivalent About Going Green. *Journal of Advertising, 40*(4), 19–32. Online: https://doi.org/10.2753/JOA0091-3367400402

Carlson, L., Grove, S. J. & Kangun, N. (1993). A Content Analysis of Environmental Advertising Claims: A Matrix Method Approach. *Journal of Advertising, 22*(3), 27–39. Online: https://doi.org/10.1080/00913367.1993.10673409

Chen, F-P. & Leu, J-D. (2011). Product Involvement in the Link Between Skepticism Toward Advertising and Its Effects. *Social Behavior and Personality: An International Journal, 39*(2), 153–159. Online: https://doi.org/10.2224/sbp.2011.39.2.153

Chocarro, R., Cortiñas, M. & Elorz, M. (2009). The Impact of Product Category Knowledge on Consumer Use of Extrinsic Cues – A Study Involving Agrifood Products. *Food Quality and Preference, 20*(3), 176–186. Online: https://doi.org/10.1016/j.foodqual.2008.09.004

Costa Filho, M., Nogueira Rafael, D., Salmonson Guimarães Barros, L. & Mesquita, E. (2023). Mind the Fake Reviews! Protecting Consumers from Deception Through Persuasion Knowledge Acquisition. *Journal of Business Research, 156*. Online: https://doi.org/10.1016/j.jbusres.2022.113538

Coughlin, S. S. (1990). Recall Bias in Epidemiologic Studies. *Journal of Clinical Epidemiology, 43*(1), 87–91. Online: https://doi.org/10.1016/0895-4356(90)90060-3

Dahlén, M. (2005). The Medium as a Contextual Cue: Effects of Creative Media Choice. *Journal of Advertising, 34*(3), 89–98. Online: https://doi.org/10.1080/00913367.2005.10639197

DeLorme, D. E., Huh, J. & Reid, L. N. (2009). Direct-to-Consumer Advertising Skepticism and the Use and Perceived Usefulness of Prescription Drug Information Sources. *Health Marketing Quarterly, 26*(4), 293–314. Online: https://doi.org/10.1080/07359680903304278

Do Paço, A. M. F. & Reis, R. (2012). Factors Affecting Skepticism Toward Green Advertising. *Journal of Advertising, 41*(4), 147–155. Online: www.jstor.org/stable/23410039

Duong, C. D. (2022). Big Five Personality Traits and Green Consumption: Bridging the Attitude–Intention–Behavior Gap. *Asia Pacific Journal of Marketing and Logistics, 34*(6), 1123–1144. Online: https://doi.org/10.1108/APJML-04-2021-0276

Eisend, M. & Tarrahi, F. (2022). Persuasion Knowledge in the Marketplace: A Meta-Analysis. *Journal of Consumer Psychology, 32*(1), 3–22. Online: https://doi.org/10.1002/jcpy.1258

Evans, N. J. & Hoy, M. G. (2016). Parents' Presumed Persuasion Knowledge of Children's Advergames: The Influence of Advertising Disclosure Modality and Cognitive Load. *Journal of Current Issues & Research in Advertising, 37*(2), 146–164. Online: https://doi.org/10.1080/10641734.2016.1171181

Feick, L. & Gierl, H. (1996). Skepticism about Advertising: A Comparison of East and West German Consumers. *International Journal of Research in Marketing, 13*(3), 227–235. Online: https://doi.org/10.1016/0167-8116(96)00009-2

Follmer, D. J., Sperling, R. A. & Suen, H. K. (2017). The Role of MTurk in Education Research: Advantages, Issues, and Future Directions. *Educational Researcher, 46*(6), 329–334. Online: https://doi.org/10.3102/0013189X17725519

Friestad, M. & Wright, P. (1994). The Persuasion Knowledge Model: How People Cope with Persuasion Attempts. *Journal of Consumer Research, 21*(1), 1–31. Online: https://doi.org/10.1086/209380

Gleim, M. R., Smith, J. S., Andrews, D. & Cronin, J. J., Jr. (2013). Against the Green: A Multi-Method Examination of the Barriers to Green Consumption. *Journal of Retailing, 89*(1), 44–61. Online: https://doi.org/10.1016/j.jretai.2012.10.001

Gong, S. & Wang, L. (2023). Are Explicit or Implicit Appeals More Credible? The Congruence Effects of Green Advertising Appeals and Product Category on Consumers' Evaluation. *Current Psychology, 42*(33), 29035–29047. Online: https://doi.org/10.1007/s12144-022-03981-4

Goodman, J. K., Cryder, C. E. & Cheema, A. (2013). Data Collection in a Flat World: The Strengths and Weaknesses of Mechanical Turk Samples. *Journal of Behavioral Decision Making, 26*(3), 213–224. Online: https://doi.org/10.1002/bdm.1753

Hafer, C. L., Mantonakis, A., Fitzgerald, R. & Bogaert, A. F. (2018). The Effectiveness of Deservingness-Based Advertising Messages: The Role of Product Knowledge and Belief in a Just World. *Revue Canadienne Des Sciences De l'Administration/Canadian Journal of Administrative Sciences, 35*(1), 34–46. Online: https://doi.org/10.1002/cjas.1406

Hibbert, S., Smith, A., Davies, A. & Ireland, F. (2007). Guilt Appeals: Persuasion Knowledge and Charitable Giving. *Psychology & Marketing, 24*(8), 723–742. Online: https://doi.org/10.1002/mar.20181

Ho, B., Shin, W. & Pang, A. (2017). Corporate Crisis Advertising: A Framework Examining the Use and Effects of Corporate Advertising Before and After Crises. *Journal of Marketing Communications, 23*(6), 537–551. Online: https://doi.org/10.1080/13527266.2015.1136349

Huh, J. & Becker, L. B. (2005). Direct-to-Consumer Prescription Drug Advertising: Understanding Its Consequences. *International Journal of Advertising, 24*(4), 441–468. Online: https://doi.org/10.1080/02650487.2005.11072938

Isaac, M. S. & Grayson, K. (2017). Beyond Skepticism: Can Accessing Persuasion Knowledge Bolster Credibility? *Journal of Consumer Research, 43*(6), 895–912. Online: https://doi.org/10.1093/jcr/ucw063

Isaac, M. S. & Grayson, K. (2020). Priming Skepticism: Unintended Consequences of One-Sided Persuasion Knowledge Access. *Psychology & Marketing, 37*(3), 466–478. Online: https://doi.org/10.1002/mar.21313

Jain, S. & Purohit, H. C. (2022). Consumer Acceptance of Online Behavioural Advertising: Role of Persuasion Knowledge and Protection Motivation. *International Management Review, 18*(2), 48–54.

Johnstone, M. & Tan, L. P. (2015). An Exploration of Environmentally-Conscious Consumers and the Reasons Why They Do Not Buy Green Products. *Marketing Intelligence & Planning, 33*(5), 804–825. Online: https://doi.org/10.1108/MIP-09-2013-0159

Joireman, J., Liu, R. L. & Kareklas, I. (2018). Images Paired with Concrete Claims Improve Skeptical Consumers' Responses to Advertising Promoting a Firm's Good Deeds. *Journal of Marketing Communications, 24*(1), 83–102. Online: https://doi.org/10.1080/13527266.2015.1126757

Jung, A. & Heo, J. (2019). Ad Disclosure vs. Ad Recognition: How Persuasion Knowledge Influences Native Advertising Evaluation. *Journal of Interactive Advertising, 19*(1), 1–14. Online: https://doi.org/10.1080/15252019.2018.1520661

Kang, E. Y. & Atkinson, L. (2021). Effects of Message Objectivity and Focus on Green CSR Communication: The Strategy Development for a Hotel's Green CSR Message. *Journal of Marketing Communications, 27*(3), 229–249. Online: https://doi.org/10.1080/13527266.2019.1640270

Keng, C-J., Tran, V-D., Liao, T-H., Yao, C-J. & Hsu, M. K. (2014). Sequential Combination of Consumer Experiences and Their Impact on Product Knowledge and Brand Attitude: The Moderating Role of Desire for Unique Consumer Products. *Internet Research, 24*(3), 270–291. Online: https://doi.org/10.1108/IntR-09-2012-0189

Kim, B. S. & Pittman, M. (2016). *Amazon's Mechanical Turk for Academics. The Hit Handbook for Social Science Research.* Irvine, CA.

Kim, Y., Oh, S., Yoon, S. & Shin, H. H. (2016). Closing the Green Gap: The Impact of Environmental Commitment and Advertising Believability. *Social Behavior & Personality: An International Journal, 44*(2), 339–351. Online: https://doi.org/10.2224/sbp.2016.44.2.339

Kirmani, A. & Zhu, R. (Juliet). (2007). Vigilant Against Manipulation: The Effect of Regulatory Focus on the Use of Persuasion Knowledge. *Journal of Marketing Research*, *44*(4), 688–701. Online: https://doi.org/10.1509/jmkr.44.4.688

Kline, R. B. (2005). *Principles and Practice of Structural Equation Modeling.* Guilford Press.

Koslow, S. (2000). Can the Truth Hurt? How Honest and Persuasive Advertising Can Unintentionally Lead to Increased Consumer Skepticism. *Journal of Consumer Affairs, 34*(2), 245–268. Online: https://psycnet.apa.org/doi/10.1111/j.1745-6606.2000.tb00093.x

Krejcie, R. V. & Morgan, D. W. (1970). Determining Sample Size for Research Activities. *Educational and Psychological Measurement, 30*(3), 607–610. Online: https://doi.org/10.1177/001316447003000308

Krugman, H. (1972). Why Three Exposures May Be Enough. *Journal of Advertising Research, 12*(6), 11–14.

Ktisti, E., Hatzithomas, L. & Boutsouki, C. (2022). Green Advertising on Social Media: A Systematic Literature Review. *Sustainability, 14*(21). Online: https://doi.org/10.3390/su142114424

Lee, J. & Haley, E. (2022). Green Consumer Segmentation: Consumer Motivations for Purchasing Pro-Environmental Products. *International Journal of Advertising: The Review of Marketing Communications, 41*(8), 1477–1501. Online: https://doi.org/10.1080/02650487.2022.2038431

Lima, P. A. B., Falguera, F. P. S., da Silva, H. M. R., Maciel, S., Mariano, E. B. & Elgaaied-Gambier, L. (2023). From Green Advertising to Sustainable Behavior: A Systematic Literature Review Through the Lens of Value–Belief–Norm Framework. *International Journal of Advertising: The Review of Marketing Communications, 43*(1), 53–96. Online: https://doi.org/10.1080/02650487.2023.2199668

Li-Shia, H., Wan-Ju, H. & Yu-Han, W. (2023). The Effects of Puffery in Food Packaging on Consumers' Responses via Persuasion Knowledge: Role of Food Type and Picture Type. *British Food Journal, 125*(3), 937–955. Online: https://doi.org/10.1108/BFJ-10-2021-1112

Lorenzon, K. & Russell, C. A. (2012). From Apathy to Ambivalence: How Is Persuasion Knowledge Reflected in Consumers' Comments about In-Game Advertising? *Journal of Marketing Communications, 18*(1), 55–67. Online: https://doi.org/10.1080/13527266.2011.620768

Luo, B., Sun, Y., Shen, J. & Xia, L. (2020). How Does Green Advertising Skepticism on Social Media Affect Consumer Intention to Purchase Green Products? *Journal of Consumer Behavior, 19*(4), 371–381. Online: https://doi.org/10.1002/cb.1818

Mallinckrodt, V. & Mizerski, D. (2007). The Effects of Playing an Advergame on Young Children's Perceptions, Preferences, and Requests. *Journal of Advertising, 36*(2), 87–100. Online: https://doi.org/10.2753/JOA0091-3367360206

Mason, W. & Suri, S. (2012). Conducting Behavioral Research on Amazon's Mechanical Turk. *Behavior Research Method, 44*(1), 1–23. Online: https://doi.org/10.3758/s13428-011-0124-6

Manuel, E., Youn, S., Yoon, D. & Morrison, M. A. (2012). Functional Matching Effect in CRM: Moderating Roles of Perceived Message Quality and Skepticism. *American Academy of Advertising Conference Proceedings,* 7.

Matthes, J. & Wonneberger, A. (2014). The Skeptical Green Consumer Revisited: Testing the Relationship Between Green Consumerism and Skepticism Toward Advertising. *Journal of Advertising, 43*(2), 115–127. Online: http://dx.doi.org/10.1080/00913367.2013.834804

Matthes, J., Schemer, C. & Wirth, W. (2007). More than Meets the Eye: Investigating the Hidden Impact of Brand Placements in Television Magazines. *International Journal of Advertising, 26*(4), 477–503. Online: https://doi.org/10.1080/02650487.2007.11073029

Mayer, R. N., Scammon, D. L. & Zick, C. D. (1993). Poisoning the Well: Do Environmental Claims Strain Consumer Credulity? *Advances in Consumer Research, 20*(1), 698–703.

McDuffie, D. (2019). Using Amazon's Mechanical Turk: Benefits, Drawbacks, and Suggestions. *APS Observer, 32*(2), 34–35.

Memon, M. A., Ting, H., Cheah, J.-H., Thurasamy, R., Chuah, F. & Cham, T. H. (2020). Sample Size for Survey Research: Review and Recommendations. *Journal of Applied Structural Equation Modeling, 4*(2), i–xx. Online: https://doi.org/10.47263/jasem.4(2)01

Mohr, L. A., Erogli, D. & Ellem, P. S. (1998). The Development and Testing of Measure of Skepticism Toward Environmental Claims in Marketers' Communications. *Journal of Consumer Affairs, 32*(1), 30–55. Online: https://doi.org/10.1111/j.1745-6606.1998.tb00399.x

Murphy, R., Graber, M. & Stewart, A. (2010). Green Marketing: A Study of the Impact of Green Marketing on Consumer Behavior in a Period of Recession. *The Business Review, 16*(1), 134–140.

Nelson, P. J. (1974). Advertising as Information. *Journal of Political Economy, 82*(4), 729–754. Online: https://doi.org/10.1086/260231

Newell, S. J. & Goldsmith, R. E. (1998). The Effects of Misleading Environmental Claims on Consumer Perceptions of Advertisements. *Journal of Marketing Theory and Practice, 6*(2), 48–60. Online: https://doi.org/10.1080/10696679.1998.11501795

O'Donohoe, S. & Tynan, C. (1998). Beyond Sophistication: Dimensions of Advertising Literacy. *International Journal of Advertising, 17*(4), 467–482. Online: https://doi.org/10.1080/02650487.1998.11104733

Obermiller, C. & Spangenberg, E. R. (1998). Development of Scale to Measure Consumer Skepticism Toward Advertising. *Journal of Consumer Psychology, 7*(2), 159–186. Online: https://doi.org/10.1207/s15327663jcp0702_03

Obermiller, C., Spangenberg, E. & MacLachlan, D. L. (2005). Ad Skepticism: The Consequences of Disbelief. *Journal of Advertising, 34*(3), 7–17. Online: https://doi.org/10.1080/00913367.2005.10639199

Ohanian, R. (1990). Construction and Validation of a Scale to Measure Celebrity Endorsers' Perceived Expertise, Trustworthiness, and Attractiveness. *Journal of Advertising, 19*(3), 39–52. Online: https://doi.org/10.1080/00913367.1990.10673191

Ohanian, R. (1991). The Impact of Celebrity Spokespersons' Perceived Image on Consumers' Intention to Purchase. *Journal of Advertising Research, 31*(1), 46–54.

Paolacci, G. & Chandler, J. (2014). Inside the Turk: Understanding Mechanical Turk as a Participant Pool. *Current Directions in Psychological Science, 23*(3), 184–188. Online: https://doi.org/10.1177/0963721414531598

Patwardhan, H. & Patwardhan, P. (2016). When Fiction Becomes Fact: Effect of Reverse Product Placement on Consumer Attitudes. *Journal of Promotion Management, 22*(3), 349–369. Online: https://doi.org/10.1080/10496491.2016.1154917

Peer, E., Vosgerau, J. & Acuisti, A. (2014). Reputation as a Sufficient Condition for Data Quality on Amazon Mechanical Turk. *Behavioral Research Methods, 46*(4), 1023–1031. Online: https://doi.org/10.3758/s13428-013-0434-y

Rahman, I., Park, J. & Chi, C. G. (2015). Consequences of "Greenwashing": Consumers' Reactions to Hotels' Green Initiatives. *International Journal of Contemporary Hospitality Management, 27*(6), 1054–1081. Online: https://doi.org/10.1108/IJCHM-04-2014-0202

Raska, D., Nichols, B. S. & Shaw, D. (2015). When Descriptive Norm Cues Fail as Persuasion Agents in Green Supermarket Advertising. *Journal of Promotion Management, 21*(6), 721–738. Online: https://doi.org/10.1080/10496491.2015.1055047

Raziq, M. M., Ahmed, Q. M., Ahmad, M., Yusaf, S., Sajjad, A. & Waheed, S. (2018). Advertising Skepticism, Need for Cognition and Consumers' Attitudes. *Marketing Intelligence & Planning, 36*(6), 678–693. Online: https://doi.org/10.1108/MIP-11-2017-0273

Romani, S., Grappi, S. & Bagozzi, R. (2016). Corporate Socially Responsible Initiatives and Their Effects on Consumption of Green Product. *Journal of Business Ethics, 135*(2), 253–264. Online: https://doi.org/10.1007/s10551-014-2485-0

Roscoe, J. T. (1975). *Fundamental Research Statistics for the Behavioral Sciences* (2nd ed.). Holt Rinehart and Winston.

Sayal, A. & Pant, M. (2022). Examining the Moderating Effect of Green Product Knowledge on Green Product Advertising and Green Product Purchase Intention: A Study Using SmartPLS SEM Approach. *International Journal of Asian Business and Information Management, 13*(1), 1–16. Online: https://doi.org/10.4018/IJABIM.316175

Scott, M. L., Mende, M. & Bolton, L. E. (2013). Judging the Book by Its Cover? How Consumers Decode Conspicuous Consumption Cues in Buyer–Seller Relationships. *Journal of Marketing Research, 50*(3), 334–347. Online: https://doi.org/10.1509/jmr.11.0478

Shank, D. B. (2016). Using Crowdsourcing Websites for Sociological Research: The Case of Amazon Mechanical Turk. *The American Sociologist, 47*(1), 47–55. Online: https://doi.org/10.1007/s12108-015-9266-9

Shen, G. C., Chiou, J., Hsiao, C., Wang, C. & Li, H. (2016). Effective Marketing Communication via Social Networking Site: The Moderating Role of the Social Tie. *Journal of Business Research, 69*(6), 2265–2270. Online: https://doi.org/10.1016/j.jbusres.2015.12.040

Sherif, M. & Hovland, C. I. (1961). *Social Judgment. Assimilation and Contrast Effects in Communication and Attitude Change.* Yale University Press.

Shrum, L. J., McCarty, J. A. & Lowrey, T. M. (1995). Buyer Characteristics of the Green Consumer and Their Implications for Advertising Strategy. *Journal of Advertising, 24*(2), 71–82. Online: http://dx.doi.org/10.1080/00913367.1995.10673477

Song, B., Tao, W. & Taylor, J. W. (2021). Building Consumer Communal Relationships Through Cause-Related Marketing: From the Perspective of Persuasion Knowledge. *Journal of Consumer Behavior, 20*(6), 1388–1402. Online: https://doi.org/10.1002/cb.1942

Srivastava, A., Dasgupta, S. A., Ray, A., Bala, P. K. & Chakraborty, S. (2021). Relationships between the "Big Five" Personality Types and Consumer Attitudes in Indian Students Toward Augmented Reality Advertising. *Aslib Journal of Information Management, 73*(6), 967–991. Online: https://doi.org/10.1108/AJIM-02-2021-0046

Sun, Y. & Wang, S. (2020). Understanding Consumers' Intentions to Purchase Green Products in the Social Media Marketing Context. *Asia Pacific Journal of Marketing and Logistics, 32*(4), 860–878. Online: https://doi.org/10.1108/APJML-03-2019-0178

Swaen, V., Vanhamme, J., Varlegh, P. W. J., Verkerk, C., Tuk, M. A., Smidts, A., Bello, R. et al. (2004). Competitive Paper Session: Cause Marketing and Consumer Skepticism. *Advances in Consumer Research, 31*(1), 302–315. Online: https://doi.org/10.4236/tel.2019.94055

Taylor, D. C. & Barber, N. (2012). Measuring the Influence of Persuasion Marketing on Young Wine Consumers. *Journal of Food Products Marketing, 18*(1), 19–33. Online: https://doi.org/10.1080/10454446.2012.627289

Tee, P. K., Lim, K. Y., Ng, C. P. & Wong, L. C. (2022). Trust in Green Advertising: Mediating Role of Environmental Involvement. *International Journal of Academic Research in Business and Social Sciences, 12*(1), 1771–1786. Online: https://doi.org/10.6007/IJARBSS/v12-i1/12046

Tutaj, K. & van Reijmersdal, E. (2012). Effects of Online Advertising Format and Persuasion Knowledge on Audience Reactions. *Journal of Marketing Communications, 18*(1), 5–18. Online: https://doi.org/10.1080/13527266.2011.620765

Vakratsas, D. & Ambler, T. (1999). How Advertising Works: What Do We Really Know? *Journal of Marketing, 63*(1), 26–43. Online: https://doi.org/10.2307/1251999

Van de Mortel, T. F. (2008). Faking It: Social Desirability Response Bias in Self-Report Research. *Australian Journal of Advanced Nursing, 25*(4), 40–48.

Van Reijmersdal, E. A. & van Dam, S. (2020). How Age and Disclosures of Sponsored Influencer Videos Affect Adolescents' Knowledge of Persuasion and Persuasion. *Journal of Youth and Adolescence, 49*(7), 1531–1544. Online: https://doi.org/10.1007/s10964-019-01191-z

Vaughn, R. (1980). How Advertising Works: A Planning Model. *Journal of Advertising Research, 20*(5), 27–33.

Vaughn, R. (1986). How Advertising Works: A Planning Model Revisited. *Journal of Advertising Research, 26*(1), 57–66.

Voorveld, H. A. M., Meppelink, C. S. & Boerman, S. C. (2023). Consumers' Persuasion Knowledge of Algorithms in Social Media Advertising: Identifying Consumer Groups Based on Awareness, Appropriateness, and Coping Ability. *International Journal of Advertising: The Review of Marketing Communications,* 1–27. Online: https://doi.org/10.1080/02650487.2023.2264045

Vries, G., Terwel, B. W., Ellemers, N. & Daamen, D. D. L. (2015). Sustainability or Profitability? How Communicated Motives for Environmental Policy Affect Public Perceptions of Corporate Greenwashing. *Corporate Social Responsibility & Environmental Management, 22*(3), 142–154. Online: https://doi.org/10.1002/csr.1327

Xie, G-X. & Kronrod, A. (2012). Is the Devil in the Details? The Signaling Effect of Numerical Precision in Environmental Advertising Claims. *Journal of Advertising, 41*(4), 103–117. Online: https://doi.org/10.1080/00913367.2012.10672460

Yang, C. & Hsu, T. (2017). Effects of Skepticism about Corporate Social Responsibility Advertising on Consumer Attitude. *Social Behavior and Personality: An International Journal, 45*(3), 453–468. Online: https://doi.org/10.2224/sbp.5788

Yu, J. (2020). Consumer Responses Toward Green Advertising: The Effects of Gender, Advertising Skepticism, and Green Motive Attribution. *Journal of Marketing Communications, 26*(4), 414–433. Online: https://doi.org/10.1080/13527266.2018.1514317

Zabkar, V. & Hosta, M. (2013). Willingness to Act and Environmentally Conscious Consumer Behaviour: Can Prosocial Status Perceptions Help Overcome the Gap? *International Journal of Consumer Studies, 37*(3), 257–264. Online: https://doi.org/10.1111/j.1470-6431.2012.01134.x

Zarouali, B., Poels, K., Ponnet, K. & Walrave, M. (2021). The Influence of a Descriptive Norm Label on Adolescents' Persuasion Knowledge and Privacy-Protective Behavior on Social Networking Sites. *Communication Monographs, 88*(1), 5–25. Online: https://doi.org/10.1080/03637751.2020.1809686

Zinkhan, G. M. & Carlson, L. (1995). Green Advertising and the Reluctant Consumer. *Journal of Advertising, 24*(2), 1–6. Online: https://doi.org/10.1080/00913367.1995.10673471

KOME – An International Journal of Pure Communication Inquiry Vol. 12. No. 1. (2024) • 61–88.
DOI: 10.17646/KOME.of.7

# The Effects of Instagram Use on Body Image, Body Satisfaction and Ways of Losing Weight – A Quantitative Study[1]

Toktam Namayandeh Joorabchi,* Mokhtar Jafari**

* National University of Malaysia (UKM) 43600 UKM Bangi, Selangor MALAYSIA
** Kurdistan Provincial Government, Imam Khomeini Street, Sanandaj, Kurdistan Province, IRAN

The present study investigates the direct effect of Instagram use on various ways of losing weight, examines the mediation effects of body satisfaction and body image, and the moderator effects of gender and marital status. A total of 520 people who both used Instagram and undertook body surgery participated in the study and filled in the online and printed versions of our questionnaire. Partial least squares regression was used to test the research hypotheses and the relationships among the variables. The results revealed that body image mediated the effect of the purpose of Instagram use on ways of losing weight; however, no mediation effect of body image and body satisfaction was found for patterns and purposes of Instagram use apart from exercise. The relationship between the purposes and pattern of Instagram usage on body satisfaction was significant. However, patterns of Instagram use had no impact on body image, while this relationship for purpose was significant. The implications of the study are discussed.

**Keywords:** Instagram, body image, body satisfaction, ways of losing weight, Iran

1 Thanks to Professor Ali Akbar Majdi, who helped us to translate the questionnaire from English to Persian language.

## Introduction

Instagram is one of the social media applications and websites that have become quite popular as technologies advanced. Owned by Facebook, more recently known as Meta, Instagram focuses on video and photo sharing. In December 2021, more than 2 billion people were using Instagram globally. The largest group of users belonged to the 25–34 year-old cohort followed by 18–24 year-olds of whom 51.6% were men (Dixon, 2022). In Iran, however, women welcome Instagram to a greater extent as it provides a proper working base for them despite some limitations that have been imposed. Moreover, most online businesses (83%) use social media platforms, including Instagram, in order to increase their sales, which in turn explains why 11 million Iranian jobs depend on online social media networks. Iranian influencers also use their Instagram accounts for business purposes. Some Instagram users in Iran pay money to be advertised on famous pages while others use Instagram as a free place to promote their goods and services (Zigma8, 2022).

The conception of the perfect body displayed on Instagram and other social media platforms engages young women's minds in comparing themselves to the models they see there (Verduyn et al., 2020). Previous findings have confirmed that an individual comparing their own body to social media models engenders more negative feelings in them about the way they look in contrast to other real-world examples (Fardouly et al., 2017). Spending excessive amounts of time in the virtual social media world, and the use of filtering or even Photoshop to manipulate reality could be explanations (Hogue & Mills, 2019). Frequent checking of users' profile photos, videos and posts, as well as liking, sharing, saving, and commenting on their posts leads to constant unintentional self-comparison of the individual to the models on display, thereby fostering negative feelings towards their own body (Kim & Chock, 2015).

The term *body image* was first introduced by the psychologist John Money, an expert in various aspects of social identity (Grunewald et al., 2021). Voelker et al. (2015) considered body image to be a complex and vital element that includes self-perception and the way individuals feel about their own bodies; and it can vary across a spectrum of positive and negative feelings. Cash et al. (2004) propose the idea that certain physical features are idealised in the way we receive information about physical appearance. There has been a plethora of reports confirming that social media use and body image are strongly connected (Manago et al., 2015). For instance, Instagram users with a positive body image share more pictures of themselves (Butkowski et al., 2019).

In this study, we have attempted to detect links between Instagram use and various ways of losing weight by examining the mediating role of body satisfaction and body image. We further tested the roles of gender and marital status as moderators. Moreover, the issues the present study investigates are five-fold: (1) Are there any relationships between patterns of Instagram usage, body image, and body satisfaction? (2) Is there any relationship between patterns of Instagram usage and different ways of losing weight? (3) Are there any relationships between reasons for using Instagram, body image, and body satisfaction? (4) Is there any relationship between reasons for using Instagram and different ways of losing weight? (5) Are there any significant mean differences between gender groups and marital status in the relationships of independent variables (IVs) and dependent variables (DVs)?

## Literature review

### *Patterns of Instagram usage, body image and body satisfaction*

Media has always played an important role in forming social norms among people. Traditionally, television and magazines determined the beauty of models, but with the advancement of technologies, social media has a significant impact on body image among the youth of today (Mills et al., 2017). The influence of modern social media here is greater than traditional media because of it is frequently accessed by the users and there is a greater availability of perfect body types through the use of hashtags (Mills et al., 2017). The widespread images of slim, idealised bodies portrayed in the media conveys the message to its audience that this body type is favoured, and if women fail to conform, the way they look will be unsatisfactory (Cafri et al., 2005).

Similarly, Sultan (2023) confirmed the negative effects of social media use on body image depending on the amount of time spent online on such platforms; that is, the more time users spent on the media, the greater were the negative effects on their body image. By the same token, the amount of time spent using Instagram is considered as a pattern of use for Instagram in the present study.

Instagram users are allowed to use editing and filtering when posting photos and creating stories, consequently they tend to spend more time on editing to create their ideal look (Brown & Tiggemann, 2016). According to Kim and Kim (2023), Instagram users who tend to use filtering and editing options when uploading posts and sharing stories have more concerns about their body image and are more vulnerable to social comparisons. Being constantly exposed to perfect body images on Instagram pushes the users towards comparing their own appearances to the idealised figures, which may lead to body dissatisfaction (Marengo et al., 2018).

Furthermore, Ahadzadeh (2017) found a positive correlation between the time spent on Instagram and the degree to which its users internalise the thin body as the ideal. This is a byproduct of presenting one’s best photos on Instagram, it contributes to body dissatisfaction. Moreover, Alfonso-Fuertes et al. (2023) reported a higher level of body dissatisfaction and lower self-esteem among the users who spent more time on Instagram.

### *Reason for using Instagram, body image and body satisfaction*

Individuals use social media for a wide range of reasons, some for personal or private purposes and some for their businesses. Huang and Ha (2021) found that the reasons for using Instagram, in comparison to Facebook, are more personal and that users experience a more pleasant sense of self-satisfaction once they are able to present a better image of themselves and win approval.

Brandtzæg & Heim (2009) outlined 12 different motives for using social media: establishing new relationships, keeping in touch with family and friends, socialisation, receiving new information, talking, cost free texting, passing time, sharing content, having fun, checking profiles, shopping and other similar activities. Similarly, Krasnova, Veltri, Eling, and Buxmann (2017), outlined four basic motives for using Instagram: building relationships, self-development getting information, and having fun.

Ridgway and Clayton (2016) discovered a relationship between posting Instagram selfies and body image satisfaction, suggesting that when body image satisfaction is promoted through posting selfies, negative romantic relationships might occur as well. Kim and Kim (2023) suggested that the type and quality of contents people share could be related to their self-esteem and body image. Kim (2020) concluded that people who post on Instagram with less desire for popularity are capable of growing their self-esteem positively in contrast to users who are thirsty for attention and consequently receive negative impacts in using social media.

Marques et al (2022) also found that the more someone uses social media, the greater their dissatisfaction are with their body image; thus it is essential to inform them of the positive ways of using social media. In another study, McComb and Mills (2021) also confirmed that when people compare themselves to social media figures, they feel less confident about their appearance, in particular those who are perfectionists suffer more about their body image.

Jung, Barron, Lee, and Swami (2022) concluded that internalising a perfect image significantly mediated the relationship between using social media and body image perception.

## *Gender and Instagram use*

Several research projects have found differences between men and women in their social media usage. Hogue and Mills (2019) found the perfectly thin bodies displayed on Instagram bring about negative feelings and body frustration among young women. Such ideally thin bodies do not necessarily have to belong to celebrities, models, or Instagram influencers but also to female peers of the same age (Brown & Tiggemann, 2016; Fardouly & Holland, 2018). According to Gobin, McComb, and Mills (2022) modern social media platforms can increase the chances of body dissatisfaction among younger females once they have compared themselves to the figures displayed. According to Sharp and Gerrard (2022), teenage girls are more vulnerable to the negative effects of using Instagram regarding their appearance; as a result, the researchers employed a variety of strategies in an attempt to keep the girls safe from the potential risks of using the media.

Butkowski et al. (2019) reported that slim Instagram users post quite differently with regard to displaying their bodies; slimmer men and women tended to show more of their bodies rather than more impersonal posts. Haferkamp et al. (2012) also confirmed that women are more likely to present their bodies in the media if they are slim. People with higher BMIs, however, were more reluctant to show their bodies online (Bue, 2020). Moreover, Butkowski et al. (2019) revealed significant differences on body satisfaction among slim versus non-slim men and women: people with higher BMIs were more reluctant to show their physique online while that was not the case for those of regular-weight ones. Ridgway and Clayton (2016) also confirmed that Instagram users who share more photos of themselves were more satisfied with their bodies.

Along with the effect of thin bodies presented in the media, McComb and Mills (2022) examined the way the western media preferred a type of body termed the slim-thin figure that has more curves, large hips, small waist and a flat stomach. They found that women who compared themselves to such ideal bodies were more dissatisfied with their body image than those exposed to thin bodies. Moreover, women with physical appearance perfectionism were even more dissatisfied with their weight and self-image.

Constant exposure to slim bodies on Instagram was reportedly connected with reduced body satisfaction, self confidence and cheerfulness (McComb et al., 2021); the previous research also confirms those findings and stated that women are no longer interested in comparing their bodies to those of other women (Brown & Tiggemann, 2016; Hogue & Mills, 2019). The reason is that slim Instagram images are considered a threat to the ordinary women's attitudes towards their bodies, and they try to avoid comparison in order not to lose the competition. Avoiding comparisons is regarded as a technique for dealing with body image threats by eliminating stressful situations (Cash et al., 2005).

### *Instagram, body surgery, dieting and exercise*

Khanjani et al. (2022) examined the direct effect of social media addiction and body image anxiety on both attitudes towards cosmetic surgery and its indirect effect through the mediating variable of body image. He concluded that body image concerns have a mediatory role in the relationship between social and media addiction and attitudes towards cosmetic surgery. Body dissatisfaction was reported to be one of the main factors that led to people commissioning cosmetic surgery (Nerini et al., 2019; Walker et al., 2021). Positive correlations were also found between body dissatisfaction and women undergoing cosmetic surgery, which confirmed the way that surgery is viewed as a means of achieving social acceptance and self-love (Lunde, 2013; Menzel et al., 2011).

Similarly, Schettino, Capasso, and Caso (2023) concluded that even if people are satisfied with their body image, they will consider cosmetic surgery in order to gain social approval. It is worth noting that as the Instagram users have grown in number, so has the number of cosmetic surgery, particularly among young women (Walker et al., 2021). Beauty standards are constantly being displayed in a variety of ways on Instagram, motivating people to follow their principles (Alberga et al., 2018; Tiggemann et al., 2020). The positive relationship between media usage and undergoing cosmetic surgery has also been documented in a number of other studies (Carrotte et al., 2017; Caso et al., 2019; Chen et al., 2019; Gattino et al., 2018; Martel et al., 2020; Walker et al., 2021).

**H1:** Instagram users will be more likely to engage in cosmetic surgery.

According to Tamannaei and Nejat (2023), there was a significant relationship between the type of image that users are exposed to and the tendency towards cosmetic surgery; viewing images of beauty influencers motivated users to undergo cosmetic body surgery more than those who viewed images of actresses.

Pilgrim and Bohnet-Joschko (2019) concluded that creating body-centred visual content is a key element in winning public trust for Instagram influencers. Dieting and workouts are identified by influencers as the perfect way of achieving body perfection. Furthermore, Tiggemann and Zaccardo (2015) stated that lifestyle is the ideal position for influencers to adopt to attract audience attention. Gender and age are among the influential variables of social network behaviour (such as searching for diets and proper exercises) among the youth (López-de-Ayala et al., 2020). In addition, Pessoa et al., (2023) referred to self-care content as a remarkable issue on Instagram for both men and women.

**H2:** Instagram users will engage more in dieting.
**H3:** Instagram users will engage more in exercising.

## Theories

According to the theory of uses and gratification, people use the media based on their taste and requirements, and once they have been gratified, they then tend to use it frequently (Casaló et al., 2017; Hwang & Cho, 2018; Mahmoud et al., 2021). Alhabash and Ma (2017) reported that the best indicators for using social media are entertainment and socialisation; Sheldon and Bryant (2016) named surveillance, documentation, and having fun as the main reasons for using Instagram. Some users take refuge on Instagram from problems in their everyday life (Hartmann et al., 2010; Sheldon & Bryant, 2016). In addition, interesting characteristics of Instagram attract users and then provide them with happy hours (Hartmann et al., 2010).

Based on the theory of social comparison (Festinger, 1954), people constantly compare themselves to those they see in the media (Lee, 2014; Mills et al., 2017; Stapleton et al., 2017), and Instagram is a perfect place for such comparisons (Moon et al., 2016), although being exposed to slim bodies in the media can raise body dissatisfaction among younger women (Cafri et al., 2005; Carter & Vartanian, 2022; Lewis-Smith et al., 2019), and at the same time reduce their self-confidence (Fardouly & Holland, 2018; Hogue & Mills, 2019; McComb & Mills, 2021). Lee (2022) also stated that as a result of comparison, excessive use of Instagram is closely related to a desire to look slim.

Based on the mood management theory of Frederick et al. (2017), being constantly exposed to idealised slim figures in the media can lead to body dissatisfaction and lower spirit which is consistent with the influence of traditional media on young women (Brown & Tiggemann, 2016; Frederick et al., 2017; Hogue & Mills, 2019). Consequently, young adults are more influenced by Instagram use because they are the largest group of users, ranging from 25 to 34 years old (Dixon, 2022).

In this study, two variables of patterns and purposes of Instagram use were considered as independent variables. Each variable directly affected different ways of losing weight through body image and body satisfaction. The question is whether the gender and marital status of the subject is important in the quality of Instagram use and different ways of losing weight through body image and satisfaction. The research framework is presented below (Figure 1).

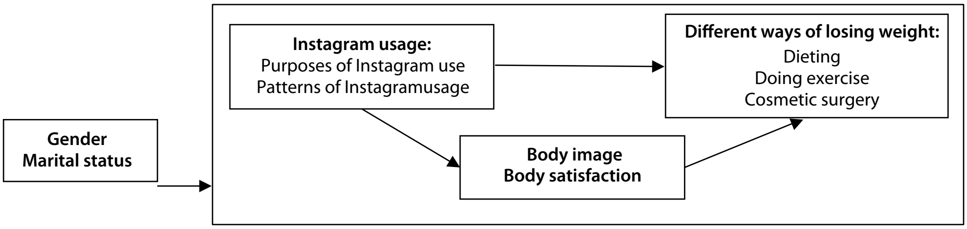


*Figure 1: The mediation effects of body image, body satisfaction, and Instagram usage on different ways of losing weight*
*Source:* Compiled by the author.

## Methodology

### *Location and sampling*

The sample for the present study was drawn from among patients who had visited a doctor for cosmetic body surgery. A selection was made from the list of general and specialist doctors in Mashhad, Iran. They are the most renowned and successful surgeons with the largest number of patients for cosmetic and body surgery in the medical system in that city. First, we went to the doctors' surgeries and asked for their permission, and then we asked the patients to answer a questionnaire. In addition, if the participants did not have time, we asked them to fill in the online versions of questionnaires through the survey link. The required data was collected via questionnaires from both male and female subjects who had undergone body surgery as a result of using Instagram.

### *Participants*

A group of people who used Instagram and had cosmetic body surgery participated in this study. The researcher distributed online and paper questionnaires among 520 male and female individuals who had undergone cosmetic body surgery or wished to do so. Some of them had several body surgery procedures. Purposive sampling was applied, and we asked the participants to fill in the survey questionnaire that addressed topics such as purposes and patterns of Instagram use, body image, body satisfaction, different ways of losing weight, as well as some demographic variables such as gender, marital status, age, the student's income and parents' income, parents' education, students' and fathers' jobs, and field of study.

Of the respondents, 63% were female and 37% were male, almost half of whom were students of social sciences; with 47.1% and 33.8% being in the field of science; and 6% had no academic education. More than half of the respondents were married (72%) and 26.3% were single. Of the respondents, 40% were employees and 37.8% were students or householders with no income, followed by 10% who were freelance. The last and smallest group were retired people (2.7%).

The respondents were aged between 15 and 80 years old with the majority of them (36%) located in the 20–40 category, followed by 40–60 year-olds at 29.2%; and 60–80 year-old participants who constituted 23.6% of the respondents. The last group belonged to those aged below 19 years old, which constituted 3.7% of the respondents. Regarding the respondent's income, 32.3% of the subjects earned 5–10 million Tomans per month (109.37– 218.73 € at the time of writing), followed by the no income group of students and housewives at 27.3%. 12.9% of the subjects earned income above ten million Tomans per month (above 218.73 €), followed by 6% who earned between one and five million per month (21.87–109.37 €). The last and smallest group belonged to 2.2% of subjects who earned less than one million Tomans per month (less than 21.87 €).

Regarding their fathers' education, almost half had not completed a diploma (53.3%), 17.9% had a diploma and 9.2% held a bachelor's degree. The three last groups belonged to the 7.4% of fathers with a Master's degree, the 5.5% with a qualification associate degree, and the 4.6% with a PhD. As for mothers' education, more than half of the respondents' (64.7%) mothers had not completed a Diploma, 19.4% had a Diploma, 5.5% had a bachelor's degree, 3.2% had a qualification associate degree, and 2.7% had Master's degree.

Regarding fathers' jobs, 30% of fathers had freelance occupations, 23.5% were retired, 16.9% were employees, 9.7% had passed away, and 1.3% were unemployed. Almost half of the participants' fathers (43%) earned 10–15 million Tomans per month; 10.4% earned above 15 million Tomans, the same percentage earned 5–10 million Tomans in a month. The last two and smallest groups had either no income (7%) or 1–5 million Tomans per month (0.8%).

Regarding patterns of Instagram use as years of use, they were divided into two groups of less than 5 years and more than 5 years. More than half of the respondents (63.6%) had used it for less than 5 years and 24.4% had used it for more than 5 years. Checking Instagram was divided into the following three groups: less than five times per day (67.2%), 6 to12 times per day (12.2%), and more than 13 times per day (7.7%). The amount of time spent on Instagram per day was divided into two groups: less than 5 hours in a day, and more than 5 hours. Most of the respondents (78%) spent less than 5 hours a day on Instagram, and 8.7% spent more than 5 hours.

The number of friends on Instagram was divided into the following three groups: below 100, between 100–200, and more than 200. The largest group of respondents (11.5%) had more than 200 friends, 5.7% had less than 100 friends, and 4.6% had 100–200 friends. From the point of the number of received Likes, two groups were specified: less than 100 Likes and more than 100 Likes. More than half of the subjects (60.5%) received less than 100 Likes, and 20.2% received more than 100 Likes. The number of followers on Instagram in the present study was divided into three groups of: less than 100 (43.7%), from 100 to 200 (14%), and more than 200 (29.8%).

Most of the participants in the present study (75.2%) mentioned that receiving Likes is not important to them while 12.1% stated that it is fairly important ($M$ = 3.62, $SD$ = 0.79). Regarding the importance of followers on Instagram, more than half of the participants (77.1%) mentioned that it was not important, and 8.9% stated that it was fairly important ($M$ = 3.62, $SD$ = 0.84). More than half of the participants (61%) mentioned that friends on Instagram are not important; and 19.8% said it was fairly important ($M$ = 3.40, $SD$ = 0.90).

Regarding, the respondents' point of view on body satisfaction, 87.1% preferred medium body size, 7.7% preferred thin and just 1.4% liked above average weight body size. From the point of doing exercise, 31.9% of the respondents exercised frequently, 27% exercised very frequently, and 27% had a medium exercise routine schedule. In addition, 30% of the respondents were very frequently on a weight loss diet; the same percentage is true for frequent dieters ($M$ = 2.29, $SD$ = 1.28). Also, 72.6% of the subjects mentioned that they were on a diet under the supervision of doctors while 23.3% went on diets independently. Moreover, 63.8% of the participants used weight loss medications very frequently and 13.7% used them frequently ($M$ = 1.64, $SD$ = 1.06). Finally, 28.6% of the respondents were not satisfied with their cosmetic surgery while 24.8% were completely satisfied ($M$ = 2.60, $SD$ = 1.33). From a maximum of 20, more than half of the respondents (79.7%) scored their beauty more than 15 and 16.2% scored their beauty at less than 15.

## *Measures*

Patterns of Instagram use were measured through 10 items. The following three open-ended questions measured Instagram usage by the number of years, times, and hours per week:

- How long have you been using Instagram?
- How often do you use Instagram?
- How many hours do you spend using Instagram each week?

Three open-ended questions measured the number of followers, friends on Instagram, and also the number of likes:

- How many followers do you have on social media?
- Approximately how many friends do you have on your Instagram account?
- How many likes do you usually receive on your Instagram posts?

Three questions measured the importance of Likes, followers and friends on Instagram for users, ranging from 5 = *"extremely important"* to 1 = *"not important at all"*. We used this dimension developed by Limniou, Ascroft, and McLean (2021). We asked "do you use Instagram" with the answer of "Yes" or "No", just to make sure that all respondents do use it.

The purpose of Instagram use was measured by 20 items, on a five-point Likert scale. Respondents were asked about media usage ranging from 1 = *"Strongly disagree"* to 5 = *"Strongly agree"* for each statement. The range of scores for this dimension was from 20 to 100. To measure this dimension, we used Pertegal, Oliva, and Rodríguez-Meirinhos's model (2019). They divided purposes for Instagram use into three dimensions: sense of belonging, self-expression, and documentation/current.

Body image was measured by 21 items ranging from 1 = *"Very much"* to 5 = *"Very little"* for each statement. The range of scores for this dimension ranged from 21 to 105; and we used body image developed by Dakanalis et al. (2017). It was divided into three dimensions of body surveillance, body shame, and appearance control beliefs.

Body satisfaction was measured by four items ranging from 1 = *"Very satisfied"* to 5 = *"Very unsatisfied"*. The range of the scores was from 4 to 20 which was developed by Madan, Beech, and Tichansky (2008). In addition, one item asked "how do you feel your looks compare to an average person's looks" ranging from 1 to 5 from *"Much better"* to *"Much worse"*. We also asked the respondents to rank their ideal body type with three answers of thin, average, and fat. They were also asked to score their beauty out of 20.

Different ways of losing weight were measured by four questions about diet, exercise and surgery. Each item was measured by four separate questions ranging from 1 = *"Very much"* to 5 = *"Very little"*. The range of the scores was from 1 to 20.

The demographic of the respondents were measured as gender, marital status, age, students' income, and their parents' income, parents' level of education, students' and fathers' jobs, and participants' field of study.

## *Data analysis*

The partial least squares variance method (PLS) of SmartPLS 3 was used for structural model analysis, which is the most commonly used method in the current research (Hair et al., 2021). The main reason for using this method in this study is that PLS is used to deal with mixed and complex model studies (Sarstedt et al., 2020), and the most important motivations, exploration and prediction, are recommended at an early stage of theoretical development in order to test and validate exploratory models. It is also suitable for prediction-oriented research (Henseler et al., 2009). In addition, "PLS path modelling will produce parameter estimates even when the sample size is very small" (Rigdon, 2016, p. 600).

In addition, descriptive analysis was employed to determine patterns and purposes of Instagram use as independent variables of the present study, and different ways of losing weight such as dieting, doing exercise and undergoing surgery as dependent variables; also, body satisfaction and body image were mediators. Furthermore, respondents' personal information (gender, marital status, age, students' income and their parents' income, parents' education, students and their fathers' job, and their field of study) was analysed via frequency, percentage, mean, and standard deviation. PLS analysis was employed for the regression analysis for moderation effects of gender and marital status.

## Results and Discussion

### *Descriptive statistics*

For the *body image* index, the majority of women (85.6%) considered it to be moderate. More than half of the respondents (55.3%) have high *body satisfaction* (Table 1).

*Table 1:*
*Descriptive Statistics Summary of all Variables*

| **Variable** | **Level n (%)** | | | **Mean** | **SD** |
|---|---|---|---|---|---|
| | **Low** | **Moderate** | **High** | | |
| Body image | 42 (7.0) | 511 (85.6) | 31 (5.2) | 61.72 | 10.07 |
| Body satisfaction | 43 (7.2) | 209 (35.0) | 330 (55.3) | 18.68 | 4.01 |

*Source:* Compiled by the author.

### *Measurement model*

The measurement model is the part of the model that examines associations between the latent variables and their measures.

### *Convergent validity*

The convergent validity of the measurement is usually ascertained by examining the loadings, average variance extracted (AVE) and also the composite reliability (Rahman et al., 2015). The composite reliabilities were all higher than 0.7 and the AVE of all constructs were also higher than 0.5.

Table 2 shows the outer loadings of all items for all variables in the initial and modified measurement model. According to these results, all outer loadings are accepted except the following items: in pattern of Instagram use, in years of Instagram use, in body satisfaction, C5, and in purpose of Instagram usage, A1, A3, A4, A8 to A13, A15, A17 to A20, in body image B1 to B4, B 6, 7, 8, B11 to B21, in surgery D9 was eliminated from the initial measurement model due to low loading factor which were less than 0.5 confirming their low contribution to the related constructs. Regarding the findings of this study, the Composite Reliability (CR) ranged between 0.83 and 0.88 and AVE ranged between 0.50 and 0.79. In addition, to measure collinearity at the indicator level, the variance inflation factor (VIF) was used. Results indicated that all values are below 5 revealing that there is no collinearity issue (Table 2).

*Table 2:*
*The result of convergent validity*

| **Construct** | **Item** | **Factor Loading (> 0.5)** | **Cronbach's Alpha (> 0.7)** | **Composite Reliability** | **Average Variance Extracted (AVE) (> 0.5)** | **Collinearity Statistics (VIF)** |
|---|---|---|---|---|---|---|
| Purpose of Instagram use | | | 0.772 | 0.835 | 0.52 | 1.573 |
| | A14 | 0.62 | | | | 1.462 |
| | A16 | 0.576 | | | | 1.485 |
| | A2 | 0.66 | | | | 1.269 |
| | A5 | 0.79 | | | | 2.307 |
| | A6 | 0.777 | | | | 2.107 |
| | A7 | 0.61 | | | | 1.464 |
| Body image | | | 0.719 | 0.826 | 0.549 | |
| | B10 | 0.753 | | | | 1.441 |
| | B14 | 0.777 | | | | 1.491 |
| | B22 | 0.67 | | | | 1.576 |
| | B5 | 0.534 | | | | 1.177 |
| | B9 | 0.861 | | | | 1.772 |
| Body satisfaction | | | 0.832 | 0.88 | 0.602 | |
| | C1 | 0.781 | | | | 1.976 |
| | C2 | 0.856 | | | | 2.646 |
| | C3 | 0.891 | | | | 2.996 |
| | C4 | 0.65 | | | | 1.369 |
| Diet | | | 0.626 | 0.838 | 0.722 | |
| | D3 | 0.806 | | | | 1.26 |
| | D5 | 0.894 | | | | 1.26 |
| Pattern of Instagram use | | | 0.77 | 0.882 | 0.79 | |
| | Hours in Day | 0.94 | | | | 1.629 |
| | Time Per Day | 0.83 | | | | 1.567 |

*Source:* Compiled by the author.

### *Discriminant validity*

Discriminant validity demonstrates the extent to which a construct is empirically distinct from another construct. Regarding the assessment of the discriminant validity of this model, the value of the heterotrait-monotrait ratio of correlations (HTMT) is 0.47, which is lower than 0.90 (Henseler et al., 2015) or 0.80 (Hair et al., 2019). The results revealed that discriminant validity has been ascertained (Table 3).

*Table 3:*
*Discriminant validity for all variables*

| | 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|
| Body satisfaction | 0.47 | | | | | |
| Diet | 0.42 | 0.17 | | | | |
| Exercise | 0.03 | 0.36 | 0.09 | | | |
| Pattern of Instagram use | 0.09 | 0.211 | 0.15 | 0.01 | | |
| Purpose of Instagram usage | 0.32 | 0.24 | 0.10 | 0.09 | 0.30 | |
| Surgery | 0.21 | 0.098 | 0.40 | 0.04 | 0.15 | 0.08 |

*1) Body image 2) Body satisfaction 3) Diet 4) Exercise*
*5) Pattern of Instagram use 6) Purpose of Instagram usage*
*Source:* Compiled by the author.

### *Path model using bootstrap*

**RQ1:** Is there any relationship between "patterns of Instagram use", "body image," and "body satisfaction"?
**RQ2:** Is there any relationship between "patterns of Instagram use" and different ways of losing weight?
**RQ3:** Is there any relationship between "purposes of Instagram usage," "body image," and "body satisfaction"?
**RQ4:** Is there any relationship between "purposes of Instagram use" and different ways of losing weight?

The path coefficients obtained from this model were consistent. The respective confidence intervals can be obtained by bootstrapping (Streukens & Leroi-Werelds, 2016). This step also provides estimates for indirect and total effects.

There was relationship between patterns of Instagram use and body satisfaction ($p < 0.05$). Patterns of Instagram use had no impact on body image, dieting and exercising ($p > 0.05$), but this relationship was meaningful and positive for undergoing cosmetic surgery ($\beta = 0.12$, $p < 0.05$). Therefore, H1, was not rejected.

There was a significant relationship between purposes of Instagram usage, body image, and body satisfaction with ($\beta = 0.24$, $p < 0.05$) and ($\beta = -0.10$, $p < 0.05$)

respectively. There was no relationship between purposes of Instagram usage and different ways of losing weight (diet, exercise and surgery) ($p > 0.05$). H2 and H3 were, therefore, rejected.

The impact of body image on exercise, dieting and undergoing surgery was positive and significant ($\beta = 0.123$, $p < 0.05$), ($\beta = 0.28$, $p < 0.05$) and ($\beta = 0.17$, $p < 0.05$) respectively. Body satisfaction just had positive and significant impact on doing exercise ($\beta = 0.38$, $p < 0.05$). However, the impact of body satisfaction on dieting and surgery was not significant ($p > 0.05$). In addition, the impact of body image on body satisfaction is significant ($p < 0.05$).

### *Mediation test of "body image" and "body satisfaction" with IVs and DVs*

No mediation effect was found between body image, patterns of Instagram use, and different ways of losing weight (diet, exercise and surgery) ($p > 0.05$). The mediation effects of body satisfaction on different ways of losing weight (diet, exercise and surgery) and pattern of Instagram use were not significant ($p > 0.05$), only body satisfaction has mediation effects with the pattern of Instagram use on exercise ($p < 0.05$).

The mediation effects of body satisfaction and purpose of Instagram use on different ways of losing weight (diet and surgery) were not significant ($p > 0.05$), however, this relationship was significant for doing exercise ($\beta = -0.038$, $p < 0.05$).

The mediation effects of body image on body satisfaction and the purposes of Instagram use were negative and significant ($\beta = -0.087$, $p < 0.05$). The mediation effects of body image and purposes of Instagram use on different ways of using methods such as diet, exercise, and surgery is significant and positive ($\beta = 0.07$, $p < 0.05$) ($\beta = 0.03$, $p < 0.05$) ($\beta = 0.042$, $p < 0.05$) respectively. The mediation effects of body satisfaction and body image on exercise were negative and significant ($\beta = -0.13$, $p < 0.05$) and there was no relationship with diet and surgery ($p > 0.05$). (Table 4, and Figure 2).

*Table 4:*
*Results of mediation tests*

| **Mediation effects** | **β** | **T** | **P Values** |
|---|---|---|---|
| Pattern of Instagram use > Body image > Body satisfaction | –0.009 | 0.667 | 0.505 |
| Pattern of Instagram use > Body image > Diet | 0.008 | 0.682 | 0.495 |
| Pattern of Instagram use > Body image > Body satisfaction > Diet | 0 | 0.113 | 0.91 |
| Pattern of Instagram use > Body image > Exercise | 0.003 | 0.618 | 0.537 |
| Pattern of Instagram use > Body image > Body satisfaction > Exercise | –0.004 | 0.653 | 0.514 |
| Pattern of Instagram use > Body image > Surgery | 0.005 | 0.62 | 0.535 |
| Pattern of Instagram use > Body image > Body satisfaction > Surgery | 0 | 0.038 | 0.969 |
| Pattern of Instagram use > Body satisfaction > Exercise | –0.045 | 2.789 | **0.005** |
| Pattern of Instagram use > Body satisfaction > Diet | 0.001 | 0.199 | 0.843 |
| Pattern of Instagram use > Body satisfaction > Surgery | 0 | 0.064 | 0.949 |

| Mediation effects | β | T | P Values |
|---|---|---|---|
| Purpose of Instagram use > Body image > Body satisfaction | –0.087 | 4.539 | **0** |
| Purpose of Instagram use > Body image > Diet | 0.07 | 3.759 | **0** |
| Purpose of Instagram use > Body image > Exercise | 0.03 | 2.331 | **0.02** |
| Purpose of Instagram use > Body image > Surgery | 0.042 | 2.591 | **0.01** |
| Purpose of Instagram use > Body image > Body satisfaction > Exercise | –0.034 | 3.849 | **0** |
| Purpose of Instagram use > Body image > Body satisfaction > Surgery | 0 | 0.063 | 0.95 |
| Purpose of Instagram use > Body image > Body satisfaction > Diet | 0.001 | 0.193 | 0.847 |
| Purpose of Instagram use > Body satisfaction > Exercise | –0.038 | 2.087 | **0.037** |
| Purpose of Instagram use > Body satisfaction > Surgery | 0 | 0.061 | 0.952 |
| Purpose of Instagram use > Body satisfaction > Diet | 0.001 | 0.177 | 0.86 |
| Body image > Body satisfaction > Exercise | –0.138 | 5.863 | **0** |
| Body image > Body satisfaction > Diet | 0.003 | 0.202 | 0.84 |
| Body image > Body satisfaction > Surgery | –0.001 | 0.066 | 0.947 |

*Source:* Compiled by the author.

## *Effect Size $f^2$*

The change in the $R^2$ value, while a particular independent construct is eliminated from the model, can be used to evaluate whether the omitted construct had a basic influence on the dependent construct or not. This measures indicators for the $f^2$ or effect size. Recommended guidelines for assessing effect size are: $f^2 \geq 0.02$, $f^2 \geq 0.15$ and $f^2 \geq 0.35$ respectively, representing the small, medium, and large effect sizes of the exogenous construct (Cohen, 1988). The result of $f^2$ revealed that effect size of exogenous construct for body image indicated the effect size for body satisfaction ($f^2 = 0.146$), diet ($f^2 = 0.07$), exercise ($f^2 = 0.014$) and surgery ($f^2 = 0.026$) in medium, and small effect sizes.

The effect size for body satisfaction, diet and surgery equals ($f^2 < 0.001$), and for exercise $f^2 = 0.14$. The effect size is small and medium. The effect size for patterns of Instagram use and body image is ($f^2 = 0.001$), for body satisfaction ($f^2 < 0.015$), for surgery ($f^2 = 0.016$), for exercise ($f^2 = 0.002$) and for diet it equals ($f^2 = 0.011$). The effect size is small. The effect size for purposes of Instagram use and body image is ($f^2 = 0.06$) and for body satisfaction ($f^2 = 0.011$), for exercise and diet ($f^2 = 0.001$), and for surgery equals ($f^2 < 0.001$). The effect sizes are medium and small.

## *Coefficient of determination ($R^2$) and ($Q^2$)*

Patterns and purposes of Instagram usage were able to explain 3% for body image, 9% for body satisfaction, 6% for diet, 11% for exercise, and 2% for surgery. A blindfolding procedure was employed to establish cross-validated redundancy measurement for each construct. The results revealed that the $R^2$ value of body image (0.05), body satisfaction (0.17), diet (0.08), exercise (0.12) and surgery (0.04) are larger than zero, recommending that the independent construct has predictive power for mediator and dependent construct under the conditions of the present study (Hair et al., 2011) (Table 5).

*Table 5:*
*Results of coefficient of determination ($R^2$) and $Q^2$*

| **Endogenous latent variable** | **$R^2$** | **Adj $R^2$** | **$Q^2$** |
|---|---|---|---|
| Body image | 0.063 | 0.059 | 0.031 |
| Body satisfaction | 0.18 | 0.176 | 0.098 |
| Diet | 0.095 | 0.089 | 0.06 |
| Exercise | 0.127 | 0.123 | 0.114 |
| Surgery | 0.05 | 0.044 | 0.029 |

*Source:* Compiled by the author.

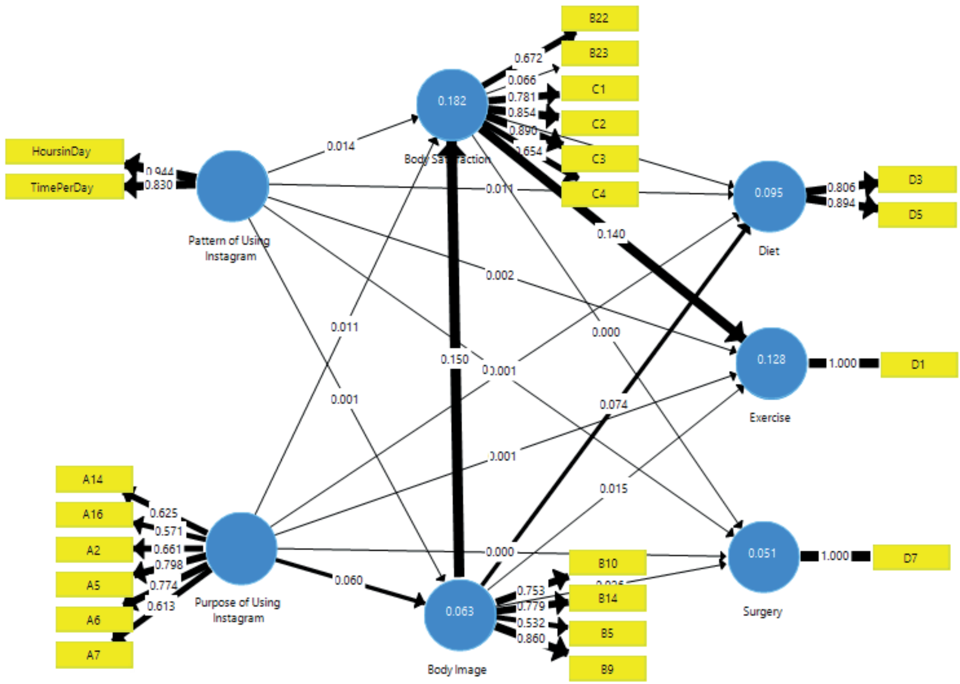


*Figure 2: The mediation effects of body satisfaction,*
*and image on different ways of losing weight and Instagram usage*
*Source:* Compiled by the author.

**RQ5:** Are there any significant mean differences between groups of gender and marital status in the relationship of IVs and DVs?

## Multiple group analysis for gender and marital status

Table 6 reported the path coefficients for each group and the significance test for the differences of group specific results based on the method of PLS-MGA (Partial least squares multi-group analysis). The notable variation between gender (male vs. female) is not significant ($p > 0.05$), just significant for the relationship between pattern of Instagram use and body image. Regardless of the group differences, marital status (married vs. single) is not significant ($p > 0.05$).

*Table 6:*
*Multi-group analysis*

| **Gender** | **Difference (Female-Male)** | **p-value** |
|---|---|---|
| Body image > Body satisfaction | 0.126 | 0.924 |
| Body image > Diet | 0.076 | 0.792 |
| Body image > Exercise | 0.036 | 0.346 |
| Body image > Surgery | 0.03 | 0.623 |
| Body satisfaction > Diet | 0.101 | 0.85 |
| Body satisfaction > Exercise | 0.074 | 0.81 |
| Body satisfaction > Surgery | 0.01 | 0.477 |
| Pattern of Instagram use > Body image | 0.221 | **0.008** |
| Pattern of Instagram use > Body satisfaction | 0.138 | 0.075 |
| Pattern of Instagram use > Diet | 0.094 | 0.23 |
| Pattern of Instagram use > Exercise | 0.047 | 0.337 |
| Pattern of Instagram use > Surgery | 0.092 | 0.192 |
| Purpose of Instagram usage > Body image | 0.08 | 0.293 |
| Purpose of Instagram usage > Body satisfaction | 0.112 | 0.799 |
| Purpose of Instagram usage > Diet | 0.053 | 0.692 |
| Purpose of Instagram usage > Exercise | 0.042 | 0.656 |
| Purpose of Instagram usage > Surgery | 0.139 | 0.832 |
| **Marital status** | **Difference (Married-Single)** | |
| Body image > Body satisfaction | 0.08 | 0.17 |
| Body image > Diet | 0.07 | 0.27 |
| Body image > Exercise | 0.01 | 0.43 |
| Body image > Surgery | 0.07 | 0.27 |
| Body satisfaction > Diet | 0.14 | 0.92 |
| Body satisfaction > Exercise | 0.19 | 0.99 |
| Body satisfaction > Surgery | 0.02 | 0.44 |
| Pattern of Instagram use > Body image | 0.04 | 0.68 |

| | | |
|---|---|---|
| Pattern of Instagram use > Body satisfaction | 0.07 | 0.24 |
| Pattern of Instagram use > Diet | 0.47 | 1 |
| Pattern of Instagram use > Exercise | 0.22 | 0.97 |
| Pattern of Instagram use > Surgery | 0.2 | 0.87 |
| Purpose of Instagram usage > Body image | 0.07 | 0.78 |
| Purpose of Instagram usage > Body satisfaction | 0.14 | 0.89 |
| Purpose of Instagram usage > Diet | 0.06 | 0.28 |
| Purpose of Instagram usage > Exercise | 0.005 | 0.46 |
| Purpose of Instagram usage > Surgery | 0.05 | 0.66 |

*Source:* Compiled by the author.

## Discussion

The present study was conducted as an attempt to find out if any relationship exists between the patterns and purposes of Instagram use and different ways of losing weight (diet, exercise and surgery) with the mediation effects of body image and body satisfaction. Moreover, the moderating effects of gender and marital status were also analysed.

The current investigation had 10 main findings which are enumerated below:

1) The relationship between patterns of Instagram use and body image was not significant while this relationship is significant for body satisfaction. 2) The relationship between patterns of Instagram use, dieting and exercising was not significant; however, this relationship proved significant for those undergoing surgery. 3) There was a significant relationship between purposes of Instagram usage, body image and body satisfaction. 4) There was no relationship between purposes of Instagram use and different ways of losing weight. 5) There was a significant relationship between body image and different ways of losing weight. 6) There was a significant relationship between body satisfaction and doing exercise, but this relationship was not significant for surgery and diet. 7) The mediation effects of body image and body satisfaction on different ways of losing weight (diet, exercise and surgery) and patterns of Instagram use were not significant except for body image and pattern of Instagram use and exercise. 8) The mediation effects of body image and purpose of Instagram use on ways of losing weight proved to be significant. 9) The mediation effect of body satisfaction and purposes of Instagram use on doing exercise was significant, but this mediation effect was not significant for dieting and undergoing surgery. 10) The moderating effect of gender and marital status was not significant; however, gender had a significant moderating effect on Instagram usage and body image.

The first main finding is that the relationship between patterns of Instagram use and body image was not significant while this relationship was significant for body satisfaction which is in line with previous findings that stated, spending more time on social media has a positive relationship on body dissatisfaction (Ahadzadeh et al., 2017;

Alfonso-Fuertes et al., 2023; Brown & Tiggemann, 2016; Fardouly & Vartanian, 2015; Graff & Czarnomska, 2019; Kim & Kim, 2023; Kleemans et al., 2018; Marques et al., 2022; Sultan, 2023). Moreover, Fardouly and Holland (2018), along with Hogue and Mills (2019) confirmed a significant relationship between media usage and negative body image.

The second main finding is that the relationship between patterns of using Instagram, dieting, and doing exercise was not significant; however, this relationship proved to be significant for undergoing surgery. This result is not consistent with the findings of Tarsitano et al. (2022), Curtis et al. (2020), Boepple and Thompson (2016), Graff and Czarnomska (2019) who reported a positive relationship between using Instagram, dieting and doing exercise. In addition, Mabe et al. (2014) observed a positive association between time spent on social media and disordered eating. However, this result is consistent with the findings of Tamannaei and Nejat (2023) who found that viewing beauty influencers' images led to a greater tendency to undertake cosmetic body surgery.

The third main finding is that the relationships between purposes of using Instagram, body image and body satisfaction are significant; which is consistent with the findings of Ridgway and Clayton (2016) who also reported significant association between posting a large number of selfies on Instagram and negative romantic relationship outcomes; suggesting that showing one's body satisfaction in the media could lead to Instagram-related disagreements. Butkowski et al. (2019) found that Instagram users who are most satisfied with their body image tend to make more selfies.

The fourth main finding showed no relationship between purposes of Instagram use and different ways of losing weight; which is consistent with the outcomes of Khanjani et al. (2022) who observed that addiction to social media is directly related to body image anxiety and tendency towards cosmetic surgery.

The fifth main finding showed significant relationship between body image and different ways of losing weight. This result is in line with the findings of McComb and Mills (2021) who reported that social comparison to media displayed figures led to lower self-confidence and body dissatisfaction. In addition, Holland and Tiggemann (2017) found that women who posted ordinary or travel photos on Instagram suffered more from disordered eating compared to women who posted exercise routines. Furthermore, those users viewing edited images might compare themselves with unrealistic beauty ideals leading to body dissatisfaction or extreme dieting (Alperstein, 2015). In contrast to our fifth outcome, women with a positive body image frequently quoted regular exercise as a way of improving their health and lifestyle rather than losing weight (Wood-Barcalow et al., 2010). Social media addiction indirectly influenced attitude towards cosmetic surgery through the mediating variable of body image concern (Khanjani et al., 2022).

The sixth main finding revealed a significant relationship between body satisfaction and doing exercise, but an insignificant one for surgery and dieting. This result is in line with the findings of Nerini et al. (2019) and Walker et al. (2021). However, it is in contrast with some similar studies that have shown a positive association between body dissatisfaction and undergoing cosmetic surgery among women (Lunde, 2013; Menzel et al., 2011).

Furthermore, this study found a significant relationship between the mediation effects of body image and purposes of Instagram use on ways of losing weight. This result is consistent with the findings of Knobloch-Westerwick and Crane (2012) who found that dieting mediated the impact of exposure to slim media figures on body satisfaction.

The last but not least of the findings belongs to the insignificant moderating effect of gender and marital status; however, gender had a moderating effect for pattern of Instagram use and body image. This result is not consistent with the findings of Huang and Su (2018), Pessoa et al., (2023), Butkowski et al. (2019), Haferkamp et al. (2012), and Sultan (2023) who found that gender matters in Instagram use. Likewise, Van den Berg et al. (2007) observed gender differences in body mediated relationships between friend dieting and body dissatisfaction.

## Conclusion

Overall, these findings provide information on the role that Instagram use plays in different ways of losing weight through the mediation effects of body satisfaction and body image. The study highlighted the importance of Instagram in different ways of losing weight between single and married male and female users. The results showed that social media, especially Instagram, has undeniable impacts on its users because of the prevalence of idealised body images which provides ample opportunity for the younger generations to get involved in the process of comparing themselves with the figures displayed in the media (Verduyn et al., 2020).

## Recommendations

In general, media literacy programs attempt to illustrate to the youth the way slim bodies are displayed in the media. With the aid of audiovisual tools, different processes of advertisement production with models are shown, so that the audience realises there is a lot of professional editing behind a single image. The main purpose of such tutorials is to depict that reality could be quite different from what is displayed in the media. Once the youth attend media literacy programs, their critical thinking abilities will increase, and as a result they will not fall for the media images.

According to McComb et al. (2021), certain disclaimers might function similarly to media literacy programs by raising awareness about the way images are edited and changed before posting on Instagram. Once they are aware of such facts, social comparisons, and their negative consequences will reduce to a great extent. Therefore, women who are well aware of manipulated images have a more positive body image towards themselves compared to those with lower media literacy skills (McLean et al., 2015). Body image researchers are truly qualified to suggest specific strategies to moderate media content for the betterment of society.

During the process of data collection, some participants were observed who believed in normal beauty standards, some of them were married, and mentioned that their husbands were satisfied with their bodies, yet they still wished to change their body image because they were not happy with their own bodies. Consultation with a psychologist is advised before undertaking any beauty surgery. Once the normal condition of the patients is confirmed, they are allowed to undergo cosmetic surgery because many people undergo such cosmetic procedures as a result of an inferiority complex, low self-esteem, or lack of self-confidence.

Preparing documentaries about people who have done cosmetic surgery to change their body image (those with side effects and those without any) could be a valuable source of information for the youth to make wise decisions. Also, cosmetic surgeons and doctors can be invited to educate people about the advantages and disadvantages of body surgery. They can show people, supported with scientific documentation, who do need to undergo such surgery. Given that, we found that Instagram use does have an impact on people's body image, even leading them towards surgery, it follows that via the same instrument, that is Instagram itself, we can inform people of the irreversible side effects of body operations.

## Limitations of this study

The present study came up with new knowledge and helpful information about the ways in which Instagram can influence its users' lifestyles; nevertheless it has certain limitations as well. As the survey questionnaires were distributed online, the respondents could have completed the forms in a less controlled setting which would in turn increase the chances of lower engagement in the study. In addition, the sample size of the study is not sufficient to represent an entire national population.

## Implications

The younger generations in every society are among the greatest assets of any community; it is therefore important to develop fruitful strategies to reduce the negative effects of being exposed to slim bodies in the media. In order to do so, the youth need to be informed of popular photo editing techniques that are widely used in the virtual world. The youth should also be warned against the hazards of comparing themselves to idealised figures displayed in the media through media literacy workshops and programs. Informative workshops and relevant programs need to be well designed with the purpose of protecting the body image, self-confidence, and body satisfaction of individuals.

## References

Ahadzadeh, A. S. Sharif, S. P., & Ong, F. S. (2017). Self-Schema and Self-Discrepancy Mediate the Influence of Instagram Usage on Body Image Satisfaction among Youth. *Computers in Human Behavior,* 68, 8–16. Online: https://doi.org/10.1016/j.chb.2016.11.011

Alberga, A. S. Withnell, S. J., & von Ranson, K. M. (2018). Fitspiration and Thinspiration: A Comparison across Three Social Networking Sites. *Journal of Eating Disorders,* 6(1), 1–10. Online: https://doi.org/10.1186/s40337-018-0227-x

Alfonso-Fuertes, I. Alvarez-Mon, M. A., Del Hoyo, R. S., Ortega, M. A., Alvarez-Mon, M., & Molina-Ruiz, R. M. (2023). Time Spent on Instagram and Body Image, Self-esteem, and Physical Comparison among Young Adults in Spain: Observational Study. *JMIR Formative Research,* 7(1), e42207. Online: https://doi.org/10.2196/42207

Alhabash, S., & Ma, M. (2017). A Tale of Four Platforms: Motivations and Uses of Facebook, Twitter, Instagram, and Snapchat Among College Students? *Social Media+ Society,* 3(1), 2056305117691544. Online: https://doi.org/10.1177/2056305117691544

Alperstein, N. (2015). Social Comparison of Idealized Female Images and the Curation of Self on Pinterest. *The Journal of Social Media in Society,* 4(2). 5–27.

Boepple, L., & Thompson, J. K. (2016). A Content Analytic Comparison of Fitspiration and Thinspiration Websites. *International Journal of Eating Disorders,* 49(1), 98–101. Online: https://doi.org/10.1002/eat.22403

Brandtzæg, P. B., & Heim, J. (2009). *Why People Use Social Networking Sites.* Online Communities and Social Computing: Third International Conference, OCSC 2009, Held as Part of HCI International 2009, San Diego, CA, USA, July 19-24, 2009. Proceedings 3. Online: https://doi.org/10.1007/978-3-642-02774-1_16

Brown, Z., & Tiggemann, M. (2016). Attractive Celebrity and Peer Images on Instagram: Effect on Women's Mood and Body Image. *Body Image,* 19, 37–43. Online: https://doi.org/10.1016/j.bodyim.2016.08.007

Bue, A. C. C. (2020). The Looking Glass Selfie: Instagram Use Frequency Predicts Visual Attention to High-Anxiety Body Regions in Young Women. *Computers in Human Behavior,* 108, 106329. Online: https://doi.org/10.1016/j.chb.2020.106329

Butkowski, C. P. Dixon, T. L., & Weeks, K. (2019). Body Surveillance on Instagram: Examining the Role of Selfie Feedback Investment in Young Adult Women's Body Image Concerns. *Sex Roles,* 81, 385–397. Online: https://doi.org/10.1007/s11199-018-0993-6

Cafri, G. Yamamiya, Y., Brannick, M., & Thompson, J. K. (2005). The Influence of Sociocultural Factors on Body Image: A Meta-Analysis. *Clinical Psychology: Science and Practice,* 12(4), 421–433. Online: https://doi.org/10.1093/clipsy.bpi053

Carrotte, E. R. Prichard, I., & Lim, M. S. C. (2017). "Fitspiration" on Social Media: A Content Analysis of Gendered Images. *Journal of Medical Internet Research,* 19(3), e95. Online: https://doi.org/10.2196/jmir.6368

Carter, J. J., & Vartanian, L. R. (2022). Self-Concept Clarity and Appearance-Based Social Comparison to Idealized Bodies. *Body Image,* 40, 124–130. Online: https://doi.org/10.1016/j.bodyim.2021.12.001

Casaló, L. V. Flavián, C., & Ibáñez-Sánchez, S. (2017). Antecedents of Consumer Intention to Follow and Recommend an Instagram Account. *Online Information Review,* 41(7), 1046–1063. Online: https://doi.org/10.1108/OIR-09-2016-0253

Cash, T. F. Melnyk, S. E., & Hrabosky, J. I. (2004). The Assessment of Body Image Investment: An Extensive Revision of the Appearance Schemas Inventory. *International Journal of Eating Disorders,* 35(3), 305–316. Online: https://doi.org/10.1002/eat.10264

Cash, T. F. Santos, M. T., & Williams, E. F. (2005). Coping with Body-Image Threats and Challenges: Validation of the Body Image Coping Strategies Inventory. *Journal of Psychosomatic Research,* 58(2), 190–199. Online: https://doi.org/10.1016/j.jpsychores.2004.07.008

Caso, D. Fabbricatore, R., Muti, F., & Starace, C. (2019). Female Sexualization and Objectification in the Images Posted on Instagram: The Role of Influencers. *Psicologia Sociale,* (3), 441–463.

Chen, J. Ishii, M., Bater, K. L., Darrach, H., Liao, D., Huynh, P. P., Reh, I. P., Nellis, J. C., Kumar, A. R., & Ishii, L. E. (2019). Association Between the Use of Social Media and Photograph Editing Applications, Self-Esteem, and Cosmetic Surgery Acceptance. *JAMA Facial Plastic Surgery,* 21(5), 361–367. Online: https://doi.org/10.1001/jamafacial.2019.0328

Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Sciences.* Hillsdale, NJ, Lawrence Erlbaum Associates.

Curtis, R. G. Ryan, J. C., Edney, S. M., & Maher, C. A. (2020). Can Instagram be Used to Deliver an Evidence-Based Exercise Program for Young Women? A Process Evaluation. *BMC Public Health,* 20, 1–9. Online: https://doi.org/10.1186/s12889-020-09563-y

Dakanalis, A. Timko, A. C., Clerici, M., Riva, G., & Carrà, G. (2017). Objectified Body Consciousness (OBC) in Eating Psychopathology: Construct Validity, Reliability, and Measurement Invariance of the 24-item OBC Scale in Clinical and Nonclinical Adolescent Samples. *Assessment,* 24(2), 252–274. Online: https://doi.org/10.1177/1073191115602553

Dixon, S. (2022, July 7). Number of monthly active Instagram users from January 2013 to December 2021 (in millions). Statista. Online: https://www.statista.com/statistics/253577/number-of-monthly-active-instagram-users/

Fardouly, J., & Holland, E. (2018). Social Media is Not Real Life: The Effect of Attaching Disclaimer-Type Labels to Idealized Social Media Images on Women's Body Image and Mood. *New Media & Society,* 20(11), 4311–4328. Online: https://doi.org/10.1177/1461444818771083

Fardouly, J. Pinkus, R. T., & Vartanian, L. R. (2017). The Impact of Appearance Comparisons Made through Social Media, Traditional Media, and in Person in Women's Everyday Lives. *Body Image,* 20, 31–39. Online: https://doi.org/10.1016/j.bodyim.2016.11.002

Fardouly, J., & Vartanian, L. R. (2015). Negative Comparisons about One's Appearance Mediate the Relationship between Facebook Usage and Body Image Concerns. *Body Image,* 12, 82–88. Online: https://doi.org/10.1016/j.bodyim.2014.10.004

Festinger, L. (1954). A Theory of Social Comparison Processes. *Human Relations,* 7(2), 117–140. Online: https://doi.org/10.1177/001872675400700202

Frederick, D. A. Daniels, E. A., Bates, M. E., & Tylka, T. L. (2017). Exposure to Thin-Ideal Media Affect Most, but Not All, Women: Results from the Perceived Effects of Media Exposure Scale and Open-Ended Responses. *Body Image,* 23, 188–205. Online: https://doi.org/10.1016/j.bodyim.2017.10.006

Gattino, S. De Piccoli, N., Fedi, A., Boza, M., & Rollero, C. (2018). A Cross-Cultural Study Of Biological, Psychological, and Social Antecedents of Self-Objectification in Italy and Romania. *Sex Roles,* 78, 325–337. Online: hhttps://doi.org/10.1007/s11199-017-0804-5

Gobin, K. C. McComb, S. E., & Mills, J. S. (2022). Testing a Self-Compassion Micro-Intervention Before Appearance-Based Social Media Use: Implications for Body Image. *Body Image,* 40, 200–206. Online: hhttps://doi.org/10.1016/j.bodyim.2021.12.011

Graff, M., & Czarnomska, O. (2019). Can Time Spent on Social Media Affect Thin-Ideal Internalisation, Objectified Body Consciousness and Exercise Motivation in Women. *Psychreg Journal of Psychology,* 3(3), 28–39. Online: https://pure.southwales.ac.uk/ws/portalfiles/portal/3659041/Graff_Czarnomska_2019_.pdf

Grunewald, W. Calzo, J. P., Brown, T. A., Pennesi, J.-L., Jun, H.-J., Corliss, H. L., & Blashill, A. J. (2021). Appearance-Ideal Internalization, Body Dissatisfaction, and Suicidality among Sexual Minority Men. *Body Image,* 38, 289–294. Online: https://doi.org/10.1016/j.bodyim.2021.05.002

Haferkamp, N. Eimler, S. C., Papadakis, A.-M., & Kruck, J. V. (2012). Men are from Mars, Women are from Venus? Examining Gender Differences in Self-Presentation on Social Networking Sites. *Cyberpsychology, Behavior, and Social Networking,* 15(2), 91–98. Online: https://doi.org/10.1089/cyber.2011.0151

Hair, J. F. Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a Silver Bullet. *Journal of Marketing Theory and Practice,* 19(2), 139–152. Online: https://doi.org/10.2753/MTP1069-6679190202

Hair, J. F. Hult, G. T. M., Ringle, C. M., Sarstedt, M., Castillo Apraiz, J., Cepeda Carrión, G., & Roldán, J. L. (2019). *Manual de Partial Least Squares Structural Equation Modeling (pls-sem)*. OmniaScience Scholar. Online: https://doi.org/10.3926/oss.37

Hair, J. F. Astrachan, C. B., Moisescu, O. I., Radomir, L., Sarstedt, M., Vaithilingam, S., & Ringle, C. M. (2021). Executing and Interpreting Applications of PLS-SEM: Updates for Family Business Researchers. *Journal of Family Business Strategy,* 12(3), 100392. Online: https://doi.org/10.1016/j.jfbs.2020.100392

Hartmann, T. Klimmt, C., & Vorderer, P. (2010). Telepresence and media entertainment. In Bracken, C. C. & Skalski, P. (Eds.), *Immersed in Media: Telepresence in Everyday Life.* (pp. 137–157). Routledge.

Henseler, J. Ringle, C. M., & Sinkovics, R. R. (2009). The Use of Partial Least Squares Path Modeling in International Marketing. In Sinkovics, R. R. & Ghauri, P. N. (Eds.), *New Challenges to International Marketing.* (pp. 277–319). Emerald Group Publishing Limited. Online: https://doi.org/10.1108/S1474-7979(2009)0000020014

Henseler, J. Ringle, C. M., & Sarstedt, M. (2015). A New Criterion for Assessing Discriminant Validity in Variance-Based Structural Equation Modelling. *Journal of the Academy of Marketing Science,* 43, 115–135. Online: https://doi.org/10.1007/s11747-014-0403-8

Hogue, J. V., & Mills, J. S. (2019). The Effects of Active Social Media Engagement with Peers on Body Image in Young Women. *Body Image,* 28, 1–5. Online: https://doi.org/10.1016/j.bodyim.2018.11.002

Holland, G., & Tiggemann, M. (2017). "Strong Beats Skinny Every Time": Disordered Eating and Compulsive Exercise in Women Who Post Fitspiration on Instagram. *International Journal of Eating Disorders,* 50(1), 76–79. Online: https://doi.org/10.1002/eat.22559

Huang, R., & Ha, S. (2021). The Role of Need for Cognition in Consumers' Mental Imagery: A Study of Retail Brand's Instagram. *International Journal of Retail & Distribution Management,* 49(2), 242–262. Online: https://doi.org/10.1108/IJRDM-04-2020-0146

Huang, Y.-T., & Su, S.-F. (2018). Motives for Instagram Use and Topics of Interest among Young Adults. *Future Internet,* 10(8), 77. Online: https://doi.org/10.3390/fi10080077

Hwang, H. S., & Cho, J. (2018). Why Instagram? Intention to Continue Instagram Use Among Korean College Students. *Social Behavior and Personality: An International Journal,* 46(8), 1305–1315. Online: https://doi.org/10.2224/sbp.6961

Jung, J. Barron, D., Lee, Y.-A., & Swami, V. (2022). Social Media Usage and Body Image: Examining the Mediating Roles of Internalization of Appearance Ideals and Social Comparisons in Young Women. *Computers in Human Behavior,* 135, 107357. Online: https://doi.org/10.1016/j.chb.2022.107357

Khanjani, Z. Pakravan, H., Ghadimi, N., & Asadi, S. (2022). The Relationship between Attitudes toward Cosmetic Surgery and Social Media Addiction based on the Mediating Role of Body Image Concern in Adolescents. *Rooyesh-e-Ravanshenasi Journal (RRJ),* 11(3), 35–46.

Kim, D., & Kim, S. (2023). Social Media Affordances of Ephemerality and Permanence: Social Comparison, Self-Esteem, and Body Image Concerns. *Social Sciences,* 12(2), 87. Online: https://doi.org/10.3390/socsci12020087

Kim, J. W., & Chock, T. M. (2015). Body image 2.0: Associations between Social Grooming on Facebook and Body Image Concerns. *Computers in Human Behavior,* 48, 331–339. Online: https://doi.org/10.1016/j.chb.2015.01.009

Kim, M. (2020). Instagram Selfie-Posting and Young Women's Body Dissatisfaction: Investigating the Role of Self-Esteem and Need for Popularity. *Cyberpsychology: Journal of Psychosocial Research on Cyberspace,* 14(4). Online: https://doi.org/10.5817/CP2020-4-4

Kleemans, M. Daalmans, S., Carbaat, I., & Anschütz, D. (2018). Picture Perfect: The Direct Effect of Manipulated Instagram Photos on Body Image in Adolescent Girls. *Media Psychology,* 21(1), 93–110. Online: https://doi.org/10.1080/15213269.2016.1257392

Knobloch-Westerwick, S., & Crane, J. (2012). A Losing Battle: Effects of Prolonged Exposure to Thin-Ideal Images on Dieting and Body Satisfaction. *Communication Research,* 39(1), 79–102. Online: https://doi.org/10.1177/0093650211400596

Krasnova, H. Veltri, N. F., Eling, N., & Buxmann, P. (2017). Why Men and Women Continue to Use Social Networking Sites: The Role of Gender Differences. *The Journal of Strategic Information Systems,* 26(4), 261–284. Online: https://doi.org/10.1016/j.jsis.2017.01.004

Lee, M. (2022). Exploring How Instagram Addiction is Associated with Women's Body Image and Drive for Thinness. *The Social Science Journal,* 1–14. Online: https://doi.org/10.1080/03623319.2022.2092380

Lee, S. Y. (2014). How Do People Compare Themselves with Others on Social Network Sites?: The Case of Facebook. *Computers in Human Behavior,* 32, 253–260. Online: https://doi.org/10.1016/j.chb.2013.12.009

Lewis-Smith, H. Diedrichs, P. C., & Halliwell, E. (2019). Cognitive-Behavioral Roots of Body Image Therapy and Prevention. *Body Image,* 31, 309–320. Online: https://doi.org/10.1016/j.bodyim.2019.08.009

Limniou, M., Ascroft, Y., & McLean, S. et al. (2022). Differences between Facebook and Instagram Usage in Regard to Problematic Use and Well-Being. *Journal of Technology in Behavioral Science,* 7, 141–150. Online: https://doi.org/10.1007/s41347-021-00229-z

López-de-Ayala, M.-C. Vizcaíno-Laorga, R., & Montes-Vozmediano, M. (2020). Hábitos y actitudes de los jóvenes ante las redes sociales: influencia del sexo, edad y clase social. *Profesional de la Información,* 29(6). Online: https://doi.org/10.3145/epi.2020.nov.04

Lunde, C. (2013). Acceptance of Cosmetic Surgery, Body Appreciation, Body Ideal Internalization, and Fashion Blog Reading among Late Adolescents in Sweden. *Body Image,* 10(4), 632–635. Online: https://doi.org/10.1016/j.bodyim.2013.06.007

Mabe, A. G. Forney, K. J., & Keel, P. K. (2014). Do You "Like" My Photo? Facebook Use Maintains Eating Disorder Risk. *International Journal of Eating Disorders,* 47(5), 516–523. Online: https://doi.org/10.1002/eat.22254

Madan, A. K. Beech, B. M., & Tichansky, D. S. (2008). Body Esteem Improves After Bariatric Surgery. *Surgical Innovation,* 15(1), 32–37. Online: https://doi.org/10.1177/1553350608316135

Mahmoud, A. B. Hack-Polay, D., Grigoriou, N., Mohr, I., & Fuxman, L. (2021). A Generational Investigation and Sentiment and Emotion Analyses of Female Fashion Brand Users on Instagram in Sub-Saharan Africa. *Journal of Brand Management,* 28(5), 526–544. Online: https://doi.org/10.1057/s41262-021-00244-8

Manago, A. M. Ward, L. M., Lemm, K. M., Reed, L., & Seabrook, R. (2015). Facebook Involvement, Objectified Body Consciousness, Body Shame, and Sexual Assertiveness in College Women and Men. *Sex Roles,* 72, 1–14. Online: https://doi.org/10.1007/s11199-014-0441-1

Marengo, D. Longobardi, C., Fabris, M. A., & Settanni, M. (2018). Highly-Visual Social Media and Internalizing Symptoms in Adolescence: The Mediating Role of Body Image Concerns. *Computers in Human Behavior,* 82, 63–69. Online: https://doi.org/10.1016/j.chb.2018.01.003

Marques, M. D., Paxton, S. J., McLean, S. A., Jarman, H. K., & Sibley, C. G. (2022). A Prospective Examination of Relationships between Social Media Use and Body Dissatisfaction in a Representative Sample of Adults. *Body Image,* 40, 1–11. Online: https://doi.org/10.1016/j.bodyim.2021.10.008

Martel, J. Powell, E., & Murina, A. (2020). The Effect of Instagram and Photograph Editing on Seeking Dermatologic Care. *Journal of Cosmetic Dermatology,* 19(10), 2732–2735. Online: https://doi.org/10.1111/jocd.13456

McComb, S. E. Gobin, K. C., & Mills, J. S. (2021). The Effects of Self-Disclaimer Instagram Captions on Young Women's Mood and Body Image: The Moderating Effect of Participants' Own Photo Manipulation Practices. *Body Image,* 38, 251–261. Online: https://doi.org/10.1016/j.bodyim.2021.04.011

McComb, S. E., & Mills, J. S. (2021). Young Women's Body Image Following Upwards Comparison to Instagram Models: The Role of Physical Appearance Perfectionism and Cognitive Emotion Regulation. *Body Image,* 38, 49–62. Online: https://doi.org/10.1016/j.bodyim.2021.03.012

McComb, S. E., & Mills, J. S. (2022). The Effect of Physical Appearance Perfectionism and Social Comparison to Thin-, Slim-Thick-, and Fit-Ideal Instagram Imagery on Young Women's Body Image. *Body Image,* 40, 165–175. Online: https://doi.org/10.1016/j.bodyim.2021.12.003

McLean, S. A., Paxton, S. J., Wertheim, E. H., & Masters, J. (2015). Photoshopping the selfie: Self photo editing and photo investment are associated with body dissatisfaction in adolescent girls. *International Journal of Eating Disorders, 48*(8), 1132–1140. Online: https://doi.org/10.1002/eat.22449

Menzel, J. E. Sperry, S. L., Small, B., Thompson, J. K., Sarwer, D. B., & Cash, T. F. (2011). Internalization of Appearance Ideals and Cosmetic Surgery Attitudes: A Test of the Tripartite Influence Model of Body Image: Erratum. *Sex Roles,* 65, 656. Online: https://doi.org/10.1007/s11199-011-0044-z

Mills, J. S. Shannon, A., & Hogue, J. (2017). Beauty, Body Image, and the Media. In M. Peaslee Levine (Ed.), *Perception of Beauty* (pp. 145–157). IntechOpen. Online: https://doi.org/10.5772/intechopen.68944

Moon, J. H. Lee, E., Lee, J.-A., Choi, T. R., & Sung, Y. (2016). The Role of Narcissism in Self-Promotion on Instagram. *Personality and Individual Differences,* 101, 22–25. Online: https://doi.org/10.1016/j.paid.2016.05.042

Nerini, A. Matera, C., Di Gesto, C., Policardo, G. R., & Stefanile, C. (2019). Exploring the Links between Self-Compassion, Body Dissatisfaction, and Acceptance of Cosmetic Surgery in Young Italian Women. *Frontiers in Psychology,* 10, 2698. Online: https://doi.org/10.3389/fpsyg.2019.02698

Pertegal, M.-Á., Oliva, A., & Rodríguez-Meirinhos, A. (2019). Development and Validation of the Scale of Motives for Using Social Networking Sites (SMU-SNS) for Adolescents and Youths. *PloS one,* 14(12), e0225781. Online: https://doi.org/10.1371/journal.pone.0225781

Pessoa, K. Alves Costa, C. L., Coelho, A. C., Bastos, A., & Rodrigues, I. (2023). Use of Instagram as a Resource for the Adoption of Behaviors Related to Health and Well-Being of Young College Students: Associations between Use Profile and Sociodemographic Variables—A Cross-Sectional Study. *Societies,* 13(2), 45. Online: https://doi.org/10.3390/soc13020045

Pilgrim, K., & Bohnet-Joschko, S. (2019). Selling Health and Happiness How Influencers Communicate on Instagram about Dieting and Exercise: Mixed Methods Research. *BMC Public Health,* 19, 1–9. Online: https://doi.org/10.1186/s12889-019-7387-8

Rahman, S. A. Amran, A., Ahmad, N. H., & Taghizadeh, S. K. (2015). Supporting Entrepreneurial Business Success at the Base of Pyramid through Entrepreneurial Competencies. *Management Decision,* 53(6), 1203–1223. Online: https://doi.org/10.1108/MD-08-2014-0531

Ridgway, J. L., & Clayton, R. B. (2016). Instagram Unfiltered: Exploring Associations of Body Image Satisfaction, Instagram# Selfie Posting, and Negative Romantic Relationship Outcomes. *Cyberpsychology, Behavior, and Social Networking,* 19(1), 2–7. Online: https://doi.org/10.1089/cyber.2015.0433

Rigdon, E. E. (2016). Choosing PLS Path Modeling as Analytical Method in European Management Research: A Realist Perspective. *European Management Journal,* 34(6), 598–605. Online: https://doi.org/10.1016/j.emj.2016.05.006

Sarstedt, M., Ringle, C. M., Cheah, J.-H., Ting, H., Moisescu, O. I., & Radomir, L. (2020). Structural Model Robustness Checks in PLS-SEM. *Tourism Economics,* 26(4), 531–554. Online: https://doi.org/10.1177/1354816618823921

Schettino, G. Capasso, M., & Caso, D. (2023). The Dark Side of# Bodypositivity: The Relationships between Sexualized Body-Positive Selfies on Instagram and Acceptance of Cosmetic Surgery among Women. *Computers in Human Behavior,* 140, 107586. Online: https://doi.org/10.1016/j.chb.2022.107586

Sharp, G., & Gerrard, Y. (2022). The Body Image "Problem" on Social Media: Novel Directions for the Field. *Body Image,* 41, 267–271. Online: https://doi.org/10.1016/j.bodyim.2022.03.004

Sheldon, P., & Bryant, K. (2016). Instagram: Motives for Its Use and Relationship to Narcissism and Contextual Age. *Computers in Human Behavior,* 58, 89–97. Online: https://doi.org/10.1016/j.chb.2015.12.059

Stapleton, P. Luiz, G., & Chatwin, H.et al. (2017). Generation Validation: The Role of Social Comparison in Use of Instagram among Emerging Adults. *Cyberpsychology, Behavior, and Social Networking,* 20(3), 142–149. Online: https://doi.org/10.1089/cyber.2016.0444

Streukens, S., & Leroi-Werelds, S. (2016). Bootstrapping and PLS-SEM: A Step-by-Step Guide to Get More Out of Your Bootstrap Results. *European Management Journal,* 34(6), 618–632. Online: https://doi.org/10.1016/j.emj.2016.06.003

Sultan, S. N. (2023). *Effect of Social Media Use on Body Image among Adolescents* University of Baghdad.

Tamannaei, F., & Nejat, P. (2023). Effect of Viewing Female Instagram Influencers' Selfies on Women's Attitudes and Tendency Toward Cosmetic Surgery as Mediated by Facial Dissatisfaction. *Applied Psychology,* 17(3), 143–168. Online: https://apsy.sbu.ac.ir/article_102856_26caaa0dd1201a50fc6ea22cdfff749f.pdf

Tarsitano, M. Pujia, R., Ferro, Y., Mocini, E., Proni, G., Lenzi, F., Pujia, A., & Giannetta, E. (2022). Symptoms of Orthorexia Nervosa are Associated with Time Spent on Social Media: A Web-Based Survey in an Italian Population Sample. *European Revue of Medical and Pharmacological Sciences,* 26(24), 9327–9335. Online: https://doi.org/10.26355/eurrev_202212_30683

Tiggemann, M. Anderberg, I., & Brown, Z. (2020). # Loveyourbody: The Effect of Body Positive Instagram Captions on Women's Body Image. *Body Image,* 33, 129–136. Online: https://doi.org/10.1016/j.bodyim.2020.02.015

Tiggemann, M., & Zaccardo, M. (2015). "Exercise to be Fit, Not Skinny": The Effect of Fitspiration Imagery on Women's Body Image. *Body Image,* 15, 61–67. Online: https://doi.org/10.1016/j.bodyim.2015.06.003

Van den Berg, P. Paxton, S. J., Keery, H., Wall, M., Guo, J., & Neumark-Sztainer, D. (2007). Body Dissatisfaction and Body Comparison with Media Images in Males and Females. *Body Image,* 4(3), 257–268. Online: https://doi.org/10.1016/j.bodyim.2007.04.003

Verduyn, P. Gugushvili, N., Massar, K., Täht, K., & Kross, E. (2020). Social Comparison on Social Networking Sites. *Current Opinion in Psychology,* 36, 32–37. Online: https://doi.org/10.1016/j.copsyc.2020.04.002

Voelker, D. K. Reel, J. J., & Greenleaf, C. (2015). Weight Status and Body Image Perceptions in Adolescents: Current Perspectives. *Adolescent Health, Medicine and Therapeutics,* (6), 149–158. Online: https://doi.org/10.2147/AHMT.S68344

Walker, C. E. Krumhuber, E. G., Dayan, S., & Furnham, A. (2021). Effects of Social Media Use on Desire for Cosmetic Surgery among Young Women. *Current Psychology,* 40, 3355–3364. Online: https://doi.org/10.1007/s12144-019-00282-1

Wood-Barcalow, N. L. Tylka, T. L., & Augustus-Horvath, C. L. (2010). "But I Like my Body": Positive Body Image Characteristics and a Holistic Model for Young-Adult Women. *Body Image,* 7(2), 106–116. Online: https://doi.org/10.1016/j.bodyim.2010.01.001

Zigma8. (2022, July 30). *Social Media Marketing and Advertising in Iran: Time, Money and Reports.* Online: https://zigma8.com/social-media-marketing-and-advertising-in-iran-time-money-and-reports/

KOME – An International Journal of Pure Communication Inquiry Vol. 12. No. 1. (2024) • 89–110.
DOI: 10.17646/KOME.of.9

# Body image and Self-Objectification in a Confucian Cultural Context: Self-Representation and Consumption of Desirable Feet on Douyin (TikTok) in China

Xiaolong Zhang*

* The Department of Media and Communication, School of Humanities and Social Sciences, Xi'an Jiaotong-Liverpool University, CHINA

While issues related to gender and mental health have been extensively discussed in the context of body image based on objectification theory, there has been limited exploration of the interplay between gender, sexual attention, and self-representations in online communication, particularly concerning specific body parts within a given cultural context. Podophilia, the most common sexual fetish, includes a range of interests in feet, such as foot tickling, kissing, foot jobs, and shoe/stocking play. Traditionally, these activities have been linked to offline experiences. However, in the digital age, particularly in China, where the government is committed to prohibiting erotic and sexually explicit materials, content displaying various private body parts faces restrictions under Chinese media and internet policies. Interestingly, the representation of feet and legs remain relatively unrestricted, resulting in a significant amount of sexually suggestive media content related to these body parts. This study aims to investigate the influence of culture, policy, and economics on self-representations of foot- and leg-related content and the consumption of such content in the Chinese online environment. Through the analysis of 500 Douyin videos and 5000 corresponding online comments, this research disclosed how video creators portray their body parts, why these videos are predominantly women-centered, and why these women are more or less *self-objectified*.

**Keywords:** foot fetishism, sexual conservatism, objectification theory, gender, China, Douyin (TikTok)

## Introduction

Desire is polymorphous in character; it is a basic human urge that pervades many of our relationships, even if unconsciously. Moreover, desire is multifaceted and lies at the heart of human intellect and communication, defying easy explanation or categorisation. Nevertheless, carnal desire is often regarded as one of the most prominent forms of desire. Bryant (1982, p. 11) has stated that "the sexual urge is a powerful component in physiological motivation and plays an equally intense role in the shaping of the social configurations that accomplish the externalization of carnal desire and provide for its satisfaction through institutionalized behavioral means". In China, however, sexual cravings are often difficult to satisfy.

Although one of our society's tasks is to "monitor, channel, and control sex behavior" (Bryant, 2011, p. 365), in China, sexuality seems to be overly regulated and inhibited (Lin, 2018). China has long been associated with sexual conservatism since ancient times, primarily influenced by cultural and political factors (e.g. Chen, Dunne, and Han, 2007; Zhang et al., 2020; Sigley, 2007). Generally, both Chinese men and women, irrespective of age, tend to be reserved when discussing sexual matters in public, even within educational contexts (Cui et al., 2001; Lieber et al., 2009; Tang, 2002). This hesitancy is rooted in the traditional perception of *sex* as a taboo subject (Jeffreys and Yu, 2015).

First, Confucianism, the system of ethical and moral government, is often viewed as the initiator of sexual conservatism in China because it "sees sexuality as taboo and forbids discussion about sex" (Gao et al., 2012, p. s13). In the era of the People's Republic of China, Confucian values continued to exert influence (Liu et al., 2020); however, political reasons have become more prominent, as sexual conservatism aligns with the core values of the Communist Party of China (Chen et al., 2015); although, prostitution, striptease dancing, pornographic sites, and various other activities featuring explicit erotic content are prohibited because they do not (Jeffreys, 2004; Chen et al., 2015).

Since the implementation of the Reform and Opening-up policy in 1976, China has witnessed a more permissive attitude towards discussions of sexuality (Ho et al., 2018; Pan and Huang, 2013). For instance, the use of sexual appeals in advertising has become increasingly common in China (Cui and Yang, 2009; Ye et al., 2012), however, the dissemination of pornographic or obscene content through print and digital media remains illegal. The government views such content as potentially harmful to the physical and mental well-being of individuals and, more significantly, as a corrupting force on societal morality (Zhang, 21 September 2018). Consequently, in China, the outlets for individuals to express or satisfy their sexual desires are limited.

Researchers have noted that the peculiarities of online media have made participation in sexual behaviours that are regulated by offline social and cultural standards enticing (Daneback and Ross, 2011). In the online space, some users serve as both producers and consumers of erotic content; this has been conceptualised by Jacobs (2011, p. 27) as "people's pornography" symbolising "a quest for the expansion of civil liberties". However, due to China's media policy, most people can only upload and access soft pornography and/or erotic materials through legally permitted online platforms. Additionally, a significant portion of this soft-pornographic content undergoes substantial censorship due to internet management regulations and guidelines. The dissemination of soft-porn content is tightly restricted within the Chinese online media landscape. For example, on 9 January 2019, the China Netcasting Services Association (CNSA) officially released the *Rules on Content Audit Standards for Online Short Videos* and the *Management Code for Online Short Video Platforms*. The former contains 100 rules, 17 of which are related to how to manage and regulate sexual audio-visual content (CNSA, 2021).

While the *Rules on Content Audit Standards for Online Short Videos* (CNSA, 2021) explicitly forbid extended emphasis on private body parts (such as breasts, buttocks, etc.) through video filming, there is an absence of provisions addressing the public display of feet and/or legs. Notably, feet, along with associated elements such as shoes, carry significant sexual connotations, and frequently employed in puns and innuendos (Achrati, 2003; Sumler, 2010). Consequently, China's rigorous internet management regulations have resulted in an abundance of erotic visual content related to feet on social media platforms. While extensive literature exists on offline practices of foot fetishism (e.g. Weinberg et al., 1994; Zarei and Bidaki, 2013), there remains a considerable gap in understanding the dynamics of this phenomenon in digital spaces, especially concerning gender relations and self-representations. Given the vital role of social media in contemporary culture (Stubbs-Richardson et al., 2018) and the Internet's role as a primary source of sexual information (Adams-Santos, 2020; Daneback et al., 2012), this research seeks to contribute to our comprehension of foot-teasing videos in the Chinese online context. It does so by examining the way vloggers present their body parts, their audience, and the relevant motivations lying behind this behaviour in the given Confucian cultural framework.

## Theoretical Background and Formulation of Hypotheses

### *Foot fetishism in Confucian culture in China and objectification theory*

According to Gates (2008), sexual fetishism is a psychosexual phenomenon characterised by intense sexual arousal, desire, or satisfaction that is focused on specific objects, body parts, or situations. Although some scholars argue that foot binding has been an extensive form of foot fetishism in ancient China since the Song dynasty (Howard and Pillinger, 2010), Shepherd (2018) sees foot binding as a fashion trend or beauty standard considered attractive and a symbol of femininity.

In ancient times, Chinese men commonly perceived foot binding as advantageous in sexual intercourse, influenced by the superstitious belief that women with bound feet possessed more muscular and sensitive vaginas (McGeoch, 2007). Despite the notion that the bound feet of Chinese women held some capacity to evoke sexual arousal or imagination among Chinese men, historical evidence suggests that these bound feet did not emerge as the focal point of sexual desire for them. The examination of numerous representations from small paintings, figurines, trick boxes, and suggestive brush-holders led Gates (2008, p. 62) to the conclusion that most Chinese men typically overlooked the supposedly irresistible feet, rarely incorporating them in foreplay. Therefore, Chinese men, within the context of sexual fetishism, may not be defined as foot fetishists who derived sexual pleasure or gratification from women's bound feet. The fondness that Chinese men exhibited towards women with bound feet was multidimensionally influenced by the prevalent cultural norms and beliefs of that era, including perceptions of it as a symbol of femininity and beauty, as an indicator of higher social status that made women more desirable as marriage partners, and as a representation of obedience and submission (Gates, 2008; Ko, 1997; Shepherd, 2018).

The multiple meanings of foot binding have fascinated many anthropologists worldwide. Discussions concerning the categorisation of foot binding as a sexual fetish remain pertinent; however, previous dialogues underscore a gendered dimension; that is, within Confucian societies, male individuals with a foot fetish, or those seeking women with bound feet, in alignment with the cultural norms surrounding women or women's feet, sought to satisfy their sexual fetishes or notions of the ideal wife.

Hence, foot fetishism may be associated historically with men in Chinese society, but only as a depiction of Chinese men's fascination with women's feet. It concerns neither Chinese men's love of other men's feet nor Chinese women's love of men's feet. Thus, in the realm of Confucian podophilia, Chinese men play an active role, while women assume a passive one concerning the physical objects of male sexual desire.

Objectification theory is a valuable paradigm for comprehending the psychological and behavioural effects of growing up in a society that frequently objectifies the female body (Moradi and Huang, 2008). Objectification happens when a person is stripped of their humanity to the degree that they are viewed as or act like an object in relation to others (Bell et al., 2018). There is mounting evidence that being objectified or seeing the objectification of women in the media may cause people to *self-objectify* (Moradi and Huang, 2008).

Self-objectification occurs when people regard themselves as a body, and prioritise their physical appearance above their abilities and humanities (Fredrickson and Roberts, 1997). Visuals on social media platforms are generally self-representations/images (Davis, 2018). In the era of social media, individuals engage in digital self-representation by curating and sharing content that reflects their identity, interests, and, importantly, physical appearance (Chua and Chang, 2016; Mascheroni et al., 2015). The pursuit and reception of sexual attention are prevalent on social media platforms. Social media users (especially female users) often seek validation through likes, comments, and shares, with some content explicitly designed to attract sexual attention (Bell et al., 2018; Davis, 2018). The interplay between self-objectification and digital self-representation is evident on social media. Influenced by societal norms, users may engage in self-objectification by sharing images conforming to perceived ideals. This, in turn, attracts sexual attention, creating a cycle where users internalise external validation, such as receiving likes and gaining followers, as a measure of their self-worth (Davis, 2018). Therefore, I formulated the following hypothesis:

**H1:** The selected foot- and leg-related videos are mainly self-objectified content for the viewer's titillation to gain internet reward.

Semantically, *foot fetishism* or *foot fetishist* have a clear gender orientation (heterosexual) and gender hierarchy in Confucian culture. First, Confucian societies generally have little tolerance for same-sex sexuality (Yang, 2021; Shi, 2013). Although it has been posited that the current Chinese government maintains a neutral stance, neither actively endorsing nor discouraging homosexuality (Mountford, 2010), it is essential to note that the government has censored content related to homosexuality in various media formats, including films, television, and social media platforms (Suen and Chan, 2020). Consequently, this raises the inference that men may refrain from self-objectification by using their feet to entice both men and women because the former might imply homosexual tendencies, while the latter could be perceived as a challenge to traditional masculinity. In a Confucian society, men are often expected to assume the role of being pleasured rather than being the pleasers in heterosexual gender dynamics (Gao et al., 2012). In addition, many past studies have noted that women are more inclined to engage in objectifying self-representations on social media platforms (Carrotte et al., 2017; Deighton-Smith and Bell, 2018; Szymanski et al., 2011). Hence, the present research predicts that women are more likely to show their feet to an audience, for which reason I formulated the following hypothesis:

**H2:** Women are more likely to show their feet or legs on Douyin than men.

Previous investigation has found that although both men and women are more likely to objectify women than men, men tend to objectify women more often than women do (Strelan and Hargreaves, 2005). This may be especially true among foot fetishists, as many scholars advocate Freud's (1905) asseveration that the foot or shoe is a corresponding token of female genitals deeply connected to young boys peering up the skirts of adult women. In support, many researchers have found that those satisfying their desires by consuming sexual media content are mostly men (Hald and Malamuth, 2008; Carroll et al., 2008). In this case, the visuals they consume are perceived as objectified instruments for their sex goals (Puvia and Vaes, 2015). More importantly, the "guiding principle of gender relations in Confucianism is 'male as superior and female as subordinate' [...] women are also supposed to be submissive and less sexually aggressive than men" (Gao et al., 2012, p. s13). As such, the pursuit of carnal satisfaction for Chinese women was denied by Confucian cultural norms. Given that commenting is an active form of digital engagement behaviour (Yoon et al., 2018), the following hypothesis is proposed:

**H2a:** Men engage more actively in commenting on foot-related videos than women.

## *Self-representation theory and the Douyin money-making mechanism*

Self-presentation theory, frequently used to describe the elements that motivate online self-presentations (Chua and Chang, 2016; Mascheroni et al., 2015), proposes two motivations that drive people to participate in self-presentation: (1) a desire to communicate their ideal self-images and (2) to satisfy their audience (Baumeister, 1982).

The former may be associated with the notion of *self-awareness* as this endeavor aims to assert women's control over their own bodies (Tiidenberg, 2017); however, the latter may be highly associated with the money-making mechanism in social media.

Research has shown that Douyin users generate income by including third-party advertisements in their posted videos (Liang, 2021) and live-streaming shows (Kaye, Chen, and Zeng, 2021). Generally, the more followers they have, the more money they make (Kaye et al., 2021; Liang, 2021). Furthermore, self-objectifying images are frequently employed to accumulate *likes* (Bell et al., 2018). Notably, these likes hold economic value on social media platforms (Veszelszki, 2018), which may, therefore, prompt Douyin users to produce video content that is engaging and captivating in order to attract viewers. This has been defined as an *attention economy* that "functions as a form of capital, which, once measured, can be marketized and financed" (Drenten et al., 2020, p. 42).

Particularly in the ongoing global Covid-19 pandemic, which has led to an economic downturn and increased unemployment rates in China (Song et al., 2020), self-employed individuals on social media platforms have experienced unprecedented competition. We-media platforms have emerged as opportunities for individuals, especially women, to seek re-employment amid the adverse impacts of Covid-19 (Martinez Dy and Jayawarna, 2020). In this increasingly competitive online business landscape, characterised by the effectiveness of using sex appeal to engage and captivate audiences (Cui and Yang, 2009), vloggers may employ images of their feet or legs to attract viewers. This choice is facilitated by the absence of CNSA prohibitions against displaying these body parts on Douyin, for which reason I formulated the following hypothesis:

**H3:** Video creators display their feet or legs more for profit than other purposes.

However, as mentioned above, filming, uploading, and distributing sexually suggestive videos online can be seen as a protest against sexual conservatism in China (Jacobs, 2011). Additionally, critics argue that objectification theory portrays women as passive victims of objectification, ignoring their agency and autonomy in negotiating and resisting objectifying experiences (Moradi and Huang, 2008). Hence, the video creator may be using their desirable feet to challenge traditional Chinese sexual morality if they do not insert commercial messages into the videos, as the commercialisation of bodies is seen as a threat to women's rights and to efforts to achieve equality (Jyrkinen, 2005). Therefore, I formulated the following hypothesis:

**H3a:** Video creators display their feet or legs more for sexual revolutionary purposes than profit-gaining.

## *Self-objectification, self-esteem, and mianzi issues in Confucian society in China*

Although posting sexually suggestive self-images on Douyin may be mainly driven by the desire for economic gain (Meng and Leung, 2021), the way in which vloggers present their sexual desirability remains unclear. To achieve profit-earning goals, they first need to engage their audience with their content, in short, to advertise themselves. Based on objectification theory, previous studies have observed that women's bodies can often be reduced to their sexual body parts (Gervais et al., 2012; Seitz, 2002). However, these investigations have not elucidated on which aspect holds greater allure and attractiveness: revealing faces, showcasing a specific body part, or the presentation of bodies and faces? One earlier study found that facial attractiveness was valued more than bodily attractiveness (Peters et al., 2007). As a result, vloggers may show body parts (feet and legs) and their faces. However, some social and cultural factors in China may prevent vloggers from doing this.

The issue of *mianzi* [面子] (*face*) is central to the Chinese concept of self (Gao, 1996). A person's mianzi can be defined as their societal self-esteem (Hwang and Han, 2010). It contains public self-image, capacity, dignity, and reputation as the key components of its internal value constructs (Zhou and Zhang, 2017, p. 152).

As the discussion above reveals, China is to some degree a country of *sexual shame* due to sexual conservatism; online users may be too shy or ashamed to show their faces when posting sexually objectifying self-images. Moreover, it has been reported that the issue of sexual harassment has caused concern for many female users of Douyin (Broderick, 2020), and both women and men tend to dehumanise objectified female targets for different reasons (Puvia and Vaes, 2015, p. 66). Being dehumanised is detrimental to social self-image and self-esteem, so Chinese video creators may not be showing their faces in their objectified self-images in order to protect their mianzi. However, scholars have demonstrated that self-objectification often results in low self-esteem (Mercurio and Landry, 2008); therefore, Confucian notions of mianzi and sexual conservatism may consequently not be binding on the creators of these videos. In light of the above discussion, the following two hypotheses were made:

**H4:** The participants are more likely to only show their feet or legs in the selected videos to preserve mianzi as defined by Confucian culture in China.
**H4a:** Self-objectification has weakened the Confucian notion of mianzi, and vloggers tend to show both their faces and feet to make their video content more appealing.

## Methodology

### *Sample selection and coding instrument*

In recent years, short video platforms have exploded in popularity in China, especially Douyin. Douyin has more than 600 million daily active users (Wang and Wu, 2021). Users can find countless videos on this platform containing soft porn or sexual-teasing content. Although some hashtags, such as #高跟鞋 (*high heels*), #丝袜 (*nylon stockings*), and #绝对领域 (*Zettai ryōiki* in Japanese; *A.T. Field* in English), #长腿女神 (*leggy goodness*), etc., are highly popular, video samples were not selected from hashtags with such explicitly gendered and sexually suggestive messages.

For example, high-heeled shoes (Kelly et al., 2005) and nylon stockings (Held, 2023) are often considered a symbol of femininity and are associated with an emphasis on women's legs, creating a sexualised connotation and contributing to a sexualised image that aligns with a conventional ideal that portrays women as heterosexual and cisgender. Furthermore, A. T. Field ('绝对领域') is an abbreviation of Absolute Territory Field, a term that describes "the thigh area seen in the gap between socks that reach the knees, and a skirt or shorts" (Surajaya, 2019, p. 219). Within manga culture, *shōjo* or *bishōjo* comics are characterised by *exaggerated sexuality* (Yiu and Chan, 2013, p. 857). A. T. Field is a frequently employed aesthetic expression in anime and manga, creating a sexually suggestive image of female characters catering to the desires of men who recognise this form of attractiveness (Surajaya, 2019). By focusing on specific attributes or clothing associated with female sexuality, these hashtags contribute to gendered and sexually suggestive messages within a heterosexual discourse.

In order to avoid biased results, videos were selected from the following hashtags with no sexually suggestive, gender, or cultural cues. These are #脚好看 (*nice feet*), #我的脚脚 (*my feet*), #脚 (*feet*), #把脚伸出来 (*show off your feet*), and #*jio* (a common dialect term for feet in Chinese). These hashtags were labelled from A to E in alphabetic order (Table 2). The selection process involved the identification of the top 100 videos that had been viewed most often from each hashtag, determined by the platform's algorithm based on user engagement metrics. Consequently, a total of 500 videos were chosen for content analysis.

With regard to user comments, the ten comments with the highest number of likes were gathered for each video, and each respective commentator was categorised by gender as male or female. Noteworthy comments may underscore recurrent trends, *themes*, or topics that strike a chord with the community; consequently, the individuals posting these comments are more likely to have longstanding immersion in this domain, indicating a deeper understanding of relevant matters. It is important to note that the author's comments are excluded from this analysis.

Regarding the hypothesis test, the following coding scheme was formulated to study the selected videos (see Table 1).

*Table 1:*
*Coding categories with explanations*

| **Scheme** | | **Explanation** |
|---|---|---|
| Themes | Sex | This element was used to test H1. The selected hashtags have no sexually suggestive cues; therefore, various foot-related content, including foot care, pedicures, foot health, and the dissemination of knowledge on foot fetishism, among others, have been shared under these selected hashtags. Hence, the themes were divided into sex and others. Sex refers to visuals that present the protagonist as sexy, coquettish, and a siren (a seductive or alluring woman). In sex-themed videos, individuals post revealing or suggestive images of themselves to garner attention or provoke sexual interest. |
| | Others | |
| The gender of the video's protagonist | Male | This element was used to test H2. Only solo-show videos were collected. |
| | Female | |
| The gender of the commentator | Male | This element was used to test H2a. |
| | Female | |
| Purposes | Profit | This element was used to test H3 and H3a. This was determined by whether the vlogger who posted the video had embedded a shopping link within it, and whether the vlogger posted a commercial message on their homepage. |
| | Sexual revolution | |
| Body fragments | Prone to show feet or legs only. | This element was used to test H4 and H4a. |
| | Prone to show the whole body, including the face. | |

*Source:* Compiled by the author.

## *Coding process and coder reliability*

Three coders (including the author) familiarised themselves with the coding instrument before the main coding. In the training process, discrepancies were discussed until the coders reached a consensus. In the training process, we found two prominent disturbances. One is that some users' comments received many likes but did not indicate their gender on their personal homepages; consequently, such comments were not collected. Also, some bloggers posted animal and human babies' feet under the selected hashtags, garnering significant views and likes. However, these sorts of content are unrelated to my research topic, podophilia, so content of this sort was not included in the study. Social media platforms primarily thrive on user-generated content (Davis, 2018). To preserve the anonymity of the video creators, their network IDs were not disclosed in the analytical process or results. 91% of the intercoder reliability was assessed using Kassarjian's (1977) coefficient of agreement. The lowest acceptable level of reliability coefficients should exceed 80%; as such, the result of my study is satisfactory.

## Results and discussion

The data was analysed using SPSS to calculate the frequencies. Also, chi-squares were applied to test the hypotheses and answer the research questions. Table 2 shows the general features of these chosen videos and the gender of the commentators. Tables 2a, 2b, and 2c demonstrate the results of the chi-square analysis.

*Table 2:*
*The representation of the selected video and the gender of the commentator (presented in frequencies)*

| Scheme | | A (%) | B (%) | C (%) | D (%) | E (%) |
|---|---|---|---|---|---|---|
| Theme | Sex | 71 | 81 | 80 | 83 | 92 |
| | Others | 29 | 19 | 20 | 17 | 8 |
| The gender of the video's protagonist | Male | 2 | 10 | 2 | 30 | 17 |
| | Female | 98 | 90 | 98 | 70 | 83 |
| Gender of the commentator | Male | 99 | 97 | 86 | 82 | 88 |
| | Female | 1 | 3 | 14 | 18 | 12 |
| Purpose | Profit | 71 | 98 | 73 | 81 | 86 |
| | others | 29 | 2 | 27 | 11 | 14 |
| Body fragment | Prone to showing feet or legs only. | 65 | 81 | 93 | 88 | 49 |
| | Prone to showing the feet/ legs with their other body parts, especially the faces. | 35 | 18 | 7 | 12 | 61 |

*Source:* Compiled by the author.

$H_1$ predicts that the selected foot-/leg-related videos are made as arousing entertainment for the audience rather than for other purposes. In support of this claim, Table 2 shows the influence of the vlogger's gender on the chosen theme of the video. The vlogger's gender significantly influences the chosen theme of the video ($\chi^2$ = 12.862, $p < 0.01$). Female vloggers predominantly engage with the theme *sex* (82.74%), whereas male bloggers show a lower association with this theme (47.37%). In contrast, male vloggers have a higher association with the theme *others* (52.63%) compared to their female counterparts (17.26%). These findings suggest a gender-based disparity in thematic content, highlighting the role of the vlogger's gender in shaping the nature of the video content. Thus, $H_1$ is accepted. The results are consistent with much previous research that women are more likely and continue to be shown as sex objects (e.g. Ward, 2016; Wright and Tokunaga, 2016).

*Table 2a:*
*The influence of gender on the theme of the video*

| **Scheme** | **Item** | **Blogger's gender N (%)** | | **Total** | $\chi^2$ | ***p*** |
|---|---|---|---|---|---|---|
| | | **female** | **male** | | | |
| Theme | sex | 398(82.74) | 9(47.37) | 407(81.40) | 12.862 | 0.000** |
| | others | 83(17.26) | 10(52.63) | 93(18.60) | | |
| Total | | 481 | 19 | 500 | | |

* $p < 0.05$ ** $p < 0.01$

*Source:* Compiled by the author.

However, the difference lies in the fact that in films and advertising, women receive payment from brands or companies to be depicted as physically attractive; on social media, they appear to have undergone a shift towards self-objectification. This is because most of the videos they posted are sexually suggestive *selfies*, positioning them as objects for the sexual amusement of others, "rather than being perceived as individuals with the ability for independent action and decision making" (Zurbriggen et al., 2010, p. 1).

Scholars have observed that marketers or advertisers frequently employ sex to promote products because of their selling power (Frith et al., 2004; First, 1998). In marketing, the concept of *sex sells* is based on the belief that integrating sexual imagery or themes into advertisements can capture attention, generate interest, and leave a lasting impression on the audience (Lawrence et al., 2021). Consequently, the primary reason for the spontaneous self-objectification of these vloggers on social media may be the effectiveness of their sexy selfies in attracting the audience's attention. Neazer (2018, pp. 46-7) also noted that sexy selfies play "a role in attracting attention from potential partners, they contributed to intimate or erotic conversations, they yielded positive feedback resulting in feelings of self-esteem and connectedness, and they helped to increase popularity". Therefore, vloggers may consider the impact of self-objectification on audience engagement and tailor their content accordingly to achieve desired outcomes.

Moreover, sex is traditionally considered a taboo topic in Chinese Confucian societies (Gao et al., 2012; Jeffreys and Yu, 2015). Advertisers commonly employ taboo appeals as an executional cue in controversial advertising, leveraging the notion that sexuality is often considered taboo to create intrigue and interest (Sabri, 2017). This strategy might be particularly effective in sexually conservative Confucian China (Jeffreys and Yu, 2015) with its strict governmental regulations on sexually suggestive and explicit materials

(Wang and Ma, 2021). Given that many people in China lack access to pornographic and erotic media content and that the socio-political climate on the subject of sex in China is highly repressive (Ho et al., 2018), the taboo or risqué nature of sexually suggestive cues could amplify the appeal of media content. This could explain why a majority of the examined foot-/leg-related videos prominently feature the theme of sex.

Although women use sex appeal on social media on their own initiative, and may also achieve their political goals and comfort in their own bodies through this practice (Tiidenberg, 2017), they are not exempt from the influence of the male gaze, which female users on social media platforms frequently become subject to through captions, edits, and comments on their selfies (Davis, 2018). As can be seen from Table 2b, Female commentators predominantly engage with the theme *others* (46.39%), while male commentators show a strong association with the theme *sex* (99.26%). These findings suggest that different video content has a significant relationship with the enthusiasm of network participation of varying gender groups ($\chi^2 = 187.715$, $p = 0 < 0.05$). From Mulvey's (1989) perspective, the exposure of women's erogenous zones delivers a direct visual impact to gazers. Furthermore, the erogenous zone is not the sole source of visual pleasure for gazers, as it can extend to other parts of the female body. Finally, the visual pleasure experienced by the gazer partly originates from discreetly observing women. Consequently, the gaze of online male users aligns ideally with gaze theory because the content they view is sexually suggestive; the medium involved is their private screens, offering a more concealed and voyeuristic gazing experience than at a movie theater. Thus, $H_{2a}$ is accepted.

*Table 2b:*
*The influence of theme on online engagements*

| **Scheme** | **Item** | **Theme N (%)** | | **Total** | $\chi^2$ | ***p*** |
|---|---|---|---|---|---|---|
| | | **sex** | **others** | | | |
| Commentator's gender | female | 3(0.74) | 45(46.39) | 48(9.60) | | |
| | male | 400(99.26) | 52(53.61) | 452(90.40) | 187.715 | 0.000** |
| Total | | 403 | 97 | 500 | | |

* $p < 0.05$ ** $p < 0.01$

*Source:* Compiled by the author.

Most of the video creators are women (90.4%). Few men showcase their feet on Douyin, possibly influenced by the discourse linking foot fetishism to historical associations with heterosexuality and male dominance over females in China, as discussed above. Consequently, when men attempt to appeal to female audiences with their feet, they risk diminishing their masculinity. Similarly, attempting to attract male audiences with foot content may lead to the public perceiving and defining them as homosexual in the online sphere. However, neither of these is currently well-tolerated in Confucian society in China (see Ren et al., 2019; Xie and Peng, 2018; Zhang et al., 2018; Zhou and Hu, 2019). Thus, $H_2$ is supported.

In China, most of the LGB population would not disclose their sexual orientation to their medical care providers (Suen and Chan, 2020), let alone make it public online. This reluctance stems from the political climate, rendering LGB individuals in China more susceptible to discrimination and inequitable treatment across various social contexts. The media landscape in China, encompassing newspapers, magazines, radio, television, and the Internet, consistently portrays LGBTQ+ individuals and lifestyles negatively (Wang and Ma, 2021). Media studies reveal that LGBTQ+ persons are often stigmatised as mentally unstable, social deviants, or second-class citizens (Deklerck and Wei, 2015). Specific instances depict LGBTQ+ individuals in Chinese media as criminals, as being severely mentally ill, as adversaries of traditional Chinese values, and as a threat to social stability (Chang and Ren, 2017).

Furthermore, the decriminalisation of homosexuality in 1997 resulted in the progressive growth of gay meeting places and social groups, as well as a significant rise in the frequency with which gay culture was represented in the media. In reaction to this transition, China's state-run media administration declared in 2008 that any texts and pictures depicting homosexuality would be prohibited from Chinese-language public media in general (Bao, 2015). Despite the growing tolerance in public attitudes towards the LGBTQ+ community, in March 2016, China's State Administration of Radio, Film, and Television (SARFT) extended the prohibition to the portrayal of homosexual characters on TV shows (Wang and Ma, 2021). This prohibition was later extended to the internet in June 2017, as indicated by Article 16, Item 67 of the *Detailed Regulations on Content Audit Standards for Online Short Videos*, which restricts the display of content related to homosexuality (SARFT, 2021).

Besides the above mentioned, this research confirms that sexual stimuli can effectively attract attention. Table 2c demonstrates that *attention* amounts to the actual or potential number of followers, online traffic, online fame and, ultimately, financial rewards as we can see that the video creators' purpose has a significant relationship with the *theme* ($\chi^2 = 54.003$, $p = 0 < 0.05$). In detail, vloggers driven by profit predominantly engage with the *sex* theme (75.79%), while those with other purposes show a higher association with the *others* theme (63.74%). Hence, $H_3$ is supported, but $H_{3a}$ is not supported. This discovery not only underscores the effectiveness of sex appeal as a tool for grabbing attention, but also highlights that the sexual behaviours of female vloggers are a long way from constituting the "people's pornography" sexual liberation movement often referred to by Jacobs (2011). Instead, it aligns more closely with what Jones (2015) defines as "online sex work", signifying the exchange of sexual commodities and/or services mediated through the internet. While their sexual activities online do indeed challenge some dominant conservative norms and principles regulating sexuality in China, such as sex being for reproduction and not pleasure (Pan, 2006); their online representation exists as sexy entertainment sold for men's pleasure.

*Table 2c:*
*The influence of the vlogger's purpose on theme*

| Scheme | Item | Purpose N (%) | | Total | $\chi^2$ | *p* |
|---|---|---|---|---|---|---|
| | | profit | others | | | |
| Theme | sex | 310(75.79) | 33(36.26) | 343(68.60) | 54.003 | 0.000** |
| | others | 99(24.21) | 58(63.74) | 157(31.40) | | |
| Total | | 409 | 91 | 500 | | |

* $p < 0.05$ ** $p < 0.01$

*Source:* Compiled by the author.

Furthermore, most bloggers (75.2%) have chosen not to show their faces in their sexually suggestive self-representations. This could be due to the need to protect their image in society and the fact that some conservative Confucian sexual ideas are still at play, making them feel ashamed or socially unethical in posting these sexy images on social media. Consequently, to protect their mianzi, they choose not to show their physical faces. Thus, $H_4$ is supported, but $H_{4a}$ is rejected. This result is also partly in line with $H_3$ in that they are here to make money, not to protest against sexual conservatism, and they may be inwardly ashamed of their online sexual behaviours since the Confucian-conservative notion of mianzi still has an effect on them. They, therefore, are not essentially free from the influence of Confucian conservatism.

## Conclusion

I analyzed the content of 500 Douyin videos relating to feet and legs to find out whether social media has become a new arena in which individuals in China can satisfy their carnal desires in the societal circumstances of Confucian sexual conservatism, with a particular emphasis on podophilia. The research findings have several theoretical implications concerning the various factors influencing sexually suggestive self-representation within China's digital media landscape; and they highlight the intricate interplay between cultural, economic, and communicative factors affecting online communication around self-objectification, self-representation, and attention-seeking behaviours.

The research findings indicate that in a country where all kinds of sexually suggestive and explicit media content are illegal and/or considered immoral, consuming some foot and leg-related materials on the Internet seems to be the only option for most people in China. Thus, cultural conservatism, especially in a society with strict control of sexual media content, can lead to a demand for online platforms where individuals can explore their sexual preferences legally. In this context, digital online platforms serve as outlets for sexual stimuli seekers to satisfy their desires and for video creators to achieve economic gain.

However, the allure of substantial economic gain inhibits these sexually suggestive visuals from significantly advancing sexual revolution and liberation in China. Vloggers commonly engage in self-objectification due to its potential for high online traffic and economic gain. The monetisation of online content (Drenten, Gurrieri, and Tyler, 2020) on Douyin thus amplifies and encourages women's sexual self-objectification. This discovery underscores the idea that attention is a scarce and valuable resource (Davenport and Beck, 2001; Goldhaber, 1997), a form of capital that, once quantified, can be commodified and converted to income (Terranova, 2012). It also affirms that for women who upload these self-representations on social media, adhering to heteronormative standards of attractiveness and femininity is crucial in garnering attention (Duffy, 2017). Thus, the monetisation of online content and its relationship with self-objectification reveals the economic consequences of digital communication. Economic incentives often lead individuals to conform to certain presentation styles, reflecting the broader influence of market forces on digital communication practices.

This can also be attributed to the infrequent participation of men in presenting their feet online, which thus does not challenge the traditional discourse on homosexuality. The traditional discourse on foot fetishism has depicted women as inferior, leading to the objectification and commodification of their body parts. This research examined videos associated with non-gender-specific hashtags, revealing a distinct gender bias. That is, the predominant focus of foot and leg-related content is women, and is of a sexually suggestive nature that incorporates self-objectification. This content primarily caters to male audiences, indicating a persistent gender dynamic within foot fetishism across over time and in diverse contexts in China. To some extent, the scarcity of male foot content on Douyin can be attributed to prevailing masculine social norms and an unsupportive political climate concerning LGB rights in China (e.g. Zhang et al., 2018; Zhou and Hu, 2019).

The findings mentioned above highlight the profound influence of cultural norms and societal values on online communication. The phenomenon of infrequent participation of men in displaying their feet online, coupled with the persistence of traditional narratives regarding homosexuality, underscores the deep-rooted cultural constructs shaping online behaviour. Moreover, the historical portrayal of women as inferior in the context of foot fetishism, resulting in the objectification and commodification of their body parts, points to the broader implications of cultural values on gender relations in digital spaces. The analysis of videos under non-gender-specific hashtags reveals a notable gender bias where the majority of foot/leg-related content revolves around women, featuring sexual suggestiveness and self-objectification. This not only reaffirms the endurance of gender dynamics in online communication, but also reflects the perpetuation of certain cultural norms. These findings suggest that culture significantly shapes the dynamics of online communication, impacting gender roles and the distribution of content based on traditional expectations. The enduring influence of cultural norms, especially in a complex socio-political landscape, remains a vital consideration in understanding digital communication practices in China.

With regard to the self-objectification of women on Douyin, it is apparent that they predominantly opt to showcase their feet without exposing their faces. This inclination to conceal their facial identity is rooted in the imperative need to uphold their social and moral reputation. While self-objectification carries the potential of undermining the self-esteem of individuals (Mercurio and Landry, 2008), leading them to integrate their faces and their body parts in visuals to seize economic opportunities, the reluctance exhibited by vloggers to do so can be traced back to the pervasive influence of Confucian conservatism and the profound importance attached to the Confucian concept of mianzi. This observation on women's self-representation on social media platforms highlights a distinct cultural influence in their communication preferences when engaging in self-objectification. This choice is rooted in the necessity of maintaining their social and moral standing, underscoring the intricate interplay between cultural values and online self-presentation, where economic incentives and societal norms converge.

## Limitations and Future Research

There are several limitations to this research. First, the sample only included videos with hashtags excluding any explicitly sexually suggestive, gender, and cultural cues. Thus, the sample was not niche enough to reveal what kind of foot- and leg-teasing visuals Chinese foot fetishists enjoy watching, or more precisely, what sort of female feet they prefer in a given cultural context. Moreover, the sample size (500 videos plus 5,000 corresponding comments) is relatively small since Douyin has 600 million active users, so any future study should increase the sample size.

My research reveals that women display their feet on social media platforms with the intention of attracting viewers for financial gain. However, it does not ascertain whether these women also derive satisfaction from the attention and adoration they receive from both male and female viewers and whether this practice fulfills their own exhibitionist or narcissistic tendencies. Previous studies have indicated that individual personality traits and psychological motives, such as exhibitionism, narcissism, voyeurism, self-esteem, self-disclosure, and the desire for attention, significantly influence people's use of social media (Park et al., 2022; Mehdizadeh, 2010; Seidman, 2013). Notably, there is substantial evidence suggesting that girls and young women are more inclined to seek validation through the acquisition of likes and, as a result, often post sexually suggestive selfies on social media platforms (Mascheroni et al., 2015). Furthermore, Tiidenberg (2017) posits that women who share provocative selfies are engaging in acts of self-awareness, asserting their autonomy over their bodies and invoking a profound sense of personal agency in the digital age. As such, this research suggests that future research could include interviews with online *foot-teasing video* creators or *foot-teasing artists* to delve into their underlying motivations.

While this study has provided valuable insights into the use of anonymous or "without face" images among vloggers in the context of Confucian mianzi and conservative views, several intriguing areas warrant further investigation. One promising avenue for future research could be an in-depth investigation into shifting preferences for physical attractiveness over facial features among male audiences. Confer, Perilloux, and Buss's (2010) findings suggest a changing trend in men's valuation of women's *bodily attractiveness* over *facial attractiveness*, particularly in a non-committal context. Additionally, future research could delve into the motivations of the male viewers on social media platforms who seek visual pleasure without the expectation of long-term relationships. Understanding their particular preferences for specific body fragments could shed light on evolving standards of attractiveness in the digital era.

On the other hand, considering the safety and privacy concerns of female users, those who choose to crop or cover their faces in images, present a particularly pertinent avenue for investigation. Building upon previous research by Ringrose and Harvey (2015), a comprehensive examination of the underlying factors driving these behaviours could provide valuable insights into the intersection of personal privacy, self-presentation, and online interactions.

## References

Achrati, A. (2003). Hand and foot symbolisms: From rock art to the Qur'ān. *Arabica, 50*(4), 464–500. Online: http://dx.doi.org/10.1163/157005803322616911

Adams–Santos, D. (2020). Sexuality and Digital Space. *Sociology Compass, 14*(8), e12818. Online: https://doi.org/10.1111/soc4.12818

Bao, H. (2015). Digital video activism: Narrating history and memory in queer China, 'comrade' China. In E. L. Engebresten & W. F. Schroeder (Eds.), *Queer/Tongzhi China: New perspectives on research, activism, and media cultures* (pp. 35–56). Nordic Institute of Asian Studies. Online: http://dx.doi.org/10.7146/ta.v0i78.118624

Bell, B. T., Cassarly, J. A., & Dunbar, L. (2018). Selfie-objectification: Self-objectification and positive feedback ("likes") are associated with frequency of posting sexually objectifying self-images on social media. *Body Image, 26,* 83–89. Online: http://dx.doi.org/10.1016/j.bodyim.2018.06.005

Broderick, R. (2020). TikTok has a predator problem. A network of young women is fighting back. *Buzzfeed News*. Online: www.buzzfeednews.com/article/ryanhatesthis/tiktok-has-a-predator-problem-young-women-are-fighting-back

Bryant, C. D. (1982). *Sexual Deviance and Social Proscription*. New York. Human Science Press.

Bryant, C. D. (Ed.). (2011). *The Routledge handbook of deviant behaviour*. New York: Routledge. Online: https://doi.org/10.4324/9780203880548

Carrotte, E. R., Prichard, I., & Lim, M. S. C. (2017). "Fitspiration" on social media: A content analysis of gendered images. *Journal of Medical Internet Research, 19*(3), e6368. Online: https://doi.org/10.2196/jmir.6368

Chang, J., & Ren, H. (2017). Keep silent, keep sinful: Mainstream newspapers' representation of gay men and lesbians in contemporary China. *Indian Journal of Gender Studies, 24*(3), 317–340. Online: https://doi.org/10.1177/0971521517716765

Chen, H., Wu, Y., & Atkin, D. J. (2015). Third-person effect and Internet pornography in China. *Telematics and Informatics, 32*(4), 823–833. Online: https://doi.org/10.1016/j.tele.2015.04.004

Chen, J., Dunne, M. P., & Han, P. (2007). Prevention of child sexual abuse in China: Knowledge, attitudes, and communication practices of parents of elementary school children. *Child Abuse & Neglect, 31*(7), 747–755. Online: https://doi.org/10.1016/j.chiabu.2006.12.013

Chua, T. H. H., & Chang, L. (2016). Follow me and like my beautiful selfies: Singapore teenage girls' engagement in self-presentation and peer comparison on social media. *Computers in Human Behavior, 55,* 190–197. Online: https://doi.org/10.1016/j.chb.2015.09.011

CNSA. (2021). *Wangluo duanshipin pingtai guanliguifan* (*'Management Code for Online Short Video Platforms'*). Online: www.cnsa.cn/art/2021/12/16/art_1488_27573.html on 25 May 2022

Davis, S. E. (2018). Objectification, sexualization, and misrepresentation: social media and the college experience. *Social Media+ Society, 4*(3). Online: https://doi.org/10.1177/2056305118786727

Deklerck, S., & Wei, X. (2015). Queer online media and the building of China's LGBT community. In E. L. Engebresten & W. F. Schroeder (Eds.), *Queer/Tongzhi China: New perspectives on research, activism, and media cultures* (pp. 18–34). Nordic Institute of Asian Studies.

Confer, J. C., Perilloux, C., & Buss, D. M. (2010). More than just a pretty face: Men's priority shifts toward bodily attractiveness in short-term versus long-term mating contexts. *Evolution and Human Behavior, 31*(5), 348–353. Online: https://doi.org/10.1016/j.evolhumbehav.2010.04.002

Cui, G. & Yang, X. (2009). Responses of Chinese consumers to sex appeals in international advertising: A test of congruency theory. *Journal of Global Marketing, 22*(3), 229–245. Online: https://doi.org/10.1080/08911760902845031

Cui, N., Li, M., & Gao, E. (2001). Views of Chinese parents on the provision of contraception to unmarried youth. *Reproductive Health Matters, 9*(17), 137–145. Online: https://doi.org/10.1016/S0968-8080(01)90017-5

Daneback, K. & Ross, M. W. (2011). The complexity of internet sexuality. *Sexual Dysfunction: Beyond the Brain-Body Connection, 31,* 121–134. Online: https://doi.org/10.1159/000328920

Daneback, K., Månsson, S. A., Ross, M. W., & Markham, C. M. (2012). The Internet as a source of information about sexuality. *Sex Education, 12*(5), 583–598. Online: https://doi.org/10.1080/14681811.2011.627739

Davenport, T. H. & Beck, J. C. (2001). T*he attention economy: Understanding the new currency of business*. Boston, MA: Harvard Business School Press.

Deighton-Smith, N. & Bell, B. T. (2018). Objectifying fitness: A content and thematic analysis of #fitspiration images on social media. *Psychology of Popular Media Culture, 7*(4), 467. Online: https://doi.org/10.1037/ppm0000143

Drenten, J., Gurrieri, L., & Tyler, M. (2020). Sexualized labour in digital culture: Instagram influencers, porn chic and the monetization of attention. *Gender, Work & Organization, 27*(1), 41–66. Online: https://doi.org/10.1111/gwao.12354

Duffy, B. (2017). *(Not) getting paid to do what you love: Gender, social media, and aspirational work*. New Haven, CT: Yale University Press. Online: https://doi.org/10.12987/yale/9780300218176.001.0001

First, A. (1998). Nothing new under the sun? A comparison of images of women in Israeli advertisements in 1979 and 1994. *Sex Roles, 38*(11–12), 1065–1077. Online: https://doi.org/10.1023/A:1018834928152

Fredrickson, B. L. & Roberts, T. A. (1997). Objectification theory: Toward understanding women's lived experiences and mental health risks. *Psychology of Women Quarterly, 21*(2), 173–206. Online: https://doi.org/10.1111/j.1471-6402.1997.tb00108.x

Freud, S. (1905). Three Essays on the Theory of Sexuality. *Standard Edition, 7,* 130–243.

Frith, T. K., Cheng, H., & Shaw, P. (2004). Race and beauty: A comparison of Asian and Western models in women's magazine advertisements. *Sex Roles, 50,* 53–61. Online: https://doi.org/10.1023/B:SERS.0000011072.84489.e2

Gao, E., Zuo, X., Wang, L., Lou, C., Cheng, Y., & Zabin, L. S. (2012). How does traditional Confucian culture influence adolescents' sexual behavior in three Asian cities? *Journal of Adolescent Health, 50*(3), S12–S17. Online: https://doi.org/10.1016/j.jadohealth.2011.12.002

Gao, G. (1996). Self and other: A Chinese perspective on interpersonal relationships. In W. B. Gudykunst, S. Ting-Toomey, & T. Nishida (Eds.), *Communication in personal relationships across cultures* (pp. 81–101). Sage Publications, Inc.

Gervais, S. J., Vescio, T. K., Förster, J., Maass, A., & Suitner, C. (2012). Seeing women as objects: The sexual body part recognition bias. *European Journal of Social Psychology, 42*(6), 743–753. Online: https://doi.org/10.1002/ejsp.1890

Goldhaber, M. H. (1997). The attention economy and the Net. *First Monday, 2*(4). Online: https://doi.org/10.5210/fm.v2i4.519

Held, I. (2023). Redefining nude: Unravelling nylon's unmarked norms. *Fashion, Style & Popular Culture, 11,* 45–64. Online: https://doi.org/10.1386/fspc_00225_1

Ho, P. S. Y., Jackson, S., Cao, S., & Kwok, C. (2018). Sex with Chinese characteristics: Sexuality research in/on 21st-century China. *The Journal of Sex Research, 55*(4–5), 486–521. Online: https://doi.org/10.1080/00224499.2018.1437593

Howard, R. & Pillinger, M. H. (2010). Consequences of Chinese foot binding. *JCR: Journal of Clinical Rheumatology, 16*(8), 408. Online: https://doi.org/10.1097/rhu.0b013e3182005c7c

Hwang, K.-K., & Han, K.-H. (2010). Face and morality in Confucian society. In M. H. Bond (Ed.), *The Oxford handbook of Chinese psychology* (pp. 479–498). Oxford University Press. Online: https://doi.org/10.1093/oxfordhb/9780199541850.013.0029

Jeffreys, E. (2004). *China, sex and prostitution*. Routledge. Online: https://doi.org/10.4324/9780203493816

Jeffreys, E. & Yu, H. (2015). *Sex in China*. John Wiley & Sons. Online: https://doi.org/10.1017/S0021911817000560

Jones, A. (2015). Sex work in a digital era. *Sociology Compass, 9*(7), 558–570. Online: https://doi.org/10.1111/soc4.12282

Kassarjian, H. H. (1977). Content analysis in consumer research. *Journal of Consumer Research, 4*(1), 8–18. Online: https://doi.org/10.1086/208674

Kaye, D. B. V., Chen, X., & Zeng, J. (2021). The co-evolution of two Chinese mobile short video apps: Parallel platformization of Douyin and TikTok. *Mobile Media & Communication, 9*(2), 229–253. Online: https://doi.org/10.1177/2050157920952120

Kelly, D. M., Pomerantz, S., & Currie, D. (2005). Skater girlhood and emphasized femininity: 'You can't land an ollie properly in heels'. *Gender and Education, 17*(3), 229–248. Online: https://doi.org/10.1080/09540250500145163

Lawrence, H., Furnham, A., & McClelland, A. (2021). Sex does not sell: Effects of sexual advertising parameters on women viewers' implicit and explicit recall of ads and brands. *Perceptual and Motor Skills, 128*(2), 692–713. Online: https://doi.org/10.1177/0031512521990352

Leistedt, S. & Thibaut, F. (2021). The concept of paedophilia. Part 1: Historical background and nosology. *Revue Medicale de Liege, 76*(3), 195–201.

Liang, T. (2021, December). The Method of the Money-Making Mechanism of TikTok. In *2021 3rd International Conference on Economic Management and Cultural Industry (ICEMCI 2021)* (pp. 3102–3105). Atlantis Press. Online: https://doi.org/10.2991/assehr.k.211209.508

Lin, Z. (2018). Individualising the sexual revolution in China: Staging, enjoying, and experiencing sexuality. *Asian Journal of Women's Studies, 24*(4), 446–462. Online: https://doi.org/10.1080/12259276.2018.1531538

Liu, J., Cheng, M., Wei, X., & Yu, N. N. (2020). The Internet-driven sexual revolution in China. *Technological Forecasting and Social Change, 153,* 119911. Online: https://doi.org/10.1016/j.techfore.2020.119911

Martinez Dy, A. & Jayawarna, D. (2020). Bios, mythoi and women entrepreneurs: A Wynterian analysis of the intersectional impacts of the COVID-19 pandemic on self-employed women and women-owned businesses. *International Small Business Journal, 38*(5), 391–403. Online: https://doi.org/10.1177/0266242620939935

Mascheroni, G., Vincent, J., & Jimenez, E. (2015). “Girls are addicted to likes so they post semi-naked selfies”: Peer mediation, normativity and the construction of identity online. *Cyberpsychology: Journal of Psychosocial Research on Cyberspace, 9*(1), 5. Online: https://doi.org/10.5817/CP2015-1-5

McGeoch, P. D. (2007). Does cortical reorganisation explain the enduring popularity of foot-binding in medieval China? *Medical hypotheses, 69*(4), 938–941. Online: https://doi.org/10.1016/j.mehy.2007.01.071

Mehdizadeh, S. (2010). Self-presentation 2.0: Narcissism and self-esteem on Facebook. *Cyberpsychology, Behavior, and Social Networking, 13*(4), 357–364. Online: https://doi.org/10.1089/cyber.2009.0257

Meng, K. S., & Leung, L. (2021). Factors influencing TikTok engagement behaviors in China: An examination of gratifications sought, narcissism, and the Big Five personality traits. *Telecommunications Policy, 45*(7), 1–15. Online: https://doi.org/10.1016/j.telpol.2021.102172

Mountford, T. (2010). The legal status and position of lesbian, gay, bisexual and transgender people in the People’s Republic of China. International Gay and Lesbian Human Rights Commission. Online: https://doi.org/10.1163/2210-7975_hrd-9815-0045

Mulvey, L. (1989). Visual pleasure and narrative cinema. In *Visual and other pleasures* (pp. 14–26). Palgrave Macmillan, London. Online: https://doi.org/10.1007/978-1-349-19798-9_3

Naezer, M. (2020). Sexy selves: Girls, selfies and the performance of intersectional identities. *European Journal of Women’s Studies, 27*(1), 41–56. Online: https://doi.org/10.1177/1350506818804845

Pan, S. M. (2006). Transformations in the primary life cycle: The origins and nature of China’s sexual revolution. In E. Jeffreys (Ed.), *Sex and sexuality in China* (pp. 21–42). New York, NY: Routledge. Online: https://doi.org/10.4324/9780203967065-7

Pan, S., & Huang, Y. (2013). *Xing zhi bian—21 shi ji zhongguo ren de xing sheng huo* (*‘The change of sex—Chinese people’s sexual lives in the 21st century’*). Beijing: China Renmin University Press.

Park, K. G., Kim, J., & Kim, H. (2022). How exhibitionism and voyeurism contribute to engagement in SNS use: The mediating effects of content production and consumption. *Telematics and Informatics,* 69. Online: https://doi.org/10.1016/j.tele.2022.101798

Peters, M., Rhodes, G., & Simmons, L. W. (2007). Contributions of the face and body to overall attractiveness. *Animal Behaviour, 73*(6), 937–942. Online: https://doi.org/10.1016/j.anbehav.2006.07.012

Puvia, E., & Vaes, J. (2015). Promoters versus victims of objectification: Why women dehumanise sexually objectified female targets. *Revue internationale de psychologie sociale, 28*(1), 63–93.

Reichert, T., & Lambiase, J. (2003). How to get “kissably close”: Examining how advertisers appeal to consumers’ sexual needs and desires. *Sexuality and Culture, 7*(3), 120–136. Online: https://doi.org/10.1007/s12119-003-1006-6

Ren, Z., Howe, C. Q., & Zhang, W. (2019). Maintaining “mianzi” and “lizi”: Understanding the reasons for formality marriages between gay men and lesbians in China. *Transcultural Psychiatry, 56*(1), 213–232. Online: https://doi.org/10.1177/1363461518799517

Ringrose, J., & Harvey, L. (2015). Boobs, back-off, six packs and bits: Mediated body parts, gendered reward, and sexual shame in teens’ sexting images. *Continuum, 29*(2), 205–217. Online: https://doi.org/10.1080/10304312.2015.1022952

SARFT. (2021). *Wangluo duanshipin neirong shenhe biaozhunxize* (*‘Detailed Regulations on Content Audit Standards for Online Short Videos’*). Online: www.nrta.gov.cn/art/2021/12/15/art_110_59299.html

Seidman, G. (2013). Self-presentation and belonging on Facebook: How personality influences social media use and motivations. *Personality and Individual Differences, 54*(3), 402–407. Online: https://doi.org/10.1016/j.paid.2012.10.009

Shi, L. (2013). Mirror rubbing: A critical genealogy of pre-modern Chinese female same-sex eroticism. *Journal of Homosexuality, 60*(5), 750–772. Online: https://doi.org/10.1080/00918369.2013.773824

Shutsko, A. (2020, July). User-generated short video content in social media. A case study of TikTok. In *International Conference on Human-Computer Interaction* (pp. 108–125). Springer, Cham. Online: https://doi.org/10.1007/978-3-030-49576-3_8

Sigley, G. (2007). Sex, politics and the policing of virtue in the People's Republic of China. In E. Jeffreys (Ed.), *Sex and sexuality in China* (pp. 51–69). Routledge. Online: https://doi.org/10.4324/9780203967065-8

Song, L., Wang, Y., Li, Z., Yang, Y., & Li, H. (2020). Mental health and work attitudes among people resuming work during the COVID-19 pandemic: a cross-sectional study in China. *International Journal of Environmental Research and Public Health, 17*(14), 5059. Online: https://doi.org/10.3390/ijerph17145059

Strelan, P., & Hargreaves, D. (2005). Women who objectify other women: The vicious circle of objectification? *Sex Roles, 52*(9), 707–712. Online: https://doi.org/10.1007/s11199-005-3737-3

Suen, Y. T., & Chan, R. C. H. (2020). A nationwide cross-sectional study of 15,611 lesbian, gay and bisexual people in China: disclosure of sexual orientation and experiences of negative treatment in health care. *International Journal for Equity in Health, 19*(1), 1–12. Online: https://doi.org/10.1186/s12939-020-1151-7

Sumler, A. (2010). A catalogue of shoes: Puns in Herodas Mime 7. *Classical World, 103*(4), 465–475. Online: https://doi.org/10.1353/clw.2010.0024

Surajaya, I. K. (2019). Zettai Ryouiki: The Use of Female Body Parts in Japanese Advertising. *Advances in Social Science, Education and Humanities Research, 365,* 219–224. Online: https://doi.org/10.2991/icsgs-18.2019.30

Szymanski, D. M., Moffitt, L. B., & Carr, E. R. (2011). Sexual objectification of women: Advances to theory and research 1ψ7. *The Counseling Psychologist, 39*(1), 6–38. Online: https://doi.org/10.1177/0011000010378402

Tang, C. S. K. (2002). Childhood experience of sexual abuse among Hong Kong Chinese college students. *Child Abuse & Neglect, 26*(1), 23–37. Online: https://doi.org/10.1016/S0145-2134(01)00306-4

Terranova, T. (2012). Attention, economy and the brain. *Culture Machine, 13,* 1–19.

Tiidenberg, K. (2017). "Nude selfies til I die"–making of 'sexy'in selfies. In P. G. Nxion and I. K. Düsterhöft (Eds.), *Sex in the digital age* (pp. 78–88). Routledge. Online: https://doi.org/10.4324/9781315446240-8

Veszelszki, Á. (2018). Like economy: What is the economic value of likes? *Society and Economy, 40*(3), 417–429. Online: https://doi.org/10.1556/204.2018.40.3.8

Wang, G., & Ma, X. (2021). Representations of LGBTQ+ issues in China in its official English-language media: A corpus-assisted critical discourse study. *Critical Discourse Studies, 18*(2), 188–206. Online: https://doi.org/10.1080/17405904.2020.1738251

Wang, W., & Wu, J. (2021). Short Video Platforms and Local Community Building in China. *International Journal of Communication, 15,* 3269–3291.

Ward, L. M. (2016). Media and sexualization: State of empirical research, 1995–2015. *The Journal of Sex Research, 53*(4–5), 560–577. Online: https://doi.org/10.1080/00224499.2016.1142496

Weinberg, M. S., Williams, C. J., & Calhan, C. (1994). Homosexual foot fetishism. *Archives of Sexual Behavior, 23*(6), 611–626. Online: https://doi.org/10.1007/bf01541815

Wright, P. J., & Tokunaga, R. S. (2016). Men's objectifying media consumption, objectification of women, and attitudes supportive of violence against women. *Archives of Sexual Behavior, 45,* 955–964. Online: https://doi.org/10.1007/s10508-015-0644-8

Xie, Y., & Peng, M. (2018). Attitudes toward homosexuality in China: Exploring the effects of religion, modernising factors, and traditional culture. *Journal of Homosexuality, 65*(13), 1758–1787. Online: https://doi.org/10.1080/00918369.2017.1386025

Yang, S. (2021). Young Generation's Perceptions of Same-Sex Sexuality and Attitudes Toward Same-Sex Marriage in South Korea. *SAGE Open, 11*(3). Online: https://doi.org/10.1177/21582440211031886

Ye, L., Ashley-Cotleur, C., & Gaumer, C. (2012). Do women still hold up half the sky? Portrayal of women in Chinese advertising: 1980–2001. *Journal of Marketing Development and Competitiveness, 6*(3), 67–82.

Yiu, W., & Chan, A. C. (2013). "Kawaii" and "moe" – Gazes, Geeks (Otaku), and Glocalisation of Beautiful Girls (Bishōjo) in Hong Kong Youth Culture. *Positions, 21*(4), 853–884. Online: https://doi.org/10.1215/10679847-2346032

Yoon, G., Li, C., Ji, Y., North, M., Hong, C., & Liu, J. (2018). Attracting comments: Digital engagement metrics on Facebook and financial performance. *Journal of Advertising, 47*(1), 24–37. Online: https://doi.org/10.1080/00913367.2017.1405753

Zarei, M., & Bidaki, R. (2013). Female foot fetishism disorder in childhood. *Journal of Research in Medical Sciences, 18*(2), 170.

Zhang, J., Zheng, L., & Zheng, Y. (2018). Consistency in preferences for masculinity in faces, bodies, voices, and personality characteristics among homosexual men in China. *Personality and Individual Differences, 134,* 137–142. Online: https://doi.org/10.1016/j.paid.2018.06.009

Zhang, W., Ren, P., Yin, G., Li, H., & Jin, Y. (2020). Sexual abuse prevention education for preschool-aged children: Parents' attitudes, knowledge and practices in Beijing, China. *Journal of Child Sexual Abuse, 29*(3), 295–311. Online: https://doi.org/10.1080/10538712.2019.1709240

Zhang, Y. (2018, September 21). Police bust platform for sex shows. *China Daily*. Online: www.chinadaily.com.cn/a/201809/21/WS5ba447c3a310c4cc775e7740.html

Zhou, L., & Zhang, S. J. (2017). How face as a system of value-constructs operates through the interplay of mianzi and lian in Chinese: a corpus-based study. *Language Sciences, 64,* 152–166. Online: https://doi.org/10.1016/j.langsci.2017.08.001

Zhou, M., & Hu, T. (2020). Social tolerance of homosexuality: A quantitative comparison of Mainland China, Singapore, and Taiwan. *Chinese Sociological Review, 52*(1), 27–55. Online: https://doi.org/10.1080/21620555.2019.1654368

Zurbriggen, E. L., Collins, R. L., Lamb, S., Roberts, T. A., Tolman, D. L., & Ward, L. M. (2010). APA task force on the sexualisation of girls. *American Psychological Association.* Online: www.apa.org/pi/women/programs/girls/report-full.pdf

KOME − An International Journal of Pure Communication Inquiry Vol. 12. No. 1. (2024) • 111–140.
DOI: 10.17646/KOME.of.11

# The Evidence of Populism in the Narratives of the President[1] of Brazil during the Covid-19 Pandemic

Cibele Silva e Souza*

* PhD student at Corvinus University of Budapest, Institute of Social and Political Sciences, Department of Sociology (Hungary);
Postgraduate student of Data Science and Big Data, Pontifical Catholic University of Minas Gerais (Brazil);
e-mail: cibeleufop@gmail.com

In Brazil, the period of the Covid-19 pandemic was characterised by a crisis reflected in social platforms and the centralisation of information in the hands of the political leader. This article analyses former President Bolsonaro's political communication on Twitter (currently known as X) in a populist context. To achieve this objective, the research sets out from the idea that populist leaders have focused attention on publicising their popularity and approaching the public, a process expanded through social media. As a result of content analysis and studies by Engesser et al. (2017), five recurring narrative motifs were observed in Bolsonaro's communication: attacks on traditional media, advocate of the people, the basis of religion and faith as a doctrine, the sovereignty of the nation, and appeals to the heart and opposition to the dominant structure. Based on the findings, the article contributes to studies on populism, placing the phenomenon in a media environment composed of political, social and economic uncertainty.

**Keywords:** Bolsonaro, Twitter, populism, communication, Covid-19, Brazil, AI

[1] Bolsonaro was Brazil's 38th President, serving from 1 January 2019 until 31 December 2022.

## Introduction

During the Covid-19 pandemic, Brazil attracted attention on the international stage not only because of the number of deaths related to the virus, but also for the repercussions to the negligent attitude of Jair Bolsonaro (without a party), who opposed the World Health Organization's (WHO) measures to combat Covid-19 and the Ministry of Education's isolation and vaccination campaigns. One of the reasons for the widespread dissemination of this politician's stance is the fact that the president, at the time stated, was one of the leaders who had the most contact with the population through publications on social media (Manfredi-Sánchez et al., 2021).

Bolsonaro, who is considered to be a right-wing populist, ignored scientific opinion on Covid-19 and downplays the severity of the pandemic in his speeches (Duarte, 2020). This context contributes to the populism scenario based on the rise of the extreme right, which, on the one hand, relies on discursive narratives, denying the politics of democratic institutions and the press, and, on the other hand, promotes militarism, nationalism and centralised power (Fernandes et al., 2021).

It is worth remembering that some studies indicate that charismatic leaders such as Donald Trump (United States) and Bolsonaro (Brazil) are part of the political spectrum of populism (Baptista et al., 2022; Mudde & Kaltwasser, 2012), taking into account that contemporary populists use social networks as a means of mediation (Mudde, 2021; Mouffe, 2018; da Silva, 2020), extolling messages with persuasive capacity (Hameleers et al., 2017). Bolsonaro cited the deforestation of the Amazon as a fantasy of global elites aimed at weakening the country's sovereignty on environmental issues, attacked institutions and undermined multilateral regional cooperation schemes (Wehner, 2023).

In the context of the health sector crisis, there was a tendency for former presidential communications in social networks to focus on decision-making issues supporting political arguments (Manfredi-Sánchez et al., 2021, p. 83). In some ways, the pandemic has increased questions about populist leaders and the actions taken by these politicians, especially considering some speeches or political actions (Santos & Cesar, 2022).

It is evident that in Bolsonaro's speeches, the *ethos* typical of populist politicians is constructed, conveying the image of a predestined leader, a messiah who has the task of fighting to alleviate the suffering of his people (da Silva, 2020). In this regard, Bolsonaro mobilises the citizenry to fight against "everything that is out there", and thus, while promoting the fight against the symbols of the State, he also omits aspects of the regression caused by his politics through his information (Maitino, 2020), considering that populism does not define organisational politics, but articulates themes (Arditi et al., 2005).

Bolsonaro makes extensive use of social media to demonstrate his ideological bias to his supporters. In this sense his speech acts in the construction of meanings that dialogue with the desires of the public, and populist leaders as well (Mendonça & Caetano, 2021). The proliferation of digital content through communication has contributed to the rise of right-wing populist leaders in the West (Norris, 2020). These developments take place in a scenario in which the public sphere has evolved with digital media, leading to the acceleration of a communicative environment in which the power of media becomes central, especially in electoral contexts (Fernández & Rodríguez-Virgili, 2019; Pérez Curiel, 2020).

In this sense, social media channels contribute to populism gaining strength and a global voice by enabling an atmosphere in which politicians and citizens expound their ideas (Hameleers & Schmuck, 2017; Bartlett et al., 2011). The media has become an important vehicle for populist communication (Engesser et al., 2017; Mendonça & Caetano, 2021) because the rhetoric of populism is reinforced through the use of discourse or written texts so that specific themes and arguments serve as a source of persuasion for supporters (Norris, 2020).

Considering the logic of the media ecosystem composed of the media, populism and the crisis generated by Covid-19, this article aims to provide a case study of presidential political communication published on the official page of President Bolsonaro on Twitter (currently known as X but referred to here as Twitter throughout) in the first nine months of 2021, one year before the elections. For this study, research focused on the methodology of Content Analysis and the Analysis of Automated Content, with the aim of answering the following questions: What are Bolsonaro's narratives as they emerged on Twitter, and how are these narratives in dialogue with populism?

The article addresses the most populist discourse and communication style through a social platform, bearing in mind that populism has a relationship with democracy and its rhetoric as we interpret it (Canovan, 1999; Hebling, 2021). Thus, the research follows the idea of populism as a style of political communication from political agents to the people (Jagers & Walgrave, 2007). In a mediatised environment, these social platforms contribute to the dissemination of populist narratives in which, in case of Twitter, the tool tends to contribute to bringing the figure of the populist leader and the people closer together, especially in the context of crisis such as the pandemic; whereas communication tends to be one of the main styles of populism (Casero-Ripollés et al., 2017; Aalberg et al., 2017), considering that communication can be interpreted as an attempt to develop a direct relationship with citizens.

Through broad communication, social platforms such as Twitter tend to promote the dissemination of themes that are contrary to the repertoire of the political elites and traditional media (Casero-Ripollés et al., 2017). Tweets become suitable as a tool for reaction, especially when it comes to current affairs and criticism of other politicians (Van Kessel & Castelein, 2016). Thus, *digital populism* becomes a central way in which political hegemony becomes mediatised, as social media enables the exchange of information without any need for intermediaries; in such a way, "messages on Twitter or WhatsApp may travel all the way to the president's smartphone" (Cesarino, 2019, p. 2).

Accordingly, the justification for elaborating this content lies in the fact that *Bolsonarismo* and its connection with populism in Brazil are little researched, as they are associated with the use of data and social networks, intended to mobilise followers (Fernandes et al., 2021). Moreover, there is evidence that the impact of populist messages on citizens is poorly studied (Hameleers & Schmuck, 2017).

In this way, this article seeks to analyse Bolsonaro's Twitter posts as a public scene for populism and to provide reflections and insights on the use of social platforms as a communication tool for populism. After all, with this wide dissemination of information through digital media, it is evident that populism in today's world affects not only economists and politicians, but also opinion-makers, such as those in academia and *the media* (Canovan, 1999). It is worth noting that this work was written a year before the Brazilian presidential elections, which marked the beginning of the building and redistribution of political electoral tactics for the year 2022. As a result, the purpose of this study is to redirect academia's attention to an age-old notion, populism, which has been modernised and digitised through social media and the pandemic situation, making this search unique.

## Theoretical framework

### *A brief look at the discussions of the concept of populism*

Populism has gained relevance over the years both in the U.S. and Europe, there being a populist style present in political communication (Casero-Ripollés et al., 2017). The concept is one of the most studied topics in the field of social sciences (Tóth, 2021) because it emerges in various forms in fractured instances and has become popular in recent years (Taggart, 2004; Jagers & Walgrave, 2007). Populism becomes a tenuous ideology that generally tends to consider society as separated into two spheres, homogeneous and antagonistic, composed of *the people* and *a corrupt elect* (Akkerman et al., 2014; Brown & Mondon, 2021), and therefore makes interpreting the people as a homogeneous mass going against the elect part of its discursive strategy (Waisbord, 2018; Brown & Mondon, 2021). In a scenario in which populism is composed of an illiberal understanding, it ultimately becomes anti-democratic in terms of representative democracy due to an internal logic that brings together popular demands and actions in a particular way (Muller, 2014).

The phenomenon is applied to various disparate movements, from the left to the political right, which can be used pejoratively to describe a threat to the status quo as defined by liberal democrats (Brown & Mondon, 2021). Populists differ according to the context – which in turn depends on the nature of the elite and the dominant discourse – and therefore claim legitimacy with regard to their speaking to the people by claiming to represent a sovereign ideal and not an interest, which is why populist politics explores the possibilities of the existing rhetoric (Canovan, 1999). A discourse can be more or less populist if we take into account the way it is articulated by equivalent logic, or rather in the way it articulates differences (Arditi et al., 2005). In one particular case, versions of right-wing populism rely on the common people, the patriotic nation, which is set in opposition to the opposition, that is, the ruling elite, left-wing parties, the media, universities, foreign interests, and other categories (Waisbord, 2018). In this way, the vision of *the people* as a collective of interests is constructed on one side (Wettstein et al., 2018; Waisbord 2020, 2018; Canovan, 1999), while the other side is then viewed as illegitimate (Muller, 2014).

### *Meeting point: The leader and the spread of populism and the media*

Social media helps politicians spread populist messages around the world by providing a broad space for politicians and citizens to expound their ideas, which helps connect people, especially populist leaders and their audiences (Hameleers & Schmuck, 2017; Engesser et al., 2017). The media acts by spreading populism and becoming a catalyst for public sentiment, which strengthens the bond of complicity between these populist leaders and the media by spreading populist information and ideas (Mazzoleni, 2008; Mazzoleni, 2003). Politics is associated with the figure of the politician empowered by their public via social networks, which is part of the composition of the media repertory (Pérez Curiel, 2020).

Populism is defined as a specific type of leadership used by actors across the ideological spectrum that cannot be defined as a left–right criterion, as it is a rhetoric of the right form of government allocation used in a society with minorities, migrants, businessmen and political elite, in the name of the people (Norris & Inglehart, 2019; Norris, 2020; Mudde & Kaltwasser, 2017). Based on this theory, populist movement leaders share the fact that their attention is focused on spreading their popularity, and on incidents involving politics and the media, and in view of the fact that they are charismatic and provocative, the media reinforces their recognition (Mazzoleni, 2008). As a result, the phenomenon is related to authoritarian leaders who tend to enforce the narrative of the rights of the people in contemplation of weakened institutions, such as the judiciary, the media and Congress (de Albuquerque, 2021).

Recently, populism is believed to be related to strong leaders who have a direct connection to the people by circumventing the authority of democratic institutions (de Albuquerque, 2021). Thus, communication becomes a means and an essential tool for populism to counter power-driven social interests (Waisbord, 2018). Through the media, populists seek to mobilise their constituencies to oppose those in power and opinion leaders (Canovan, 1999).

Taking into account that in the last few years some politicians have gained space in the media, they are recognised as populists with deep dimensions and political causes (Moffitt, 2016; Mouffe, 2018; Reynié, 2016; Soffer, 2022), which is consistent with some common ideological references to Bolsonaro. The hero figure conveyed by Donald Trump in the North American Republican Party, which "can step in from outside and solve the problems that Washington and politicians have created" (Kellner, 2016, p. 26), has contributed to the repercussions of the spectacularisation of media (Schwartzenberg, 1977; Kellner, 2016).

In addition to the populist discourse, part of the right-wing communication of the policy of Marine Le Pen's French National Front is presented in direct and emotional language, with an emphasis on claims "in the name of the people" with references to collective memories (Stockemer & Barisione, 2017; Hebling, 2021; Reynié, 2016; Soffer, 2022). Another illustration of this contemporary environment that covers the growth of populism in Europe (Tóth, 2020), is the right-wing populism evident in Hungarian political communication, such as that from Viktor Orbán (Tóth et al., 2019; Maitino, 2020).

Populists are attracted to social media because it provides an ideal opportunity framework for populist communication (see Engesser et al., 2017). In certain cases, social media platforms act as tools to connect people, allowing those in power to bypass the journalistic filter, favouring freedom of ideological articulation through information and messages (Engesser et al., 2017). In other cases, politics and the media focus on the "celebrity politician" style (Street, 2004, p. 436).

As its basis, populist ideology rests on four key issues: *popular sovereignty, the people* who are characterised as pure, *the corrupt elite* and *adverse threats*. From this, populist communication comprises of an emphasis on the sovereignty of the people, the idea of advocating for the people, attacking the perceived elites, and invocations to the heart through the idealisation of the community (Engesser et al., 2017). The language of populists is constructed, justified in the name of the people, and tending to disarm critics and dismantle liberal democratic restrictions (Norris, 2020). The people become an essential tool in communication because a populist leader's rhetoric is based on the *will of the people* and *the enemy of the people in the establishment,* therefore democratic values prevail, legitimising the idea that power resides in the people (Norris, 2020, p. 699).

In this environment and with the resources of digital technology, populist political leaders secure public notoriety through their visibility in the media, which they use as political capital in pursuit of their goals in the political arena (Mazzoleni, 2008). The social media creates a parallel schedule based on the publications posted by political candidates on their profiles (in the form of *tweets*) and the publications spread by their followers through *likes* or *retweets* (Pérez Curiel, 2020).

Thus, when looking at politics from the perspective of populism and from the digital and technological aspect, the persuasive language in which the rhetoric of symbolic statements is used as a form of power is evident (Norris, 2020). However, studies suggest that populism disregards the public sphere, in which politics is an agonistic dynamic with actors in constant conflict, which explains why populists regard criticism in the context of journalistic reporting as fake news (Waisbord, 2018).

Through communication, populists express a close relationship with the people in order to reinforce the needs and demands of their audience and portray them as untouchable (Engesser et al., 2017). Populist actors take upon themselves the idea of restoring the sovereignty of the people and make this the central theme of the populist narrative (Engesser et al., 2017). In this way, populist authors make their tale reach its target audience and the public's desires, i.e. the "call to the heart" (Taggart, 2004).

Through the use of communication, there are studies that claim that Twitter is the foremost medium for populist parties (Van Kessel & Castelein, 2016). Populism can also be considered a political strategy that does not focus on the content of the policy or political discourse but on the relationship of the leader to the people, that is, the voters who support the party structure around the leader (Serrano, 2020). In this way, the construction of the people is established in relation to the subjects and their oppressors, which is part of the communicative process, as the phenomenon produces the existence of *the people* (Waisbord, 2018).

Most populist politicians are charismatic, consider themselves to be a part of the people, and manage to deal with the media by addressing controversial issues that attract media attention (Serrano, 2020). There are studies that indicate that populism is characteristic of a mood of enthusiasm that attracts people outside the political arena because the idea is that the emotional factor contributes to the sense of salvation or renewal of the country, which is why emotions are intensified and associated with the figure of a charismatic leader (Canovan, 1999).

It should be remembered that ideological and social factors are conditions that promote populist ideas (Serrano, 2020). Some authors argue that there are three factors that currently support the viable conditions for populism: the crisis of political parties, the personalisation of power, and the influence of the media (Serrano, 2020; Mény & Surel, 2002).

Faced with the media's freedom and the articulation of populist leaders, electoral and ideological engagement occurs, causing voters to refrain from opinions while still absorbing them. As a result, personalised leadership becomes a natural factor in the reaction against the prevailing policies in certain cases, rejecting institutional structures, including layers of bureaucratic organisation. This helps populists celebrate both the spontaneous action of their base and the close personal relationship between leader and followers (Canovan, 1999).

It is worth noting that populist leaders tend to glorify personalities that are somewhat flamboyant and contribute to the agenda in the media (Mazzoleni, 2008). These leaders also position themselves as democrats, and express their popular opinions and grievances that are ignored by the government, political parties and even the media (Canovan, 1999).

In some ways, there is a tendency for populist leaders to use similar communication strategies (Fontes & Marques, 2022), despite having different goals (Norris, 2020). Contemporary studies on media indicate that populist communication is limited to the figure of the leader, located in the political spectrum between right and left, and often constructed through memes, slogans and *emojis* that dialogue with the leader's speech and consequently bring him closer to citizens through personalised messages, mainly through *emoticons* and *hashtags* (Manfredi-Sánchez et al., 2021, p. 84).

What contributes to populism being defined mainly by the state of political communication while being close to the people is the adoption of an anti-establishment position, and the emphasis on the homogeneity of the people (Jagers & Walgrave, 2007). If, on the one hand, emotions are reinforced on social media when dealing with populism, then, on the other hand, they also exalt affectivity based on feelings (Mendonça & Caetano, 2021).

The rise of communication media in modern times has made it possible for politicians to create a *modus operandi* for showing more loyalty to a person, an idea, an institution, or an organisation, which makes it easier for political actors to show their power to thousands of media outlets with just the click of a mouse (Bartlett et al., 2011; Bourdieu, 1989). If the media's role is to disseminate a country's public agenda, it is also true that in some cases they tend to foster political distrust and disinterest, contributing to the spread of populist ideas related to these factors (Mazzoleni, 2008).

When it comes to the narrative of populism, the expressions are characterised by a democratic language aimed at the general population, often simple and frank, using tabloid-style communication that also offers solutions and analyses social issues (Canovan, 1999; Mazzoleni, 2008). Despite the great inconsistency and ambiguity that surround the phenomenon of populism, the subject has proven to be resilient when dealing with a variety of concepts that surround the phenomenon, especially when it comes to the present and past of Latin America (Waisbord, 2003).

## *The case: Brief contextualisation of the Brazilian scenario*

Jair Bolsonaro started his presidential term in 2018 at a time when the country's political parties and leaders had been discredited by corruption scandals such as Operation Lava Jato, an investigation carried out by the Federal Police of Brazil that was supported by the president (Fernandes et al., 2021). In recent years, there has been a decline in Brazilian democracy, which resulted in the rise of Bolsonaro (de Albuquerque, 2021); evidence of this can be found in the public demonstrations of 2013, the impeachment of former president Dilma Rousseff (Workers' Party) in 2016, the arrest and, later release, of Luiz Inácio Lula da Silva (Workers' Party) in 2018, and in the election of Bolsonaro (no party) with 55.13% of the votes (Souza, 2020). Bolsonaro's presidential campaign made extensive use of social media engagement, which served to facilitate interaction between voters and the repercussions of ideas (Cesarino, 2019; Viscardi, 2020).

Elected with the campaign slogan "Brazil above everything, God above all", former federal deputy Bolsonaro faced the pandemic in his first term, and his media-mediated speech became one of the most important sources of information for the population. Add to that his engagement on other social sites and the loyalty of some of his followers (his Twitter account had 8.1 million followers), who share the same ideals and call him *Bolsomito or mith* (a combination of his name and the word *myth*). The term "myth" in this context refers to the idea of a hero, someone who is perceived as extraordinary, almost legendary, by the view point of his supporters.

This position as leader of the nation occurs in a scenario in which Brazil is one of the five countries with the highest number of Covid-19 cases, according to data from the *Johns Hopkins Coronavirus Resource Center,* there were 594,653 deaths by the end of September 2021. As stated on the website of the *United Nations Brazil,* the pandemic has affected the economic, social and political development of several countries and, above all, the lives of many people, since the crisis in the health sector has increased inequalities and structural problems, including economic problems, unemployment and recession (Furstenau et al., 2021).

The president's argument against the isolation and lockdown policies was based on the fact that the Brazilian economy could not stall in the face of the virus because if it did, people would die of hunger and poverty (Recuero & Soares, 2021). Consequently, Bolsonaro's attitude in relation to the pandemic was one of the factors that triggered the serious situation of the country in the face of Covid-19; particularly given that 2021 was the epicentre of the crisis, with about 300,000 deaths in March (Fernandes et al., 2021).

With his speech marked by parodies and an eccentric performance, Bolsonaro's narratives allow the recurrence of an ambiguous, ironic and humorous account, part of the populist performance (Mendonça & Caetano, 2021) that also exhibited traces of criticism and a neglect of dialogues with social transgressions (Bakhtin, 1984; Mendonça & Caetano, 2021). A discourse that tends to go beyond the limits established by language, norms and values, and consequently affects power structures (Bakhtin, 1984).

Bolsonarism creates a narrative based on the figure of the *good citizen,* who becomes the narrative key for mobilisation and articulation for Brazilians (Maitino, 2020). It is important to highlight the populist style in Latin America, promoting the ascension of individuals, criticising politicians, parties, and the use of media repercussions on digital platforms (Waisbord & Amado 2017). In this regard, Bolsonaro mobilises citizens to fight against *everything that is out there,* and thus, whilst promoting the fight against the symbols of the state, he omits to mention the aspects of regression caused by his politics (Maitino, 2020).

The President's position contributed to a split in the political environment. Considering that Bolsonaro's speeches led to tensions between the government and his health ministers and state governors because they disagreed about what to do against Covid-19, this contributed in some way to an extensive media agenda (Santos & Cesar, 2022), all in an environment where social platforms served as a scene for controversial positions related to the crisis in the health sector.

Considering this, Brazil stands out in this unprecedented context of a politically polarised environment, in which a leader with populist traits opposes the press (Fontes & Marques, 2022). It should also be recalled that over the years Bolsonaro had tried to avoid the traditional media, and his first words as President in 2018 were said in a live broadcast on Facebook and not at the party headquarters or in a public place, as had been common in previous elections in the country (Fernandes et al., 2021).

Bolsonaro's charismatic use of his social platforms to engage and spread his ideas on the pandemic resonated with his supporters. Bolsonaro's media communication, as a right-wing populist leader, may have played a significant role in the substantial increase in the number of deaths. This becomes evident when we observe that the president did not provide adequate grounds for claiming that the economic impact of social isolation policies would result in more deaths than those directly resulting from the pandemic (Soares, 2020). Therefore, according to Soares's analysis (2020), this political stance may have played a crucial role in the high mortality rate.

In this context, the head of state openly displayed his rejection of the effectiveness of vaccines and tended to question scientific research, moving in the opposite direction to the measures proposed by the World Health Organization (WHO) to combat Covid-19. In some of his social media speeches, Bolsonaro criticised WHO as he did in the *Correio Brasiliense* newspaper: "Our WHO has left something to be desired. It talks so much about focusing on science, the WHO has the least science", and then tried to reiterate his position against the vaccine in the *Folha de São Paulo* newspaper: "I am not going to get vaccinated and that's the end of it, my problem." Furthermore, Bolsonaro again reiterated his position in videos on his YouTube channel, proposing an end to isolation as follows: "Let us work, the virus will not go away." In speeches, at events, in conversations, and on social media, Jair Bolsonaro emerges as a critic of the *Ministry of Health's* policies: according to him, the Covid-19 virus was just a "little flu" (Recuero & Soares, 2021). As followed, the spread of disinformation and the role of traditional media in this scenario cannot be separated from issues in the political arena, especially in case of Brazil, given Bolsonaro's speech which downplayed the significance of Covid-19, the so-called "little flu" (Santos & Cesar, 2022).

Even without the support of economic and scientific arguments, the president's statements were constant throughout the year and had a significant impact on public opinion, as they tended to reinforce disinformation (Recuero & Soares, 2021). Therefore, the issue of populism is important for Brazil due to the current situation of the country in a time of crisis (Ricci et al., 2021).

## *Bolsonaro and the media: A love–hate relationship*

Bolsonaro views his Twitter profile as a source of *true* information and promotes the notion that the traditional media works by propagating "fake news about his government" (Costa & Bernardi, 2020, p. 89). This political strategy contradicts the logic of media spectacle (Goffman, 2011; Schwartzenberg, 1977; Thompson, 2008; Souza, 2018), in which the media becomes an actor in the formation of reality and perception in the world.

Thus, Bolsonaro's attack on the media intersects with the politics of spectacle (Pajnik & Sauer, 2017; Costa & Bernardi, 2020), in which social networks like Twitter serve as significant instruments for alignment with their followers and for putting information of interest to people on the agenda. Bolsonaro used the media to rally the public against democratic institutions like the legislature and the judiciary (Costa & Bernardi, 2020, p. 89). Consequently, the politician affected the relationship between the administration and the media from a perspective in which it began to question the veracity and engagement of information from the communication vehicles (Marques, 2023).

Based on the idea of constructing reality, individuals base their actions and define meanings, contributing to the course of events between social fields (Bourdieu, 1989; Thompson, 2008; Souza, 2018). Faced with this social construction, the Brazilian media ended up reporting divergent information with a tendency towards polarisation between supporters of the politician versus critics. In these vehicles, we see defenders of the Jair Bolsonaro regime attempting to shelter the politician from the crises and scandals, as well as criticism of the government, Covid-19 and corruption (Botelho et al., 2022).

Bolsonaro employs the strategy of openly saying that traditional sources of information, such as newspapers, broadcast inaccurate information about him and his government and, as a result of this narrative, he proposes that his audience avoid traditional media (da Silva, 2020). Therefore, Bolsonaro tries to use the social media to strengthen his connection with his audience by appealing to the people and the heart, and by targeting the media (da Silva, 2020).

Moreover, social media becomes the main tool in promoting *appeals to the people,* making use of Twitter as one of the main tools and sources of information in Bolsonaro's political speech in a context in which these platforms legitimise the rhetoric of leaders (Costa & Bernardi, 2020). These dynamics highlight the growing importance of digital platforms in shaping public opinion and in the communication strategy of contemporary political leaders.

## Methods

Considering that contemporaneously the announcements and the communication of the Brazilian President (2019–2022) were made through social sites, in a scenario where digital tools were used as a reference both for the population and for the press, this work uses the methodology of content analysis and computer-assisted content analysis (CACA) for 611 tweets on the official page of President Jair Messias Bolsonaro in the first nine months of 2021 (1 January to 30 September), these were intended for the president's target audience, such as Brazilians, the nation, voters and non-voters.

The research makes use of two software programs that allow the semi-automatic collection of content with the use of software for text analysis, prioritising computer-assisted content analysis, in which reading and coding (by the machine) provide the collection and mapping of recurring narratives in tweets. To extract and map the content, the work used the software *SentiOne,* a tool that monitors free and global social media through algorithms, mentions and insights, allowing a better *overview* of posts. And *T-Lab,* a software that allows the semi-automatic analysis of keywords, which makes the analysis more effective through informative graphics.

The use of these two software programs aids in the visualisation and mapping of the most common themes in the posts, as well as serving as a foundation for the systematic categorical construction of the data, as proposed by Bardin (1977), which encourages content categorisation and segmentation to elaborate the analysis. In this regard, the goal was to develop the primary narratives about the former president, which is exactly the classification process utilised by Waisbord and Amado (2017).

The choice of Twitter as the base reference for this research was related to the influence of this communication platform on the daily lives of Brazilians, since Bolsonaro's Twitter account had 8 million followers at the time of this research (Figure 1). Twitter was created in 2006 as a multidimensional *microblogging* platform, in which it opens space for the discussion of different topics (Viscardi, 2020).

The 280 character limit for posts applies to all users, with the aim of information getting straight to the point with precision and effectiveness. This format allows politicians to deliver a short, direct and unambiguous message when compared with the previous traditional style of messaging, which allowed for nuances in information (Van Kessel & Castelein, 2016). We should also take into account that on Twitter, visibility and the possibility of an immediate response are factors that increase the political influence of the social platform (Pérez Curiel, 2020).

Furthermore, according to *Statista,* Brazil is among the top five countries in the ranking of users of the social platform according to surveys, hence highlighting the influence of the platform in the construction of public opinion, particularly in decisive moments or crises.


*Figure 1:*
*Bolsonaro's Twitter*
*Source:* Twitter photo of the former president in September 2021, during his government.

With automated content, the survey has advantages and disadvantages. Among the advantages, the chosen method contributed to effective, reliable and close-to-reality results, in addition to allowing for the analysis of a large amount of data in a relatively short period. The disadvantages are that failures in searches may occur, especially when it comes to words and their meanings. Therefore, in an attempt to remedy this gap, the research relies on Computer-Assisted Content Analysis (CACA), in which, after the searches performed by the two software programs, the analysis and measurement of the content is carried out in order to address the categories.

After the *SentiOne* had been collected in the period demarcated in the analysis, the most recurrent words (machine search) were mined using T-Lab, which enabled a broader aspect through mining. Then the data were analysed empirically, qualitatively and quantitatively in order to arrive at the most recurrent categories through secretion and mining.

The words that make up the categories were chosen according to the recurrence of each category, and because it is a quantitative and qualitative research, after the searches carried out by the software, content mining was carried out in order to filter the meanings that best validate the framework of each one. Categories are giving shape to the main recurrences (Figure 2).

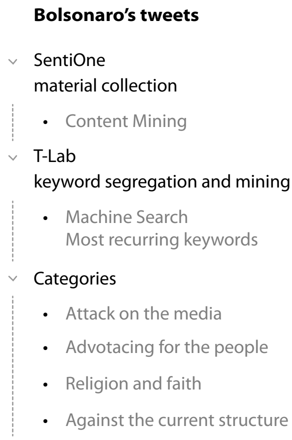


*Figure 2:*
*Methodological map*
*Source: MindMeister* – from the content of this research.

Thus, the categories emerge based on the research of Engesser et al. (2017), Taggart (2004), Waisbord (2018), who discuss the political actor as a populist and present some key ideological elements that serve the following five categories (Table 1) created by this research according to the data collected from the analysis: 1. attack on the media; 2. advocating for the people; 3. religion and faith; 4. sovereignty and appeal to the heart; 5. opposing the dominant structure.

Following the work done by Engesser et al. (2017) that proposes categories to shape populism, in a pedagogical way this work divides Bolsonaro's narratives on Twitter into five categories that dialogue with contemporary studies about populism, taking into account the qualitative research of the text, which addresses the idea that populism manifests itself in a fragmented way in social networks (Engesser et al., 2017).

From this categorisation and the translations done by the author, the material was framed according to the segmentation in the period of the first nine months of the year 2021, corresponding to the third year of Bolsonaro's first term as president, in an attempt to analyse and regulate Bolsonaro's main narratives on Twitter and how these narratives dialogue with populism. Brazil has a presidential electoral system, in which elections are held through mandatory voting every four years. The election would be held on 2 October 2022.

*Table 1:*
*Categories worked on in this research*

| Category | Meanings based on each category | Machine search |
|---|---|---|
| Attack on the media | Criticising the media, as well as the information disclosed by these media. Opposition/ Adversity to the means of communication. | “media”, “traditional media”, “press”, “newspapers”, “television”, “newspaper without information”, “misinformation”, “uninformed”, “media hypocrisy”, “the press beats me”, “lie”, “press lies” “disinformation”, “false information”, “lying political opposition”, “fake news” (published by the media) |
| Advocating for the people | Positioning himself as the defender of the people, intermediation of problems and issues in favour of the people. | “right to come and go”, “the climate of fear that does not help”, “appeal to the people”, “appeal to Brazilians”, “guarantee the dignity of Brazilians”, “radical”, “irrational”, “irresponsible”, “right of the nation”, “liberty”, “democracy” |
| Religion and faith | Exaltation of themes of religions, the Bible and God. | “religion”, “faith”, “God”, “Jesus”, “bible”, “glory”, “bless”, “resurrection”, “João” (John: the New Testament), “God above all” |
| Nation’s sovereignty and appeal to the heart (heart invocation) | Exaltation of the homeland and the nation with an emotional background. | “the nation”, “our country”, “a better Brazil”, “a better country”, “Brazil above everything”, “Brazil is ours”, “Brazil is green and yellow”, “change Brazil”, “Brazil of the Brazilians”, “trust in Brazil”, “Brazilian people”, “people of the nation”, “the Brazilian people”, “long live our Brazil”, “the will of the Brazilian”, “our country wants”, “national sovereignty” |
| Against the current structure | Opposition to the current structure of the country. | “army day”, “armed forces”, “military”, “aeronautics”, “army”, “general”, “dictatorship” |

*Source:* Data extracted from the content of this research.

Thus, the reflection of the research is not populism as a concept but rather how the media promote the populist narrative and, in case of Bolsonaro, at what points this discussion stands out through the categories, starting from the point that these media serve as a structure for populist communication (Engesser et al., 2017; Gründl, 2022).

From this perspective, the temporal selection is marked by a moment of crisis in the face of the inconveniences caused by the pandemic and also the initiation of the construction of the electoral scenario. One of the limitations of the research is the fact that it does not cover the period of one year, nor does it make comparisons with other media, given the large amount of data collected for this work and the deepening of the analysis of the different segmentation of political communication found.

## Results

### *Bolsonaro's narrative on Twitter and his interaction with the public*

In the period investigated, contextualised in the period when Bolsonaro was president, he wrote 611 posts, which had different reaches in different months. The highest reach was in May, with 276,078,617 number total of unique users who saw a post, and the lowest in July, with 152,058,371 (Figure 3), which clearly shows the interaction of users with the official profile and its publications, that is, the engagement.

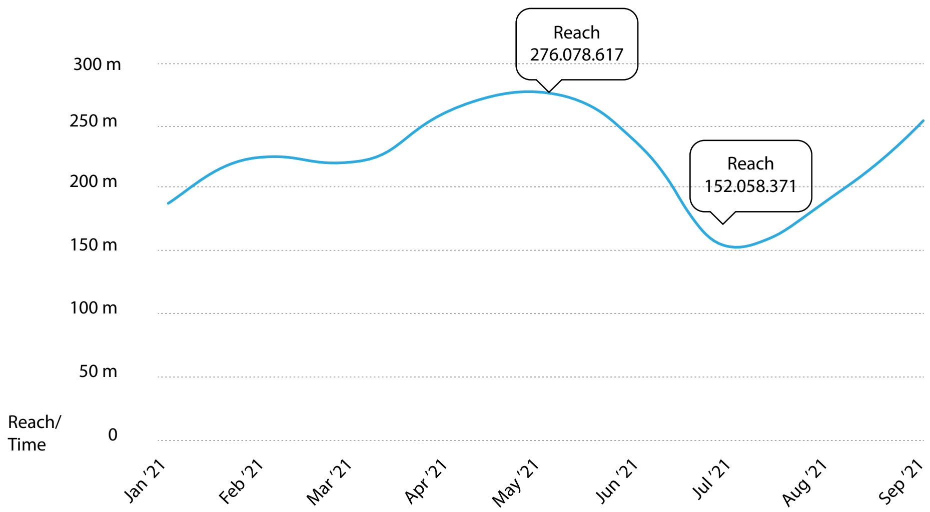


*Figure 3:*
*Scope of publications made by Jair Bolsonaro on Twitter*
*Source:* SentiOne – data extracted from the content of this research.

These posts consist mostly of sentences followed by pictures and videos and were published weekly in the form of live streams in which the President addressed the nation to keep the public informed. The contact between politicians and the public on Twitter serves both as a communication tool and a means of revealing ideas and opinions related to public and administrative management, strategies and self-promotion of the government.

In general, when it comes to the content analysed, there is a tendency for Jair M. Bolsonaro to be, in a certain way, exalted or criticised through his posts by the social platform's users. On the other hand, the politician tries to coordinate with his followers when he expresses opinions and reveals ideas. It is through this interaction between the politician and the public that the major response to the official site takes place, constantly putting controversial issues and the daily life of Brazilians on the agenda. In this way, Twitter made it possible to synthesise communication strategies and the 'feedback' of information between the head of state and his people.

Since this is a study about populism, it is worth mentioning here that the focus was on the search for an automated analysis when the collected contents were put in dialogue with the word 'people'. In this sense, the people become the central issue of populism (Engesser et al., 2017). Arguing that they speak for the people, populists build their legitimacy by claiming to be democratic sovereigns not bound to the interests of the economic class, usually translating problems into democratic issues (Canovan, 1999).

References to people run like a thread through all the categorical segments studied – the attack on the media, advocacy for the people, religion and faith, sovereignty and appeals to the heart, as well as resistance to the ruling structure. This fact shows that Bolsonaro connects several themes to popular aspirations, such as religion, democracy, thanks, recognition and congratulations, defence, media, support, work and others (Figure 4).

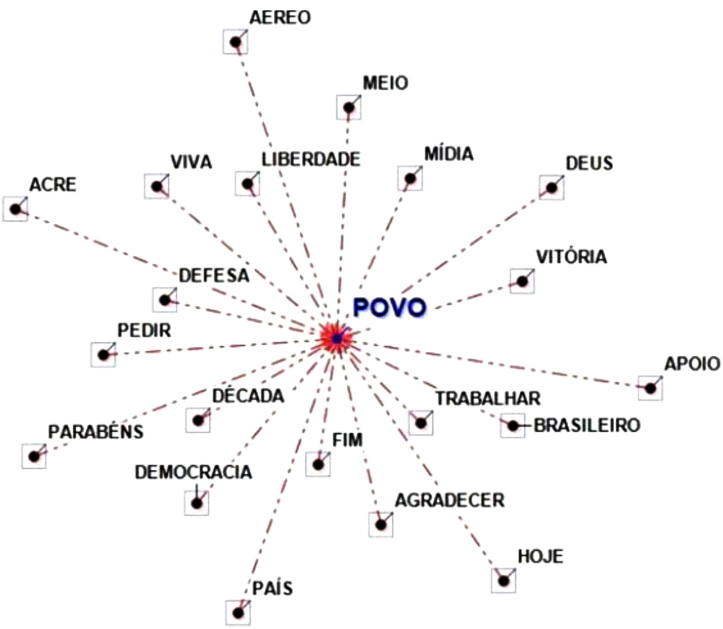


*Figure 4:*
*The keyword "people" and its relationship network in the posts*
*Source:* T-Lab – data extracted from the content of this research.

Through the content analysis of Bolsonaro's posts, 29% attack the media, 24% advocate for the people; 21% are related to the subject of religion and faith, 14% speak up against the current structure, 12% appeal to sovereignty and invocation of the heart (Table 2).

*Table 2:*
*Result of categorisation*

| Categories | Recurrence percentage |
|---|---|
| Attack on the media | 30% |
| Advocating for the people | 24% |
| Religion and faith | 21% |
| Against the current structure | 14% |
| Nation's sovereignty and heart invocation | 11% |

*Source:* Data extracted from the content of this research.

In the subchapters, the study then looks at these five categories that appear in the former president's tweets to consider populist communication in the media and how it appears in political communication. In this way, it aims to show how these contemporary narratives are inextricably linked to populism, which aims at a new contemporary scenario composed of the factor of a global crisis in health, reflected in all sectors of Brazilian society, especially at a time when access to information is determined by digital communication through social platforms.

### *Attack on the media: Disinformation and distrust of traditional media*

On Twitter, Bolsonaro made it clear that his deviation from traditional media was real, as can be read in one of his tweets: "If you do not read the newspaper, you are without information, if you do read, you are uninformed." In 30% of the analysed content, the former president attacks the media, mainly when it comes to the alignment of the media. Populism is usually associated with a certain type of communication between the people and the leader, manipulation of the media, and representative discourse between the people and the nation (Waisbord, 2003).

These findings support the theory that Bolsonaro attacks the media in order to divert attention away from unfavourable or controversial issues related to his government, or even for personal gain. Given that, as previously discussed, the main speeches targeting the media are tied to the legislative investigation primarily centred on corruption associated with opposition parties, such as the PT and their political adversaries, referred as the Parliamentary Commission of Inquiry (CPI) (Botelho et al., 2022). Primarily because it is a context that must consider the consequences of false content from social actors (Carvalho et al., 2021) in an environment where Bolsonaro makes use of multiple media attacks, engaging in demagoguery to encourage disorder in times of crisis (Costa & Bernardi, 2020).

From the perspective in which the Bolsonaro Government was marked by democratic setbacks in sectors such as public policies, the environment, the press and the judiciary (Avritzer et al., 2021; Avritzer, 2020), the use of denialism in a democratic environment (Guerreiro & Almeida, 2021), together with the use of belief in the myth of racial democracy (Oliveira et al., 2020; do Nascimento, 1978), the attack on the media through Twitter becomes one of the main narratives of political engagement, in which criticism of the media contributes to the discredit of the traditional media of information, enabling disinformation, corroborating denialism, and opening paths for the spread of fake news, added to the fact that this attack was not aligned with the social demands and desires of the population in the face of the crisis.

The president criticises the attitude of newspapers and magazines, in that he explicitly and repeatedly contests various pieces of information disseminated by these media. On the one hand, Bolsonaro wants to gain the media's trust, but on the other hand, he accuses them of being malicious, and attacks their credibility by questioning their honesty and alleging that they are spreading disinformation (Leschzyk, 2021). This occurs at a moment when the pandemic has increased questions about populist leaders and the actions taken by these politicians in an environment of crisis, especially considering some speeches or political actions (Santos & Cesar, 2022).

In this sense, there is a gap in traditional media due to this divergence, enabling the emergence of populism in the fact that politicians know how to use digital media to their benefit, claiming the centrality of information by becoming real opinion makers. This is evident in the first "live" broadcast of 2021, posted as a tweet. In this video, Bolsonaro highlights the importance of "live" during his term, seemingly seeing this form of communication as a strategy to make people understand what is happening in the federal government, without distorting information from other media, since his government does not count on the support of traditional media.

Digital communication, through Twitter, becomes a fundamental basis for disseminating information about the presidency. And since Bolsonaro is the central source of information on social media, when he discredits the traditional media, he becomes the epicentre of government communication and, above all, the information filter itself. It can be concluded that the politician is aware of the great impact of his social media page and the importance of the information he transmits to his followers about reducing the distance between the population and its representative.

As the politician points out, "when the media does a good job, the representative is praised", while on the other hand, "the work of our government is done seriously, that's why we get beat up by the media". Bolsonaro mentions the repercussions for his government spreading misinformation by the media. In contrast, the content presented shows that the former president also criticises some reports published against him by the *Revista Época* and, contrary (adverse) to this means of communication, advocates the use of misinformation related to the president's vaccination card. Introducing an extroverted and charismatic manner in a frank and popular dialogue, Bolsonaro clarifies that the vaccine problem is of a bureaucratic nature and it is not his intention to prevent the vaccination campaign in Brazil.

The criticism of traditional media also extends to blogs: for example, in one of his tweets, Bolsonaro criticises the positioning of some Brazilian digital influencers. According to Bolsonaro, these influencers put on masks when they approached him during the pandemic, and therefore, for him, this attitude is a form of attack on the presidency because it is linked to the "hypocrisy of most of the media" – regarding the use of masks. Keeping the focus of criticism on the media, the president criticises it by making a comparison in which he mentions that every thirty-six seconds a military policeman is hit by a stone, but in his opinion, this is not revealed by the media because "for the traditional media, everything is normal".

In his tweets Bolsonaro endorses the notion that "the press beat me from the beginning", citing the newspaper *Correio Brasiliense* that published a report on the high number of hungry people in Brazil, relating it to government administration. In the dialogue, Bolsonaro argues that the foreclosure policy contributes to this type of reporting and is also responsible for the high inflation, misery and rising unemployment in the country. Given this view of the pandemic and the country's scenario, the president believes that the media is spreading panic, creating a climate of mistrust and misinformation (Leschzyk, 2021).

Bolsonaro claims in one of his tweets that the country will soon have a huge crisis and therefore he reminds the population that he is unjustly on trial, accused of genocide, which is contradictory from his point of view, since he did not shut down businesses, shops, or public spaces. Finally, he argues, "I am not threatening anyone, but soon we will have a serious problem in Brazil". The president deliberately claims that his communications network "is one of the most interactive in the world". Bolsonaro praises freedom, the use of information and social media.

This constant criticism of the media by Bolsonaro puts the media in a delicate situation that leads to the dilution of the content disseminated by it. Therefore, Bolsonaro's analysed tweets tend to discredit the media when it comes to issues related to the president, the government and even the pandemic – placing himself at the centre of information, insofar as there is an expansion of social media, as in the case of Twitter, in which the politician becomes the voice of truth that he himself delivers to the population.

## *Advocating for the people: The issue of Covid-19 'versus' face-to-face work*

The figure of the leader who stands up for the people appears in 24% of the tweets, with the main theme being face-to-face work in a pandemic scenario, in which Bolsonaro points out the restrictions against the virus by positioning himself against the lockdown, the use of masks, vaccines and the *stay at home* virtual campaign. The justification offered by Bolsonaro is that if Brazilians adopt these measures, such as the lockdown, the country will go through a crisis; according to him, "Brazil cannot stop" in the face of the pandemic. In this sense, Bolsonaro assumes the role of advocate for the people in the face of Covid-19 restrictions established by WHO.

Despite the lack of scientifically sound arguments, Bolsonaro's tweets make his narrative clear: he positions himself as a defender of the interests of the population in the face of the adversity caused by the pandemic, and consequently, the politician appears as a mediator possessing the supposed solution to the crisis facing the country, even without scientific basis. In this case, populism places itself in the position of the expressive democrat, raising questions and ignoring ideas in an attempt to mobilise its base through the media (Canovan, 1999).

In his tweets, Bolsonaro preaches that the *stay at home* campaign is a danger to Brazil and, above all, to the people, which can lead to unemployment, depression, inflation and the destruction of the country's economy. It follows that in these nine months' worth of posts, a direct and transparent emphasis can be observed, opposing the *stay at home* campaign in the country, and advising the population to forgo safety measures.

In a charismatic way, by calling his audience to participate in personal work through tweets, the politician positions himself as a voice in the fight against unemployment and consequently assumes a role of appealing to the public against the prevailing social structures, as his political opponents, in the fight against unemployment related to the Covid-19, such as the media, academia, experts and even health organisations. This is because populist discourse corresponds to the idea of appealing to the people, which tends to be directed against established power structures and even values (Canovan, 1999).

In the analysed content, it is worth mentioning the weekly "live" broadcast of 01/04/21, in which Bolsonaro mentions the procedures to validate the use of the vaccine in the country, based on the security requested for the release of the vaccine by the National Health Surveillance Agency (Anvisa), and confirms the problems that the country is facing with the closure of trade in São Paulo. Next, Bolsonaro points out the "bad faith" of his opponents, blaming the federal government for the death toll from Covid-19 and clarifying that the lockdown policy. He also states that "the *stay at home* is a part of more restrictive powers than the 'state of siege'", a number of bureaucratic and political emergency measures according to which the President of the Republic at the time suspends the activities of legislative (deputies and senators) and judiciary powers. According to Bolsonaro, religious freedom and the "right to come and go" are sacred to the people, which is why isolation campaigns in the country are inadmissible.

At another time, in the live broadcast of 08/04/21, when specifically addressing the issue of Covid-19 in relation to the vaccine and the isolation of the virus in the country, Bolsonaro pointed out that in the face of the crisis, "the climate of terror does not help save lives". This statement is in dialogue with the panic among the population, given the high mortality rate associated with the virus.

In one of the tweets critical of the measures taken against Covid-19, the former President, posting a photo of a woman with a child on the beach (open environment), questions his followers about the need for isolation, asking where a person is better protected, on the beach or at home. In contrast to isolation, the former president also says that Brazil is one of the countries with the most vaccinations in the world. From this narrative, it can be concluded that populism in contemporary societies should be considered an appeal to the people directed against established structures and prevailing values, which leads to the legitimisation of this political style.

With simple vocabulary and examples from the everyday lives of the people, Bolsonaro traces his role as an advocate of the people against health measures and isolation campaigns in a time of crisis and uncertainty. Added to this, the politician endorses the position against the lockdown and the isolation policies triggered by some states and cities, including measures of protection against Covid-19. As an advocate of the people, the politician reiterates his commitment against restrictive measures that are "radical, irrational and irresponsible" because "in addition to fighting the virus, it is necessary to guarantee the dignity of Brazilians who have to work". As a result, the theme of personal work is important in the tweet speech to motivate the public to go to work despite the challenges posed by the pandemic and its constraints.

## *Religion above all*

Based on the Instituto DataFolha, the population of Brazil adheres to the following religions and denominations: 50% Catholics, 31% Evangelicals and 10% without religion; thus, the evocation of religion is a strong ally in the political game. In Bolsonaro's posts, appeal to religion is the third most recurrent narrative, with 21% of tweets, in which he quotes biblical verses and religious greetings, such as "God bless our Brazil!".

According to data from the Instituto DataFolha, from a survey carried out before the 2018 elections (conducted in 2017), at the time of the electoral decision 81% of Brazilians do not usually consider the position of their religious leader in choosing candidates to be supported. Through Twitter, the former president seeks to spread his faith as one of the characteristics of his personality, and mainly associates it with his truthful and honest conduct. Thus, one of the most important themes in Bolsonaro's pronouncements is the interaction between political and religious discourse, as it is part of charismatic dominance (da Silva, 2020).

The exaltation of God is part of Bolsonaro's routine in the media, where he makes his faith clear to the population, as can be seen in the following sentences: "Jesus said to him, 'I am the resurrection and the life. He who believes in me, even though he dies, will live'; John 11:25"; "God bless Brazil and keep our freedom!"; as well as the evocation of his campaign motto "Brazil above everything! God above all!".

In a charismatic manner and with popular words, the former president captivates not only his religious audience but also those who aspire to honesty, good behaviour and morality, making religious discourse not only a strategy but also part of the populist narrative. In this sense, ideological manipulation contributes to the construction of behavioural paradigms that lead to a process of social unity associated with a charismatic, constructed authority figure, in which values are reinforced through this figure of the political leader (da Silva, 2020).

Bolsonaro's posts endorse particular thanks as exemplified by the text, "My most noble reverence to the Redentoristas Nuns, who live in the cloister in Formosa-GO. Without the fight you fight, mine would be nothing". Religious alignment is constantly on the political page on Twitter; at times they are linked to visits, comments, events and commemorative dates. On one occasion, a video was posted in which the former president displayed children playing religious songs, and at the end stated, "I thank all those who believe in Brazil and have God in their hearts for the invitation!".

When making political links in which to mention dialogue with religion, Bolsonaro cites the former president, Fernando Henrique Cardoso, and says he supports the idea of opening the economy to generate work. To finish the post, Bolsonaro cites a verse from the Bible, recalling the story of the apostle John (John 8:32). Another phrase with biblical reference tweeted by the politician cites the G1 report journal, which has disclosed that the Minister of the Federal Supreme Court (STF) granted a pardon to the ex-minister of the civil house, José Dirceu; however, the minister has remained in prison due to the accusations of Lava Jato. The religious narrative as an element in Bolsonaro's posts forms, in a sense, a shield for the behaviour, morality and honesty that he repeatedly expresses to his followers. This strategy for triggering religiosity, especially in times of crisis, is also in dialogue with the fact that Brazil is one of the countries with the highest percentage of Catholics, and the issue resonates strongly in the media.

## *Against the existing structure: Participatory military in front of democracy*

Populism tends to question the institutional order by designating the press as an agent and a part of history (Arditi et al., 2005). Bolsonaro being a retired army captain, the glorification of the military is another theme that is present on Twitter in 14% of the analysed content, focusing on the mention of bodies of power such as the army, the military police and the air force. This finds also dialogue with the 21-year history during which Brazil lived under a military dictatorship after a coup d'état in 1964. Despite the country's historical past and the strained relationship between the military and political power since the coup, the former president praises the military in several tweets, for example, congratulating the army for the military technology of Brazil. He also endorses the military's participation in the pandemic scenario, as shown in the following excerpt: "The military is involved in the transport and vaccination against Covid."

The former president makes this glorification and opening to the military's participation in power clear by showing the government's involvement with the following text: "I present the new commanders of the Armed Forces"; "Today, at 11 a.m., General Paulo Sérgio takes command of the Armed Forces. Brazil above everything! God above all!"; "April 19, Brazilian Army Day". In Twitter messages, Bolsonaro highlights the link between the government administration and the ever-present partnership with the military to improve the country, as can be seen in some excerpts, such as "Belém residents have 2 more posts opened in the military of the organizations"; "in the states of Goiás and Amazonas there are more than 100 schools trained by the respective military police, always highlighted in the most varied tests, such as the ENEM".

In the context of Covid-19, Bolsonaro makes clear the importance of helping the sector in its journey through the crisis, and reinforces the support of military sectors: "Military members of the Planalto Joint Command have already transported more than 420 tons of cargo in support of health agencies"; "After the 9th Motorized Infantry Battalion started to support vaccination against Covid in Pelotas (RS)". Thus, the dialogue between the government and the military makes up this section of the politician's Twitter narrative, in that he highlights the unity between his government and the sector, and his support when he presents the services rendered and tributes paid to his followers. In this way, Bolsonaro makes the military an integral part of his power.

### *Sovereignty and invocation of the heart: Unity of the nation in saluting the Brazilian people*

Bolsonaro exalts Brazil as a homeland and as a nation, thus positioning himself in favour and support of the country's development: "Brazil above everything!" and "Brazil is ours!" These mentions of the country tend to exalt nationalism and unity, and appear in 11% of the tweets, highlighting excerpts such as, "Brazil is green and yellow"; "together, we can change the destiny of Brazil".

The former president recurrently cites the country as a way of thanking and recognising the population in relation to his government, and claims that his conscience and adoration toward the people are expressed through his administrative and political decisions, as in, "Thank you for your trust in Brazil"; "A hug for my Brazil". Thus, he suggests a strong positive relationship between the politician, the people and the nation. In one of the invocations in which he juxtaposes the country's past and the present, Bolsonaro recalls the "Brazil of a few years ago, when corruption guided our infrastructure".

The exaltation of the people is also part of the former president's narrative; after all, as the politician quotes, the "moderating power is the people", creating the illusion that people have power. In this sense, the sovereignty of the people is a central issue of populism (Engesser et al., 2017). It is thus evident that, on his Twitter page, Bolsonaro dialogues with the Brazilian people supporting the nationalisation of the homeland, congratulating and thanking them: "With the people, wherever the people are"; "Congratulations to the Brazilian people. Democratic elections only with public counting of votes"; and "Long live our Independence! Long live our Brazil! Long live the Brazilian people!"

## Conclusion and discussion

Political communication via Twitter has contributed to the expansion of populism. From the analysis of Bolsonaro's 611 tweets in the first nine months of 2021, it is clear how important the social platform is for the politician's engagement and his way of disseminating administrative political information, as well as – mainly – reaffirming positions discussed in the traditional media. Bolsonaro's Twitter account plays a crucial role in disseminating information and legitimising his leadership in an era in which communication tools play a growing role in shaping and disseminating political messages. Thus, the media promotes the engagement of public feelings in the face of populism, in a context in which social and political aspects are guided (Mazzoleni, 2003; Serrano, 2020).

Given the five categories analysed, the main and most relevant aspect of this work lies in pointing out the contrast between the predominant category, *attack on the media,* in relation to the others, especially when it comes to *advocating for the people;* it might be stated that this is the present work's main finding. Criticism of the media, exercised by the politician on the social platform, is more prominent than the dialogue about the needs and desires of the population in a time of crisis.

Bolsonaro attacks the media as a way to divert attention from unfavourable or controversial issues facing his government. The forming of close online (parasocial) relationships can be seen in how the populist leader uses social media to form ties with his audience, thus painting the picture of an approachable leader while preserving the idea that he is addressing social demands. This narrative, expertly crafted by Bolsonaro, also pushes his supporters to distrust traditional media outlets.

In addition to this, by advocating for the people through the media, Bolsonaro seeks to strengthen his connection with his supporter base and consequently, social media emerge as key actors, serving not only as communication vehicles, but also as catalysts of the *appeal to the people*. The appeal to the people amplifies the evidence proving that populists use people-centrism. Thus, Bolsonaro supported himself by attacking the media and his opponents through social networks during his political career, even though he had a government involved in political scandals and fake news (Avritzer, 2020).

In this sense, this becomes a political strategy in which the focus is not the content of policies but the link between the leader and the people (Serrano, 2020) as a basis of support through the media. As a populist, Bolsonaro used his Twitter account as a major means of communication, repeatedly falling into certain patterns such as attacking the media, advocating for the people, appealing to religion and faith, sovereignty, appealing to the heart and opposing the dominant structure. In an environment of crisis such as that caused by the pandemic, these categories contribute to strengthening ideas, and the values of the populist discourse focused on the people.

In an extroverted manner and with the goal of improving Brazil, the politician uses his involvement on the social media page not just as a political tool, but also as an ideological one in addressing issues oriented to the nation and that affect his influence in the media. In the end, ideological and social factors facilitate populist ideas (Serrano, 2020). As observed, the media is one of the main topics in Bolsonaro's repertoire on Twitter, in which the politician reveals to his followers his distrust of the traditional media. On the one hand, the politician questions the information disseminated by traditional media; on the other hand, he reinforces the information on his social media pages. Thus, Bolsonaro takes the position of a source of truth when it comes to various areas such as politics, economy, science, health and even restrictive measures against Covid-19, for example.

Bolsonaro opposes the country's traditional media, claiming that he does not have the support of the main means of communication, as well as raising questions about the truthfulness and honesty which are traditionally associated with the media. This adds credibility to his approach to the people, especially in the context of a crisis, in which the politician assumes the role of advocate for the people, taking a stand against isolationist measures in the fight against the virus. Bolsonaro, allegedly to prevent the collapse of the country and to avoid unemployment and hunger, assumes the role of advocate in favour of face-to-face work, opposing the recommendations of the World Health Organization or the Brazilian Ministry of Health.

Religion is another theme that the former president repeatedly addresses in his tweets to show his religiosity, honesty and morality in the face of the adversity that his government is going through. Using verses from the Bible, giving thanks and praising God, Bolsonaro positions himself as a man of tradition and faith. In his tweets, faith is one of the elements that brings him closer to his audience, to his followers.

The involvement of the military in the government is another category that appears in the tweets in which Bolsonaro praises the contributions of the military and their importance in the development of the nation, opposing the current democratic structure of a country that experienced two years of dictatorship. This connection appears not only in the praise of the military's work during the Covid-19, but also explicitly in the publication's commemorative days of the Army and Armed Forces and politics, resolutions and decisions.

Politicians frequently bring up the nation and people's sovereignty. In his posts on Twitter, Bolsonaro makes it clear that this communication reduces the distance between the leader of the nation and the people, which contributes to the politician's engagement on social sites. This all takes place in an environment in which the democratic audience fashions politics in a spectacle managed by the mass media (Arditi et al., 2005).

By linking his posts to the categories of attacking the media, standing up for the people, religion and faith, sovereignty and appeal to the heart, and resistance to the ruling structure, it becomes clear that populism is part of the narrative construction of Jair Messias Bolsonaro's communication. In a way, political discourses, whether linked to populist logic or not, contribute to the construction of the image of public figures (Viscardi, 2020).

Furthermore, this study paves the way for reflection on future research: considering that criticism of the media is a more prominent category for Bolsonaro than advocating for the people or any other category, this contradicts the large body of evidence proving that populists use people-centrism much more often than antagonism (Blassnig et al., 2019; Van Leeuwen, 2019; Rooduijn & Pauwels, 2011).

It is, therefore, important to reflect on three factors that constitute the phenomenon in the contemporary period: the reach of new digital media, the pandemic, and the crisis and insecurity created in this context. The composition of these factors underscores the importance of studies that examine political communication, crises and the narratives of heads of state in the context of populism.

*Acknowledgement:* Thanks to the SentiOne team for providing the software for this research.

## References


Aalberg, T., Esser, F., Reinemann, C., Strömbäck, J. & Vreese, C. H. (Eds.). (2017). *Populist Political Communication in Europe.* Routledge. Online: https://doi.org/10.4324/9781315623016

Akkerman, A., Mudde, C. & Zaslove, A. (2014). How populist are the people? Measuring populist attitudes in voters. *Comparative Political Studies, 47*(9), 1324–1353. Online: https://doi.org/10.1177/0010414013512600

Arditi, B., Barros, S., Bowman, G. & Howarth, D. (2005). *Populism and the Mirror of Democracy.* Verso.

Avritzer, L. (2020). *Política e antipolítica. A crise do governo Bolsonaro*. Todavia.

Avritzer, L., Kerche, F. & Marona, M. (2021). *Governo Bolsonaro. Retrocesso democrático e degradação política.* Autêntica Editora.

Bakhtin, M. M. (1984). *Rabelais and his World.* Trans. by H. Iswolsky. Indiana University Press.

Baptista, É. A., Hauber, G. & Orlandini, M. (2022). Despolitização e populismo: as estratégias discursivas de Trump e Bolsonaro. *Media & Jornalismo, 22*(40), 105–119. Online: https://doi.org/10.14195/2183-5462_40_5

Bardin, L. (1977). Tradução de Luis Antero Neto e Augusto Pinheiro. *Análise de conteúdo*.

Bartlett, J., Birdwell, J. & Littler, M. (2011). *The New Face of Digital Populism.* Demos.

Blassnig, S., Ernst, N., Büchel, F., Engesser, S. & Esser, F. (2019). Populism in online election coverage: Analyzing populist statements by politicians, journalists, and readers in three countries. *Journalism Studies, 20*(8), 1110–1129. Online: https://doi.org/10.1080/1461670X.2018.1487802

Botelho, M. A., de Campos, M. M., Coimbra, M. R. & dos Santos, D. L. V. (2022). Discursos e redes anticorrupção no Twitter: "Bolsonaro incorruptível". *Liinc em Revista, 18*(2). Online: https://doi.org/10.18617/liinc.v18i2.6003

Bourdieu, P. (1989). *O poder simbólico.* Trans. by F. Tomaz. Difel.

Brown, K. & Mondon, A. (2021). Populismo, a mídia e o mainstreaming da extrema direita: a cobertura do The Guardian sobre o populismo como um estudo de caso. *Política, 41*(3), 279–295.

Canovan, M. (1999). Trust the people! Populism and the two faces of democracy. *Political Studies, 47*(1), 2–16. Online: https://doi.org/10.1111/1467-9248.00184

Carvalho, P. R., Castro, P. C. & Schneider, M. A. F. (2021). Desinformação na pandemia de Covid-19: similitudes informacionais entre Trump e Bolsonaro. *Em Questão, 27*(3), 15–41. Online: https://doi.org/10.19132/1808-5245273.15-41

Casero-Ripollés, A., Sintes-Olivella, M. & Franch, P. (2017). The populist political communication style in action: Podemos's issues and functions on Twitter during the 2016 Spanish general election. *American Behavioral Scientist, 61*(9), 986–1001. Online: https://doi.org/10.1177/0002764217707624

Cesarino, L. (2019). On Digital Populism in Brazil. *PoLAR: Political and Legal Anthropology Review, 15*. Online: https://polarjournal.org/2019/04/15/on-jair-bolsonaros-digital-populism/

Costa, A. L. V. & Bernardi, A. J. B. (2020). Respostas Populistas à Crise do Coronavírus: Análise dos Twitters de Donald Trump e Jair Bolsonaro [Populist Responses to the Coronavirus Crisis: Analysis of Tweets by Donald Trump and Jair Bolsonaro]. *Political Observer. Revista Portuguesa de Ciência Política,* (14), 81–103. Online: https://doi.org/10.33167/2184-2078.RPCP2020.14/pp.81-103

Da Silva, Y. M. (2020). *Bolsonaro and Social Media: A Critical Discourse Analysis of the Brazilian President's Populist Communication on Twitter.* Dissertation. Online: https://urn.kb.se/resolve?urn=urn:nbn:se:uu:diva-414748

De Albuquerque, A. (2021). Populismo, Elitismo e Democracia: Reflexões a partir da Operação Lava-Jato. *Mediapolis–Revista de Comunicação, Jornalismo e Espaço Público,* (12), 17–31. Online: https://doi.org/10.14195/2183-6019_12_1

Duarte, T. R. (2020). Ignoring scientific advice during the Covid-19 pandemic: Bolsonaro's actions and discourse. *Tapuya: Latin American Science, Technology and Society, 3*(1), 288–291 Online: https://doi.org/10.1080/25729861.2020.1767492

Do Nascimento, A. (1978). *O genocídio do negro brasileiro. Processo de um racismo mascarado.* Paz e Terra.

Engesser, S., Ernst, N., Esser, F. & Büchel, F. (2017). Populism and social media: How politicians spread a fragmented ideology. *Information, Communication & Society, 20*(8), 1109–1126. Online: https://doi.org/10.1080/1369118X.2016.1207697

Fernández, C. B. & Rodríguez-Virgili, J. (2019). Electors are from Facebook, political geeks are from Twitter: Political information consumption in Argentina, Spain and Venezuela. *KOME: An International Journal of Pure Communication Inquiry, 7*(1), 42–62. Online: https://doi.org/10.17646/KOME.75698.62

Fernandes, C. M., de Oliveira, L. A., Coimbra, M. R. & de Campos, M. M. (2021). Press X Government: the populist rhetoric of the Covid-19 pandemic on the social network Twitter. *Brazilian Journalism Research, 17*(3), 562–595. Online: https://doi.org/10.25200/BJR.v17n3.2021.1416

Folha de São Paulo (2017, October 26). *Na hora do voto, 19% dos brasileiros com religião seguem líder da igreja.* Online: https://datafolha.folha.uol.com.br/opiniaopublica/2017/10/1930455-para-votar-19-dos-brasileiros-com-religiao-seguem-indicacao-da-igreja.shtml

Folha de São Paulo (2020, December 15). *Eu não vou tomar vacina e ponto final, problema meu.* Online: https://www1.folha.uol.com.br/equilibrioesaude/2020/12/eu-nao-vou-tomar-vacina-e-ponto-final-problema-meu-diz-bolsonaro.shtml

Fontes, G. S. & Marques, F. P. J. (2022). Defending democracy or amplifying populism? Journalistic coverage, Twitter, and users' engagement in Bolsonaro's Brazil. *Journalism, 24*(8), 1634–1656. Online: https://doi.org/10.1177/14648849221075429

Furstenau, L. B., Rabaioli, B., Sott, M. K., Cossul, D., Bender, M. S., Farina, E. M. J. D. M., Filho, F. N. B., Severo, P. P., Dohan, M. S. & Bragazzi, N. L. (2021). A bibliometric network analysis of coronavirus during the first eight months of Covid-19 in 2020. *International Journal of Environmental Research and Public Health, 18*(3). Online: https://doi.org/10.3390/ijerph18030952

G1 (2020, January 13). 50% dos brasileiros são católicos, 31%, evangélicos e 10% não têm religião, diz Datafolha. *Globo.* Online: https://g1.globo.com/politica/noticia/2020/01/13/50percent-dos-brasileiros-sao-catolicos-31percent-evangelicos-e-10percent-nao-tem-religiao-diz-datafolha.ghtml

Goffman, E. (2011). A representação do eu na vida cotidiana. In *A representação do eu na vida cotidiana.* Editora Vozes.

Gründl, J. (2022). Populist ideas on social media: A dictionary-based measurement of populist communication. *New Media & Society*, *24*(6), 1481–1499. Online: https://doi.org/10.1177/1461444820976970

Guerreiro, C. & Almeida, R. D. (2021). Negacionismo religioso: Bolsonaro e lideranças evangélicas na pandemia Covid-19. *Religião & Sociedade, 41*(2), 49–74. Online: https://doi.org/10.1590/0100-85872021v41n2cap02

Hameleers, M., Bos, L. & De Vreese, C. H. (2017). "*They* did it": The effects of emotionalized blame attribution in populist communication. *Communication Research, 44*(6), 870–900. Online: https://doi.org/10.1177/0093650216644026

Hameleers, M. & Schmuck, D. (2017). Somos nós contra eles: um experimento comparativo sobre os efeitos das mensagens populistas comunicadas através das mídias sociais. *Informação, Comunicação e Sociedade, 20*(9), 1425–1444.

Hebling, M. (2021). Populismo de direita e discurso político nas campanhas presidenciais de Donald Trump e Marine Le Pen. *Teoria & Pesquisa: Revista de Ciência Política, 30*(2), 86–104.

Jagers, J. & Walgrave, S. (2007). Populism as political communication style: An empirical study of political parties' discourse in Belgium. *European Journal of Political Research, 46*(3), 319–345. Online: https://doi.org/10.1111/j.1475-6765.2006.00690.x

Johns Hopkins Coronavirus Resource Center (2021). Online: https://coronavirus.jhu.edu/map.html

Jornal Correio Brasiliense (2020, June 18). "O que menos tem de ciência é a nossa OMS", diz Bolsonaro. Online: www.correiobraziliense.com.br/app/noticia/politica/2020/06/18/interna_politica,865035/o-que-menos-tem-de-ciencia-e-a-nossa-oms-diz-bolsonaro.shtml

Kellner, D. (2016). *American Nightmare. Donald Trump, Media Spectacle, and Authoritarian Populism.* Sense Publishers. Online: https://doi.org/10.1007/978-94-6300-788-7

Laclau, E. (2012). *La razón populista*. Fondo de cultura Económica.

Leschzyk, D. K. (2021). Infodemic in Germany and Brazil. *Zeitschrift für Literaturwissenschaft und Linguistik,* 51, 477–503. Online: https://doi.org/10.1007/s41244-021-00210-6

Maitino, M. E. (2020). Populismo e bolsonarismo. *Cadernos Cemarx, 13.* Online: https://doi.org/10.20396/cemarx.v13i00.13167

Manfredi-Sánchez, J. L., Amado-Suárez, A. & Waisbord, S. (2021). Twitter presidencial ante la Covid-19: Entre el populismo y la política pop. *Comunicar: Revista Científica de Comunicación y Educación*, *29*(66), 83–94. Online: https://doi.org/10.3916/C66-2021-07

Marques, F. P. J. (2023). Populism and Critical Incidents in Journalism: Has Bolsonaro Disrupted the Mainstream Press in Brazil? *The International Journal of Press/Politics*. Online: https://doi.org/10.1177/19401612231153110

Mazzoleni, G. (2003). Media e populismo: un ambiguo connubio. *Comunicazione Politica, 4*(2), 133–139.

Mazzoleni, G. (2008). Populism and the Media. In D. Albertazzi & D. McDonnell (Eds.), *Twenty-first Century Populism* (pp. 49–64). Palgrave Macmillan. Online: https://doi.org/10.1057/9780230592100_4

Mendonça, R. F. & Caetano, R. D. (2021). Populism as parody: The visual self-presentation of Jair Bolsonaro on Instagram. *The International Journal of Press/Politics, 26*(1), 210–235. Online. https://doi.org/10.1177/1940161220970118

Méndez, A. R. (2021). La polarización en las democracias contemporáneas. Esbozo de un modelo analítico de comunicación política populista. *Sintaxis. Revista Científica del Centro de Investigación para la Comunicación Aplicada,* (7), 33–49. Online: https://doi.org/10.36105/stx.2021n7.02

Mény, Y. & Surel, Y. (2002). The Constitutive Ambiguity of Populism. In Y. Mény & Y. Surel (Eds.), *Democracies and the Populist Challenge* (pp. 1–21). Palgrave Macmillan. Online: https://doi.org/10.1057/9781403920072_1

Miguel, L. F. & Biroli, F. (Eds.). (2010). *Mídia, representação e democracia.* São Paulo: Editora Hucitec.

Moffitt, B. (2016). *The Global Rise of Populism. Performance, Political Style, and Representation.* Stanford University Press. Online: https://doi.org/10.1515/9780804799331

Mouffe, C. (2018). *For a Left Populism.* Verso Books.

Mudde, C. (2021). Populism in Europe: An illiberal democratic response to undemocratic liberalism (The Government and Opposition/Leonard Schapiro Lecture 2019). *Government and Opposition, 56*(4), 577–597. Online: https://doi.org/10.1017/gov.2021.15

Mudde, C. & Kaltwasser, C. R. (Eds.). (2012). *Populism in Europe and the Americas. Threat or Corrective for Democracy?* Cambridge University Press. Online: https://doi.org/10.1017/CBO9781139152365

Mudde, C. & Kaltwasser, C. R. (2017). *Populism. A Very Short Introduction.* Oxford University Press. Online: https://doi.org/10.1093/actrade/9780190234874.001.0001

Muller, J. W. (2014). O povo deve ser extraído de dentro do povo. *Constellations, 21*(4), 483–493.

Norris, P. (2020). Measuring populism worldwide. *Party Politics, 26*(6), 697–717. Online: https://doi.org/10.1177/1354068820927686

Norris, P. & Inglehart, R. (2019). *Cultural Backlash. Trump, Brexit, and Authoritarian Populism.* Cambridge University Press. Online: https://doi.org/10.1017/9781108595841

Oliveira, R. G. D., Cunha, A. P. D., Gadelha, A. G. D. S., Carpio, C. G., Oliveira, R. B. D. & Corrêa, R. M. (2020). Desigualdades raciais e a morte como horizonte: considerações sobre a Covid-19 e o racismo estrutural. *Cadernos de Saúde Pública, 36*. Online: https://doi.org/10.1590/0102-311x00150120

Pajnik, M. & Sauer, B. (Eds.). (2017). *Populism and the Web. Communicative Practices of Parties and Movements in Europe.* Routledge. Online: https://doi.org/10.4324/9781315101958

Pérez Curiel, C. (2020). Political influencers/leaders on Twitter. An analysis of the Spanish digital and media agendas in the context of the Catalan elections of 21 December 2017. *KOME: An International Journal of Pure Communication Inquiry, 8*(2), 88–108. Online: https://doi.org/10.17646/kome.75672.46

Recuero, R. & Soares, F. (2021). O Discurso Desinformativo sobre a Cura do Covid-19 no Twitter: Estudo de caso. *E-Compós, 24*. Online: https://doi.org/10.30962/ec.2127

Reynié, D. (2016). The Specter Haunting Europe: "Heritage Populism" and France's National Front. *Journal of Democracy, 27*(4), 47–57. Online: https://doi.org/10.1353/jod.2016.0061

Ricci, P., Izumi, M. & Moreira, D. (2021). O populismo no Brasil (1985–2019). Um velho conceito a partir de uma nova abordagem. *Revista Brasileira de Ciências Sociais, 36*(107). Online: https://doi.org/10.1590/3610707/2021

Rooduijn, M. & Pauwels, T. (2011). Measuring populism: Comparing two methods of content analysis. *West European Politics, 34*(6), 1272–1283. Online: https://doi.org/10.1080/01402382.2011.616665

Santos, N. F. D. & Cesar, C. M. (2022). Covid and populism in the news: how Brazilian media outlets approach the issue of populism during the pandemic. *Brazilian Journalism Research, 17,* 536–561. Online: https://doi.org/10.25200/BJR.v17n3.2021.1426

Schwartzenberg, R.-G. (1977). *O estado espetáculo.* Diefel.

Serrano, E. (2020). Populismo em Portugal. *Media & Jornalismo, 20*(37), 221–239. Online: https://doi.org/10.14195/2183-5462_37_12

Silva, A. M. (2020). (Não) é só uma gripezinha: argumentação e realidade forjada nos pronunciamentos de Jair Bolsonaro sobre a covid-19. *Revista Eletrônica De Estudos Integrados Em Discurso E Argumentação, 20*(2), 4–28. Online: https://doi.org/10.47369/eidea-20-2-2736

Soares, F. (2020, July 3). A novel high specificity Covid-19 screening method based on simple blood exams and artificial intelligence. *MedRxiv.* Online: https://doi.org/10.1101/2020.04.10.20061036

Soffer, D. (2022). The use of collective memory in the populist messaging of Marine Le Pen. *Journal of European Studies, 52*(1), 69–78. Online: https://doi.org/10.1177/00472441211072619

Souza, Cibele Silva e (2018). *The personalization of politics and image construction processes: strategies of Dilma Rousseff and Aécio Neves in the 2014 Elections and 2016 Impeachment.* Master's Dissertation, Federal University of Juiz de Fora. Online: https://repositorio.ufjf.br/jspui/handle/ufjf/6725

Souza, Cibele Silva e (2020). *Convergence between Corruption and the Coronavirus Pandemic in Brazil.* KKI Policy Brief Series of the Institute for Foreign Affairs and Trade. Online: https://kki.hu/wp-content/uploads/2020/12/E-2020_96_brazil.pdf

Statista (2021). *Leading countries based on number of Twitter users as of July 2021.* Online: www.statista.com/statistics/242606/number-of-active-tweeter-users-in-selected-countries/

Stockemer, D. & Barisione, M. (2017). The 'new' discourse of the Front National under Marine Le Pen: A slight change with a big impact. *European Journal of Communication, 32*(2), 100–115. Online: https://doi.org/10.1177/0267323116680132

Street, J. (2004). Celebrity Politicians: Popular Culture and Political Representation. *The British Journal of Politics and International Relations, 6*(4), 435–452. Online: https://doi.org/10.1111/j.1467-856X.2004.00149.x

Taggart, P. (2004). Populism and representative politics in contemporary Europe. *Journal of Political Ideologies, 9*(3), 269–288. Online: https://doi.org/10.1080/1356931042000263528

Thompson, J. B. (2008). A nova visibilidade. *Matrizes*, *1*(2), 15–38. Online: https://doi.org/10.11606/issn.1982-8160.v1i2p15-38

Tóth, T. (2020). Target the enemy: explicit and implicit populism in the rhetoric of the Hungarian right. *Journal of Contemporary European Studies, 28*(3), 366–386. Online: https://doi.org/10.1080/14782804.2020.1757415

Tóth, T. (2021). Fractured implicitness. Why implicit populism matters? *KOME: An International Journal of Pure Communication Inquiry, 9*(2), 35–45. Online: https://doi.org/10.17646/KOME.75672.68

Tóth, T., Kékesdi-Boldog, D., Bokor, T. & Veczán, Z. (2019). "Protect our homeland!" Populist communication in the 2018 Hungarian election campaign on Facebook. *Central European Journal of Communication, 12*(2), 169–186. Online: https://doi.org/10.19195/1899-5101.12.2(23).4

Twitter of Jair Bolsonaro. Online:@jairmessias.bolsonaro

Van Kessel, S. & Castelein, R. (2016). Shifting the blame. Populist politicians' use of Twitter as a tool of opposition. *Journal of Contemporary European Research, 12*(2). Online: https://doi.org/10.30950/jcer.v12i2.709

Van Leeuwen, M. (2019). Measuring People-Centrism in Populist Political Discourse. In J. Zienkowski & R. Breeze (Eds.), *Imagining the Peoples of Europe* (pp. 315–339). John Benjamins. Online: https://doi.org/10.1075/dapsac.83.13lee

Viscardi, J. M. (2020). Fake news, verdade e mentira sob a ótica de Jair Bolsonaro no Twitter. *Trabalhos em Linguística aplicada, 59*, 1134–1157. Online: https://doi.org/10.1590/01031813715891620200520

Waisbord, S. (2003). Media Populism: Neo-Populism in Latin America. In G. Mazzoleni, J. Stuart & B. Horsfield (Eds.), *The Media and Neo-Populism. A Contemporary Comparative Analysis* (pp. 197–217). Praeger.

Waisbord, S. (2018). Truth is what happens to news: On journalism, fake news, and post-truth. *Journalism Studies, 19*(13), 1866–1878. Online: https://doi.org/10.1080/1461670X.2018.1492881

Waisbord, S. & Amado, A. (2017). Populist communication by digital means: presidential Twitter in Latin America. *Information, Communication & Society, 20*(9), 1330–1346. Online: https://doi.org/10.1080/1369118X.2017.1328521

Wehner, L. E. (2023). Stereotyped images and role dissonance in the foreign policy of right-wing populist leaders: Jair Bolsonaro and Donald Trump. *Cooperation and Conflict, 58*(3), 275–292. Online: https://doi.org/10.1177/00108367221108814

Wettstein, M., Esser, F., Schulz, A., Wirz, D. S. & Wirth, W. (2018). News Media as Gatekeepers, Critics, and Initiators of Populist Communication: How Journalists in Ten Countries Deal with the Populist Challenge. *The International Journal of Press/Politics, 23*(4), 476–495. Online: https://doi.org/10.1177/1940161218785979

World Health Organization (2020). *Recomendações sobre o uso de máscaras no contexto da Covid-19.* Online: https://apps.who.int/iris/bitstream/handle/10665/332293/WHO-2019-nCov-IPC_Masks-2020.4-por.pdf

YouTube (2021, September 9). *Jair Bolsonaro, Live da Semana – PR Jair Bolsonaro.* Online: www.youtube.com/watch?v=9BTGEYi3O_M

KOME − An International Journal of Pure Communication Inquiry Vol. 12. No. 1. (2024) • 141–162.
DOI: 10.17646/KOME.of.13

# Populist Cues in Media Framing

## Exploring How Populism by the Media Emerges in Western News Coverage of Protests[1]

Tamás Tóth,* Márton Demeter,** Lilla Petronella Szabó,*** Bernát Török****

* Ludovika University of Public Service, Department of Social Communication, Hungary
** Ludovika University of Public Service, Department of Social Communication; Corvinus Institute for Advanced Studies, Hungary
*** Corvinus University of Budapest, Department of Communication and Media Science, Hungary
**** Ludovika University of Public Service, Institute of the Information Society, Hungary

The media, or "fourth estate" as it is also known, which scrutinises the political elites, relies on journalists supporting the idea of a free press, independent of political interference. Research has demonstrated that journalists imply anti-elitism and people-centrism – the core features of populism – to criticise the establishment and speak on behalf of ordinary citizens. Scholars, therefore, developed the concept of "media populism" to conceptualise the proliferation of the populist communication phenomenon in different media content types. Spurred by the intention above, this study aims to fill a gap by analysing the extent to which anti-elitism and the general will of the people appear in the online news coverage of demonstrations in five Western media outlets. The study analyses 469 items of news coverage of protests from 108 countries between 2010 and 2020. Quantitative content analysis and confirmatory factor analysis revealed that news outlets emphasise anti-elitism as the primary populist cue in protest coverage. Additionally, the paper contributes to the concept of media populism by arguing that journalists articulate the *volonté general* in coverage when protesters oppose adverse changes in legislation. Media populism has a specific function in the coverage of protests: it suggests that protesters want to participate in decision-making processes.

**Keywords:** populism, demonstrations, anti-elitism, general will, media populism

1 No grants were included in this research.

## Introduction

Populism has been widely analysed in social sciences, especially since the Brexit referendum and Donald Trump's electoral victory in the United States (Hunger & Paxton, 2022). A specific segment of the research field argues that populism can be intertwined with social movements as a means of mobilisation that revolves around the moral division of the good people and the corrupt elite where public grievances are articulated (Aslanidis, 2016b). We argue that additional theoretical background paves the way indirectly for the connection between social movements and populism, namely the one that has explored ties between the media and populism (Moffitt, 2018). The theory that relies on media populism highlights the media's contribution to spreading populist claims (Esser et al., 2016; Krämer, 2014). This paper focuses primarily on a subtype of media populism, namely *populism by the media,* referring to "media organizations actively engaging in their own kind of populism" (Esser et al., 2016, p. 367) to provide a unique analysis of populist cues in media coverage that deals with protests from the angle of the media. Since there are many protests that articulate that the elite is out of touch with the people (Aslanidis, 2016b), we find it important to research the extent to which journalists imply the populist "us versus them" approach via populism by the media.

Scholars argue that "although populism by the media may be overall a scarce phenomenon, segments of populist ideas may be more salient in some outlets in some periods" (Hameleers & Vliegenthart, 2020, p. 20). Ample empirical evidence proves that specific media types, such as tabloid newspapers, have intrinsic stylistic features aligned with populist people-centrism and anti-elitism (Herkman & Kalsnes, 2022; Krämer, 2014, 2018; Wettstein et al., 2018). However, Rooduijn (2014) found that opinion articles in *The Guardian, The Telegraph,* the *Frankfurter Allgemeine* and the *Süddeutsche Zeitung* are more populist than the tabloids *The Sun* and *Bild*. Additionally, Hameleers and Vliegenthart (2020) found no evidence for the theoretical assumption that popular news outlets are more populist in their coverage than broadsheets. In turn, they demonstrated that the left-wing broadsheet outlet *de Volkskrant* increased people-centrism and anti-elitism in its coverage between 1990 and 2017 (Hameleers & Vliegenthart, 2020). These unexpected findings push us toward analysing populist cues in online coverage of protests between 2010 and 2020 in some mainstream news outlets. We chose the period between 2010 and 2020 because the last decade brought remarkable successes for populists, suggesting that hundreds of millions are disappointed in the mainstream political elite (Eatwell & Goodwin, 2018; Ruth-Lovell et al., 2019).

Although the number of protests globally almost tripled between 2006 and 2020 (Ortiz et al., 2022), no empirical research has analysed media populism in news article coverage of demonstrations at international level. It is important to study media populism in this manner because we have little knowledge of how journalists embed populist features when they introduce the possible motivations of protesters internationally. In sum, our study aims to provide another research angle on the framing techniques journalists use for demonstrators by considering populism by the media (Rak, 2021). Our rationale for analysing news on demonstrations leans on the following assumption: coverage of protests attracts the fragmented features of populism, resisting the “corrupt” establishment and articulating the “good” people’s demands (Engesser, Ernst, et al., 2017).[2] Additionally, news articles on demonstrations might fit Benjamin Krämer’s argument: “media populism is more than regular (albeit politically biased) political reporting, but a particular form of politics by some media” (Krämer, 2014, p. 54). We emphasise that the aim of our study is not to prove that protests or demonstrators are populist. In turn, aligned with former studies (de Vreese et al., 2018; Rooduijn & Pauwels, 2011), we analyse how journalists implement the general will of the people and anti-elitism in protest coverage. We chose to scrutinise the appearance of the *volonté general* rather than references to the people (e.g. solely people-centrism) because the latter could be too blurry and universal in the news and possibly skew the results of our analysis (Heiss & Matthes, 2020). Additionally, the manual quantitative content analysis might capture the general will of the people with higher validity than it detects people-centrism.

Furthermore, we argue that economic deprivation is also a vital theme to implement in this analysis. Even though economic deprivation is not the core element of populism, several scholars have claimed that it might be an important factor in the success of this phenomenon because the Great Recession, housing crises and remarkable differences in wages paved the way for the proliferation of populism (Adler & Ansell, 2020; Bos et al., 2020; Eatwell & Goodwin, 2018; Maher et al., 2022).

To move forward within the research field of media populism, where research dealing with international rather than national media populism is scarce, we analysed how protest coverage is framed in a selected number of news organisations in the United Kingdom and the United States. We aim to provide insights into how the BBC, CNN, Fox News, *The Guardian* and *The New York Times* depicted the motivations of demonstrators by embedding, intentionally or otherwise, the general will of the people, anti-elitism and economic deprivation in their coverage. Aligned with Ortiz and colleagues’ (2013) research, this paper does not focus on one specific issue that triggered demonstrations in many countries almost at the same time (such as the tragic death of George Floyd in the United States) but on different events in various countries (n = 108) to provide an extended picture of protest coverage. Finally, although scholarly analyses that interprets coverage of demonstrations implements the conceptual background of a protest paradigm that depicts protesters negatively (Gruber, 2023), populism by the media could be a possible alternative concept to help us to understand journalistic frames on demonstrations from a reversed angle in contrast to the protest paradigm.

## The conceptualisation of the populist communication phenomenon

Despite the ongoing scholarly debate on whether populism is an ideology (Mudde, 2004), a political communication style (Jagers & Walgrave, 2007), a strategy (Weyland, 2017), or a logic (Laclau, 2005), recent studies have demonstrated that the discursive approach of populism is helpful if one’s aim is to measure this phenomenon (Aslanidis, 2016a, 2018).

2 We use the terms “news”, “news articles” and “coverage” interchangeably.

Conceptually, almost every approach accepts that populism relies on the Manichean differentiation between the "evil" elite and the "good" people (de Nadal, 2021). These two groups are homogenous, and the former takes advantage of the latter (Martella & Bracciale, 2022). Populism revolves around the idea that the (political) elite does not care about the people's interests because the former group is corrupt and selfish, while the latter is pure and decent (Mudde, 2017). In other words, the elite forces the people into an underdog status (De Cleen & Stavrakakis, 2017).

In this paper, similarly to a recent study analysing the populist media coverage in newspapers (Hameleers & Vliegenthart, 2020), we consider populism a communication phenomenon that implies fragmented elements through which populist ideas can be disseminated (de Vreese et al., 2018). We focus on anti-elitism and the general will of the people, two features that can appear together or fragmentally in populist communication (Engesser, Fawzi, et al., 2017). We also consider economic deprivation a relevant factor attached to anti-elitism and the general will of the people.

## Anti-elitism, the general will of the people and economic deprivation

The core of populist *anti-elitism* leans on the idea that the "corrupt elite" is the opposite of the "good people" (Reveilhac & Morselli, 2022). The "people" versus "elite" differentiation leans on morality: the former is an idealised group that deserves admiration (Taggart, 2004), while the latter is a selfish circle that turns its back on the silent majority (Mudde, 2017). Populist anti-elitism depicts the elite as a group that betrays ordinary citizens, and to preserve power, it goes against the "general will" of the people.

Many scholars (Canovan, 2005; Jagers & Walgrave, 2007; Mudde, 2017) agree with the idea that populism is not possible without its fundamental agent, "the people". Mudde (2017) argues that even other features of populism, "the elite" and "general will", obtain their meaning from "the people". Although people-centrism is vital in populism, we have created a category that is more likely to be perceived in content analysis: *the general will of the people*. Our rationale for merging *the people* and *general will* into the same category is twofold. First, scholars argue that measuring and coding people-centrism is conceptually challenging and problematic in content analysis, especially in categorising pronouns such as *we* and *you* that might refer to broad or narrow groups (Heiss & Matthes, 2020; Krämer, 2017; Krippendorff, 2004; Rooduijn & Pauwels, 2011). Second, "Essential to populist politics is the concept of a general will, closely linked to the homogenous interpretation of the people" (Mudde, 2017, p. 33). In other words, populists claim that politicians should accept and follow the will of the people. We, thus, created one category from the above two to overcome the challenging concept of people-centrism. We presumed that journalists characterise the *articulated* demands of protesters or introduce how the authorities have disregarded their will. For instance, *The New York Times'* coverage of a protest in Lebanon articulates indirectly (e.g. inserts a quote from a protester) the demonstrators' demands: "'We need a whole new system, from scratch,' said Omar Kammoureh, 47, a car dealership employee who had brought his 7-year-old daughter, Lara, to the downtown Beirut protest on Monday. 'It's been a very bad 30 years'" (Yee, 2019). We acknowledge that such articulations are not equivalent to the *volonté general* because the protesters cannot articulate the will of the 99 per cent. However, Laclau (2005) emphasises that there is no need for the opinion of the 99 per cent to create populist messages, but it is crucial to articulate the will of the people that can theoretically create a *common denominator* for the silent majority. In this light, depicting and broadcasting the protesters' demands fits the general will of the people category within media populism. Additionally, the quotes can still represent the main demands of the protesters although every individual protester might have different problems with their current situations. Still, we assume that these quotations are not embedded in coverage by chance. On the contrary, the reason for documenting and inserting the quotations in coverage should be rooted in the idea that they give important hints about the motivation of demonstrators. Finally, utilising the category of "the general will of the people" relies on another theoretical background: it implies that the elite does not support democracy and disregards common sense solutions, which is morally unacceptable (Laclau, 2005).

Researchers argue that between 2006 and 2013, the most frequent motivation behind demonstrations was economic injustice (Ortiz et al., 2013), which fact is vital to our analytical perspective: economic deprivation fuels populism and its mobilising effects (Spruyt et al., 2016) because discontent fosters the conflict between the elite and the people (Maher et al., 2022). Populists stimulate the feeling of deprivation, and those who suffer from it are more convinced if the responsibility for the grievance is placed outside the in-group individual and shifted towards the elite (Boeynaems et al., 2022; Spruyt et al., 2016). We included economic deprivation in this analysis because ample academic work analysing issues that possibly pave the way for populism suggests that economic deprivation and relative deprivation can be important predictors of populist attitudes (Eatwell & Goodwin, 2018). The former (economic deprivation) revolves around the observation that since the onset of neoliberal economic policies, economic inequality has been worse than in the 1950s or 1960s, even in many Western countries (Piketty, 2014, 2020). Relative deprivation is the perception that relies on the following thought process: "When I think about what I have compared to others, I feel deprived" (Callan et al., 2008, p. 1518). Relative deprivation, among many other attitudes, is a predictor of populist attitudes (Elchardus & Spruyt, 2016) and citizens' participation in political gatherings (Gonthier & Guerra, 2022). Both economic and relative deprivation are rooted in economic injustice, thus we assume that they might be connected to media populism.

## Populism by the media

In his influential work, Benjamin Krämer argues that "media populism is neither political in a narrow sense, nor strictly apolitical, but political in a wider sense" (Krämer, 2014, p. 54). Researchers argue that media populism is a matter of degree and not a universal feature shared by every media channel (Krämer, 2014). Scholars have also revealed that media populism consists of three subcategories, namely populism through the media, populist citizen journalism and populism by the media (Esser et al., 2016; Moffitt, 2018). We chose *populism by the media* as our conceptual research perspective for the following reason: populism by the media takes place when media coverage utilises "crisis narratives, people-centrism, blame frames, overly generalizing 'us versus them,' anti-elite, and anti-outgroup perspectives that are characteristic of populist communication" (Ragragio, 2022b, p. 783).

We presume that the news coverage of protests fits the description above because anti-elitism and the general will of the people are expected to emerge in the analysis. Journalistic ideology and the principle of the free press incorporate anti-elitist attitudes, viewing the media as the "fourth estate" that functions as the objective scrutiniser of the ruling establishment (Esser et al., 2016; Kovach & Rosenstiel, 2007). Supporting the aforementioned theoretical argument, Andersson (2010) also claims that political and media populism have one common feature: anti-elitism bias. Besides that, Wayne and Murray (2009) argue that British journalists overreact to the professionalisation of political communication by cynicism towards the elite and by emphasising the shortcomings of political agents. Anti-establishment populism in the media suggests that politicians must be responsive to people's concerns and supports democratic procedures (de Maeyer & Trudel, 2016; Wettstein et al., 2018). Considering the media's "fourth estate" position, its criticism of elites, and frustration with the routines of the mainstream political elites, we outline the following hypothesis:

> **H1:** Journalists utilise anti-elitist cues more frequently in their coverage of demonstrations than they refer to economic deprivation as the motivation of protesters.

We argue that besides anti-elitism, articulating the people's demands is also a vital feature of populism by the media because journalists might "see themselves as true representatives of the perspective, if not the will of the people" (Krämer, 2018, p. 17). In other words, the people-centrist style might appear in coverage because journalists intend to articulate the demands of the masses (Wettstein et al., 2018). Economic reasons might also foster a people-centrist style, as this type of storytelling is much easier to sell to wider audiences (Wettstein et al., 2018). Finally, ample empirical evidence proves that significant people-centrist bias prevails in the content and quality of tabloid and weekly news outlets (Wettstein et al., 2018). Therefore, our second hypothesis is the following:

> **H2:** Journalists utilise the general will of the people more frequently in their coverage of demonstrations than they refer to economic deprivation as the motivation of protesters.

Although scientific literature on media populism has been published, there has been little research that quantifies the proportion of populist cues in newspapers. Specifically, Wettstein and colleagues (2018) found that weekly broadsheet newspapers are more prone to utilise anti-elitist discourse than people-centrism. However, the study above also highlighted that besides anti-elitism, people-centrist bias was also significant in broadsheet newspapers in nine European countries (Wettstein et al., 2018). In turn, Hameleers and Vliegenthart (2020) found that people-centrism spectacularly outperforms anti-elitism in Dutch media outlets. Since the empirical results on the extent and ratio of people-centrism and anti-elitism within media populism vary, we outline our first research question:

> **RQ1:** To what extent do journalists utilise the general will of the people, anti-elitism, and economic deprivation in coverage when they describe the motivation of protesters?

Finally, the three features discussed above consist of several content items[3] that might emerge in news coverage. For instance, "economic deprivation" implies four elements: housing, low wages, austerity, and high prices for travel and food. These items were created deductively. Consequently, we aim to scrutinise the extent to which they are depicted as possible motivations for demonstrators. Therefore, our second research question is:

> **RQ2:** Which item is portrayed as the most common motivation for demonstrations in the coverage of protests?

## Materials and methods

### *Data collection*

We selected the BBC, CNN, Fox News, *The New York Times* and *The Guardian* as the sources of the analysed news articles on demonstrations. We chose the media above because they are among the top ten most popular news websites in the world (Majid, 2022), and some of them have ideological biases, while others have rather neutral political positions: *The Guardian* and *The New York Times* are closer to the left-wing, Fox News is closer to the-right-wing, while CNN and BBC have rather neutral ideological positions (Budak et al., 2016; Pew Research Center, 2014). Moreover, since we were unsure of the magnitude of national political biases in news coverage in countries where autocratic political leaderships are in charge, we decided to analyse the above five sources that possibly have less bias towards the protesters in their content. We collected news from these sites between 2010 and 2020, including eleven years of protest coverage. We used the news websites' search engines to find relevant coverage using two keywords: *protest(s)* and *demonstration(s)*. We disregarded filtering demonstration size in terms of the number of participants. Consequently, smaller protests with a few participants and mass demonstrations with tens of thousands of attendees were also part of the analysis.

3 We refer to content item(s) as "item(s)" in the rest of the study.

We included countries with a population of at least one million, and where at least three news websites covered the same demonstration. We excluded countries with less than one million inhabitants because most news outlets above tend to disregard protests in these territories. Overall, 108 countries fitted our criteria (see Figure 1), including 469 items of news coverage of protests. The aggregated population of the analysed countries is approximately 7.033 billion, and therefore, our analysis focuses on global protest coverage in a selected number of news organisations in two countries.

We analysed one specific demonstration from each country. For a specific demonstration to be included in our database, we adhered to the following criteria: at least three news outlets for the protest to be coded needed coverage. If several demonstrations emerged within the same country in the analysed time frame, we chose the one covered to the greatest extent (namely, by each media outlet). Similarly to Ortiz and colleagues' work (2013), this analysis does not screen for one specific protest type (violent demonstrations, riots, strikes) over another (non-violent demonstrations).


*Figure 1:*
*Countries highlighted in green are included in the analysis*
*Source:* Compiled by the authors.

## *General description*

This study relies on two methods. We chose manual quantitative content analysis to reach high validity and sufficient reliability. As a result, we provided codebooks and training sessions for two coders who conducted a quantitative manual content analysis by searching for items such as 1. housing, 2. low wages, 3. austerity and 4. high prices for travel and food that are parts of the economic deprivation factor. In other words, all three cues (e.g. anti-elitism, the general will of the people and economic deprivation) are factors constituted by the items (Table 1). Finally, confirmatory factor analysis was conducted to demonstrate how the items constitute the factors and to what extent anti-elitism, the general will of the people and economic deprivation emerge in the coverage of protests.

## *The protocol for the manual quantitative content analysis and intercoder reliability*

Two PhD candidates who are proficient in English coded the coverage. Three training sessions provided sufficient knowledge on possible items that might connect to the "general will of the people", "anti-elitism" and "economic deprivation". Moreover, we introduced all items (see the next section) that could be the components of the presumed factors. Coders worked with written texts only, including titles, subtitles, leads, the body of the text and photo captions. Additionally, if journalists embedded tweets within the news, the written contents of the post were also coded. Coders identified items using binary codes, where "0" means the absence and "1" is the item's presence. We note that coding was conducted on items only. Later, these items constituted the three main factors.

We followed Neuendorf's (2017) suggestion and selected an 11% database sample to measure intercoder reliability. Krippendorff's α was utilised to calculate intercoder reliability using ReCal (Freelon, 2013). The general will of the people reached the lowest reliability (Krippendorff's α = 0.67), followed by anti-elitism (Krippendorff's α = 0.841) and economic deprivation (Krippendorff's α = 0.958). The general will of the people factor has acceptable reliability, while the other two factors have high reliability (Guo et al., 2020).

In the next section, we introduce the deductive items and their typologies. These typologies were parts of the codebook and functioned as the coders' main instructions. We created easy-to-understand coding typologies because we assumed that reading articles is energy-consuming for coders. Therefore, a straightforward coding guide was vital to pursue high reliability. We also supplied examples for every item to demonstrate what a specific item typology means to make coders' work as consistent as possible.

## *Items and factors*

This section introduces the items that are parts of the specific, assumed factors. It is important to note that journalist(s) could utilise several of the following items in the same news articles. In this scenario, every perceived item was coded within the same coverage. When protests are not covered, we understand them as "missing value", and when protests are covered, but features of media populism are missing, their values are zero.

## F1 – General will of the people

The problem in outlining general will connects to Laclau's (2005) claim, and the observations of other scholars (de Nadal, 2021), that defining the *volonté general* is highly problematic. Therefore, the demands of protesters that were emphasised in the coverage were coded. Since we were analysing populism by the media and not the attitudes of demonstrators, our question was: what did journalists find to be emphasised among the protester's demands? We emphasised to the coders that if expressions such as "we want", "we need", "we demand", "we wish", "people want", "people need", "people demand", "people wish", "country wants", "country needs", "country demands" and "country wishes" appear, they need to code the presence of that element in the relevant item(s). The General will of the people factor contains the following items:[4]

- Changes in legislation: amendments that harm the people's rights, welfare, or interests (Bánkuti et al., 2012), for instance, ratifying the increase of labour hours (Schaeffer, 2019)
- Separation of power: if a ruling political regime aims to weaken the checks and balances, for instance, by attacking and depowering the Constitutional Court (Mudde, 2016; Verseck, 2013)
- Sovereignty: the protesters claim that the government is created by and subject to the will of the people, which also emerged during the Arab Spring, evoking popular sovereignty through grassroots contention in the Arab world (Aslanidis, 2017)
- Freedom of speech, media and education: this item includes the free expression of the popular will, an independent media system that is not corrupted by the elite, and the education that is pivotal in providing a better life for the young generation. For illustration, college students at Johannesburg University in South Africa started protesting because tuition fees were raised by 10.5% in 2016 (BBC, 2016)

## F2 – Economic deprivation

Items of economic deprivation are apparent in the coverage of protests when "unemployment", "poverty", "starvation", "recession", "stagnation", "deprivation", or "economic decline" are explicitly articulated. Deductively, we outlined the following four categories of Economic deprivation:

- Housing: unaffordable housing is an enormous challenge for many citizens. For example, the Israeli "J14" movement was established against high housing prices (Schipper, 2017)
- Low wages: extant research proved that protesting for higher wages is among the most frequent demands of demonstrations on a global scale (Ortiz et al., 2013); for example, women in Switzerland protested for higher wages because males

4 We utilised capital starting letters in when we referred to factors.

earn significantly more than their female colleagues (Schaverien & Cumming-Bruce, 2019)
- Austerity: the Great Recession affected many countries in the 2010s; in Europe, demonstrations in Portugal, Italy, Ireland, Greece and Spain (PIIGS) were primarily fuelled by austerity measures (Accornero & Ramos Pinto, 2015)
- High prices for travel and food: increasing fares for public transport, water supply and food might mobilise citizens with extreme intensity. For instance, mass demonstrations in Brazil started because the bus ticket fee increased by 20 cents (Mourão, 2019)

## F3 – Anti-elitism

If a news article explicitly claimed that a demonstration was an anti-government protest, coders were instructed to code the "Protest the elite" item with "1". If the article outlined that "anti-government" protests emerged because frauds were revealed on a moral basis, the coders were asked to code both the "Protest the elite" and "Corruption/frauds" items with "1". It is important to mention that if coverage suggests that the elite is inexperienced, incompetent, etc., that is not enough to code the presence of populist anti-elitism because these allegations refer to the lack of abilities but not to corruptness. Populist anti-elitism revolves around moral issues such as disregarding the people's will or grievances, misleading the citizens, risking their well-being, welfare, security, stealing from public funds, and so on (Hameleers, 2018; Laclau, 2005). Anti-elitism consists of the following items:

- Protest the elite: the failure of political representation and political systems means that the political elite disregards fulfilling the people's demands; therefore, citizens express their discontent by joining demonstrations and explicitly opposing the political elite. A notable example is the Arab Spring, which can be considered a remarkable chain reaction in which protesters demanded democratic institutions and the freedom of expression (Aslanidis, 2017)
- Corruption/frauds: suspicious transactions to tax havens, nepotism, and alleged electoral frauds might fuel demonstrations (Dimitrova, 2018). In Romania, which is one of the most corruption-plagued members of the European Union, for example, protesters demanded the termination of the government because of the unbearable volume of its economic scandals (Agence France-Presse, 2018)
- Social media: this item seems irrelevant to anti-elitism, but former studies have demonstrated that social media is vital in resisting the establishment (Heiss et al., 2020). The mobilisation of the masses against the political elite via social media has become a well-functioning practice, especially since the Arab Spring, when communication between the organisers and protesters was essential in mobilising citizens (Comunello & Anzera, 2012). Unsurprisingly, many autocratic regimes shut down social media within their territory to prevent large, nationwide protests.

*Table 1:*
*Factors and their constituent items*

| F1 – General will of the people | F2 – Economic deprivation | F3 – Anti-elitism |
|---|---|---|
| Changes in legislation | Housing | Protest the elite |
| Separation of power | Low wages | Corruption/frauds |
| Sovereignty | Austerity | Social media |
| Freedom of speech, media and education | High prices for travel and food | |

*Source:* Compiled by the authors.

*Table 2:*
*Factor loadings and Cronbach's alpha*

| Item name | F1 General will of the people | F2 Economic deprivation | F3 Anti-elitism | Explained variance (%) |
|---|---|---|---|---|
| Changes in legislation | .448 | | | 69 |
| Separation of power | .9 | | | |
| Sovereignty | .722 | | | |
| Freedom of speech, media and education | .864 | | | |
| *alpha* | *.665* | | | |
| Housing | | .744 | | 74.49 |
| Low wages | | .726 | | |
| Austerity | | .753 | | |
| High prices | | .756 | | |
| *alpha* | | *.547* | | |
| Social media | | | .643 | 54.98 |
| Anti-elitism | | | .765 | |
| Corruption/frauds | | | .807 | |
| *alpha* | | | *.58* | |

*Source:* Compiled by the authors.

Items were measured on a 5-point scale, where values represent the number of different journal outlets in which an item appeared. Measurements and calculations were aggregated on a country level; thus, there were 108 units of analysis for each item. For a unit, the maximum value (5) was added if a report containing the corresponding item was published in all five analysed newspapers.

As stated above, eleven items were grouped into three main factors based on theoretical considerations. To test the reliability of our factors, we conducted a confirmatory factor analysis (CFA). Moreover, as a post hoc reliability test, we calculated Cronbach's alpha for testing the internal consistency of the three main factors. Items, the composition of the main factors, the results of the CFA, and Cronbach's alpha values are reported in Table 2. Concerning the number of items under our factors (3 and 4) and following Taber's (2018) instructions, Cronbach alpha values higher than 0.5 are acceptable if the number of items is lower than five; we considered our alphas reliable.

To address our hypothesis, we tested the mean differences between our factors. As two factors (Factor 1 and Factor 2) entail four items, while the third factor entails three items, we normalised the attributed values. For those factors with four items, the value range was originally $5 \times 4 = 20$, while the value range was $5 \times 3 = 15$ for the third factor with three items only. Thus, we divided the final scores by four for factors with four items, and the final scores were divided by three in the case of the factor with three items. As a result, while keeping the original distribution of values, all factors have the same value range (1–5) after normalisation, and thus, we were able to compare the mean scores of the factors.

## Results

The Kolmogorov-Smirnov normality test showed that none of our three factors has a normal distribution, so mean differences were measured by non-parametric (Wilcoxon rank-sum) tests. Mean differences were found to be statistically significant between all the analysed factors ($p < 0.01$ for F1/F2, $p < 0.001$ for F2/F3, $p < 0.001$ for F1/F3).

*Table 3:*
*Mean differences between factors*

| **Factor** | **N** | **Range** | **M** | **SD** |
|---|---|---|---|---|
| F1<br>General will of the people | 108 | 0–5 | .683 | .6699 |
| F2<br>Economic deprivation | 108 | 0–5 | .354 | .9295 |
| F3<br>Anti-elitism | 108 | 0–5 | 1.1 | 1.0949 |

*Source:* Compiled by the authors.

As Table 3 shows, we found the highest mean values in the case of Factor 3, followed by Factor 1 and Factor 2. In other words, "Anti-elitism" is the most dominant populist cue *depicted* as a driving force of demonstration, followed by the "General will of the people" and Economic deprivation. These findings validated H1 and H2: both Anti-elitism and the General will of the people outperform Economic deprivation. The outcomes above suggest that the analysed newspapers' coverage imply populism by the media rather than focusing on economic challenges that might have fuelled protesters' discontent. The results regarding RQ1 are in contrast to Hameleers and Vliegenthart's (2020), and aligned with Wettstein and colleagues' (2018) findings: "Anti-elitism" outperforms the "General will of the people", and "Economic deprivation" suggesting that journalists rather characterise citizens' discontent toward the elite than introducing protesters' demands and economic challenges. Therefore, the outcomes suggest that this form and extent of media populism primarily focuses on depicting the political elite as failing leaders who have lost the trust of the demonstrators.

*Table 4:*
*Mean values for the individual items and main factors*

| Item | M | SD |
|---|---|---|
| Protest the elite | 2.7315 | 1.806 |
| Changes in legislation | 1.1944 | 1.721 |
| Factor 3 Anti-elitism | 1.1 | 1.094 |
| Corruption/frauds | .9074 | 1.450 |
| Social media | .713 | 1.119 |
| Factor 1 General will of the people | .683 | .6699 |
| Sovereignty | .6111 | 1.324 |
| High prices | .5556 | 1.355 |
| Freedom of speech, media, and education | .5278 | 1.054 |
| Austerity | .4722 | 1.226 |
| Separation of power | .3981 | 1.049 |
| Factor 2 Economic deprivation | .354 | .9295 |
| Low wages | .3333 | .8203 |
| Housing | .0556 | .2676 |

*Source:* Compiled by the authors.

Besides the main factors, we also calculated mean values for the individual items. Results are reported in descending order in Table 4. Consequently, we answer RQ2: the mean values show that "Protest the elite" is the most frequent item, followed by "Changes in legislation" item, and the "Anti-elitism" factor. Again, the results above suggest that resisting the elite is the primary feature of the protest coverage, followed by an item attached to the "General will of the people". In turn, items dealing with economic discontent are not among the prominent frames that characterise the narratives on demonstrations.

## Discussion

Scholars argue that the relationship between the media and populism is ambivalent, and mainstream media outlets might contribute to the rise of populism as they are not just the "source of descriptions of society, but they are themselves subject to politicized descriptions of society" (Krämer, 2018, p. 17). Our results provided several contributions to the scholarly discussion on populism by the media. Our analysis revealed that there are coherent factors that we can consider in the analysis of populist communication as they appear in the coverage of reporting on demonstrations. Of these factors, two are frequently used in studies on political populism, namely "anti-elitism" and referring to "the general will of the people" (Akkerman et al., 2014). Our analysis shows that these characteristics of the populist communication phenomenon can also be found in news coverage, implying that anti-elitism is potentially a more general feature of contemporary mass communication. This outcome corresponds to other studies that found that anti-elitism might be a general characteristic of citizens without reference to their populist attitudes (Zsolt et al., 2021).

The interaction between the elites and citizens should be the fundamental feature of democracies (Dimitrova, 2018). However, researchers argue that the distances between these groups have increased in the last couple of decades (Berman & Snegovaya, 2019). For instance, the case of Central and Eastern Europe is relevant, where anti-government mass demonstrations increased in the 2010s, compared to the 1990s and 2000s (Clark & Regan, 2021).[5] Regarding the theoretical arguments and experiences above, our finding is important because it shows that the analysed (online) quality news outlets imply a considerable anti-elitist feature in their coverage, suggesting the increasing cleavage between the political elite and citizens (Esser et al., 2016). The anti-elitist feature is introduced via the protesters' frustration with the political elite, while direct criticism from journalists towards the establishment rarely appears in the scrutinised news. Instead, journalists embed indirect criticism in coverage by introducing the irreconcilable opposition between the establishment and the protesters. Based on the analysed news, citizens are predominantly depicted as desperate outcasts who feel discontent and disappointment with the political elite (Portos, 2021). Protesters are depicted as opposed groups to the political elite because they can feel that the current establishments are morally failed, corrupt, and, in many instances, oppressive (Aslanidis, 2017).

Although journalists and editors had no control over the demands of anti-elitist protesters, they could decide how the coverage was framed (Ragragio, 2022a). In other words, the journalists or editors could decide – in the cases of anti-government protests – whether they emphasised that which the demonstrators were demanding from the political elite (e.g. implying the general will into the news) or introduced the role

5 We provided Table 5 (see Appendix) based on the Mass Mobilization Project (Clark & Regan, 2021), which collects anti-government demonstrations globally. In Table 5, we introduce data on mass mobilisations (50+ participants) from Central and Eastern European countries between 1990 and 2020. We inserted every Central and Eastern European country that existed or was established in the first half of the 1990s. On the other hand, we excluded Montenegro and Kosovo, which declared their independence in 2006 and 2008. Besides, we also disregarded the Soviet Union, Yugoslavia and Czechoslovakia, which ceased to exist in the first half of the 1990s.

economic deprivation was playing in anti-establishment demonstrations, if any. Based on the results above, we argue that populism by the media is fuelled primarily by protesters' hostile attitudes towards the political elite because readers might pay increased attention to proliferating political frustrations. At this point, the question is how and to what extent journalists add the *volonté general* and (if applicable) deprivation-driven motivations to the coverage of protests. We reflect first on the general will of the people, and then we discuss how our findings on economic deprivation relate to former studies.

The people-centrist aspect of media populism is apparent in our scrutiny because the constituent items of the general will are depicted as the motivations of protesters. This outcome is aligned with former findings where the increasing presence of people-centrism was perceived within popular and mainstream news outlets (Hameleers & Vliegenthart, 2020). In our paper, the second most frequently perceived item is "changes in legislation", which is a constituent of the "general will of the people" factor. This item reflected on demonstrations that started as an opposition to legislation that might harm citizens. This finding is also a considerable one because journalists articulated the will of the protesters as contrasted demands to unpopular measures. In other words, journalists might speak indirectly on behalf of the people, such as in the case of Guatemala, where news showed that demonstrations started because the establishment approved budget cuts on health care and education (Wirtz & Kitroeff, 2020). Journalist attitudes and the ideology of the free press imply the articulation of the people's discontent (Esser et al., 2016), which is spectacular in the scrutinised news that introduces citizens' anxieties when unpopular legislation occurs.

Researchers argue that citizens with populist attitudes support direct democracy more than their non-populist peers (Mohrenberg et al., 2021). To some extent, our findings on the two most frequent items ("protest the elite" and "changes in legislation") corroborate Mohrenberg and colleagues' (2021) results from the angle of media coverage. Our findings suggest that protesters are depicted in several articles as anti-establishment demonstrators who exercise their right to articulate their discontent by protesting when harmful legislation emerges. Since politicians submit, accept, or reject legislative proposals in contemporary representative systems, demonstrators might feel that protesting is their only democratic opportunity to resist legislation that harms democracy, transparency, or well-being. Populism by the media also shows that people who react to unpopular legislation by gathering in public spaces are willing to participate or reflect on decision-making processes. In other words, populism by the media might support the exercise of democratic rights (Mouffe, 2018) from at least two perspectives. First, it introduces the sensitivity of protesters when they feel that painful legislative decisions harm them. Second, the supportive framing of protests might foster empathy toward demonstrators within and beyond the borders of the affected area (Harlow et al., 2017). Our findings suggest that populism by the analysed media is close to this phenomenon's inclusionary version (Mudde & Rovira Kaltwasser, 2013) because journalists avoided the utilisation of the protest paradigm, which delegitimises the demonstrations through the use of negative frames (Brown & Harlow, 2019; Gruber, 2023; Mourão, 2019; Rak, 2021).

Regarding economic deprivation, Ortiz and colleagues (2013) argue that financial grievance – followed by anti-elitism – was the most frequent motivation of protesters between 2006 and 2013. In contrast, anti-elitism is the first, while economic deprivation is the last factor in our results. A possible explanation for this outcome is that the Great Recession affected the financial situation of citizens so severely that the motivation of demonstrators was inevitably the frustration of becoming or being deprived between 2006 and 2013. Possibly, as the austerity measures started to cease, so did the number of news articles on protests driven by economic grievances.

The study has specific limitations. It focuses on a single protest per country, which precludes the generalisability of our results. Although many quotes from protesters were embedded into the coverage to introduce the demonstrators' demands and grievances, we did not aim to prove whether protesters or demonstrations were populist because we did not implement comprehensive surveys or experimental methods. Besides that, local newspapers are also missing from our sample due to language barriers. We did not differentiate between coverage of democratic and authoritarian states because had we focused on this separation, we would have had to imply other concepts, such as populism in democracies and authoritarian systems, which was beyond our conceptual background, and would rather have pushed this paper's direction into the realm of political science that focuses on ideologies and governance rather than communication and journalism studies. Finally, we did not analyse geographical and geopolitical differences, so further analysis should decide if geographical scrutiny can find statistically significant differences across world regions regarding the potential motivations of protesters.

## Appendix

*Table 5:*
*Mass anti-government demonstrations*
*in Central and Eastern European Countries between 1990–2020*

| Country | 1990–1999 | 2000–2009 | 2010–2020 |
|---|---|---|---|
| Albania | 4 | 1 | 42 |
| Belarus | 30 | 24 | 22 |
| Bosnia and Herzegovina | 12 | 10 | 31 |
| Bulgaria | 72 | 21 | 24 |
| Czech Republic | 8 | 10 | 28 |
| Croatia | 11 | 11 | 20 |
| Estonia | 11 | 22 | 4 |
| Hungary | 18 | 20 | 33 |
| Latvia | 27 | 19 | 18 |
| Lithuania | 17 | 21 | 8 |
| Moldova | 28 | 41 | 41 |
| North Macedonia | 17 | 22 | 40 |

| Country | 1990–1999 | 2000–2009 | 2010–2020 |
|---|---|---|---|
| Poland | 62 | 17 | 40 |
| Romania | 119 | 11 | 72 |
| Russia | 41 | 41 | 100 |
| Slovakia | 15 | 14 | 25 |
| Slovenia | 11 | 10 | 11 |
| Ukraine | 16 | 28 | 105 |
| Total | 519 | 343 | 664 |

*Source:* Clark & Regan, 2021

## References

Accornero, G. & Ramos Pinto, P. (2015). 'Mild Mannered'? Protest and Mobilisation in Portugal under Austerity, 2010–2013. *West European Politics, 38*(3), 491–515.

Adler, D. & Ansell, B. (2020). Housing and populism. *West European Politics, 43*(2), 344–365. Online: https://doi.org/10.1080/01402382.2019.1615322

Agence France-Presse (2018, August 12). Romania: second night of protests after 450 injured in clashes. *The Guardian*. Online: www.theguardian.com/world/2018/aug/11/romania-second-night-of-protests-after-450-injured-in-clashes

Akkerman, A., Mudde, C. & Zaslove, A. (2014). How Populist Are the People? Measuring Populist Attitudes in Voters. *Comparative Political Studies, 47*(9), 1324–1353. Online: https://doi.org/10.1177/0010414013512600

Andersson, C. (2010). Populism och journalistik – stadigt sällskap eller tillfällig bekantskap? *Statsvetenskaplig Tidskrift, 112*(3), 271–287.

Aslanidis, P. (2016a). Is Populism an Ideology? A Refutation and a New Perspective. *Political Studies, 64*(1), 88–104. Online: https://doi.org/10.1111/1467-9248.12224

Aslanidis, P. (2016b). Populist social movements of the great recession. *Mobilization: An International Quarterly, 21*(3), 301–321.

Aslanidis, P. (2017). Populism and social movements. In C. R. Kaltwasser, P. Taggart, P. O. Espejo & P. Ostiguy (Eds.), *The Oxford Handbook of Populism* (pp. 305–325). Oxford University Press.

Aslanidis, P. (2018). Measuring populist discourse with semantic text analysis: an application on grassroots populist mobilization. *Quality & Quantity, 52*(3), 1241–1263. Online: https://doi.org/10.1007/s11135-017-0517-4

Bánkuti, M., Halmai, G. & Scheppele, K. L. (2012). Hungary's Illiberal Turn: Disabling the Constitution. *Journal of Democracy, 23*(3), 138–146.

BBC (2016, October 4). Why are South African students protesting? *BBC News*. Online: www.bbc.com/news/world-africa-34615004

Berman, S. & Snegovaya, M. (2019). Populism and the Decline of Social Democracy. *Journal of Democracy, 30*(3), 5–19. Online: https://doi.org/10.1353/jod.2019.0038

Boeynaems, A., Burgers, C., Konijn, E. A. & Steen, G. J. (2022). Attractive or repellent? How right-wing populist voters respond to figuratively framed anti-immigration rhetoric. *Communications, 48*(4), 502–522. Online: https://doi.org/doi:10.1515/commun-2021-0082

Bos, L., Schemer, C., Corbu, N., Hameleers, M., Andreadis, I., Schulz, A., Schmuck, D., Reinemann, C. & Fawzi, N. (2020). The effects of populism as a social identity frame on persuasion and mobilisation: Evidence from a 15-country experiment. *European Journal of Political Research, 59*(1), 3–24. Online: https://doi.org/10.1111/1475-6765.12334

Brown, D. K. & Harlow, S. (2019). Protests, Media Coverage, and a Hierarchy of Social Struggle. *The International Journal of Press/Politics, 24*(4), 508–530. Online: https://doi.org/10.1177/1940161219853517

Budak, C., Goel, S. & Rao, J. M. (2016). Fair and Balanced? Quantifying Media Bias through Crowdsourced Content Analysis. *Public Opinion Quarterly, 80*(S1), 250–271. Online: https://doi.org/10.1093/poq/nfw007

Callan, M. J., Ellard, J. H., Will Shead, N. & Hodgins, D. C. (2008). Gambling as a Search for Justice: Examining the Role of Personal Relative Deprivation in Gambling Urges and Gambling Behavior. *Personality and Social Psychology Bulletin, 34*(11), 1514–1529. Online: https://doi.org/10.1177/0146167208322956

Canovan, M. (2005). *The People.* Polity Press.

Clark, D. & Regan, P. (2021). *Mass Mobilization Protest Data.* Harvard Dataverse. Online: https://doi.org/doi:10.7910/DVN/HTTWYL

Comunello, F. & Anzera, G. (2012). Will the revolution be tweeted? A conceptual framework for understanding the social media and the Arab Spring. *Islam and Christian–Muslim Relations, 23*(4), 453–470. Online: https://doi.org/10.1080/09596410.2012.712435

De Cleen, B. & Stavrakakis, Y. (2017). Distinctions and Articulations: A Discourse Theoretical Framework for the Study of Populism and Nationalism. *Javnost – The Public, 24*(4), 301–319. Online: https://doi.org/10.1080/13183222.2017.1330083

De Maeyer, J. & Trudel, D. (2016). A Rebirth of Populist Journalism. *Niemanlab.* Online: www.niemanlab.org/2016/12/a-rebirth-of-populist-journalism/

De Nadal, L. (2021). On populism and social movements: from the Indignados to Podemos. *Social Movement Studies, 20*(1), 36–56. Online: https://doi.org/10.1080/14742837.2020.1722626

De Vreese, C. H., Esser, F., Aalberg, T., Reinemann, C. & Stanyer, J. (2018). Populism as an Expression of Political Communication Content and Style: A New Perspective. *The International Journal of Press/Politics, 23*(4), 423–438. Online: https://doi.org/10.1177/1940161218790035

Dimitrova, A. L. (2018). The uncertain road to sustainable democracy: elite coalitions, citizen protests and the prospects of democracy in Central and Eastern Europe. *East European Politics, 34*(3), 257–275. Online: https://doi.org/10.1080/21599165.2018.1491840

Eatwell, R. & Goodwin, M. (2018). *National Populism. The Revolt against Liberal Democracy.* Penguin Books.

Elchardus, M. & Spruyt, B. (2016). Populism, Persistent Republicanism and Declinism: An Empirical Analysis of Populism as a Thin Ideology. *Government and Opposition, 51*(1), 111–133. Online: https://doi.org/10.1017/gov.2014.27

Engesser, S., Ernst, N., Esser, F. & Büchel, F. (2017). Populism and social media: how politicians spread a fragmented ideology. *Information, Communication & Society, 20*(8), 1109–1126. Online: https://doi.org/10.1080/1369118X.2016.1207697

Engesser, S., Fawzi, N. & Larsson, A. O. (2017). Populist online communication: introduction to the special issue. *Information, Communication & Society, 20*(9), 1279–1292. Online: https://doi.org/10.1080/1369118X.2017.1328525

Esser, F., Stępińska, A. & Hopmann, D. N. (2016). Populism and the media: Cross-national findings and perspectives. In T. Aalberg, F. Esser, C. Reinemann, J. Strömbäck & C. De Vreese (Eds.), *Populist Political Communication in Europe* (pp. 365–380). Routledge.

Freelon, D. G. (2013). ReCal OIR: Ordinal, Interval, and Ratio Intercoder Reliability as a Web Service. *International Journal of Internet Science, 8*(1), 10–16.

Gonthier, F. & Guerra, T. (2022). From the People, Like the People, or For the People? Candidate Appraisal Among the French Yellow Vests. *Political Psychology, 43*(5), 969–989. Online: https://doi.org/10.1111/pops.12826

Gruber, J. B. (2023). Troublemakers in the Streets? A Framing Analysis of Newspaper Coverage of Protests in the UK 1992–2017. *The International Journal of Press/Politics, 28*(2), 414–433. Online: https://doi.org/10.1177/19401612221102058

Guo, L., Mays, K., Lai, S., Jalal, M., Ishwar, P. & Betke, M. (2020). Accurate, Fast, But Not Always Cheap: Evaluating "Crowdcoding" as an Alternative Approach to Analyze Social Media Data. *Journalism & Mass Communication Quarterly, 97*(3), 811–834. Online: https://doi.org/10.1177/1077699019891437

Hameleers, M. (2018). A Typology of Populism: Toward a Revised Theoretical Framework on the Sender Side and Receiver Side of Communication. *International Journal of Communication 12*, 2171–2190. https://doi.org/1932–8036/20180005

Hameleers, M. & Vliegenthart, R. (2020). The Rise of a Populist Zeitgeist? A Content Analysis of Populist Media Coverage in Newspapers Published between 1990 and 2017. *Journalism Studies, 21*(1), 19–36. Online: https://doi.org/10.1080/1461670X.2019.1620114

Harlow, S., Salaverría, R., Kilgo, D. K. & García-Perdomo, V. (2017). Protest Paradigm in Multimedia: Social Media Sharing of Coverage about the Crime of Ayotzinapa, Mexico. *Journal of Communication, 67*(3), 328–349. Online: https://doi.org/10.1111/jcom.12296

Heiss, R., Knoll, J. & Matthes, J. (2020). Pathways to political (dis-)engagement: motivations behind social media use and the role of incidental and intentional exposure modes in adolescents' political engagement. *Communications, 45*(s1), 671–693. Online: https://doi.org/10.1515/commun-2019-2054

Heiss, R. & Matthes, J. (2020). Stuck in a Nativist Spiral: Content, Selection, and Effects of Right-Wing Populists' Communication on Facebook. *Political Communication, 37*(3), 303–328. Online: https://doi.org/10.1080/10584609.2019.1661890

Herkman, J. & Kalsnes, B. (2022). Media populism and the life-cycle of the Norwegian Progress Party. *Communications, 48*(2), 315–335. Online: https://doi.org/doi:10.1515/commun-2021-0075

Hunger, S. & Paxton, F. (2022). What's in a buzzword? A systematic review of the state of populism research in political science. *Political Science Research and Methods, 10*(3), 617–633. Online: https://doi.org/10.1017/psrm.2021.44

Jagers, J. & Walgrave, S. (2007). Populism as political communication style: An empirical study of political parties' discourse in Belgium. *European Journal of Political Research, 46*(3), 319–345. Online: https://doi.org/10.1111/j.1475-6765.2006.00690.x

Kovach, B. & Rosenstiel, T. (2007). *The Elements of Journalism: What Newspeople Should Know and the Public Should Expect.* Three Rivers Press.

Krämer, B. (2014). Media populism: A Conceptual Clarification and Some Theses on its Effects. *Communication Theory, 24*(1), 42–60. Online: https://doi.org/10.1111/comt.12029

Krämer, B. (2017). Populist Online Practices: The Function of the Internet in Right-wing Populism. *Information, Communication & Society, 20*(9), 1293–1309. Online. https://doi.org/10.1080/1369118X.2017.1328520

Krämer, B. (2018). Populism, Media, and the Form of Society. *Communication Theory, 28*(4), 444–465. Online: https://doi.org/10.1093/ct/qty017

Krippendorff, K. (2004). *Content Analysis. An Introduction to Its Methodology* (Second ed.). Sage Publications.

Laclau, E. (2005). *On Populist Reason.* Verso.

Maher, P. J., Lüders, A., Erisen, E., Rooduijn, M. & Jonas, E. M. (2022). The Many Guises of Populism and Crisis: Introduction to the Special Issue on Populism and Global Crises. *Political Psychology, 43*(5), 819–826. Online: https://doi.org/https://doi.org/10.1111/pops.12840

Majid, A. (2022, June 20). Top 50 most popular news websites in the world: Wordle fuels huge New York Times traffic growth. *PressGazette.* Online: https://www.editorandpublisher.com/stories/top-50-most-popular-news-websites-in-the-world-wordle-fuels-huge-new-york-times-traffic-growth,231850

Martella, A. & Bracciale, R. (2022). Populism and emotions: Italian political leaders' communicative strategies to engage Facebook users. *Innovation: The European Journal of Social Science Research, 35*(1), 65–85. Online: https://doi.org/10.1080/13511610.2021.1951681

Moffitt, B. (2018). Populism and media in Western Europe. In C. De la Torre (Ed.), *Routledge Handbook of Global Populism* (pp. 235–248). Routledge.

Mohrenberg, S., Huber, R. A. & Freyburg, T. (2021). Love at first sight? Populist attitudes and support for direct democracy. *Party Politics, 27*(3), 528–539. Online: https://doi.org/10.1177/1354068819868908

Mouffe, C. (2018). *For a Left Populism.* Verso Books.

Mourão, R. R. (2019). From Mass to Elite Protests: News Coverage and the Evolution of Antigovernment Demonstrations in Brazil. *Mass Communication and Society, 22*(1), 49–71. Online: https://doi.org/10.1080/15205436.2018.1498899

Mudde, C. (2004). The Populist Zeitgeist. *Government and Opposition, 39*(4), 541–563. Online: https://doi.org/10.1111/j.1477-7053.2004.00135.x

Mudde, C. (2016, January 29). *Why Should We Study Populism?* Utah, United States, The Wheatley Institution of Brigham Young University. Online: www.youtube.com/watch?v=zE9RkfRqGcE&t=2384s&ab_channel=TheWheatleyInstitution

Mudde, C. (2017). An ideational approach. In C. R. Kaltwasser, P. Taggart, P. O. Espejo & P. Ostiguy (Eds.), *The Oxford Handbook of Populism* (pp. 27–48). Oxford University Press.

Mudde, C. & Rovira Kaltwasser, C. (2013). Exclusionary vs. inclusionary populism: Comparing contemporary Europe and Latin America. *Government and Opposition, 48*(2), 147–174. Online: https://doi.org/10.1017/gov.2012.11

Neuendorf, K. A. (2017). *The Content Analysis Guidebook* (2nd ed.). Sage Publications.

Ortiz, I., Burke, S., Berrada, M. & Cortés, H. (2013). *World Protests 2006–2013.* Initiative for Policy Dialogue.

Ortiz, I., Burke, S., Berrada, M. & Saenz Cortés, H. (2022). *World Protests. A Study of Key Protest Issues in the 21st Century*. Springer Nature.

Pew Research Center (2014). Ideological Placement of Each Source's Audience. In *Political Polarization and Media Habits* (pp. 9–10). Pew Research Center. Online: www.pewresearch.org/wp-content/uploads/sites/8/2014/10/Political-Polarization-and-Media-Habits-FINAL-REPORT-7-27-15.pdf

Piketty, T. (2014). *Capital in the Twenty-First Century.* The Belknap Press of Harvard University Press.

Piketty, T. (2020). *Capital and Ideology.* The Belknap Press of Harvard University Press.

Portos, M. (2021). *Grievances and Public Protests. Political Mobilisation in Spain in the Age of Austerity.* Palgrave Macmillan.

Ragragio, J. (2022a). Framing media populism: The political role of news media editorials in Duterte's Philippines. *Journalism, 23*(6), 1301–1318. Online: https://doi.org/10.1177/1464884920959505

Ragragio, J. (2022b). Mediatized Voices of Science: News Media Narratives of Science and Populism in the Philippines. *Journalism Studies, 23*(7), 781–799. Online: https://doi.org/10.1080/1461670X.2022.2034521

Rak, J. (2021). Framing enemies by the state television: delegitimization of anti-government protest participants during the first wave of the pandemic in Poland. *Journal of Contemporary Central and Eastern Europe, 29*(2–3), 157–175. Online: https://doi.org/10.1080/25739638.2021.2007601

Reveilhac, M. & Morselli, D. (2022). Populism in an Identity Framework: A Feedback Model. *Communication Theory, 32*(1), 88–115. Online: https://doi.org/10.1093/ct/qtab003

Rooduijn, M. (2014). The Mesmerising Message: The Diffusion of Populism in Public Debates in Western European Media. *Political Studies, 62*(4), 726–744. Online: https://doi.org/10.1111/1467-9248.12074

Rooduijn, M. & Pauwels, T. (2011). Measuring Populism: Comparing Two Methods of Content Analysis. *West European Politics, 34*(6), 1272–1283. Online: https://doi.org/10.1080/01402382.2011.616665

Ruth-Lovell, S. P., Doyle, D. & Hawkins, K. A. (2019). *Consequences of Populism Memo for The Guardian's New Populism Project.*

Schaeffer, C. (2019, January 15). Hungary's Workers Are the Victims of a Policy That Limits Migration. *The Atlantic.* Online: www.theatlantic.com/international/archive/2019/01/slave-law-hungary-workers-leaving-migrants/580333/

Schaverien, A. & Cumming-Bruce, N. (2019, June 14). Swiss Women Strike Nationwide to Protest Inequalities. *The New York Times.* Online: www.nytimes.com/2019/06/14/world/europe/switzerland-women-strike.html

Schipper, S. (2017). Social movements in an era of post-democracy: How the Israeli J14 tent protests of 2011 challenged neoliberal hegemony through the production of place. *Social & Cultural Geography, 18*(6), 808–830. Online: https://doi.org/10.1080/14649365.2016.1228115

Spruyt, B., Keppens, G. & Van Droogenbroeck, F. (2016). Who Supports Populism and What Attracts People to It? *Political Research Quarterly, 69*(2), 335–346. Online: https://doi.org/10.1177/1065912916639138

Taber, K. S. (2018). The use of Cronbach's alpha when developing and reporting research instruments in science education. *Research in Science Education, 48*(6), 1273–1296. Online: https://doi.org/10.1007/s11165-016-9602-2

Taggart, P. (2004). Populism and representative politics in contemporary Europe. *Journal of Political Ideologies, 9*(3), 269–288. Online: https://doi.org/10.1080/1356931042000263528

Verseck, K. (2013, March 12). Hungary's parliament 'ends separation of powers'. *Deutsche Welle.* Online: www.dw.com/en/hungarys-parliament-ends-separation-of-powers/a-16665707

Wayne, M. & Murray, C. (2009). U.K. Television News: Monopoly Politics and Cynical Populism. *Television & New Media, 10*(5), 416–433. Online: https://doi.org/10.1177/1527476409334020

Wettstein, M., Esser, F., Schulz, A., Wirz, D. S. & Wirth, W. (2018). News Media as Gatekeepers, Critics, and Initiators of Populist Communication: How Journalists in Ten Countries Deal with the Populist Challenge. *The International Journal of Press/Politics, 23*(4), 476–495. Online: https://doi.org/10.1177/1940161218785979

Weyland, K. (2017). Populism: A political-strategic approach. In C. Rovira Kaltwasser, P. Taggart, P. Ochoa Espejo & P. Ostiguy (Eds.), *The Oxford Handbook of Populism* (pp. 48–73). Oxford University Press.

Wirtz, N. & Kitroeff, N. (2020, November 21). Protesters in Guatemala Set Fire to Congress Building Over Spending Cuts. *The New York Times.* Online: www.nytimes.com/2020/11/21/world/americas/guatemala-budget-protests-congress-fire.html

Yee, V. (2019, November 23). Lebanon Protests Unite Sects in Demanding New Government. *The New York Times.* Online: www.nytimes.com/2019/10/23/world/middleeast/lebanon-protests.html

Zsolt, P., Tóth, T. & Demeter, M. (2021). We are the ones who matter! Pro and anti-Trumpists' attitudes in Hungary. *Journal of Contemporary European Studies, 30*(4), 719–737. Online: https://doi.org/10.1080/14782804.2021.1992362

This page intentionally left blank.

# Contents