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Meme marketing effectiveness: A moderated-mediation model

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ABSTRACT

Underpinned by brand placement literature, associative network theory, and narrative transportation theory, this research examines how meme marketing types (brand prominent and brand subtle) create immersive consumer experiences through narrative transportation and the moderating effects of consumer brand knowledge, meme literacy, and linguistic characteristics (i.e., pronouns) on meme marketing effectiveness. Study 1 (N = 300) confirms that brand prominent meme marketing generates more favourable consumer outcomes (attitude towards ad, customer engagement) and narrative transportation compared to brand subtle meme marketing. Additionally, Study 1 examines the moderating effects of consumer brand knowledge and the mediating role of narrative transportation. Study 2 (N = 300) validates the findings of Study 1 and assesses the mediating role of narrative transportation between brand prominent meme marketing (vs. brand subtle) and outcomes among consumers with varying meme literacy. Brand prominent meme marketing yields profound consumer outcomes and narrative transportation, especially with low brand knowledge. Study 3 (N = 253) confirms the results of Studies 1 and 2 and further introduces a novel linguistic moderator, examining the use of first-person and second-person pronouns within the meme marketing content using a different product category. This study uncovers the influence of second-person pronouns on intensifying narrative transportation. Empirical evidence supports all three moderated mediation models. Overall, this study adds to the knowledge on meme marketing and provides useful insights for designing and targeting effective meme marketing campaigns.

1. Introduction

Internet memes have become the most prominent form of digital content found online (Voigts, 2018) and an innate language of digital culture (Forceville, 2014). Meme marketing, a strategy that leverages the popularity of internet memes, allows brands to seamlessly integrate their brand elements (i.e., brand name, logo, product picture, etc.) into entertaining content to communicate and engage with customers in a naturalistic way. Over the past few years, meme marketing has emerged as a popular social media marketing and advertising communication strategy with remarkable engagement results. For example, according to Paquette (2019), meme marketing results in a 30% engagement rate on social media, compared to 1% on Google AdWords. However, little is known about the underlying mechanisms of meme marketing effectiveness, particularly the factors that can enhance or hinder its impact on consumer attitudes and engagement (Malodia et al., 2022; Razzaq et al., 2023).

Brand placement, a prominent marketing tactic, has experienced significant revenue growth, totalling approximately \$23 billion USD in

2021 (Statista, 2023). As digital media continues to evolve, marketers are constantly seeking new ways to reach wider audiences. Meme marketing, in this context, has surfaced as a new marketing communication strategy in which brands can strategically place or integrate their brand elements into entertaining internet memes to boost engagement. For instance, Wendy's, a popular fast food brand in the USA, experienced a 49.7% surge in customer engagement over social media platforms after implementing meme marketing (Kao et al., 2020).

Although marketing researchers have studied the effectiveness of meme marketing for brand image building (Teng et al., 2022), brand recall (Yang, 2022), and viral marketing (Zhang and Huang, 2022), there exists a knowledge gap in the literature concerning how consumers perceive the placement of brand elements (i.e., brand name, logo, product picture, etc.) within meme marketing content (Malodia et al., 2022). This gap deserves scholarly attention because prior literature has highlighted that brand placements in meme marketing differ from high (prominent) to low (subtle) (Brubaker et al., 2018). Marketers must understand this knowledge to composite the right proportion of brand elements when designing meme marketing campaigns. Furthermore, the

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underlying psychological mechanism of meme marketing that influence consumer attitudes and engagement remain unknown (Razzaq et al., 2023). Examining the psychological mechanics underpinning meme marketing can provide insights into the cognitive processes, such as narrative transportation, underlying customer responses. This will aid marketers in designing meme marketing campaigns that match consumers narrative processing, improving customer engagement. Lastly, there is a dearth of research on the potential boundary conditions that affect the efficacy of meme marketing. Identifying boundary conditions such as brand knowledge, meme literacy, and linguistic characteristics is crucial because engagement and message receptivity increase when meme marketing is designed and targeted to resonate with individual (i.e., consumers brand knowledge, meme literacy) and strategic factors (linguistic) (Razzaq et al., 2023).

Against this background, the present study investigates the impact of two common meme marketing types on attitude towards ad, and customer engagement. The first is called brand prominent meme marketing, while the latter is referred to as brand subtle meme marketing. In accordance with the brand placement literature (Jinyoung Yoo, Choi and Song, 2022), we define the two types of meme marketing by the extent to which the brand is the focus of attention within the media content (i.e., an internet meme). We measure meme marketing effectiveness by focusing on attitudes towards the ad because a key objective of any marketing or advertising communication is to influence consumer attitudes (Watkins et al., 2016). Adding to that, meme marketing serves as an ongoing enactment of customer engagement (Lee et al., 2018), as firms use this marketing technique to encourage social media metrics (e.g., likes and comments). Hence, we measure customer engagement via likes, comments, and tags (Coelho et al., 2016; Kang et al., 2022).

This study aims to fill the gaps in the preceding literature on meme marketing by addressing four important research questions (RQs): **RQ1**. What is the effect of meme marketing types on consumer outcomes (i.e., attitude towards ad, and customer engagement)? **RQ2**. What is the mediating role of narrative transportation in the relationship between meme marketing type and consumer outcomes (i.e., attitude towards ad, and customer engagement)? **RQ3**. What is the moderating role of brand knowledge in the relationship between meme marketing type and consumer outcomes? **RQ4**. What is the moderating role of meme literacy in the relationship between meme marketing type and consumer outcomes? **RQ5**. What is the moderating role of meme marketing linguistic characteristics (i.e., pronouns) in the relationship between meme marketing type and consumer outcomes?

Fig. 1 shows the framework of the study: the effects of meme marketing types, the mediating role of narrative transportation, and the moderating role of brand knowledge, meme literacy, and meme

marketing linguistic characteristics on attitude towards ad, and customer engagement.

To this end, we provide at least four contributions to the broader literature on meme marketing and narrative transportation. First, we highlight the differential effects of two meme marketing types on consumer outcomes, thereby enriching our understanding of how the nuanced integration of brand elements within meme marketing can result in more favourable consumer attitudes and engagement. Second, drawing on narrative transportation theory (Green and Brock, 2000), we provide a theoretical explanation for the distinct effects of brand prominent and brand subtle meme marketing on narrative transportation by shedding light that the presence of explicit brand cues in brand prominent meme marketing captures audience attention and stimulates cognitive and emotional responses, leading to increased narrative transportation. A lot of research has been done on how advertisements in conventional media can elicit narrative transportation (Cao et al., 2021; Kang et al., 2020; Kim et al., 2016). Little research has been conducted on how narrative transportation can be achieved through an image or picture-based content (Grigsby et al., 2022), such as meme marketing. This is critical since modern marketers prefer image-based content over text-based content on social media platforms such as Instagram and Facebook (van Enschot et al., 2022).

Third, by incorporating associative network theory (Keller, 1993), resource matching hypothesis (Larsen et al., 2004), and self-referencing (Vesanen, 2007), our study advances theoretical understanding of meme marketing and provides new insights into how the moderation of subjective (i.e., brand knowledge and meme literacy) as well as strategic factors (i.e., pronouns) influence narrative transportation. This will deepen our understanding of how meme marketing types can be designed in accordance with consumers' brand knowledge level to trigger a process of spreading activation (i.e., brand memory retrieval) and aligned with target audience meme literacy (i.e., ability to comprehend the symbolic meaning of memes) level to foster greater narrative transportation (Verhellen et al., 2016). Likewise, this will shed light on how the linguistic elements can be strategically harnessed to establish a direct and personal connection between customers and meme marketing content, which, in turn, serves to amplify narrative transportation and consumer attitudes (Merchant and Rose, 2013).

Lastly, we empirically demonstrate that the mediation of narrative transportation between brand prominent meme marketing (vs. brand subtle) and consumer attitudes towards ad, and customer engagement is subject to consumer brand knowledge, meme literacy, and linguistic characteristics. This empirical evidence strengthens the theoretical foundation of meme marketing by demonstrating the significance of considering individual (i.e., brand knowledge and meme literacy) and

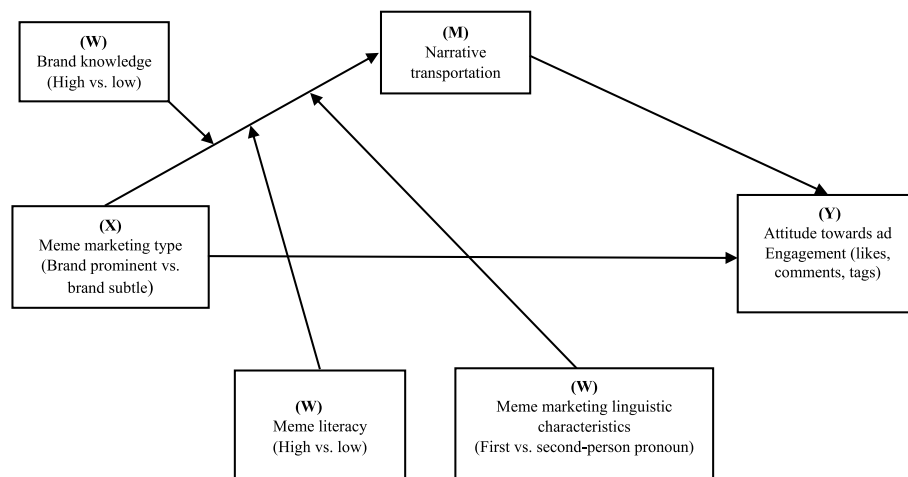


Fig. 1. Conceptual framework.

strategic factors (linguistic) as influential boundary conditions that can enhance or diminish the effectiveness of meme marketing. This insight expands the knowledge base by incorporating individual-level variables and tactical elements that influence the effectiveness of meme marketing, moving beyond a one-size-fits-all approach.

The subsequent sections include a review of relevant literature and the formation of hypotheses, followed by the study design of three experiments, a discussion of the findings, theoretical contributions, implications of the research, limitations, and future research directions.

2. Theoretical background and hypothesis development

2.1. Meme marketing types

To distinguish the two types of meme marketing, we draw insights from brand placement literature (Corkindale et al., 2023). Brand placement is the marketing technique of inserting brand identifiers or elements (brand name, logo, etc.) within entertaining media content (TV, radio, film, music videos, video games) to engage elusive (i.e., marketing-savvy) consumers (Russell, 2019). Studies on visual attention and brand placement have examined the effect of prominent as well as subtle brand placements with a variety of variables, such as product or logo size (Van Reijmersdal, Rozendaal and Buijzen, 2012), placement location (Gupta and Lord, 1998), modality (i.e., whether the place is visual or auditory) (Cowley and Barron, 2008), and the frequency of mentioning textual or visual brand identifiers (Matthes et al., 2007).

Brand prominence is the degree to which the media content contains the level of display or placement of visual and textual brand identifiers (Harms et al., 2017). Increased levels of visual and verbal references to a brand increase its prominence (Russell, 2002). Among the various aforementioned brand placement variables, this study particularly focuses on the frequency of mentioning textual or visual brand elements as a reference point to distinguish brand prominent meme marketing from brand subtle meme marketing (Grigsby et al., 2022). The focus on the frequency of mentioning brand elements stems from the recognition that meme marketers already employ these textual and visual brand identifiers on social media (Brubaker et al., 2018), and it also offers a clear and measurable indicator, facilitating a more precise examination of its impact on consumer attitudes and engagement. Accordingly, brand prominent meme marketing exhibits frequent mention of the textual and visual brand elements (i.e., making the brand more visible), whereas brand subtle meme marketing does not frequently mention the brand elements (i.e., making the brand less visible). By examining how the current practise of embedding prominent vs. subtle brand elements into meme marketing influences consumers responses and narrative transportation (Brubaker et al., 2018), this study aims to determine effective meme marketing design characteristics that have a favourable impact on consumer attitudes and engagement.

2.2. Meme marketing and narrative transportation

Meme marketing comes under the realm of commercial stories because it follows a marketing and communication objective (i.e., convey brand intentions to persuade and engage customers) (Razzaq et al., 2023). Narrative transportation theory describes how people are immersed in a story or transported into a narrative world and how the story may affect their real-world beliefs as a result (Green and Brock, 2000). Using narrative transportation theory as a backdrop, we contend that meme marketing is a form of visual storytelling because it includes the following essential narrative elements (see Table 1). First, meme marketing entails a plot (i.e., a temporal sequence of events), in which brand stories are given a clear structure, connecting the beginning and finish into a coherent and meaningful brand narrative (de Saint Laurent, Glăveanu and Literat, 2021). The plot of a story affects narrative transportation to the extent that it evokes mental imagery (Escalas, 2004). We expound that meme marketing depicts various brand

Table 1

An explanation of meme marketing using narrative transportation elements.

Narrative elements in meme marketing	Example
<ul style="list-style-type: none"> Plot: A person returning home (beginning of plot). Skipping home chores [i.e., changing clothes, doing laundry, emptying dishwasher (middle of plot). Eat Ruffles (end of plot)]. Depicted movement: The implied motion (stretched legs) induced by the characters of the meme generate a perception of time sequence (chronology), enabling transportation-imagery. Character: This meme is called "skipping stairs."¹¹ Identifiable meme character. Outcome: Ruffles is are tasty that eating them overpowers all other necessary chores. Narrative person or voice: First person pronoun (me), facilitating personification, mental imagery, and narrative transportation. 	 <p>Brand: Ruffles</p>

experiences that let the consumer actively imagine, leading to greater evocation of mental imagery. Meme marketing portrays varying imaginative consumption experiences both retrospectively (i.e., past imagery) and prospectively (i.e., future imagery), facilitating transportation imagery (Van Laer, De Ruyter, Visconti and Wetzels, 2014).

Second, meme marketing includes various characters playing roles in the plot. Internet memes entail a variety of characters conveying information relating to the brand or the customer. Often these characters are identifiable across social media space (e.g., Success Kid, Drake Yes-No, Doge, Shiba Inu, Salt Bae, Bernie Mittens, etc.), surging consumer narrative transportation (Van Laer et al., 2014). Third, a lot of the characters in meme marketing depict motion. The perception of movement is linked to the activation of the superior temporal sulcus region of the brain, which is responsible for social perception (Allison et al., 2000). Importantly, when viewing depicted movement in meme marketing, the same region of the brain that senses real movement is activated (Cian et al., 2014). Thus, consumers can not only detect movement automatically but also imagine the result of depicted movement by referring to their relevant movement schema (Freyd, 1983). Furthermore, depicted movement triggers dynamic imagery, which occurs when consumers impulsively imagine the outcomes of depicted movement from a static image (Cian et al., 2014). According to existing literature on narrative transportation (Grigsby et al., 2022), imaginative motion results in narrative transportation, followed by improved customer evaluations and attitudes.

Fourth, even when meme marketing does not depict a motion, it employs another narrative transportation-inducing element called anthropomorphism. To boost engagement, meme marketing employs the visual rhetoric strategy of anthropomorphism (i.e. the attribution of human-like physical or inner mental states or emotions to lifeless objects) (Razzaq et al., 2023). Assigning human characteristics to non-human objects increases attention and cognitive resources (Guido et al., 2019), which are necessary for narrative transportation.

Fifth, meme marketing consists of an outcome or climax revealing the underlying brand communicative intention (i.e., assertive, directive, expressive) as per the brand objective (e.g., inform, call to action, express emotion) to deliver value and boost customer engagement (Razzaq et al., 2023). Lastly, meme marketing incorporates a key storyteller element called narrative person or voice (i.e., first vs. second vs. third person narrative), influencing communication effectiveness (Peräkylä et al., 2015). Meme marketing is replete with first-person pronouns (i.e.,

I or me), second-person pronouns (you or your), and third-person pronouns (Ngo, Northey, Tran, & Septianto) (Putra and Triyono, 2016), enhancing consumer personification and narrative transportation (Pachucki et al., 2022).

2.3. The effect of meme marketing types on consumer outcomes

This study proposes that brand prominent meme marketing (vs. brand subtle) is more effective in generating favourable attitude towards ad, and customer engagement. Attitude towards ad is defined as the propensity to respond favourably or unfavourably to a specific advertising stimulus during a specific exposure or situation (MacKenzie et al., 1986). A person's favourable or unfavourable attitude towards ad, in turn, influences their attitude towards what is being advertised (Yang et al., 2020), and it may include both affective and cognitive judgements (Hamelin et al., 2017). Moreover, the level of connection, involvement, and participation of customers with a brand or its content on social media platforms is referred to as customer engagement (Zheng et al., 2022). In the context of this study, customer engagement is measured using three behavioural responses: likes, comments, and tags because these digital behavioural metrics are considered crucial in predicting the effectiveness of marketing communication (Xiao et al., 2023).

Brand prominent meme marketing explicitly features brand elements capturing audience attention, allowing consumers to quickly associate the meme with the advertised brand, thus positively influencing consumer attitudes and engagement (Guo et al., 2019). Brand subtle meme marketing, on the other hand, obscurely features brand elements, which leads to less consumer attention, impeding cognitive processing and brand recognition, resulting in less favourable consumer attitudes and engagement (Van Berlo, Van Reijmersdal and Waiguny, 2023).

Existing brand placement research has exhibited that prominent brand placements have a greater effect size on consumer attitudes than subtle placements when the brand is trying to evoke mental imagery or plot-connect story elements (Babin et al., 2021). Given that meme marketing communicates relatable emotional brand experiences, immersing the audience in an imaginary world. Brand prominent meme marketing in this regard will attract more consumer attention/interest, offering an enhanced narrative processing opportunity, which, in turn, forms a more favourable attitude towards ad, and customer engagement compared to brand subtle meme marketing. Thus, we hypothesize the following.

H1. Brand prominent meme marketing (vs. brand subtle meme marketing) will result in more favourable (a) attitudes towards ad, and (b) customer engagement.

2.4. Varied effects of meme marketing types on narrative transportation

The differing effects of meme marketing types (brand prominent vs. brand subtle) on narrative transportation can be explained through the lens of transportation theory (Green and Brock, 2000). Transportation theory posits that transportation is facilitated by narrative elements that capture the audience's emotions and cognitive processes (Yildiz and Sever, 2022). In the context of brand prominent meme marketing, prominent brand elements draw immediate attention and serve as explicit cues to establish an association between meme narrative and brand. These prominent cues have the ability to stimulate increased cognitive processing and emotional engagement (Hamby et al., 2023). Prior research has shown that prominent placements have a greater

impact on narrative transportation than subtle placements (Yang and Roskos-Ewoldsen, 2007). This is because prominent placements catch audience attention, giving prominent brand placements a narrative processing edge over subtle placements and thereby immersing the audience in a narrative world (Song et al., 2023).

On the other hand, brand subtle meme marketing may demand a higher level of interpretation due to the absence of explicit brand cues in order to recognise an association between meme narrative and brand. As a result, cognitive processing and emotional engagement may be lowered, leading to reduced narrative transportation. Consistent with this, it has been demonstrated that brand prominence enhances narrative transportation and subsequent brand attitudes (Storm and Stoller, 2015). Hence, we put forward the following hypothesis.

H2. Brand prominent meme marketing (vs. brand subtle meme marketing) has a greater effect on narrative transportation.

2.5. Brand knowledge and its interaction with meme marketing types

Brand knowledge refers to the awareness and understanding of a specific brand in the minds of consumers. Brand knowledge is a crucial factor in brand placement effectiveness (Martí-Parreño et al., 2017) because consumers with high (vs. low) brand knowledge possess a well-developed understanding of the brand, making them more attentive to brand placements. This heightened attention and processing can lead to stronger brand recall, comprehension, and overall effectiveness of the placement (Davtyan and Tashchian, 2022; Natarajan et al., 2018). Moreover, high (vs. low) brand knowledge acts as a priming mechanism, facilitating the activation of brand-related associations and positively influencing the effectiveness of brand placements (Chan, 2022). An interaction effect of brand knowledge and meme marketing types on narrative transportation is expected because brand knowledge level can positively impact the benefits of brand placement on narrative transportation (Erfgen et al., 2015).

Human memory, according to the associative network theory, is a network of interconnected nodes that activate one another in relevant contexts. Dens and De Pelsmacker (2010) define brand knowledge as a node in memory to which multiple associations are linked, constituting the brand's associative network. The extent of retrieval in memory is determined by a spreading activation process from node to node. The information activated in memory by a brand's knowledge (i.e., its associative network) serves as the foundation for evaluative judgements. High brand knowledge level enhances the relevance and meaningfulness of the message via the spreading activation process, leading to increased narrative transportation (Eng and Jarvis, 2020). In the case of high brand knowledge, there will be no significant difference in the narrative transportation among brand prominent and subtle meme marketing because customers can draw on their knowledge or memory to compensate for the absence of prominent brand cues in the case of brand subtle meme marketing. As such, the level of interpretation required remains the same in both types of meme marketing, leading to a similar level of narrative transportation.

Contrary to this, low brand knowledge typically triggers more extensive elaboration than high brand knowledge because individuals lack pre-existing brand associations; hence, they exert more cognitive effort to understand and evaluate the brand-related content encountered (Campbell and Keller, 2003; Sujan 1985). When customers do not possess a high level of brand knowledge, they will have to rely on the brand placement cues within the meme marketing types. Brand prominent meme marketing with more visible brand cues will make it easier to connect the brand to the narrative, aiding information processing and interpretation, hence being more effective in enhancing narrative transportation compared to brand subtle meme marketing. As per associative network theory (Keller, 1993), associations aroused by the brand prominent meme marketing would establish new 'nodes' in the brand's associative network for consumers with low brand knowledge.

¹ **Skipping stairs** refers to a meme showing a person stretching his legs over several steps in a set of stairs. The person or character is labelled one character or and the stairs are labelled different steps in a path, showing the character's willingness to jump to the end of the path. Retrieved from (www.knowyoumeme.com).

In other words, prominent cues within brand prominent meme marketing will imbue meaning into a low knowledge brand. Therefore, it is expected that individuals with low brand knowledge will experience greater narrative transportation when exposed to brand prominent meme marketing (vs. brand subtle). State formally.

H3. The effect of brand prominent meme marketing (vs. brand subtle meme marketing) on narrative transportation is greater when brand knowledge is low. Such difference will not occur when brand knowledge is high.

2.6. The mediation of narrative transportation and moderation of brand knowledge

Narrative transportation induced by meme marketing via narrative elements of plot, character, depicted motion, outcome, and voice will positively impact consumer beliefs, attitudes, and intentions (Brechtman and Purvis, 2015; Chiu et al., 2012). Previous literature has shown that narrative transportation reduces counterarguments, which favourably impacts attitudes towards ad (Cao et al., 2021; Muralidharan and Kim, 2019), and customer engagement (Pachucki et al., 2022). According to transportation theory (Green and Brock, 2000), the combination of narrative elements increases attention, imagery, and emotions, facilitating narrative-based processing and enabling consumers to immerse themselves in a narrative world. That is, the impact of meme marketing types on consumer attitudes and engagement depends on the degree to which the consumer is narratively transported.

However, this underlying psychological mechanism varies as a function of consumer brand knowledge. Consumer brand knowledge is a well-established construct in marketing and has been recognised as a key determinant of attitude towards ad, and customer engagement (Rossiter, 2014). The meme marketing execution typology proposed by Razzaq et al. (2023) highlights the pivotal role of subjective brand knowledge for meme marketing effectiveness. We believe that exploring how consumer brand knowledge interacts with meme marketing types (i.e., prominent vs. subtle) provides valuable insights into the complex interplay between brand knowledge level (i.e., high vs. low) and meme marketing outcomes. Moreover, consumer brand knowledge and narrative transportation are interrelated factors because brand knowledge affects the degree to which individuals are narratively transported (Hamby et al., 2023). Critically, consumers with varying levels of brand knowledge may engage differently with meme marketing narratives, resulting in distinct consumer outcomes.

As discussed above, we propose that consumers with low brand knowledge are more likely to rely on brand cues (prominent or subtle) to learn about the brand. In that case, the more the brand is prominent, the easier the associations from the meme narrative will transfer to the brand (Kamleitner and Khair Jyote, 2013). Prominent placements in the context of low brand knowledge raise brand visibility and make it easier to associate the brand with the narrative, enhancing the effect of narrative transportation on consumer evaluations (Verhellen et al., 2016). Additionally, prominent meme marketing (vs. brand subtle) repeatedly mentions visual and textual brand identifiers, which provides an opportunity for consumers with low brand knowledge to link the different elements of the story to the brand, resulting in a richer set of (positive) associations that could eventually improve consumer attitudes and engagement. Finally, since individuals with low brand knowledge are less familiar with the brand and its persuasive practices, brand prominent meme marketing is less likely to activate persuasion knowledge, compared to individuals with high brand knowledge. Thus, we propose the following hypothesis.

H4. There will be a significant moderated mediation effect, such that brand prominent meme marketing (vs. brand subtle meme marketing) will have a greater effect on narrative transportation, leading to greater (a) attitude towards ad, and (b) customer engagement, when brand knowledge is low. However, such differences will not occur when brand

knowledge is high.

2.7. The mediation of narrative transportation and moderation of meme literacy

The definition of meme marketing proposed by Razzaq et al. (2023) underscores the significance of meme literacy (contextual knowledge) for meme marketing effectiveness. Meme literacy is the ability of an individual to understand the symbolic values and implicit meanings adhering to the texts and images of internet memes circulating online. Internet memes contain certain verbal clauses and symbols that require sophisticated internet meme contextual knowledge. Previous studies have demonstrated that contextual knowledge is a precondition for the comprehension of internet memes (meme literacy; Burgess, 2008; Milner, 2016; Miltner, 2014). The unfamiliarity of people with internet memes and their contextual knowledge makes it hard to understand them (Lin et al., 2014). Meme literacy not only aids in the comprehension of internet memes, but it also serves as a gatekeeper, indicating that an individual is a member of the global meme community who is “in the know” about digital meme culture (Milner, 2012).

The inclusion of meme literacy as a moderator was based on its distinct pertinence within the realm of meme marketing (Razzaq et al., 2023). There are several factors content-related (i.e., iconicity and humour) and customer-related (i.e., escapism, social gratification, and content gratification) factors (Malodia et al., 2022), that could potentially impact the effectiveness of meme marketing. However, meme literacy emerged as a critical factor within the landscape of internet meme culture because memes comprise different symbolic verbal clauses (e.g., That Feeling When², You vs. The Guy She Tells You Not to Worry About,³ How it Started vs How it’s Going,⁴ etc.) and visuals (e.g., Ice-Bucket Challenge,⁵ Doge,⁶ Success Kid,⁷ LOLcats,⁸ Grumpy Cat,⁹ etc.) that require sophisticated internet meme-specific contextual knowledge to understand the symbolic meanings (Glitsos and Hall, 2019). This is also evident from the study of Shifman (2014, p. 100), who found that different internet memes require different types of meme literacy (high vs. low) to decode the intended meaning. Further, meme

² That feeling when usually begins the emotional outreach and is sometimes followed by a redundant *when*. A description of some not-so-everyday situation is typed that expresses how the writer feels. Retrieved from: <https://www.merriam-webster.com/wordplay/what-does-tfw-mean-that-feeling-when>.

³ You vs. The Guy She Told You Not to Worry About internet meme compare two subjects or fictional characters side-by-side, with the one on the right being the more desirable of the two. Retrieved from: <https://knowyourinternetmeme.com/internetmemes/you-vs-the-guy-she-told-you-not-to-worry-about>.

⁴ How It Started vs. How It’s Going refers to a two sequential images labelled under the text, “How it started,” and, “how it’s going.” This internet meme is applied to broad categories, such as self-improvement posts, and ironic parodies of relationship posts. Retrieved from: <https://knowyourinternetmeme.com/internetmemes/how-it-started-vs-how-its-going>.

⁵ Ice Bucket Challenge is a dare game in which the participant must pour a bucket of ice water over his or her head and nominate any three individuals to perform the same challenge within the next 24 h. Retrieved from: <https://knowyourinternetmeme.com/internetmemes/ice-bucket-challenge>.

⁶ Doge is a slang term for “dog” that is primarily associated with pictures of Shima Inus. This internet meme is photoshopped to change the dog’s face and captioned with different texts. Retrieved from: <https://knowyourinternetmeme.com/internetmemes/doge>.

⁷ Success Kid is a reaction internet meme of a baby at a beach with a smug facial expression. Retrieved from: <https://knowyourinternetmeme.com/internetmemes/success-kid-i-hate-sandcastles>.

⁸ LOLcats are image macros consisting of humorous photos of cats with superimposed text written in a form of broken English. Retrieved from: <https://knowyourinternetmeme.com/internetmemes/lolcats>.

⁹ Grumpy Cat is an internet meme of an annoyed cat facial expressions. Retrieved from: <https://knowyourinternetmeme.com/internetmemes/grumpy-cat>.

literacy and narrative transportation are intrinsically related because consumers' ability to understand and process internet memes (meme literacy) impacts their immersion in meme marketing narratives and will subsequently affect their attitudes and engagement.

Since the efficacy of meme marketing hinges on the receiver's capability to express an up-to-date literacy about internet meme culture (Segev et al., 2015). Therefore, its effectiveness will be disparate among consumers with different levels of meme literacy (high vs. low). According to the resource matching hypothesis, elaboration to process the narrative increases if the receiver has the required resources (Larsen et al., 2004). In the context of meme marketing, the required resource is the level of meme literacy (Highfield and Leaver, 2016), which depicts the individual's capability to adequately process the meme marketing information. Moreover, the extended transportation-imagery model also supports the notion of contextual cultural knowledge as a prerequisite to processing and understanding the narrative presented in the story (Van Laer et al., 2014). As such, to immerse themselves in a narrative world, consumers require high meme literacy to develop meaningful plot connections between brand elements and internet memes implicit socio-cultural symbolic meanings.

When customers possess a high level of meme literacy, brand prominent meme marketing (vs. brand subtle) will not only catch audience attention (due to explicit brand elements) but also provide the ability to process and understand the narrative contained in the meme, thereby facilitating narrative transportation (Song et al., 2023). In contrast, a low level of meme literacy will leave the customer wondering about what the brand is trying to communicate (Razzaq et al., 2023), irrespective of the meme marketing type, constraining their imagination of the story plot. Specifically, we expect that when meme literacy is low, the impact of brand prominent meme marketing on narrative transportation and subsequent consumer attitudes and engagement will be diminished, leading to less differentiation between the two types of meme marketing. Following this reasoning, we expect that when meme literacy is high, the impact of brand prominent meme marketing (vs. brand subtle) on narrative transportation will be more pronounced, leading to more favourable attitudes and higher levels of engagement. In contrast, such differences, however, will not exist when meme literacy is low. Therefore, we suggest the following hypothesis.

H5. There will be a significant moderated mediation effect, such that brand prominent meme marketing (vs. brand subtle meme marketing) will have a greater effect on narrative transportation, leading to greater (a) attitude towards ad, and (b) customer engagement, when meme literacy is high. However, such differences will not occur when meme literacy is low.

In summary, both brand knowledge and meme literacy are individual-level moderators that shape how consumers respond to meme marketing. They are interconnected in the sense that they both influence the degree of narrative transportation experienced by consumers, ultimately impacting their attitudes and engagement with meme marketing. Since both brand knowledge and meme literacy are individual-level moderators, we introduce a strategic-level moderator called "meme marketing linguistic characteristic." This strategic-level moderator examines the use of first-person and second-person pronouns in meme marketing to gain insights into consumer responses.

2.8. The mediation of narrative transportation and moderation of meme marketing linguistic characteristics

Apart from the dispositional characteristics, this study further investigates meme marketing effectiveness on the basis of the linguistic characteristics being employed within the meme content. Specifically, how the use of singular pronouns (first vs. second-person) affects meme marketing effectiveness. The study of Razzaq et al. (2023) highlighted that meme marketing often employs personal pronouns for personalisation, relatability, and to convey feelings and emotions. Personal

pronouns are employed as communication engagement markers, either to concentrate readers' attention or to incorporate them as discourse participants (Al-Subhi, 2022).

Previous research has demonstrated that minor variations in language usage can impact consumers' motivation (Patrick and Hagtveldt, 2012), word-of-mouth (Aletti et al., 2019), and responses to marketing communication (Sela et al., 2012). While marketing scholars demonstrate that pronouns influence consumer behaviour in a variety of traditional contexts, including advertising (Kronrod and Danziger, 2013), online consumer reviews (Ludwig et al., 2013), and servicescapes (Touchstone, Koslow, Shamdasani, & D'Alessandro, 2017), we extend this investigation to meme marketing. Meme marketing is distinct in its informal and often humorous nature, relying heavily on textual and visual elements to convey brand messages. This context presents unique challenges and opportunities for marketers, making it important to investigate how pronouns operate within this specific medium.

While prior studies have mostly examined the impact of first-person and third-person pronouns (Labrecque et al., 2020; Lee and Oh, 2021), our research aims to explore the effects of first-person and second-person pronouns due to their widespread usage in meme marketing (Razzaq et al., 2023). The utilisation of second-person pronouns in meme marketing is a prevalent technique that actively involves the reader, hence fostering a heightened sense of personalisation (Cruz et al., 2017). Our reasoning is consistent with the unique nature of meme marketing, in which personalisation is a major driver of immersion. Hence, we posit that the examination of first-person and second-person perspectives within the realm of meme marketing holds significance and merit in comprehending the distinct linguistic attributes that foster narrative transportation and engagement.

Marketing research suggests that content that is personally relevant to consumers tends to be more persuasive (Chu et al., 2022; Santos et al., 2023). When second-person singular pronouns (e.g., you) are used in marketing messages, they directly address the customer, creating a sense of personal relevance (Schoenmakers et al., 2023). The use of second-person pronouns has the capacity to alter the perception of the recipient from a general audience or an abstract entity to the reader as an individual human being engaging with the marketing content (Cruz et al., 2017). Contrary to this, first-person singular pronouns (e.g., I, me) activate a low level of self-referencing among the recipients because they communicate the internal states of the sender or the brand and are therefore less relevant to the viewer (Fennis and Wiebenga, 2017).

Self-referencing is a psychological phenomenon in which people link new information or stimuli to themselves and their past experiences (Vesonen, 2007). Because the self is complex, its activation requires the use of certain linguistic cues (i.e., pronouns) that can establish linkages between words and our memory. Addressing customers directly through second-person pronouns and introducing retrospective (i.e., past) and prospective (i.e., future) brand experiences to which customers can relate facilitates the activation of self-related thoughts. Second-person pronouns prompt individuals to mentally place themselves in the scenario described in the meme marketing content. This personal involvement can intensify the feeling of being transported into the narrative, as it becomes easier for viewers to imagine themselves as the central character or subject of the story (Fennis and Wiebenga, 2017). Moreover, as per narrative transportation theory (Perkins and Forehand, 2012), the use of second-person pronouns in marketing provides a self-referencing cue to the customer in building a self-related narrative of oneself, resulting in more immersion. When meme marketing uses first-person pronouns, it may not facilitate narrative transportation as effectively because the narrative is centred around the brand rather than the customer. This might lead viewers to perceive the content as less relevant to their own experiences and reduce their inclination to engage with the narrative (Merchant and Rose, 2013), resulting in lower immersion with the meme marketing message.

When a second-person pronoun is used, brand prominent meme marketing (vs. brand subtle) will not only grab audience attention (due

to explicit brand elements) but will also create a direct and personal connection between the viewer and the content. This personalisation can enhance narrative transportation by making customers feel like they are part of the story or message. As a result, they may become more engaged with the meme marketing content and develop a more positive attitude towards the ad. In contrast, when the first-person pronoun is used (e.g., “I” or “we”), the focus is on the brand or marketer themselves. This may shift the viewer’s attention away from the narrative, reducing the level of narrative transportation. Consequently, this reduced narrative transportation might result in less favourable attitudes towards the ad and customer engagement. This perspective can make customers feel like passive observers rather than active participants in the meme marketing narrative. Building upon this rationale, we anticipate that when second-person pronouns are used linguistically, the effect of brand prominent meme marketing (vs. brand subtle) on narrative transportation will be more pronounced, leading to more favourable attitudes and customer engagement. In contrast, these differences will not exist in the case of a first-person pronoun.

H6. There will be a significant moderated mediation effect, such that brand prominent meme marketing (vs. brand subtle meme marketing) will have a greater effect on narrative transportation, leading to greater (a) attitude towards ad, and (b) customer engagement, when second person-pronoun is used. However, such differences will not be observed in the presence of a first-person pronoun.

3. Overview of studies

We conducted three experimental investigations to rigorously test our hypotheses. Study 1 focused on examining H1 to H4, which collectively explore the influence of meme marketing types (brand prominent vs. subtle), narrative transportation, and the moderating role of consumer brand knowledge, on consumer outcomes (i.e., attitude towards ad, and customer engagement). Study 2 aimed to validate the findings from Study 1 related to H1 and H2 and test H5 to confirm the mediating role of narrative transportation between brand prominent meme marketing (vs. brand subtle) and outcomes among consumers with varying meme literacy. Furthermore, Study 3 serves to corroborate the results of Studies 1 and 2 concerning H1 and H2. In addition to this, Study 3 introduces a novel linguistic moderator (i.e., H6), which examines the use of first-person and second-person pronouns within meme marketing content while employing a different product category.

As food and beverage brands, we used two real-world cookie brands, Oreo and Hydrox in Study 1 and KFC in Study 2, because meme marketing is more prevalent in the food and beverage industry (Razzaq et al., 2023). To enhance the generalizability of findings, we utilised a different product category brand (i.e., GUCCI watch) for Study 3. In terms of the meme templates, we used a meme template called “Galaxy Brain” in Study 1 and “Draw 25” in Study 2. To gain knowledge about both memes, we consulted knowyourmeme.com, the largest online directory for internet memes. After attaining sophisticated knowledge about memes, we added brand elements (i.e., brand name, product picture, etc.) to the respective meme template from high (brand prominent) to low (brand subtle) by using a free online meme creator platform called [imgflip](http://imgflip.com).

We recruited participants located in the U.S. from Prolific (Study 1, 2, and 3). Prolific is a reliable crowd-working platform for online experiments in the field of social science (Palan and Schitter, 2018). To ensure the quality of the data, we employed the following pre-screening criteria: (1) location in the U.S.; (2) at least a 97% approval rate; and (3) a minimum 500 previous submissions.

4. Study 1

4.1. Method

Study 1 employed a single-factor (meme marketing type: brand prominent vs. brand subtle) between-subject experimental design for testing H1 and a 2 (meme marketing type: brand prominent vs. brand subtle) × 2 (brand knowledge: high vs. low) between-subjects experimental design for examining H2 and H3 respectively. Study 1 comprised of 300 participants (55% females, Mage = 33.45, SD = 12.45) located in the US from Prolific. The study reveals a diverse age range, with 27.7% aged 15–25, 40.2% aged 25–35, 18% aged 35–45, and 14.1% aged 45 and above. In terms of education, 19.8% completed high school, 29.7% held bachelor’s, 24.6% master’s, 4.9% Ph.D., and 20.9% received trade school training.

4.2. Stimuli

Four stimuli with manipulated meme marketing types (brand prominent vs. brand subtle) and brand knowledge levels (high vs. low) were created (see Appendix A). In terms of brand prominent meme marketing, brand placement was manipulated by frequently mentioning the brand name textually within the meme and product picture (i.e., more visual and textual brand identifiers), whereas brand subtle meme marketing was manipulated by textually mentioning brand name less frequently along with no product picture (i.e., less visual and textual brand identifiers). This manipulation method was derived from previous research (Avramova et al., 2018; Grigsby and Mellema, 2020). Brand knowledge was manipulated by using Oreo in high brand knowledge and Hydrox in low brand knowledge. The high brand knowledge condition featured Oreo because it is a well-known brand and respondents are more likely to have encountered it through advertising or personal experience. Hydrox was assigned to the low brand knowledge condition because respondents will have few interactions with the brand. The study of Li et al. (2022) used identical brand knowledge manipulation procedure.

4.3. Measures

Meme marketing type, the categorical independent variable, was manipulated by showing two different stimuli. Brand knowledge as a categorical variable was manipulated as well. To measure narrative transportation, we used 8 items from the being hooked scale of Escalas (2004) on a 7-point Likert scale (1 = strongly disagree, 7 = strongly agree) which showed reasonable reliability [$\alpha = 0.87$]. This scale is often applied to access consumer narrative transportation (Pachucki et al., 2022). Attitude towards ad was measured using three seven-point semantic differential scales from the study of Lutz et al. (1983) (1 = very bad, 7 = very good; 1 = very unfavourable, 7 = very favourable; 1 = strongly negative, 7 = strongly positive) [$\alpha = 0.82$]. Customer engagement (likes, comments, and tags) was measured using 4 items adopted from the study of Shehu et al. (2016) (1 = very unlikely, 7 = very likely) [$\alpha = 0.85$]. Appendix B contains the items, factor loadings, descriptive statistics, and detailed measurement results for Study 1.

Humour is the main characteristic of meme marketing. Different types and styles of humour, such as bizarre jokes, dark humour, exaggeration, quirky content, parody, puns, sarcasm, self-deprecating jokes, and silliness, are employed in meme marketing (Razzaq et al., 2023). Therefore, we control the effects of need for humour using the 12-item scale of Picard and Blanc (2013) (1 = strongly disagree, 7 = strongly agree). Similarly, consumer transportability is the individual’s chronic predisposition to be transported, which operates independently of any specific narrative or genre (Huang et al., 2018). Hence, to eliminate the possible influence of consumer transportability, we control its effects by adopting the 6-item consumer transportability scale of Dal Cin, Zanna, and Fong (2004) (1 = strongly disagree, 7 = strongly agree).

4.4. Results

4.4.1. Manipulation checks for meme marketing types and brand knowledge

To check if meme marketing types and brand knowledge were successfully manipulated, we conducted an independent sample *t*-test ($N = 121$) with two-item measures for meme marketing types: "To what extent could you identify the presence of a brand in this meme?" (1 = no presence, 5 = very high presence), "To what extent were the brand logo and brand name visible in this meme?" (1 = not visible, 5 = very highly visible) and three-item measures for brand knowledge: "To what extent are you familiar with the brand depicted in this meme?" (1 = not at all familiar, 5 = very highly familiar), "To what extent have you purchased the brand's product shown in this meme?" (1 = not at all, 5 = very often), "How knowledgeable are you about the brand shown in this meme?" (1 = not knowledge at all, 5 = very knowledge). As expected, participants in the brand prominent meme marketing condition perceived greater brand prominence as compared to those in the brand subtle meme marketing condition ($M_{\text{prominent}} = 3.06$ vs. $M_{\text{subtle}} = 2.36$, $t(119) = 4.16$, $p < .05$). In addition, an independent sample *t*-test revealed that participants in the high brand knowledge condition have greater brand knowledge as compared to those in the low brand knowledge condition ($M_{\text{oreo}} = 3.42$ vs. $M_{\text{hydrox}} = 1.47$, $t(119) = 12.93$, $p < .01$). So, meme marketing type and brand knowledge manipulations were successful.

4.5. Hypothesis testing (H1)

The results of a series of ANCOVA with the need for humour as a covariate revealed that participants in the brand prominent meme marketing condition showed a significantly higher level of attitude toward ad ($M_{\text{prominent}} = 5.39$, $SD = 1.12$ vs. $M_{\text{subtle}} = 4.14$, $SD = 1.35$, $F(1,296) = 9.62$, $p < .001$), and customer engagement ($M_{\text{prominent}} = 5.57$, $SD = 1.62$ vs. $M_{\text{subtle}} = 4.96$, $SD = 1.18$, $F(1,296) = 7.95$, $p < .005$), than those in the brand subtle meme marketing condition (see Fig. 2). Thus, H1 was supported. More precisely, as predicted in H1, planned contrasts show that participants in the brand prominent meme marketing condition exhibit significantly higher levels of attitude toward ad ($M_{\text{prominent}} = 5.66$, $SD = 1.34$) compared to those in the brand subtle meme marketing condition ($M_{\text{subtle}} = 4.01$, $SD = 2.34$), $t(146) = 4.68$, $p < .01$). Similarly, participants in the brand prominent meme marketing condition revealed significantly higher levels of customer engagement ($M_{\text{prominent}} = 5.82$, $SD = 1.41$) compared to those in the brand subtle meme marketing condition ($M_{\text{subtle}} = 4.43$, $SD = 1.29$), $t(146) = 4.91$, $p < .01$). Fig. 2 represents the mean of attitude towards ad and customer engagement with the standard deviation (SD) error bar at different meme marketing types.

4.6. Hypothesis testing (H2–3)

To examine H2 and H3, a 2 (meme marketing type: brand prominent vs. brand subtle) \times 2 (brand knowledge: high vs. low) analysis of covariance (ANCOVA) was conducted to assess the effects of meme marketing types on narrative transportation (see Table 2). We included need for humour and consumer transportability as covariates. It was found that brand prominent meme marketing causes more narrative transportation ($M_{\text{prominent}} = 4.78$, $SD = 1.15$) than brand subtle meme marketing ($M_{\text{subtle}} = 3.62$, $SD = 1.27$, $t(295) = 4.22$, $p < .05$). Therefore, H2 was supported. Furthermore, as hypothesized in H2, we conducted planned contrasts to compare the effect of brand prominent meme marketing to brand subtle meme marketing on narrative transportation. Results revealed that participants in the brand prominent meme marketing condition ($M_{\text{prominent}} = 5.24$, $SD = 1.98$), $t(145) = 3.32$, $p < .05$) experienced significantly higher levels of narrative transportation compared to those in the brand subtle meme marketing condition ($M_{\text{subtle}} = 2.66$, $SD = 1.56$), $t(145) = 3.12$, $p < .05$).

The analysis revealed a significant main effect of meme marketing type $F(1, 295) = 10.20$, $p < .001$, $\eta^2 = 0.023$) and brand knowledge level $F(1, 295) = 9.11$, $p < .001$, $\eta^2 = 0.016$) on narrative transportation (see Table 2). Moreover, a significant interaction between meme marketing type and brand knowledge was found on narrative transportation $F(1, 295) = 9.80$, $p < .001$, $\eta^2 = 0.019$). As shown in Fig. 3, when participants possess high brand knowledge, the narrative transportation scores for brand prominent and brand subtle meme marketing groups were not significantly different, but when the brand knowledge was low, participants reported significantly greater narrative transportation for brand prominent meme marketing ($M_{\text{prominent}} = 5.59$, $SD = 1.34$) than brand subtle meme marketing ($M_{\text{subtle}} = 3.82$, $SD = 1.45$, $t(295) = 5.77$, $p < .001$). Hence, H3 was supported. As stated in H3, we conducted planned contrasts to assess the interaction between brand knowledge levels and the effect of brand prominent meme marketing on narrative transportation. When brand knowledge was low, participants in the brand prominent meme marketing condition ($M_{\text{prominent}} = 5.39$, $SD = 1.12$) exhibited significantly higher levels of narrative transportation compared to those in the brand subtle meme marketing condition ($M_{\text{subtle}} = 4.09$, $SD = 2.34$), $t(145) = 4.68$, $p < .01$. Conversely, when brand knowledge was high, no significant difference in narrative transportation emerged between the two marketing types ($M_{\text{prominent}} = 4.49$, $SD = 1.83$ vs. $M_{\text{subtle}} = 4.39$, $SD = 1.71$), $t(145) = 3.74$, $p < .05$).

Fig. 3 depicts mean of narrative transportation with the standard deviation (SD) error bar at different meme marketing types and brand knowledge levels.

4.7. Hypothesis testing (H4)

4.7.1. Moderated mediating analysis

We used PROCESS model 7 with 5000 bootstrap samples to test the moderated mediation, following prior research (Schaarschmidt and Dose, 2023). Meme marketing type (dummy-coded as 1 = prominent, -1 = subtle) was coded as an independent variable. Brand knowledge (dummy-coded as 1 = high, -1 = low) as a first-stage moderator, narrative transportation as a mediator, need for humour and consumer transportability as covariates, and attitude towards ad, customer engagement as dependent variables.

We found a significant interaction effect between meme marketing type and brand knowledge on narrative transportation ($B = 0.31$, $SE = 0.06$, $t = 5.16$, $p < .001$) (see Table 3), such that brand prominent meme marketing (vs. brand subtle) led to a greater effect on narrative transportation in the low brand knowledge condition ($B = 0.22$, $SE = 0.06$, $t = 3.66$, $p < .005$); however, such differences did not occur in the high brand knowledge condition ($B = 0.07$, $SE = 0.14$, $t = 0.51$, $p = .724$). Further, narrative transportation significantly predicted attitude towards ad ($B = 0.30$, $SE = 0.07$, $t = 4.28$, $p < .001$), and customer engagement ($B = 0.35$, $SE = 0.09$, $t = 3.88$, $p < .005$). We also found a non-significant direct effect of meme marketing type on attitude towards ad ($B = 0.13$, $SE = 0.15$, $t = 0.86$, $p = .521$), and customer engagement ($B = 0.16$, $SE = 0.29$, $t = 0.55$, $p = .680$).

More crucially, results of the bootstrapping revealed a significant index of moderated mediation ($B = 0.32$, $CI = [0.15; 1.46]$), such that the indirect effect of meme marketing type on attitude towards ad through narrative transportation is significant for low brand knowledge ($B = 0.26$, $CI = [0.10; 1.14]$) and non-significant for high brand knowledge ($B = 0.05$, $CI = [-0.22; 0.93]$). Moreover, the bootstrapping results found a significant index of moderated mediation ($B = 0.38$, $CI = [0.06; 0.79]$), such that the indirect effect of meme marketing type on customer engagement through narrative transportation is significant for low brand knowledge ($B = 0.29$, $CI = [0.08; 1.34]$) and non-significant for high brand knowledge ($B = 0.06$, $CI = [-0.05; 0.62]$). Thus, H4 is supported.

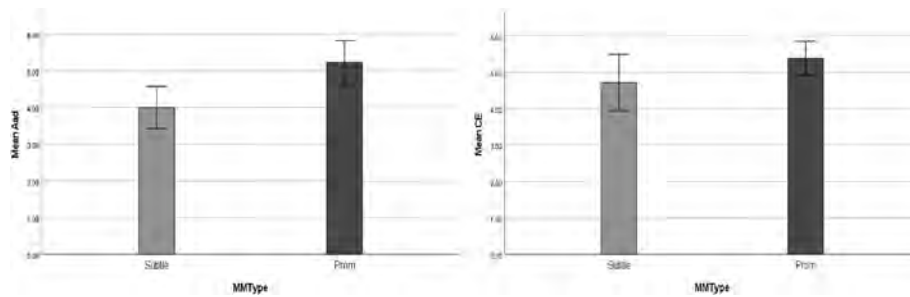


Fig. 2. Attitude towards ad, and customer engagement by meme marketing type.

Table 2
Summary of results H2–3.

Independent variable				
Dependent variable	Meme marketing type	Brand knowledge level	n	M
Narrative transportation	Brand prominent meme marketing	High brand knowledge	86	5.75
	Brand prominent meme marketing	Low brand knowledge	81	5.56
	Brand subtle meme marketing	High brand knowledge	72	5.42
	Brand subtle meme marketing	Low brand knowledge	61	3.92
	Total brand prominent meme marketing		167	4.88
	Total brand subtle meme marketing		133	4.10
		Total high brand knowledge	158	4.72
	Total low brand knowledge	142	3.63	
Main effects		F	p	
Meme marketing type		F (1, 295) = 10.20	p < .001	
Brand knowledge level		F (1, 295) = 9.11	p < .001	
Interaction effect				
Meme marketing type × Brand knowledge level		F (1, 295) = 9.80	p < .001	

Note: Need for humour and consumer transportability act as controlling variables.

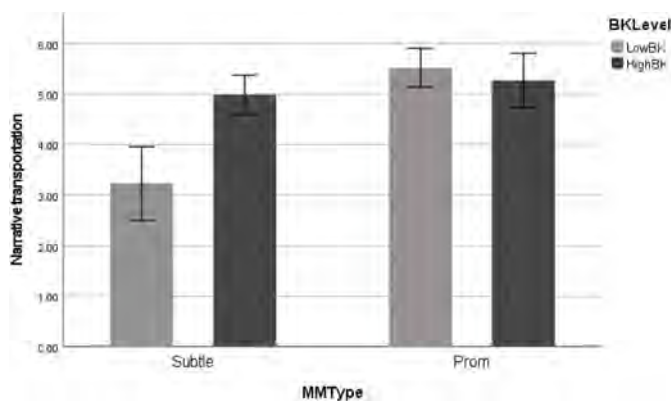


Fig. 3. Narrative transportation by meme marketing type and brand knowledge level.

5. Study 2

5.1. Method

In Study 1, we have successfully established that the effectiveness of meme marketing types does not significantly differ among customers

with a high level of brand knowledge, which is commonly found among well-established brands. However, considering the prevalence of meme marketing adoption by such prominent brands, we aimed to delve deeper into the dynamics of consumer responses. Notably, in Study 2, we deliberately chose a well-known brand, KFC, where brand knowledge is high. This choice allowed us to explore how meme marketing efficacy might be moderated by contextual knowledge, specifically meme literacy. In addition, we have introduced brand familiarity as a control variable in Study 2. This control variable allows us to account for potential differences in customer attitudes toward the brand (i.e., KFC) used in our study. It helps ensure that any observed effects are attributed to meme marketing types and moderators rather than pre-existing brand attitudes. Importantly, our focus in Study 2 is on the interplay between meme contextual knowledge and the effectiveness of different meme marketing types, rather than solely on the impact of brand knowledge. We believe that this nuanced perspective adds depth to our investigation of the role of meme contextual knowledge in meme marketing.

For the main experiment, a total of 300 participants (44.67% female; M_{age} = 32.68, SD = 11.23) were recruited from Prolific in May 2023. We used a between-subjects 2 (meme marketing type: brand prominent vs. brand subtle) × 2 (meme literacy: high vs. low) design.

5.2. Stimuli

Four stimuli with manipulated meme marketing types (brand prominent and brand subtle meme marketing) and meme literacy levels (high and low) were created (see Appendix A). A real-world fast-food brand (i.e., KFC) was selected. All four stimuli included an identical meme called Draw 25,¹⁰ an image of a person playing the card game Uno. To manipulate meme literacy, an experimental design similar to that of Soscia et al. (2019) and Viglia and Dolnicar (2020) was created in which each respondent was randomly assigned to the experiment groups 1 (N = 75) and 3 (N = 76), and control groups 2 (N = 79) and 4 (N = 70) (see Appendix A for experimental treatment). To create varying levels of meme literacy among the participants, we employed a treatment group and a control group. The treatment group, consisting of Groups 1 and 3, received the prescribed treatment of meme contextual knowledge. In other words, these groups were provided with additional information about the “Draw 25” meme, which enabled participants to better understand the implicit meanings and references associated with the text and image of the meme. On the other hand, the control group, comprising Groups 2 and 4, served as a comparison point. The stimulus for the control groups did not include the contextual information or implicit meanings adhering to the text and image of the meme. By omitting this contextual knowledge, we aimed to create a lower level of meme literacy among participants in these groups. Comparing the

¹⁰ Draw 25 meme contains an image of a customizable Uno wild card next to an image of a man with a large hand of cards. The wild card typically gives the option of performing an action or “draw 25” and the second image infers that a person decided against performing the action. Retrieved from (www.knowyoumeme.com).

Table 3
Moderated mediation analysis.

Antecedent	DV = Narrative transportation (M)				DV (Y)							
					Attitude towards ad				Customer engagement			
	Coeff	SE	t	p	Coeff	SE	t	p	Coeff	SE	t	p
Meme marketing type (X)	0.28	0.06	4.66	0.001	0.13	0.15	0.86	0.521	0.16	0.29	0.55	0.680
Brand knowledge (W)	-0.11	0.35	-0.31	0.853	—	—	—	—	—	—	—	—
X × W	0.31	0.06	5.16	0.001	—	—	—	—	—	—	—	—
Narrative transportation	—	—	—	—	0.30	0.07	4.28	0.001	0.35	0.09	3.88	0.005
Need for humour (as Covariates)	0.20	0.05	4.12	0.001	-0.16	0.12	-1.33	0.195	0.09	0.22	0.41	0.817
Consumer transportability (as Covariates)	-0.15	0.07	-2.14	0.092	0.25	0.10	2.51	0.064	0.34	0.09	3.78	0.005
Model summary					R ² = 0.25, F (3, 293) = 9.57, p < .001				R ² = 0.30, F (3, 293) = 12.81, p < .001			
Conditional indirect effect	Coeff	SE	95%		Coeff	SE	95%		Coeff	SE	95%	
			LLCI	ULCI			LLCI	ULCI				
High brand knowledge	0.05	0.10	-0.22	0.93	0.06	0.13	-0.05	0.62	0.05	0.08	0.08	1.34
Low brand knowledge	0.26	0.08	0.10	1.14	0.29	0.05	0.08	1.34	0.09	0.06	0.06	0.79
Index of moderated mediation	0.32	0.06	0.15	1.46	0.38	0.09	0.06	0.79				

Note: Standardized coefficients. P < .05; p < .01; p < .001.

Abbreviations Coeff = coefficient; SE = standard error; LLCI = lower level confidence interval; ULCI = upper level confidence interval.

responses and attitudes of participants in the treatment group (with high meme literacy) to those in the control group (with low meme literacy), we can examine the specific impact of meme literacy on the variables of interest (Lim et al., 2022).

5.3. Measures

Afterwards, the participants answered questions about the mediating variable (narration transportation [$\alpha = .92$] measured on a 7-point Likert scale (1 = strongly disagree, 7 = strongly agree) and dependent variables (attitude towards ad [$\alpha = 0.91$], and customer engagement [$\alpha = 0.93$]) using a seven-point semantic differential scale (1 = very bad/very unfavourable/strongly negative, 7 = very good/very favourable/strongly positive). ca Appendix B contains the items, factor loadings, descriptive statistics, and detailed measurement results for Study 2.

5.4. Results

5.4.1. Manipulations checks of meme marketing types and meme literacy

To check if meme marketing types were successfully manipulated, we conducted an independent sample *t*-test (N = 127) with two-item measures for meme marketing types: “To what extent could you identify the presence of a brand in this meme?” (1 = no presence, 5 = very high presence), “To what extent were the brand logo and brand name visible in this meme?” (1 = not visible, 5 = very highly visible), identical to study 1. Participants in the brand prominent meme marketing condition perceived more brand prominence than those in the brand subtle meme marketing condition ($M_{\text{prominent}} = 3.62, M_{\text{subtle}} = 2.81, t(125) = 3.49, p < .05$).

In order to nullify the effects of the *confounding variable* (i.e., contextual knowledge about the “Draw 25” meme), we only recruited participants who didn’t know the implicit meaning of “Draw 25” by following the lead of Viglia and Dolnicar (2020). Specifically, we recruited participants who were not familiar with the implicit meaning of “Draw 25” meme. This mechanism included three pre-screening questions about the “Draw 25” meme: “Do you recognise this meme? (1 = Yes, 2 = No)”; “Do you know the meaning of this meme? (1 = Yes, 2 = No)”. “Which of the following message does this meme communicate? (1 = Call or text your ex, 2 = Draw 25, 3 = Neither call or text your ex nor draw 25, 4 = No idea)”. Participants who either recognise or know the meaning of the “Draw 25” meme or correctly answered the implicit message that the meme is trying to communicate couldn’t continue the survey. This pre-screening process led to the exclusion of 20 participants who were already familiar with the meme. By applying this method, we aimed to minimize the influence of contextual knowledge on our

research outcomes and maintain the internal validity of our study.

The manipulation of the high vs. low meme literacy worked as intended. An independent sample *t*-test revealed that participants in the high meme literacy condition understood the implicit communicative message from the brand and chose the right option from a list of options compared to those in the low meme literacy condition ($M_{\text{high meme literacy}} = 3.88, M_{\text{low meme literacy}} = 1.13, t(125) = 13.41, p < .01$). The ability to select the correct communicative message of meme marketing in high meme literacy conditions indicates that the provided contextual knowledge greatly aided the participants in uncovering the underlying brand narrative. Participants who were in the low meme literacy condition did not understand the implicit message of the “Draw 25” meme and hence were unable to decode the brand message. Thus, meme marketing types and meme literacy manipulations were successful.

Consumer outcomes. A series of ANCOVA with meme marketing type as an independent variable and need for humour and brand familiarity as covariates revealed that participants in the brand prominent meme marketing condition had a significantly higher level of attitude towards ad ($M_{\text{prominent}} = 4.78$ vs. $M_{\text{subtle}} = 4.20, F(1,297) = 7.56, p < .005$) and customer engagement ($M_{\text{prominent}} = 4.12$ vs. $M_{\text{subtle}} = 3.95, F(1,297) = 6.14, p < .005$) than those in the brand subtle meme marketing condition. These results verified the findings of Study 1 regarding H1.

Narrative transportation. An ANCOVA test with meme marketing type as an independent variable, consumer transportability, need for humour, and brand familiarity as control variables, and narrative transportation as a dependent variable demonstrated that a higher

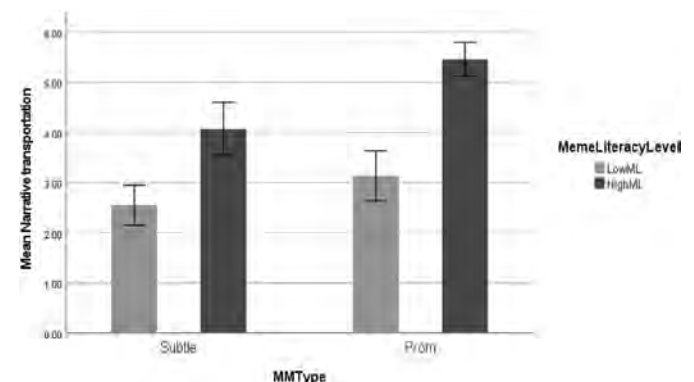


Fig. 4. Narrative transportation by meme marketing type and meme literacy level.

narrative transportation was reported when participants evaluated brand prominent meme marketing (vs. brand subtle) ($M_{\text{prominent}} = 4.69$ vs. $M_{\text{subtle}} = 3.82$, $F(1, 296) = 6.52$, $p < .005$). This finding offers validation to Study 1 about H2.

Meme literacy interaction with meme marketing type. Further, follow-up ANCOVA results found a significant interaction effect between meme marketing type and meme literacy on narrative transportation $F(1, 296) = 13.24$, $p < .001$, $\eta^2 = 0.17$). As can be seen in Fig. 4, when meme literacy is high, brand prominent meme marketing reported significantly higher narrative transportation ($M_{\text{prominent}} = 5.73$, $SD = 1.21$) than brand subtle meme marketing ($M_{\text{subtle}} = 4.11$, $SD = 1.13$, $t(296) = 8.74$, $p < .001$). However, when meme literacy is low, such differences do not occur ($M_{\text{prominent}} = 3.21$, $SD = 1.35$ vs. $M_{\text{subtle}} = 2.81$, $SD = 0.82$, $t(296) = 3.10$, $p = .159$). Fig. 4 displays the mean of narrative transportation with the standard deviation (SD) error bar at different meme marketing types and meme literacy levels.

5.5. Hypothesis testing (H5)

We utilised PROCESS model 7 with 5000 bootstrap samples to investigate moderated mediation (Hayes, 2017). Meme marketing type (dummy-coded as 1 = prominent, -1 = subtle) was coded as an independent variable. Meme literacy (dummy-coded as 1 = high, -1 = low) as a first-stage moderator and narrative transportation as a mediator. Need for humour, consumer transportability, and brand familiarity as covariates, whereas attitude towards ad, attitude towards brand, and customer engagement were dependent variables.

We found a significant interaction effect between meme marketing type and meme literacy on narrative transportation ($B = 0.25$, $SE = 0.04$, $t = 6.25$, $p < .001$) (see Table 4), such that brand prominent meme marketing (vs. brand subtle) led to a greater effect on narrative transportation in the high meme literacy condition ($B = 0.34$, $SE = 0.05$, $t = 6.81$, $p < .001$); however, such differences did not occur in the low meme literacy condition ($B = -0.27$, $SE = 0.12$, $t = -2.25$, $p = .147$). Further, narrative transportation significantly predicted attitude towards ad ($B = 0.35$, $SE = 0.07$, $t = 5.12$, $p < .001$) and customer engagement ($B = 0.24$, $SE = 0.05$, $t = 4.81$, $p < .001$) (see Table 4). We also found a non-significant direct effect of meme marketing type on attitude towards ad ($B = 0.15$, $SE = 0.14$, $t = 1.07$, $p = .296$) and customer engagement ($B = 0.22$, $SE = 0.17$, $t = 1.29$, $p = .243$).

More crucially, results of the bootstrapping revealed a significant index of moderated mediation ($B = 0.27$, $CI = [0.20; 1.15]$), such that the indirect effect of meme marketing type on attitude towards ad through narrative transportation is significant for high meme literacy (B

$= 0.24$, $CI = [0.19; 0.75]$) and non-significant for low meme literacy ($B = -0.06$, $CI = [-0.13; 0.66]$). Moreover, findings of the bootstrapping revealed a significant index of moderated mediation ($B = 0.35$, $CI = [0.31; 0.92]$), such that the indirect effect of meme marketing type on customer engagement through narrative transportation is significant for high meme literacy ($B = 0.30$, $CI = [0.25; 1.36]$) and non-significant for low meme literacy ($B = -0.07$, $CI = [-0.16; 0.81]$). So, H5 is supported.

6. Study 3

6.1. Method

For Study 3, we ended up with a sample of 253 participants (53% female; $M_{\text{age}} = 31.74$, $SD = 9.12$) located in the US from Prolific after removing those who failed the attention check questions in September 2023. We used a between-subjects 2 (meme marketing type: brand prominent vs. brand subtle) \times 2 (personal pronoun: first vs. second) design.

6.2. Stimuli

Four stimuli with manipulated meme marketing types (brand prominent and brand subtle meme marketing) and personal pronouns (first and second) were created (see Appendix A). Different from Study 1 and Study 2, where food and beverage brands were employed for stimulus development, Study 3 used a different product category brand (i.e., GUCCI watch). Since food and beverages are consumable items with specific emotional and sensory associations, while watches are durable goods with different attributes and symbolic meanings (Nuweihed and Trendel, 2023). Hence, using a different product category brand (i.e., GUCCI) will help to enhance the generalizability of findings across different product categories along with the external validity (Ngo et al., 2020). To manipulate personal pronouns within the linguistic text of memes, we employed two different personal pronouns: “I” for the first-person singular pronoun and “you” for the second-person singular pronoun, as part of our experimental stimuli. To mitigate potential order effects and participant biases, the order of presentation of “I” and “you” pronoun stimuli was randomised across participants. This method of personal pronoun manipulation was derived from prior research (Kachersky and Carnevale, 2015).

6.3. Measures

The participants then responded to questions regarding the

Table 4
Moderated mediation analysis.

Antecedent	DV = Narrative transportation (M)				DV (Y)							
					Attitude towards ad				Customer engagement			
	Coeff	SE	t	p	Coeff	SE	t	p	Coeff	SE	t	p
Meme marketing type (X)	0.09	0.23	0.40	0.396	0.15	0.14	1.07	0.296	0.22	0.17	1.29	0.243
Meme literacy (W)	0.10	0.16	0.62	0.254	–	–	–	–	–	–	–	–
X \times W	0.25	0.04	6.25	0.001	–	–	–	–	–	–	–	–
Narrative transportation	–	–	–	–	0.35	0.07	5.12	0.001	0.24	0.05	4.81	0.001
Need for humour (as Covariates)	0.07	0.20	0.35	0.428	0.09	0.21	0.42	0.373	-0.15	0.06	2.52	0.127
Consumer transportability (as Covariates)	-0.13	0.05	2.61	0.104	0.16	0.05	3.21	0.005	-0.24	0.10	2.41	0.153
Brand familiarity (as Covariates)	0.31	0.18	1.72	0.195	0.23	0.15	1.53	0.220	0.14	0.19	0.73	0.329
Model summary					$R^2 = 0.18$, $F(4, 294) = 7.26$, $p < .001$				$R^2 = 0.29$, $F(4, 294) = 9.47$, $p < .001$			
Conditional indirect effect	Coeff	SE	95%		Coeff	SE	95%		Coeff	SE	95%	
			LLCI	ULCI			LLCI	ULCI			LLCI	ULCI
High meme literacy	0.24	0.07	0.19	0.75	0.30	0.05	0.25	1.36	0.05	0.05	0.25	1.36
Low meme literacy	-0.06	0.14	-0.13	0.66	-0.07	0.20	-0.16	0.81	0.20	0.20	-0.16	0.81
Index of moderated mediation	0.27	0.06	0.20	1.15	0.35	0.08	0.31	0.92	0.08	0.08	0.31	0.92

Note: Standardized coefficients. $P < .05$; $p < .01$; $p < .001$.

Abbreviations: Coeff = coefficient; SE = standard error; LLCI = lower level confidence interval; ULCI = upper level confidence interval.

mediating variable (narrative transportation [$\alpha = .82$]) using a 7-point Likert scale (1 = strongly disagree, 7 = strongly agree) and dependent variables (attitude towards ad [$\alpha = 0.83$], and customer engagement [$\alpha = 0.80$]) using a 7-point semantic differential scale (1 = very poor/very unfavourable/strongly negative, 7 = very good/very favourable/strongly positive). The items, factor loadings, descriptive statistics, and detailed measurement results for Study 3 are listed in [Appendix B](#).

6.4. Results

6.4.1. Manipulations checks of meme marketing types and personal pronouns

An independent sample *t*-test ($N = 92$) showed that participants in the brand prominent meme marketing condition perceived greater brand prominence than participants in the brand subtle meme marketing condition ($M_{\text{prominent}} = 5.62$ vs. $M_{\text{subtle}} = 2.49$; $t(90) = 5.81$, $p < .01$), indicating that meme marketing type manipulation was successful. A self-referencing seven-item scale from the study of [Martin et al. \(2004\)](#) that includes items such as “The meme seemed to relate to me personally” was used to check the manipulation of personal pronouns in order to assess the effectiveness of our linguistic manipulation and to ensure that participants perceived the intended differences between the “I” and “you” pronoun conditions. An independent sample *t*-test revealed that participants in the second-person pronoun condition perceived significantly more self-reference compared to participants in the first-person pronoun condition ($M_{\text{second-person}} = 5.16$ vs. $M_{\text{first-person}} = 2.80$; $t(90) = 4.49$, $p < .01$). To assess the efficacy of personal pronoun manipulations in distinguishing between first- and second-person pronouns, both [Cruz et al. \(2017\)](#) and [Escalas et al. \(2004\)](#) employed self-referencing scales in their respective studies.

Consumer outcomes. A series of ANCOVA with the need for humour, consumer transportability, and brand familiarity as covariates found that participants in the brand prominent meme marketing condition had a significantly higher level of attitude towards ad ($M_{\text{prominent}} = 4.46$ vs. $M_{\text{subtle}} = 3.10$, ($F(1, 249) = 8.05$, $p < .005$) and customer engagement ($M_{\text{prominent}} = 4.73$ vs. $M_{\text{subtle}} = 3.62$, ($F(1, 249) = 16.20$, $p < .001$) than those in the brand subtle meme marketing condition. These results verified the findings of Study 1 and Study 2 regarding [H1](#).

Narrative transportation. An ANCOVA test demonstrated that a higher narrative transportation was reported when participants evaluated brand prominent meme marketing (vs. brand subtle) ($M_{\text{prominent}} = 5.21$ vs. $M_{\text{subtle}} = 4.64$, ($F(1, 248) = 6.28$, $p = .010$). This finding offers validation to Study 1 and Study 2 about [H2](#).

Linguistic characteristics interaction with meme marketing type. A significant interaction effect was found between meme marketing type and meme marketing linguistic characteristics (i.e., pronouns) on narrative transportation ($F(1, 248) = 19.34$, $p < .001$, $\eta^2 = 0.20$). As can be seen in [Fig. 5](#), when a second-person pronoun is used,

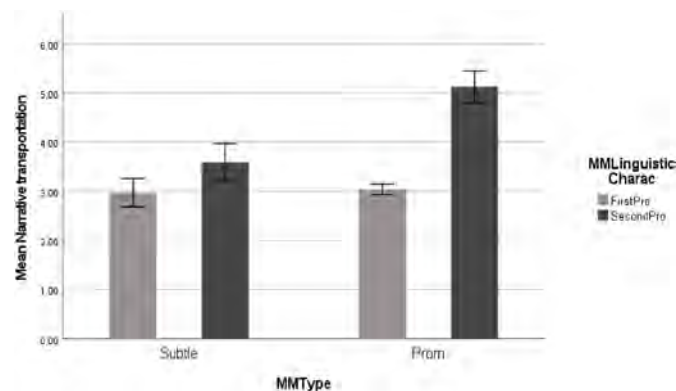


Fig. 5. Narrative transportation by meme marketing type and meme marketing linguistic characteristics.

brand prominent meme marketing reported significantly higher narrative transportation ($M_{\text{prominent}} = 5.11$, $SD = 1.84$) than brand subtle meme marketing ($M_{\text{subtle}} = 3.85$, $SD = 1.59$, $t(248) = 9.47$, $p < .001$). However, when a first-person pronoun is used, such differences do not occur ($M_{\text{prominent}} = 3.25$, $SD = 1.07$ vs. $M_{\text{subtle}} = 3.01$, $SD = 1.26$, $t(248) = 6.74$, $p < .005$).

[Fig. 5](#) depicts the mean of narrative transportation with the standard deviation (SD) error bar at different meme marketing types and meme marketing linguistic characteristics.

6.5. Hypothesis testing (H6)

To explore moderated mediation, we used PROCESS model 7 with 5000 bootstrap samples ([Hayes, 2017](#)). A significant interaction effect was found between meme marketing type and meme marketing linguistic characteristics on narrative transportation ($B = 0.31$, $SE = 0.04$, $t = 7.76$, $p < .001$) (see [Table 5](#)), such that brand prominent meme marketing (vs. brand subtle) had a greater effect on narrative transportation in the second-pronoun condition ($B = 0.28$, $SE = 0.05$, $t = 5.61$, $p < .001$); however, such differences did not exist in the first-pronoun condition ($B = -0.10$, $SE = 0.12$, $t = -0.84$, $p = .395$). In addition, narrative transportation significantly predicted attitude towards ad ($B = 0.35$, $SE = 0.06$, $t = 5.84$, $p < .001$) and customer engagement ($B = 0.37$, $SE = 0.04$, $t = 9.26$, $p < .001$) (see [Table 5](#)). We also found a non-significant direct effect of meme marketing type on attitude towards ad ($B = 0.09$, $SE = 0.14$, $t = 0.64$, $p = .375$) and customer engagement ($B = 0.19$, $SE = 0.11$, $t = 1.72$, $p = .204$).

Importantly, bootstrapping results revealed a significant index of moderated mediation ($B = 0.21$, $CI = [0.15; 1.72]$), such that the indirect effect of meme marketing type on attitude towards ad through narrative transportation is significant for second-person pronoun ($B = 0.24$, $CI = [0.41; 1.92]$) but not for first-person pronoun ($B = -0.11$, $CI = [-0.04; 0.18]$). Furthermore, the bootstrapping results revealed a significant index of moderated mediation ($B = 0.32$, $CI = [0.27; 1.85]$), indicating that the indirect effect of meme marketing type on customer engagement via narrative transportation is significant for second-person pronoun ($B = 0.30$, $CI = [0.09; 1.68]$) but not for first-person pronoun ($B = -0.05$, $CI = [-0.03; 0.27]$).

7. General discussion

We conducted three experimental studies to test our hypotheses, examining the effectiveness of meme marketing. Specifically, brand prominent meme marketing (vs. brand subtle) reported a more favourable attitude towards ad, and customer engagement (see [Fig. 2](#)), as well as narrative transportation (see [Table 2](#) for summary of results). The findings contradict extant brand placement literature ([Boerman et al., 2015](#); [Choi et al., 2018](#)), highlighting that prominent brand placements in meme marketing capture audience attention, allowing consumers to quickly associate the meme with the advertised brand for improved attitudes and engagement. As far as narrative transportation is concerned, the findings are in line with previous literature on narrative transportation theory ([Green and Brock, 2000](#)). That is, prominent brand placements facilitate a faster and easier immersion into a narrative world ([Halkias, 2015](#)).

More importantly, we found a significant interaction between brand knowledge and meme marketing types on narrative transportation ([H3](#)). In particular, we found that high brand knowledge results in similar or indistinguishable narrative transportability across both types of meme marketing (see [Table 2](#) for summary of results). However, when brand knowledge is low, only brand prominent meme marketing (vs. brand subtle) results in greater narrative transportation. The findings provide support for associative network theory ([Keller, 1993](#)), expounding that associations brought up by the prominent brand elements and meme story would create new ‘nodes’ in the brand’s associative network for people who have low knowledge about the brand, leading to narrative

Table 5
Moderated mediation analysis.

Antecedent	DV = Narrative transportation (M)				DV (Y)							
					Attitude towards ad				Customer engagement			
	Coeff	SE	t	p	Coeff	SE	t	p	Coeff	SE	t	p
Meme marketing type (X)	0.12	0.19	0.63	0.383	0.09	0.14	0.64	0.375	0.19	0.11	1.72	0.204
Linguistic characteristics (W)	0.10	0.22	0.45	0.432	—	—	—	—	—	—	—	—
X × W	0.31	0.04	7.76	0.001	—	—	—	—	—	—	—	—
Narrative transportation	—	—	—	—	0.35	0.06	5.84	0.001	0.37	0.04	9.26	0.001
Need for humour (as Covariates)	0.06	0.25	0.24	0.546	0.05	0.17	0.30	0.517	0.12	0.08	1.51	0.257
Consumer transportability (as Covariates)	-0.14	0.10	1.41	0.263	0.19	0.09	2.12	0.184	0.20	0.12	1.67	0.234
Brand familiarity (as Covariates)	-0.23	0.15	1.54	0.249	0.14	0.25	0.57	0.413	0.29	0.06	4.84	0.010
Model summary	R ² = 0.22, F (7, 239) = 7.17, p < .005								R ² = 0.41, F (7, 239) = 25.65, p < .001			
Conditional indirect effect	Coeff	SE	95%		Coeff	SE	95%					
			LLCI	ULCI			LLCI	ULCI				
Second-person pronoun	0.24	0.07	0.41	1.92	0.30	0.08	0.09	1.68				
First-person pronoun	-0.11	0.18	-0.04	0.18	-0.05	0.16	-0.03	0.27				
Index of moderated mediation	0.21	0.06	0.15	1.72	0.32	0.05	0.27	1.85				

Note: Standardized coefficients. P < .05; p < .01; p < .001.

Abbreviations: Coeff = coefficient; SE = standard error; LLCI = lower level confidence interval; ULCI = upper level confidence interval.

transportation (Avramova, 2017).

In addition, as predicted, a significant moderated mediation was observed (H4). Brand prominent meme marketing (vs. brand subtle) had a greater effect on narrative transportation, resulting in greater attitude towards ad, and customer engagement, when brand knowledge is low. No such differences occurred with high brand knowledge (see Table 3 for summary of results). The results add to our understanding that the mediating effects of narrative transportation for meme marketing effectiveness are conditional upon low brand knowledge for brand prominent meme marketing (vs. brand subtle).

Study 2 serves as a crucial follow-up to Study 1. The aim of Study 2 was two-fold: firstly, to confirm the results obtained in Study 1 regarding H1 and H2, and secondly, to extend the findings by empirically testing a different moderated mediation effect (H5). Specifically, respondents reported greater effects of brand prominent meme marketing (vs. brand subtle) on attitude towards ad, and customer engagement through narrative transportation when meme literacy is high, whereas such differences did not occur meme literacy is low (see Table 4 for summary of results). This validates Razzaq et al. (2023) claim that the efficacy of meme marketing hinges on customers' ability to express an up-to-date literacy with the digital meme culture.

Lastly, Study 3 validates and expands upon the results of Studies 1 and 2, confirming H1 and H2 while exploring a new moderated mediation effect (H6) in a different product category. Respondents exhibited more favourable responses to brand prominent meme marketing as opposed to brand subtle meme marketing, in terms of their attitudes towards ad and their level of customer engagement through narrative transportation. Notably, these favourable responses were more pronounced when the second-person pronoun was used. However, it's worth noting that such distinctions did not emerge in the first-person pronoun condition. For a comprehensive summary of these findings, please refer to Table 5.

7.1. Theoretical implications

This study contributes to meme marketing effectiveness and offers important theoretical implications. First, we contribute to meme marketing scholarship by empirically identifying narrative transportation as a key driver of meme marketing effectiveness. We shed light on how meme marketing can create immersive experiences for customers by disentangling the effects of two common meme marketing types (brand prominent vs. brand subtle). Although prominent brand placements are negatively related to consumer outcomes and narrative transportation due to the activation of persuasive knowledge (Friestad and Wright,

1994; Milfeld and Flint, 2021), the present study found the opposite pattern. Different from conventional brand placement media (TV, film, video games, and music videos), in which brand prominence diverts attention from the story, brand prominent meme marketing grabs attention and assists in immersion. This has important implications for the meme marketing theoretical framework (Malodia et al., 2022; Razzaq et al., 2023), implying that if the message includes narrative elements (i.e., plot, depicted motion, anthropomorphism, character, outcome, narrative voice, and humour), then consumers don't perceive it as a persuasive marketing tactic from the brand, even when the brand is highly prominent.

Second, marketers frequently use storytelling to interact with customers and persuade them through narrative transportation. The results of this research can help to explain disparate findings regarding the potential of picture-based content to induce narrative transportation (Grigsby et al., 2022). While some research suggests that consumers can achieve narrative transportation from a single image (e.g., Kim et al., 2016), others imply the opposite (Lien and Chen, 2013). Based on our findings, we predict that picture-based media content like meme marketing can facilitate narrative transportation. The results of this study confirm that the theory of narrative transportation may be extended to photo narrative, which opens up fascinating new avenues of investigation. Theoretically, we connect several narrative design elements previously unconnected to narrative transportation theory that can prompt narrative transportation.

Third, by applying the associative learning theory (Keller, 1993), this study contributes to our understanding of how consumers with low brand knowledge engage in narrative-based processing when exposed to meme marketing types. By leveraging the principles of associative learning, we underscore that brand prominent meme marketing (vs. brand subtle) with repeated brand element exposures leads to the formation of new nodes in the brand's associative network, thus immersing consumers in a narrative world (Milfeld and Flint, 2021). This mechanism helps consumers with low brand knowledge integrate brand elements within the meme's storyline, enhancing the accessibility and strength of brand-related associations and ultimately contributing to narrative transportation.

By responding to the call of Razzaq et al. (2023), this study provides empirical evidence on the boundary condition role of dispositional characteristics (i.e., brand knowledge and meme literacy) that can positively and negatively affect narrative transportation and thus increase or decrease downstream consumer attitudes and engagement. Critically, the findings of this study demonstrated that the underlying psychological mechanism (narrative transportation) of meme marketing

effectiveness is contingent upon consumer brand knowledge and meme literacy. More specifically, low brand knowledge and high meme literacy in the context of brand prominent meme marketing (vs. brand subtle) increase consumer narrative fluency (i.e., the ease with which the meme marketing narrative is processed) (Avramova et al., 2018).

Finally, we advance the theoretical underpinnings of meme marketing by delving into the intricacies of linguistic characteristics, specifically the use of pronouns, and their role in activating self-related thoughts. As demonstrated, the activation of the self within meme marketing content is contingent on the strategic employment of linguistic cues, such as second-person pronouns. When addressed directly through these pronouns, customers are prompted to mentally immerse themselves in the narrative, fostering a sense of personal involvement and facilitating narrative transportation (Fennis and Wiebenga, 2017). Drawing from narrative transportation theory (Perkins and Forehand, 2012), this research underscores the pivotal role of second-person pronouns in creating a self-referencing cue for customers, enabling them to construct self-related narratives and enhancing immersion within meme marketing content. However, it's important to note that even though the use of first-person pronouns in meme marketing do not directly hinder narrative transportation, as suggested by the non-significant main effect, but still may place the narrative focus on the brand rather than the customer, potentially influencing the narrative experience differently (Merchant and Rose, 2013). This theoretical insight elucidates how linguistic choices shape customer attitudes and engagement, contributing to a deeper understanding of meme marketing effectiveness. Overall, the findings broaden the application and understanding of meme marketing in relation to brand placement design choices, underlying mechanism and contingent boundary conditions, demonstrating how the effectiveness of meme marketing can be leveraged.

7.2. Practical implications

This study provides practical guidelines for designing and targeting meme marketing campaigns to enhance meme marketing effectiveness. First, marketers should consider employing brand prominent meme marketing to enhance consumer attitudes, engagement, and narrative transportation. By incorporating narrative elements such as plot, depicted motion, anthropomorphism, character, outcome, and narrative voice, marketers can create immersive brand consumption experiences that capture consumers attention and harness consumer attitudes and engagement. This is particularly effective for audiences with low brand knowledge, as brand prominent meme marketing (vs. brand subtle) helps establish stronger associations between the brand and the narrative. However, for audiences with high brand knowledge, the impact of brand prominent meme marketing (vs. brand subtle) diminishes. In such cases, marketers can focus on either brand prominent or brand subtle meme marketing to induce narrative transportation.

Furthermore, current research reveals that picture-based content, such as meme marketing, has the ability to generate narrative transportation. Internet memes are narrative artefacts, conveying relatable emotional experiences and thereby immersing the audience in a narrative world (Pires et al., 2023). However, this transportation is contingent upon the marketer's ability to incorporate narrative elements. This is especially beneficial for advertisers who want to use picture-based ads with little copy (text) on platforms like Instagram and Facebook because such ads may struggle to create strong arguments and long-lasting persuasive effects as per the traditional ELM framework (Petty et al., 1983).

In addition, marketers must ensure that meme marketing is designed and targeted with the audience's meme literacy and brand knowledge in mind, capitalising on their knowledge of meme culture and brand to positively impact consumer attitudes and engagement. When targeting audiences with high meme literacy, brand prominent meme marketing (vs. brand subtle) can be employed to facilitate greater narrative transportation. On the other hand, for audiences with low meme

literacy, marketers should avoid overly complex symbolic memes that may hinder narrative transportation. In this regard, the managerial focus should be on targeting young generational cohorts (i.e., millennials and Gen Z) because internet memes are more admired among the youth.

Last but not least, meme marketers should recognise the critical role of pronouns in meme marketing. When crafting meme marketing textual content, consider addressing the audience directly through second-person pronouns. This can prompt viewers to immerse themselves in the narrative, fostering a sense of personal involvement and enhancing narrative transportation. This approach can be particularly effective for brand prominent meme marketing, as it captures viewers' attention to mentally immerse themselves in the narrative. For brand subtle meme marketing, where the brand's presence is more discreet, the role of second-person pronouns may be less pronounced.

8. Limitations and future research

The findings of this study are limited by the product category that was employed in its studies. While study 1 used two different real-world brands, study 2 included a fast food brand. All these products fall within the same product category (i.e., food and beverage). We did not investigate how different product types might affect narrative transportation. Future studies could look into the impact of product categories on meme marketing processing and evaluation. In addition, one particular genre of meme marketing called "image macro" (i.e., combination of image and text) was employed in this study. Internet memes exist in varied formats (e.g., GIFs, videos, etc.) on social media. Future research needs to explore the effectiveness of other genres in the context of meme marketing to increase the generalizability of the results.

Drawing on pragmatics literature (Forceville, 2014; Wharton, 2009), we contend that meme marketing utilizes visual implicatures, requiring consumers to make inferential hypotheses to uncover the underlying intentions of the brand. Future research should explore the role of spontaneous inference in meme marketing effectiveness, using experimental designs to manipulate implicit information in meme content and measure consumer inferences. This could provide insights into cognitive processes and customer engagement. To further enrich the theoretical contributions of this research, we suggest exploring the integration of dynamic picture interaction and personal pronoun choice in meme marketing. Finding the optimal combination of text and image stimuli that elicits greater narrative transportation is crucial for effective meme marketing execution. We anticipate that dynamic picture interaction, especially when paired with a second-person pronoun, will enhance the generation of mental imagery and elevate narrative transportation compared to static images with a first-person pronoun.

Other than meme literacy, internet memes require varied types of literacies, such as cultural (pop culture) (Shifman, 2013), digital (technology/social media savvy) (Boyle, 2022), intertextual (borrowing content from other references) (Laskin and Laskin, 2022), and visual (interpretation of perceptual, structural, and ideological components of memes) (Romero and Bobkina, 2021). Therefore, a fruitful research area is to investigate how these literacies can increase or decrease the effectiveness of meme marketing. Examining this is vital because meme creation and consumption rest on these literacies (Nissenbaum and Shifman, 2017). Lastly, we assume that brand prominent meme marketing doesn't result in the activation of persuasion knowledge, as there exists a negative relationship between the activation of persuasion knowledge and narrative transportation (Boerman et al., 2015). However, we don't directly measure this effect. Future investigations may extend the current research by determining whether brand prominent meme marketing triggers persuasion knowledge.

CRedit authorship contribution statement

Ali Razzaq: Writing – review & editing, Writing – original draft,

Formal analysis, Data curation, Conceptualization. **Wei Shao:** Writing – review & editing, Supervision, Project administration, Conceptualization. **Sara Quach:** Writing – review & editing, Supervision, Project administration, Conceptualization.

Declaration of competing interest

I am writing to submit our manuscript entitled “**Meme marketing effectiveness: A moderated-mediation model**” for consideration to be

published in Journal of Retailing and Consumer Services. I declare that there are no conflicts of interest associated with this submission, and all authors listed in the manuscript have agreed to this statement. Thank you for considering our submission, and we look forward to the opportunity to contribute to the scientific knowledge in our field.

Data availability

Data will be made available on request.

Appendix A. Meme marketing stimuli

Study 1

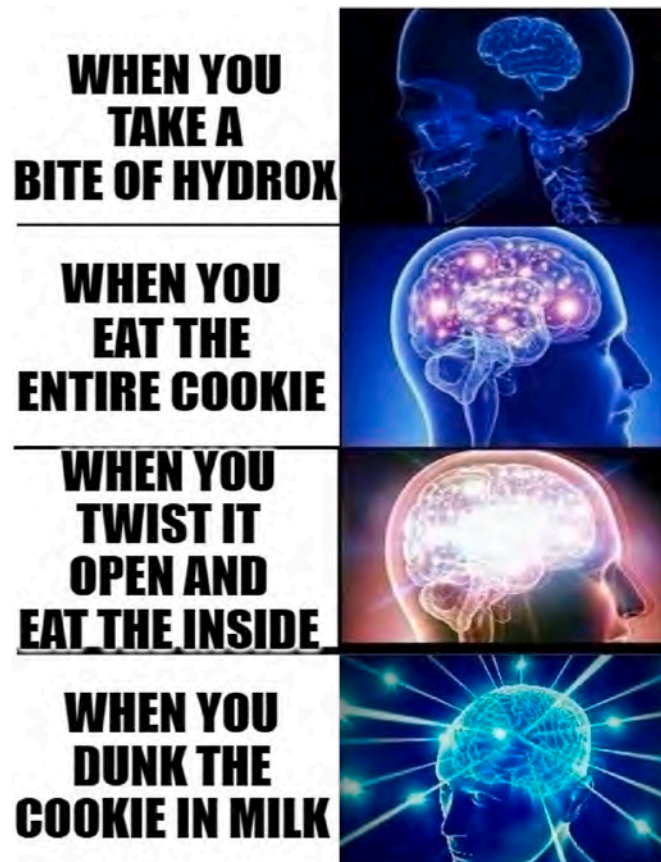




BPM × Low brand knowledge



BSMM × High brand knowledge



BOMM × Low brand knowledge

Study 2



BPMM × High meme literacy

Contextual knowledge: Draw 25 refers is a meme with one image of a customizable Uno wild card next to an image of a man with a large hand of cards. The wild card typically gives the option of performing an action or “draw 25” and the second image infers that a person decided against performing the action. The images together paint the picture that the person would rather do anything but what the card asks for.



BPM \times Low meme literacy



BSMM \times High meme literacy

Contextual knowledge: Draw 25 is a meme with one image of a customizable Uno wild card next to an image of a man with a large hand of cards. The wild card typically gives the option of performing an action or “draw 25” and the second image infers that a person decided against performing the action. The images together paint the picture that the person would rather do anything but what the card asks for.



BSMM × Low meme literacy

Study 3



Brand prominent meme marketing × First pronoun



Brand prominent meme marketing × Second pronoun



Brand subtle meme marketing × First pronoun



Brand subtle meme marketing × Second pronoun

Appendix B. Scale Items, Factor loadings, and Descriptive Statistics of constructs

Sources	Measurement items	(Study 1)			(Study 2)			(Study 3)		
		FL	M	SD	FL	M	SD	FL	M	SD
		$\alpha = .87$			$\alpha = .92$			$\alpha = .82$		
Mediator: Narrative Transportation (Escalas et al., 2004)	1. This meme did not really hold my attention. ^R (1 = Strongly disagree, 7 = Strongly agree)	.80	3.12	1.59	.87	3.36	1.84	.85	3.15	2.92
	2. This meme did not draw me in. ^R (1 = Strongly disagree, 7 = Strongly agree)	.79	2.43	1.17	.90	3.48	1.61	.80	4.26	1.45
	3. This meme really intrigued me. (1 = Strongly disagree, 7 = Strongly agree)	.81	4.81	1.80	.89	5.54	2.36	.83	2.93	2.26
	4. If I had come across this meme on my social media feed, I would have viewed it. (1 = Strongly disagree, 7 = Strongly agree)	.82	5.15	1.84	.91	5.31	1.45	.77	3.56	1.72
	5. I could not relate to this meme. ^R (1 = Strongly disagree, 7 = Strongly agree)	.78	2.42	1.63	.89	2.73	1.69	.89	2.37	1.98
	6. This meme reminded me of experiences or feelings I have had in my own life. (1 = Strongly disagree, 7 = Strongly agree)	.82	5.29	1.93	.92	5.21	1.48	.74	5.14	1.56
	7. While viewing this meme, I felt as though I was right there in the situation experiencing the same thing. (1 = Strongly disagree, 7 = Strongly agree)	.77	4.54	1.51	.88	5.13	1.66	.83	2.91	1.08
	8. I would like to have an experience like the one shown in this meme. (1 = Strongly disagree, 7 = Strongly agree)	.75	5.28	1.86	.90	5.10	1.63	.82	5.42	1.24
DV: Attitude towards ad (Lutz et al., 1983)		$\alpha = .81$			$\alpha = .92$			$\alpha = .83$		
	1. How do you feel about the meme you just saw ...									
	•Strongly negative (1) – Strongly positive (7)	.81	5.34	1.41	.90	5.46	1.71	.79	3.14	1.12
	•Don't like it at all (1) – Like it a lot (7)	.78	5.19	1.72	.94	5.53	1.65	.73	6.12	1.67
	•Very unfavourable (1) – Very favourable (7)	.77	5.31	1.45	.93	5.32	1.70	.84	4.15	1.29
DV: Customer engagement (Shehu et al., 2016)		$\alpha = .84$			$\alpha = .93$			$\alpha = .80$		
	1. If you came across this meme on your social media feed, how likely is it for you to click the “like” button. (1 = Very unlikely, 7 = Very likely)	.84	4.59	1.22	.94	5.56	1.43	.87	5.14	1.41
	2. If you came across this meme on your social media feed, how likely is it for you to click the “share” button. (1 = Very unlikely, 7 = Very likely)	.83	4.61	1.18	.85	5.39	1.76	.76	3.89	1.19
	3. If you came across this meme on your social media feed, how likely is it for you to “tag” your friends or family members. (1 = Very unlikely, 7 = Very likely)	.80	4.49	1.72	.89	5.33	1.60	.74	5.28	1.63
Covariate: Need for humour (Picard and Blanc, 2013)		$\alpha = .81$			$\alpha = .92$			$\alpha = .83$		
	1. People expect me to say funny things. (1 = Strongly disagree, 7 = Strongly agree)	.79	4.42	1.64	.82	4.81	1.43	.87	4.50	1.34
	2. I can make people laugh with the things I say. (1 = Strongly disagree, 7 = Strongly agree)	.82	5.17	1.36	.90	5.51	1.47	.76	4.74	2.21
	3. I often come with witty comments. (1 = Strongly disagree, 7 = Strongly agree)	.84	5.39	1.22	.78	5.25	1.46	.89	1.02	0.72
	4. I am good at cracking jokes and funny stories. (1 = Strongly disagree, 7 = Strongly agree)	.80	4.56	1.71	.81	5.95	1.31	.79	5.78	1.93
	5. People tell me that I am quick-witted. (1 = Strongly disagree, 7 = Strongly agree)	.85	4.67	1.44	.93	4.64	1.87	.85	3.70	1.15
	6. I often feel the need to make other people laugh. (1 = Strongly disagree, 7 = Strongly agree)	.77	4.48	1.90	.91	4.79	1.51	.80	4.85	1.72
	7. I am a humour enthusiast. (1 = Strongly disagree, 7 = Strongly agree)	.81	4.83	1.81	.89	5.15	1.30	.88	4.75	1.38
	8. I prefer situations where people are free to express their sense of humour. (1 = Strongly disagree, 7 = Strongly agree)	.75	5.76	1.24	.70	5.57	1.24	.82	1.63	0.96
	9. I enjoy being with people who tell jokes or funny stories. (1 = Strongly disagree, 7 = Strongly agree)	.78	5.67	1.35	.85	5.96	1.43	.75	5.67	1.28
	10. I often read jokes and funny stories. (1 = Strongly disagree, 7 = Strongly agree)	.83	5.58	1.23	.93	5.35	1.62	.76	4.89	1.37
	11. I need to be with people who have a sense of humour. (1 = Strongly disagree, 7 = Strongly agree)	.87	4.74	1.56	.91	5.66	1.58	.71	3.21	1.92
	12. I enjoy being around quick-witted people. (1 = Strongly disagree, 7 = Strongly agree)	.90	5.63	1.24	.94	5.73	1.45	.83	5.43	1.76
Covariate: Consumer transportability (Dal Cin et al., 2004)		$\alpha = .81$			$\alpha = .92$			$\alpha = .83$		
	1. When I encounter visual content (i.e., image or video) on my social media feed, I can easily envision myself in the events described in the visual content.	.83	4.91	1.47	.78	4.51	1.26	.75	4.02	1.62
	2. When I encounter visual content (i.e., image or video) on my social media feed, I find myself feeling what the characters may feel.	.80	4.42	1.65	.83	4.85	1.47	.78	5.98	1.25
	3. When I encounter visual content (i.e., image or video) on my social media feed, I find it difficult to ignore activity around me. ^R	.82	3.38	1.20	.93	3.51	1.13	.89	3.88	1.02
	4. When I encounter visual content (i.e., image or video) on my social media feed, I sometimes feel as if I am part of the story.	.70	3.74	1.72	.89	4.46	1.19	.75	3.75	1.45
	5. When I encounter visual content (i.e., image or video) on my social media feed, I am often emotionally affected by the visual content.	.82	4.68	1.59	.94	4.93	1.22	.82	4.12	1.15
Covariate: Brand familiarity (Campbell and Keller, 2003)		$\alpha = .81$			$\alpha = .92$			$\alpha = .83$		
	1. To what extent are you familiar with the brand depicted in this meme.				.90	4.83	1.70	.91	5.54	1.67
	2. How often do you purchase the brand shown in this meme.				.92	4.76	1.43	.77	4.96	1.21
	3. How knowledgeable are you about the brand's product shown in this meme.				.88	4.97	1.62	.81	5.31	1.08

Appendix C

Table 1

Correlations and reliabilities.

Correlations and reliabilities (Study 1)							
		AVE	MSV	1	2	3	4
1	Narrative transportation	0.84	0.15	(0.93)			
2	Attitude towards ad	0.88	0.24	0.28	(0.89)		
3	Customer engagement	0.92	0.13	0.33	0.35	0.33	(0.93)
(Study 2)							
		AVE	MSV	1	2	3	4
1	Narrative transportation	0.91	0.20	(0.90)			
2	Attitude towards ad	0.88	0.29	0.15	(0.93)		
3	Customer engagement	0.87	0.22	0.26	0.35	0.40	(0.92)
(Study 3)							
		AVE	MSV	1	2	3	4
1	Narrative transportation	0.88	0.14	(0.93)			
2	Attitude towards ad	0.91	0.18	0.25	(0.89)		
3	Customer engagement	0.92	0.29	0.21	0.29	0.38	(0.90)

Note: $N_1 = 300$, $N_2 = 300$, $N_3 = 253$. Off-diagonal numbers are correlations between the constructs. Correlations greater than 0.14 are significant at $p < .05$. Correlations greater than 0.18 are significant at $p < .01$. Numbers in parentheses are construct reliability (CR) values.

Abbreviations: AVE = Average variance extracted, MSV = Maximum shared variance.

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