

New Challenges in Social Media Marketing: Exploring the Interaction Effects of Age and
Message Format on Cognitive, Affective, and Behavioral Outcomes

By

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THESIS

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ABSTRACT

New Challenges in Social Media Marketing: Exploring the Interaction Effects of Age and Message Format on Cognitive, Affective, and Behavioral Outcomes

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The prevalence of social media and their increasingly diverse user demographics have started to pose new challenges to marketing communication researchers and professionals. Guided by the media richness theory (MRT), this study investigates the main effects of age and three message formats (i.e., text, image, and video) on social media and their interaction effects on attention capturing, positive emotions, product liking, information seeking, and buying intent. The results of an online experiment ($N = 240$) showed there was a significant main effect of age on different positive emotions (i.e., excited, controlling, and influential), and a significant main effect of format on one positive emotion (i.e., hopeful). There was also a significant interaction effect of age and message format influencing the effectiveness of a social media message for participants' attention capturing, positive emotions, product liking, information seeking, and buying intent. I discussed possible reasons behind these results and suggestions for future research.

Keywords: Media richness theory, attention capturing, positive emotions, product liking, information seeking, buying intent, age, message formats, social media marketing

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DEDICATION

I dedicate my thesis work to my most exceptional supporters.

Graduate school has been a time of low quantity but high quality friends who have wiped my tears during the hardest setbacks I have experienced and celebrated with me the best accomplishments of my life. I am very lucky to have such special individuals care for me. Thank you for everything you do for me.

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Chapter 1 Introduction

Social media usage has expanded exponentially for the last ten years. According to Pew Research Center (Perrin, 2015), social media usage among American adults increased from 7% to 65% from 2005 to 2015. Most social media users (e.g., users of Twitter, Facebook, and Instagram) visit the social media platform at least once every day (Perrin & Anderson, 2019). Social media usage has become many people's routine activity and has affected "...communications patterns around the globe, as well as the way people get and share information" (Perrin, 2015). Marketing communication professionals have turned to social media to reach a massive audience, for the convenience of allowing consumers to advance in the purchasing process, and the value of being able to accomplish this at little to no cost (Sajid, 2016). A variety of marketing objectives can be achieved with social media, including branding, customer relationship management, consumer research, direct communication, and sales promotions delivery (Ashley & Tuten, 2014).

The growing popularity and benefits of social media platforms have warranted scholarly inquiry for effective social media marketing communication. Social media messages can be presented in different formats (i.e., text, image, or video). The media richness theory (MRT) postulates that messages vary in richness based on the number of cues available, the synchronicity of the media, the degree of personalness, and the language variety presented (Ferry et al., 2001). Drawing on MRT, I argue that social media messages vary in richness by the number of cues and language variety. Specifically, text provides limited visual cues and language that is not natural, image provides a higher visual cue with colors and figures and a visually natural language, while video provides visual and audio cues and language variety (i.e., Text = Low, Image = Medium, Video = High). In the current social media marketing literature,

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researchers have found that different formats affect emotions, purchase intent, and persuasion differently (e.g., Adelaar, et al., 2003; Pelsmacker & Neijens, 2012; Tutaj & Reijmersdal, 2012). Yet, social media users are bombarded with various messages every minute, often resulting in information overload and social media fatigue, failing in the purpose of social media marketing (Bright et al., 2015).

Moreover, the increasing diversity in social media users' age may challenge the effectiveness of traditional social media marketing strategies. With the increasing availability of the internet, users are no longer exclusively young early adopters. In 2016, 67% of all Americans above the age of 65 reported using the internet (Anderson & Perrin, 2017). Social media usage among adults over the age of 65 increased from 2% in 2008 (Anderson & Perrin, 2017) to 40% in 2019 in the United States (Pew Research Center, 2019). These statistics suggest age diversity in social media users. In fact, scholars have found differences in attention capturing, product liking, and information seeking among people in different age categories (Tarabashkina et al., 2018; Miller & Bell, 2012; Berger & Messerschmidt, 2009). For example, age predicted individuals' tendencies to be influenced by marketing intentions (i.e., informing or selling), with older people more critical of informative messages and more difficult to be persuaded (Tarabashkina et al., 2018). Other studies revealed differences in adults' perceived credibility of websites by age categories (Howe & Teufel, 2014).

Messages on social media manifest in different formats, and audiences of various age groups may respond to them differently. Therefore, tailoring message formats based on social media users' characteristics, such as age may bring positive influences on social media marketing effectiveness. In fact, Dunaetz et al. (2015) argued that younger generations prefer communication with lower levels of media richness as they do not require much effort to

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understand the message. Yet, besides the interest in empirical studies researching age's effect on how people respond to messages with different formats, most studies limited their sample age diversity to a small degree or ignored age as an important variable (Lazard & Atkinson, 2015).

Due to the increase in social media usage of various age groups and the technological advances to present social media marketing messages in different formats, I aim to fill the research gap on how individuals of different age groups respond to social media marketing communication messages in various formats. Practically speaking, internet and social media analytics tools make tailoring message formats based on users' age possible. For example, tools such as Google Analytics (Google Marketing Platform, 2019), Twitter algorithms (Morgan-Lopez et al., 2015), or Facebook Blueprint can provide information about users' age. With such research tools, practitioners could potentially count on valuable age-group strategies for social media marketing, including format preferences that highlight general age-group behaviors and expected responses, ultimately assisting marketers, communicators, and managers in delivering effective communication. It is worth exploring how social media users of different age groups may react differently towards various format messages to predict responses in terms of attention capturing, positive emotions, product liking, information seeking, and buying intent.

Chapter 2 Social Media User Age and Marketing Responses

Social Media Users and its Changing Age Groups

The latest statistics show a steadily increasing number of internet users. According to the International Telecommunication Union (2019), the number of internet users has more than doubled in the past ten years globally, jumping from 25.8% in 2009 to 53.6% in 2019. Recently, the United States communications industry has invested in broadband deployment, including the next-generation wired and wireless internet services, according to the Federal Communications Commission's 2019 Broadband Deployment Report. With at least minimum speed internet access available to more than 96% of the U.S. population as of 2017 (Broadband Deployment Report, 2019), it is no surprise the percentage of American internet users is constantly increasing.

The belief that the internet is only for young generations has changed in recent years. Internet users are becoming more diverse in age and no longer only include young adults. In the United States, a national representative sample (Anderson & Perrin, 2017) indicated 67% of people above the age of 65 use the internet. Among the senior internet-using population, 75% use it daily, and 10% use it constantly. Surprisingly, an estimated 44% of people ages 80 and over use the internet. Moreover, more than half of the senior people who were surveyed (i.e., 65 and over) agreed that technology has a mostly positive impact on society (Anderson & Perrin, 2017).

With an increase in internet usage and its diversity, there has also been an increase in social media usage and its diversity in users' age groups. In 2019, 72% of the U.S. adults surveyed reported using at least one social media site (Pew Research Center, 2019). Sites like Twitter, Facebook, and Instagram are used daily by over half of their users. The age diversity of

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social media users has also increased significantly. Social media usage in adults over the age of 65 has increased from 2% in 2008 (Anderson & Perrin, 2017) to 40% in 2019 (Pew Research Center, 2019). Since 2017, the majority of people in three age categories (i.e., 18 to 29, 30 to 49, and 50 to 64) use social media. The previous statistics marked the beginning of a new trend in social media usage.

Age's Influence in The Social Media Marketing Context

Due to social media platforms' increasing accessibility and adoption, communicators have turned to them as marketing tools that allow organizations to prosper. Specifically, social media platforms have become popular communication channels due to the magnitudes of reach and influence. According to the Social Media Marketing Industry Report (2016) by Social Media Examiner, 63% of businesses invest over 6 hours per week on social media marketing, while 39% spend over 11 hours each week. Marketers and communicators have realized the value of social media as marketing and communication platforms.

Recently, social media platforms have started counting on complex algorithms to target the most appropriate and interested audiences for marketing communication purposes. This is especially useful since consumers are exposed to thousands of social media messages every day (Simola et al., 2015), and targeted messages may generate more interests and attention. Twitter collects information from an individual account, such as tweets liked and retweeted, as an indicator of a user's age and what marketing to send their way (Morgan-Lopez et al., 2015). Businesses may define their market segment by age category, among other characteristics, to communicate with the most appropriate age group. Therefore, the responses that are expected by an age group can help guide marketing efforts to a market segment.

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In the current marketing and communication literature, scholars argue that the field is changing from traditional advertising via old-fashioned channels, such as television, to new media channels where consumers are empowered to control what messages they want to see, such as social media (e.g., Pelsmacker & Neijens, 2012). Scholars have found that age differences influence shopping channel preferences (Boardman & McCormick, 2018). Specifically, in-depth interviews conducted in a 50-year age span indicated that ages 20 to 29 preferred mobile commerce as their main shopping channel, while ages 60 and over preferred in-store shopping. Research results like these provide insight into the type of marketing materials that internet users expect to see. On social media platforms, users usually have the option to skip, close, or scroll away from marketing messages. Therefore, it is important to study if and how individuals of different age groups respond to social media marketing messages differently.

In the extant social media and marketing literature, researchers have started to investigate how to: obtain and retain audience attention in these new media channels; create positive emotions; convince them to like the product; motivate them to seek out more information; and eventually, buy the product or service. In the following paragraphs, these five topics are discussed.

First, scholars have investigated the attention capturing of ads in different age groups. Generally, scholars have found that younger consumers show less attention to ads in comparison with older consumers (Speck & Elliot, 1997). Similarly, young adults were found to spend less time on online pages with more advertisements than older adults (Danaher et al., 2006). Furthermore, age may be an indicator of user interests. For example, in a study by Fox et al. (1998), when participants were presented with ads of beer and cigarettes, those under 21 did not

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show as much attention as those who were 21 and over. Different ages may imply different interests, which may yield different responses to a marketing message.

Moreover, ad viewers' emotional responses in various age groups showed differences in the marketing and advertising literature. For example, McKay-Nesbitt et al. (2011) found that older adults responded more positively emotionally to all types of ads presented. Furthermore, they found that younger adults recalled negative emotional messages better, while older adults ages 48 to 89 recalled rational and positive emotional messages better. A similar study discovered older adults aged 65 and over have a preference for affective ads regardless of the product (Aimee et al., 2007). On the contrary, younger adults aged 18 to 25 have positive emotions towards affective ads only if the product is hedonic (i.e., a luxury product), since they prefer rational ads when the product is utilitarian (i.e., an essential product or one that has practical value) (Drolet et al., 2007).

Scholars also examined product liking and attitude differences across age groups. For example, people in various age groups differed in perceived message usefulness, intention to use the information, and attitude of social media messages (Perju-Mitran & Budacia, 2017). Specifically, older viewers over 50 years of age had higher perceived usefulness and a more positive attitude. There are a few other age-based differences, such as the intention to distribute the information and willingness to become loyal to a brand or company (Perju-Mitran & Budacia, 2017). Younger adults up to 35 years old are more open to participation and engagement with advertisements than older age groups. Additionally, age groups 20 to 35 and 36 to 50 have more intention to distribute information than older age categories. Another study supports that younger adults have a more favorable perceived brand image because they generally spend less time viewing the ad (Goodrich, 2013). Overall, factors such as product

liking, attitude, perceived usefulness, and intention to use the information can indicate how effective a message is and can be predictors if there are age-based patterns in the responses.

Furthermore, several studies (e.g., Se-Joon & Kar, 2006; Wilson et al., 2002) have found an influence of age in decision-making processes such as information seeking, which is a behavior that reduces uncertainty about an upcoming purchase (Desarbo & Choi, 1998). The internet is one possible source of information and is preferred for its ease of use, accessibility to large amounts of data, time and money efficiency, the network of experts available for contact, and the flexibility in terms of space and time of usage (Savolainen, 1999). Scholars have found that younger adults aged 18 to 34 trust online information whether they are internet adopters or not, while older adults over 65 years of age trust online information only if they are internet adopters (Miller & Bell, 2012). It was also found that consumers of older age visit online communities for information seeking more often than younger consumers (Berger & Messerschmidt, 2009). While some may believe “online communities are commonly understood as an instrument to attract younger consumers,” researchers have discovered older people who are at an advanced life stage with responsibilities and expensive, long-term purchases rely on online communities to find pre-purchase information more often than younger adults (Berger & Messerschmidt, 2009, p. 459).

Lastly, researchers found that different age groups react and respond differently to marketing messages, such as their attitude toward a product and willingness to buy the product. For example, Tarabashkina et al. (2018) studied the differences in advertisement persuasion in kids aged 8 to 13 based on the different perceived ad intent (i.e., attention grabbing, product liking, or informing). They found that younger kids were more likely than older kids to be persuaded in situations where they believed the advertisements intended to capture their attention

or make them like the product. Studies like these suggest age predicts individuals' tendencies to be influenced by marketing intentions (i.e., informing or selling), such that older adolescents seemed to be more critical of marketing messages. Additionally, Scholars have found a significant difference in adults' perceived credibility of websites with different ad layouts by age categories (Howe & Teufel, 2014). Specifically, young adults aged 18 to 24 have recognized and rejected native ads (i.e., ads that match the form and function of the platform they are presented in) while older adults aged 55 to 64 see no difference in credibility of sites with both native and banner ads (i.e., the rectangular image displays that stand out on the side, top, or center of a website and redirect to a different site) and are willing to make a purchase regardless of the layout.

The previous literature has accumulated abundant empirical evidence that age can influence consumer responses to marketing messages. Yet, some of them provide inconclusive evidence of the relationships, which warrants further scholarly investigations. For example, scholars have studied the difference in attention captured by ads, but not in a social media context (Fox et al., 1998). In other cases of the literature, results focus on the positive reactions to a marketing message, but not the product liking (Perju-Mitran & Budacia, 2017), which is a marketing objective of businesses selling a product. Furthermore, scholars have found inconsistent results for the effect of age on positive emotions (Aimee et al., 2007; McKay-Nesbitt et al., 2011), information seeking (Miller & Bell, 2012; Berger & Messerschmidt, 2009), and buying intent (Tarabashkina et al., 2018; Howe & Teufel, 2014).

Based on the discussion above, investigating how different people in age groups respond to social media marketing messages, including attention capturing, positive emotions, product liking, information seeking, and buying intent, could yield important theoretical and practical

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insights. Age can be identified using web tracking tools including Google Analytics (Google Marketing Platform) or social media analytics tools such as Twitter Analytics and Facebook Blueprint. Understanding how social media users in different age groups respond to social media marketing messages may be attainable and have significant practical value, as it can predict likely responses by age categories, facilitating decision-making marketers. Therefore, I propose the following research questions:

RQ 1a: How does age predict users' attention capturing towards a product in social media marketing?

RQ 1b: How does age predict users' positive emotions towards a product in social media marketing?

RQ 1c: How does age predict users' product liking towards a product in social media marketing?

RQ 1d: How does age predict users' information seeking towards a product in social media marketing?

RQ 1e: How does age predict users' buying intent towards a product in social media marketing?

Chapter 3 Social Media Message Format and Marketing Responses

Media Richness Theory

The MRT draws a continuum measuring how rich a message is, according to the number of cues available, the synchronicity of the media, the degree of personalness, and the language variety presented (Ferry et al., 2001). The cues refer to all forms of communication, including verbal (e.g., language, tone) and non-verbal (e.g., facial expressions). Synchronicity is the ability to receive a response or feedback immediately, while personalness refers to how personal the message must be (e.g., firing a subordinate will require a higher level of personal focus than asking a coworker where to go for lunch). The last factor is the language variety, which covers the ability to transmit natural language (e.g., speech, writing, or singing) as opposed to constructed or formal languages that are developed consciously and require effort to process (e.g., algebra or computer coding). These four factors serve as indicators to determine the richness of media.

MRT has provided communicators with important insights on which media is more effective to use in a specific communication situation. MRT indicates that for tasks that are complex in nature, rich media is more effective (Rambe & Retumetse, 2017). For instance, showing employees safety procedures that must be followed precisely is best communicated using a rich medium that includes a physical demonstration in person or video. On the other hand, communication of simple tasks is actually more efficient and appropriate with lean media (Rambe & Retumetse, 2017). For example, confirmation of receiving a text message from a friend will suffice with a thumb up emoji, with no need to call or visit the friend in person. According to MRT, the communication goal of each individual situation will determine the most

convenient media to utilize, with no one media being superior or preferable in a generalizable form.

Being developed in the 1980s, MRT is considered as one of the pioneering frameworks for studies on communication technology and media use behaviors (Ishii et al., 2019). Although MRT was developed before the technological era of today, it has found applications in modern research. MRT lists factors that help determine the richness levels across different types of media, including face-to-face, video conference, phone or radio call, and documents. Moreover, MRT can have practical applications across other areas such as marketing and in relation to other variables, such as studies over preferred channels, emotions, perceived value, engagement, attention grabbing, purchase intent, and loyalty, among others (Badger et al., 2014; Dunaetz et al., 2015; Mandal & McQueen, 2012; Marcin & Ilona, 2018; Tseng et al., 2017).

MRT can be used as a theoretical framework to study different formats' influences on audience responses on social media. For example, MRT would describe social media messages as either lean or rich depending on the messages' format. Voice chat is considered rich due to its immediacy, while text messages are lean since the format was limited to text (Kwak, 2012). Furthermore, current technological advances have enriched channels previously labeled as lean. Emojis, images, and audio or video attachments have made instant messaging a richer channel, according to MRT (Sheer, 2011). Researchers have applied MRT in marketing and communication studies to measure the relationship between media richness and user responses. While it is common for models to become outdated due to uncontrollable societal changes, MRT continues to serve its objective of evaluating communication richness.

Message Format and Its Influence in the Social Media Marketing Context

In the current literature of social media marketing strategies, researchers have found that different message formats affect attention capturing, emotions, product liking, information seeking, and purchase intent (e.g., Adelaar et al., 2003; Pelsmacker & Neijens, 2012; Mandal & McQueen, 2012; Kaid, 2003; Tutaj & Reijmersdal, 2012). In the following sections, I will review the literature on these marketing responses to social media messages and the various formats messages can be displayed on, utilizing MRT as a theoretical framework.

Researchers have applied MRT in marketing and communication studies to study the relationship between media richness and users' attention. For example, Sunday et al. (1998) argued that "to the extent advertisers use the new features of the online medium that are non-existent in print, they are probably more likely to enhance user attention to the advertising" (p.830). Examples of these features include audio, video, and animated images. An additional study compared the attention captured by business ads on a directory book. Quarter-page image ads were more attractive compared to regular text listings, and participants saw 93% of quarter-page image ads and only 26% of regular text listings (Lohse, 1997).

Scholars expanded literature by studying differences in engagement and time dedicated to different formats. Guided by MRT, Lazard and Atkinson (2015) compared reader engagement when exposed to messages in simple text, image, or a combination of these, known as infographics. They found that visual messages are important for persuasive message processing, and infographics proved to be a good option for communicators. Additionally, research supports a difference between time dedicated to banner ads in comparison to skyscraper ads, the attention, and memory retained, regardless of the product relevance (Simola et al., 2015). These references suggest that message format may play an important role to capture audiences' attention. The

practical implication is that marketing communicators can improve user attention if they present a message in the most convenient format.

Guided by MRT, users' emotional responses to different media formats have been explored in the literature. For example, Adelaar et al. (2003) conducted an experiment to research the effects of media formats (i.e., text, still images, or video) on emotions and found that the combination of sound and text caused an increase in positive emotions. Another study has found that richer media with multiple cues and immediacy results in greater socio-emotional communication, message clarity, and increases positive perceptions (Kahai & Cooper, 2003). Lu et al. (2014) conducted an experiment to test the effectiveness of websites with different levels of richness. The richer websites revealed higher intentions of the people to visit that website and a stronger commitment to recommend the website. Overall, marketing messages that contain both visual and verbal cues elicit emotional consumer responses.

Concerning the product liking, Tseng et al. (2017) found the richness of media affected customers' perceived value of the product and customer loyalty. Specifically, the larger number of cues, immediacy, and personalness in mobile instant messaging resulted in greater perceived functional and social value, and the language variety influenced user loyalty positively. Relatedly, Levy and Gvili (2015) argue that richness is a factor that makes an electronic message more credible, which may in turn influence product liking positively. A study by Coyle and Thorson (2001) found that users exhibited a more positive attitude with increased richness, defined as the number of different senses that a medium can engage and how closely a medium can replicate parts of the human sensory system (Steuer, 1992).

Furthermore, scholars (e.g., Sundar, 2000) found there is a relationship between message format (i.e., text only, pictures only, audio only, text and pictures, text and audio, audio and

pictures, or a combination of text, pictures, and video) and positive perception or liking. In presenting news, there was higher memory when presented text, and higher positive perceptions for pictures compared to other formats. In the case of ads, exposure to videos generated the most positive perceptions. Similarly, Kaid (2003) evaluated marketing messages during the 2000 presidential campaign to compare internet to traditional television in terms of effectiveness. Volunteers evaluated political candidates more positively when presented an online marketing message compared to other forms or messages like television debates, ads, and news. In these cases, rich marketing messages influenced the perceived value of a product (in this study, the presidential candidates) and perceived message credibility, which may, in turn, generate product liking.

The influence of message format on information seeking has been studied by multiple scholars. Marcin and Ilona (2018) found that consumers were more willing to seek information after being exposed to online messages because this format had a higher perceived richness compared to offline messages. Relatedly, Kaid (2003) found that viewing political marketing messages online stimulated greater information seeking behavior than viewing the same marketing message in the traditional television medium. Also, Savolainen (1999) discovered non-work related information seeking was preferred through calls or video calls. Because social media marketing is non-work related, viewers may be more willing to seek information when presented with a marketing message in video or audio. However, a study on small businesses' adoption of social media revealed consumers prefer to seek information in online blogs and chats with only text instead of social media posts with images and videos (Mandal & McQueen, 2012). The previous studies have found a relationship between the format of a message and the

information seeking of potential buyers. The literature on format preferences shows inconsistent results similar to the influence of age on viewer outcomes.

The existing literature also supports differences in buying intent or persuasion when audiences are exposed to different message formats. Presenting messages in verbal formats such as video sponsorships (i.e., people speaking about a product giving their review and recommendations), compared to visuals like banner ads (i.e., simple rectangular displays on a website that may contain text and image), are more appealing (Tutaj & Reijmersdal, 2012). This can potentially be due to the more personal-leveled communication in the video sponsorships. Adelaar et al. (2003) found that a combination of sound and text, as opposed to simple text or still images, caused higher levels of impulse buying intent. Behavioral intentions measured after viewing rich versus lean online marketing messages also showed a difference in Coyle's and Thorson's experimental study (2001), where richer media led to higher levels of purchase intention. Scholars support there are differences in buying intent and information seeking, as well as attention, emotions, and product liking across different formats. Based on the previous literature review on format influences in communication, I propose the following research questions:

RQ 2a: How does message format predict users' attention capturing towards a product in social media marketing?

RQ 2b: How does message format predict users' positive emotions towards a product in social media marketing?

RQ 2c: How does message format predict users' product liking towards a product in social media marketing?

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RQ 2d: How does message format predict users' information seeking towards a product in social media marketing?

RQ 2e: How does message format predict users' buying intent towards a product in social media marketing?

Chapter 4 Age and Social Media Message Format in Marketing Responses

The Interaction between Age and Format in the Social Media Marketing Context

In the first three chapters, I reviewed relevant literature on age and formats' effect on attention capturing, positive emotions, product liking, information seeking, and buying intent. I argue that the interaction effects of age and message format on these dependent variables in the social media context are interesting to explore as well. There are a few reasons. First, given the rise of age diversity in social media users, the scope of media richness studies should be expanded to investigate different age groups on social media (Dunaetz et al., 2015; Tseng et al., 2017; Boardman & McCormick, 2018; Tarabashkina et al., 2018). Second, fueled by the popularity of social media among consumers, marketers have turned to social media platforms as a tool for reaching their marketing goals (Social Media Marketing Industry Report, 2016). Therefore, more interaction research applied to social media may be of use to marketers. Third, there is little research on the relationship between age, message formats, and consumer responses in the marketing and communication literature. Insights generated from this line of research can provide marketers and communicators with important practical guidance.

In the current literature, conflicting evidences exist on how people's age influences their response to messages in different formats. For example, Scholars have found that younger generations used communication channels with lower levels of richness as opposed to older subjects who use rich channels (Dunaetz et al., 2015). Following MRT to categorize communication channels (i.e., face-to-face, telephone, instant messaging, text messaging, and email) by the synchronicity and number of cues, Dunaetz et al. (2015) suggested younger generations do not require much effort to understand digital messages, as technology has been present in their communication most, if not all, of their lives, making it feel natural and

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effortless. However, despite the communication channel usage differences among ages, there were no preferences identified in older adults. These interesting results are of valuable practicality to communicators, as they support that age and media richness may interact to influence audience responses. In this case, the older a person is, the richer the communication channel used, although it is not necessarily preferred by the consumer. Results supporting age and format affect cognitive, affective, and behavioral outcomes may imply that older individuals are more mentally mature and are willing to process information in a richer and more detailed format. On the other hand, young adults are expected to like more simple information as they prefer quick and simple messages.

Despite the increasing social media user diversity, most studies have examined samples with little age diversity when studying social messages' effects (Lazard & Atkinson, 2015). Scholars have found that age affects consumer responses with different message formats in various situations (e.g., interactive ads and websites), and I believe the same effect can be found in the social media context. Drawing on the MRT, social media messages can be rated according to their level of richness (i.e., text, image, or video). By investigating the possible interaction between age and different social media message formats on audience responses, marketers and communicators may be able to develop effective social media communication strategies to achieve desired consumer responses. Based on the above discussion, I propose the following research questions:

RQ 3a: How does age interact with message formats to influence attention capturing towards a product in social media marketing?

RQ 3b: How does age interact with message formats to influence positive emotions towards a product in social media marketing?

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RQ 3c: How does age interact with message formats to influence product liking towards a product in social media marketing?

RQ 3d: How does age interact with message formats to influence information seeking towards a product in social media marketing?

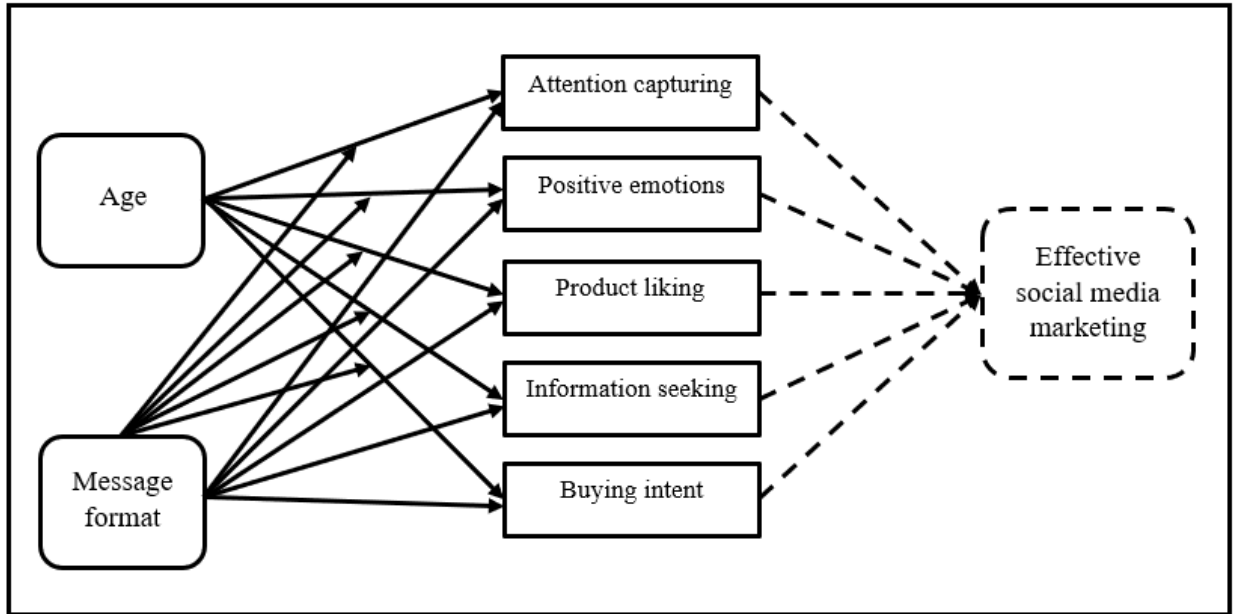
RQ 3e: How does age interact with message formats to influence buying intent towards a product in social media marketing?

Chapter 5

Research Questions

Figure 1

Research Questions Model



Note. Research questions model with age and message format as independent variables and attention capturing, positive emotions, product liking, information seeking, and buying intent as dependent variables.

Chapter 6 Method

Sampling Method

This study used the crowdsourcing marketplace MTurk by Amazon to recruit the sample. The MTurk marketplace was used as it provides a more diverse sample than a traditional non-representative student sample (Sheehan, 2018). Casler et al. (2013) compared conducting experiments recruiting participants from MTurk, social media, and in-person, and found no significant difference in the results. Furthermore, MTurk users showed more attention to surveys than subject pool participants (Hauser & Schwarz, 2016). Overall, the MTurk platform allows researchers to access relatively representative samples.

A link to the questionnaire was posted on the platform and subjects were recruited to complete the questions in exchange for a compensation of \$0.20. Among the 649 MTurk responses, 409 were not approved for not completing the survey or failing the attention check. 240 responses were approved, and 80 participants were randomly assigned to each format of the marketing messages. The dataset contained 68% males (i.e., 163 males) and 32% females (i.e., 77 females). To get a relatively equal number of responses in different ages groups and message formats, the survey was posted in batches using the age categories suggested by Pew Research Center (2018).

Study Procedures

This study used a between-subjects experimental design hosted by Qualtrics. First, participant was asked if he or she is a Twitter user. Twitter users were then randomly assigned to view one of the three messages (i.e., text, image, or video). Then, participants were asked to respond to a series of 7-point Likert-type items (1 = strongly disagree, 7 = strongly agree). A

manipulation check was added to confirm subjects' perceived richness of the presented message format was in accordance with MRT's propositions.

Experimental Stimulus

A marketing message was designed in three different formats and placed with a background that imitated the natural feed of Twitter. American adults considered Twitter as a platform for sharing news and following celebrities rather than friends and family (Hughes & Wojcik, 2019), and it was selected and designed to resemble a participant's timeline on Twitter. Other social media platforms, such as Facebook, on which users are accustomed to viewing their friends' posts, are more difficult to resemble and will generate experimental artificiality.

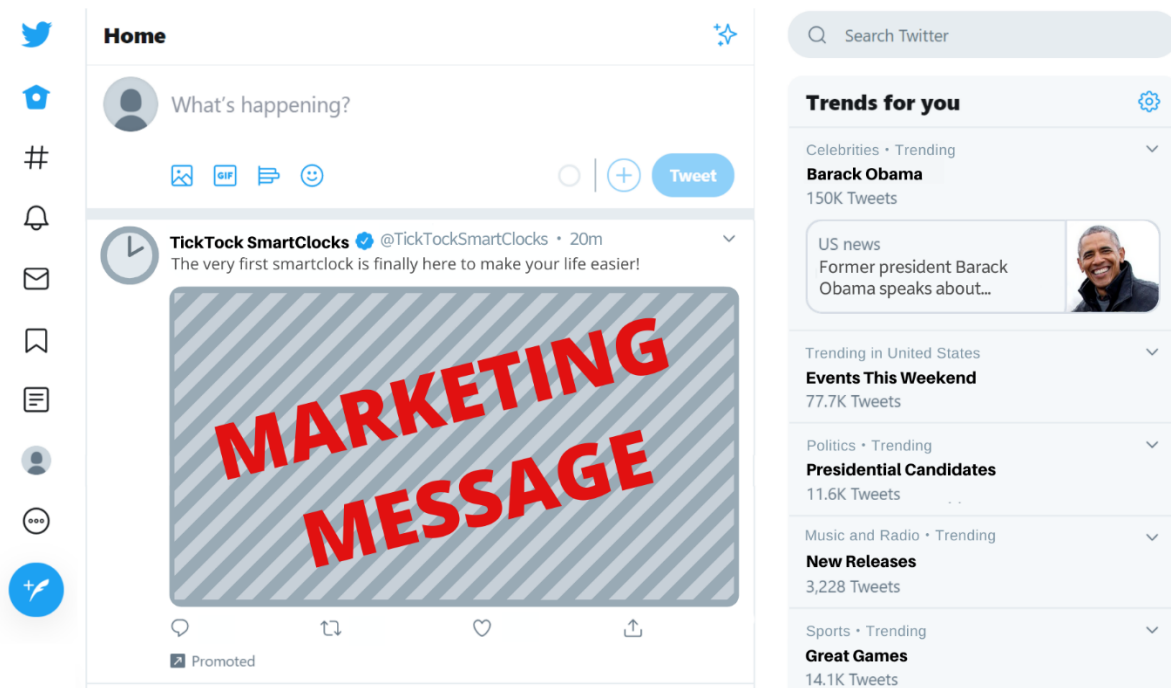
To eliminate potential confounding factors, the social media marketing messages were created with a fictitious brand of a search good. A search good is a product that can be easily evaluated with little effort. To avoid potential confounding factors, a clock was selected because all regular clocks function similarly and the messages were presented with a similar color palette. Additionally, people of all ages use clocks and they can evaluate the product easily. To make the product more attractive than a typical daily appliance at home, the clock is presented as a smart clock with features that provide tasks that a personal assistant could perform.

Subjects were presented a marketing message similar to how they would experience it when they use social media in their daily life. To imitate the natural setting of a personal social media account, participants were asked to select one user who they follow from a list of the top 10 most followed celebrities on Twitter (i.e., Barack Obama, Katy Perry, Justin Bieber, Rihanna Fenty, Taylor Swift, Cristiano Ronaldo, Lady Gaga, Ellen DeGeneres, Donald Trump, and Ariana Grande; Pope, 2019). Based on their selections, they were presented the messages with the influential user whom they follow. For example, if a participant indicated he or she followed

Barack Obama, the advertisement was shown with the background of Barack Obama, as shown below in Figure 2.

Figure 2

Background Image Simulating Twitter



Note. There were ten backgrounds total, one for each celebrity. Participants only viewed one based on a previous response self-reporting who they follow and support on Twitter. See Appendix A for all backgrounds.

Similar to previous experiments' operationalizations of message formats, the marketing message contained a combination of text, image, and video, with one dominant format. The messages in text dominant, image dominant, and video link are presented below.

Figure 3

Text Dominant Marketing Message



Note. Image used to represent the format text.

Figure 4

Image Dominant Marketing Message



Note. Image used to represent the format image.

Figure 5

Video Marketing Message



Note. The video message is available for review at the following link:

<https://youtu.be/t0VNC45IMCs>

Manipulation Check

A manipulation check was conducted to examine whether participants’ perceived message richness was consistent with MRT’s predictions. Participants’ scores for the format they were presented were used for the manipulation checks (i.e., 1 = Most lean, 2 = Very lean, 3 = Somewhat lean, 4 = Both rich and lean, 5 = Somewhat rich, 6 = Very rich, 7 = Most rich). To ensure participants fully understand the meaning of media richness, they saw the following definition of richness: “A message is rich if it is able to portray multiple information cues simultaneously. Examples of communication cues include verbal (tone and language), non-verbal (facial expressions and gestures), audio (sounds), and visual (charts and images).” The responses were analyzed with one-way ANOVA test comparing the richness perceptions of each format. The result showed there was a significant difference in the means of the perceived richness of different formats [$F(2, 237) = 13.71, p < 0.001$]. These results are displayed in Table 1.

Table 1

1-way Analysis of Variance for Manipulation Checks

Source	SS	MS	F (2,237)	p
Between-treatments	45.11	22.55	13.71	< 0.001
Within-treatments	389.83	1.65		
Total	434.93			

Note. The richness perception scores of the format each participant was presented with were compared.

Consistent with MRT’s predictions, video had the highest perceived richness ($M = 5.91$), image had a lower level of perceived richness ($M = 5.53$), and text had the lowest perceived richness ($M = 4.86$). A post-hoc Tukey HSD test was conducted. The multiple comparisons result showed a significant difference in perceived richness between text and image ($p < 0.01$). There was also a significant difference in perceived richness between text and video ($p < 0.001$). However, there was not a significant difference in perceived richness between image and video ($p = 0.138$). These results are displayed in table 2. The full results of frequencies and percentages of each message format’s perceived richness are in Appendix B in Table 12.

Table 2

Tukey HSD Multiple Comparisons Results for Manipulation Check

	<i>M</i>	<i>SD</i>	<i>p</i>		
			Text	Image	Video
Text	4.86	1.38	-	-	-
Image	5.53	1.24	< 0.004	-	-
Video	5.91	1.21	< 0.000	0.138	-

Note. Treatments paired only once.

Measures

Formats

Following Adelaar et al. (2003), the message formats for this study were operationalized as text, image, or video. Similar to Dunaetz et al. (2015), Table 3 was also used to draw a continuum of format’s richness based on the number of cues and language variety, where video is number 1 in richness, image number 2, and text number 3.

Table 3

Richness Ranking of Formats According to MRT

High ↑ ↓ Low	Format	Number of cues	Language variety	Richness Ranking
	Video	High-Visual, Audio	High-Audio, visually natural	1
	Image	Medium-Visual	Medium-Visually natural	2
	Text	Low-Limited visual	Low-Not natural	3

Note. Two MRT measures are used to rank how rich a format is. Video is considered the richest format.

Age

Participants were asked to enter their age in the form of a number.

Attention Capturing

Consumer attention has been defined by asking questions referring to cognitive availability, amount of time spent thinking about, and being attentive to what they refer to as the engagement partner (Dessart et al., 2016). Based on this definition, I developed the following items to measure attention capturing on a Likert scale: “I think this ad grabs my attention;” “I spent time reviewing this ad;” and “I stopped what I am doing to pay attention to this ad.” The Cronbach’s alpha was 0.66. α is slightly below the common guideline for internal consistency probably because of the small number of items.

Because previous scholars that researched attention capturing relied on eye-tracking technology, it was difficult to find a measurement scale with statements already formulated. For this reason, an additional measurement is necessary. With the help of Qualtrics features, respondents were asked the following, “Click on the area of the image that grabbed your

attention the most.” The results were then coded to identify if the respondents clicked on the marketing message or any other area of the background. The possible areas to select for attention captured are displayed ahead in different colors.

Figure 6

Preselected Areas of Image Displayed



Note. Participants had the option of selecting which color area of the displayed image grabbed their attention. There were four preselected areas that the participant could not see. The celebrity shown on the right panel varied according to each respondent’s previous selection.

Positive Emotions

According to Mehrabian and Russell’s (1974) model, pleasure, arousal, and dominance are the three main factors of positive emotional responses. I followed Adelaar et al. (2003) to use semantic differential scales when measuring positive emotions, such as “unhappy or happy,” “melancholic or content,” and “despairing or hopeful.” I placed positive emotions to the right and negative emotions to the left in order to conveniently compare responses with the remaining

variables on a Likert scale. The Cronbach's alpha was 0.88. Complete measures can be reviewed on Appendix A.

Product Liking

For this variable, I adapted a brand likeability scale (Nguyen et al., 2015) which proposes brand likability has four different dimensions: positive associations, interaction interest, personified quality, and brand contentment. I adapted the statements to reflect the product in the messages, such as "I strongly believe that Ticktock Smartclocks can keep its promise to me," "Ticktock Smartclocks is associated with a positive motive," and "I feel that I am favored and given priority by Ticktock Smartclocks." The Cronbachs' alpha for each dimension were the following: $\alpha = 0.84$ for positive association, $\alpha = 0.87$ for interaction interest, $\alpha = 0.85$ for personified quality, and $\alpha = 0.85$ for brand contentment. Full measures are on Appendix A.

Information Seeking

I adapted the information seeking measure from a 12-item measure in political marketing to be used in the current study (Kaid, 2003). Removing three irrelevant items, only 9 of the 12 items were used for this study. Examples included "I would like to watch more ads on TickTock SmartClocks;" "I would like to watch more social media marketing on TickTock SmartClocks;" and "I would like to participate in an electronic chat about TickTock SmartClocks." The Cronbach's alpha for the revised 9-item measure was 0.94. Full measures can be seen on Appendix A.

Buying Intent

Buying intent was measured using Lin et al.'s (2011) measure. The items included "Assuming I am in need and given the chance, I intend to buy from Ticktock Clocks," "Assuming I am in need and given the chance, I predict that I should buy from Ticktock Clocks

in the future,” “If I am in need, it is likely that I will buy clocks from Ticktock Clocks in the near future,” and “If I am in need, I expect to buy from Ticktock Clocks in the near future.” The statements were adopted almost identically, with the exception that “purchase” is adjusted to “buy” and the brand name was added as well. The Cronbach’s alpha was 0.90.

Confirmatory Factor Analyses

A confirmatory factor analysis (CFA) was conducted for the multidimensional constructs: positive emotions, product liking, and information seeking.

First, I conducted a CFA for positive emotions. The CFA model with the three dimensions proposed by the original author (i.e., pleasure, arousal, and dominance) showed a poor data-model fit, $\chi^2 (74, N = 240) = 213.90, p < 0.001, CFI = 0.89, SRMR = 0.60, RMSEA = 0.09$. Therefore, positive emotions items were used as individual dependent variables in all subsequent analyses.

The product liking scale had four dimensions. The CFA model showed acceptable data-model fit, $\chi^2 (113, N = 240) = 292, p < 0.001, CFI = 0.94, SRMR = 0.04, RMSEA = 0.08$. Therefore, I used the four dimensions in my analyses separately.

The source used for information seeking combined twelve items to measure information seeking and other related behaviors. These items were adjusted to refer to TickTock SmartClocks instead of political candidates. Before analyzing the questionnaire results, three items not measuring information seeking were excluded “I would like to promote TickTock SmartClocks for free,” “I would like to purchase TickTock SmartClocks,” and “I would like to be an investor in TickTock SmartClocks.” A confirmatory factor analysis for the one-factor model with the remaining nine items was conducted. The model showed good data-model fit, $\chi^2 (27, N = 240) = 36, p < 0.001, CFI = 0.99, SRMR = 0.07, RMSEA = 0.04$.

Analytical Strategies

I used SPSS 26.0 to conduct statistical analyses. To answer RQs 1a-e, a set of simple linear regression analysis was conducted with the independent variable being age. The dependent variables were attention capturing, individual positive emotions, four product liking dimensions (i.e., positive associations, interaction interest, personified quality, and brand contentment), information seeking revised mean, and buying intent.

To answer RQs 2a-e, separate one-way ANOVA tests were conducted with the independent variable being message format and the dependent variables mentioned above. This examined if format affects the overall attention capturing, emotions, product liking, information seeking, and buying intent of the respondents. All items used in positive emotions were analyzed individually once again for interactions according to each emotion.

To answer RQs 3a-e, I used the SPSS PROCESS V3.4 to test the interaction effects of age and message format on the dependent variables.

Descriptive Statistics

Descriptive statistics are reported in Table 4 among dependent variables in this study (i.e., attention capturing, positive emotions, product liking, information seeking, and buying intent).

Table 4

Descriptive Statistics

	<i>M</i>	<i>SD</i>	Pearson’s correlation				
			Attention capturing	Positive emotions	Product liking	Information seeking	Buying intent
Attention	5.23	1.00					
				-	-	-	-

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	<i>M</i>	<i>SD</i>	Pearson's correlation				
			Attention capturing	Positive emotions	Product liking	Information seeking	Buying intent
capturing							
Positive emotions	5.30	0.91	0.49**		-	-	-
Product liking	4.89	0.99	0.60**	0.64**		-	-
Information seeking	4.95	1.28	0.54**	0.63**	0.87**		-
Buying intent	4.94	1.36	0.55**	0.52**	0.77**	0.84**	

Note. Correlation pairs displayed only once.

**p < 0.01 (2-tailed)

Chapter 7 Results

The means of attention capturing, information seeking, and buying intent were used in the analyses presented below. In addition, positive emotions items were analyzed separately. Product liking was entered into the model based on its four dimensions: positive association, interest to interact, personified quality, and brand contentment.

RQs 1a-e

A set of simple linear regression analyses was conducted in SPSS to examine the effect of age on attention capturing, positive emotions, product liking, information seeking, and buying intent.

The results of RQ 1a showed no significant main effect of age on attention capturing ($B = -0.00, p = 0.57$).

For RQ 1b, among the different types of positive emotions, I found significant main effects of age on excited ($B = 0.01, p = 0.03$) with an R^2 of 0.02, controlling ($B = -0.01, p = 0.04$) with an R^2 of 0.02, and influential ($B = -0.02, p = 0.01$) with an R^2 of 0.02. Regression coefficients calculated for the remaining positive emotions were not significant. Please see table 5 for complete regression coefficient results.

RQ 1c asked whether age impacts product liking. I found no significant main effect of age on positive association ($B = 0.00, p = 0.84$), interest to interact ($B = 0.00, p = 0.95$), personified quality ($B = -0.00, p = 0.78$), or brand contentment ($B = -1.629E-6, p = 1.00$).

For RQ 1d, I found no significant main effect of age on information seeking ($B = 0.00, p = 0.86$).

Lastly, for RQ 1e, there was no significant main effect of age on buying intent ($B = 0.01, p = 0.38$).

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As a complementary test for attention capturing, a cross-tabulation was also conducted to show those who selected the marketing message section of the entire image displayed with the social media background. Out of 240 participants, a total of 149 did not select the marketing message (62%), while 91 did (38%). Of 60 participants per age group, the group 18 to 29 had 25 positive selections of the marketing message area. The age group 30 to 49 also had 25 participants who selected the marketing message. The age group 50 to 64 had 23 selections of the marketing message. Lastly, the age group 65 or older only had 18 participants who selected the marketing message.

Table 5

Regression Results for Age

Variable	<i>B</i>	<i>SE B</i>	<i>t</i>	<i>p</i>
Attention capturing	-0.00	0.00	-0.57	0.57
Positive emotions				
Happy	-0.00	0.01	-0.27	0.79
Content	0.01	0.01	1.03	0.30
Hopeful	-0.01	0.01	-1.51	0.13
Pleased	0.00	0.01	-0.08	0.93
Satisfied	-0.01	0.01	-1.27	0.21
Relaxed	0.00	0.01	0.31	0.76
Stimulated	0.01	0.01	0.79	0.43
Excited	0.01	0.01	2.16	0.03
Frenzied	-0.01	0.01	-1.90	0.06

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Variable	<i>B</i>	<i>SE B</i>	<i>t</i>	<i>p</i>
Jittery	-0.01	0.01	-1.10	0.27
Dominant	-0.01	0.01	-1.40	0.16
In control	-0.01	0.01	-1.37	0.17
Controlling	-0.01	0.01	-2.07	0.04
Influential	-0.02	0.01	-2.53	0.01
Product liking				
Positive association	0.00	0.01	-0.25	0.84
Interest to interact	0.00	0.01	0.06	0.95
Personified quality	-0.00	0.00	-0.28	0.78
Brand contentment	-1.629E-6	0.01	0.00	1.00
Information seeking	0.00	0.01	0.18	0.86
Buying intent	0.01	0.01	0.87	0.38

Note. Independent variable is age, and dependent variable are attention capturing, positive emotion items, product liking dimensions, information seeking, and buying intent.

B = Unstandardized Beta

RQs 2a-e

I conducted a series of one-way ANOVA tests to answer RQ 2a-e, which asked for message formats' effects on the dependent variables.

For RQ 2a, there was no statistically significant effect of message format on attention capturing at the $p < 0.05$ level [$F(2, 237) = 0.89, p = 0.41$].

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For RQ 2b, there was a statistically significant effect of message format on hopeful at the $p < 0.05$ level [$F(2, 237) = 3.18, p = 0.04$] with a η^2 of 0.03. Furthermore, no other significant main effects were found in RQ 2b. The main effects of the remaining dependent variables are presented in table 6.

For RQ 2c, there was no statistically significant effect of message format on the four subdimensions of product liking. There was no statistically significant effect on positive associations at the $p < 0.05$ level [$F(2, 237) = 2.10, p = 0.13$]. There was no statistically significant effect on interest to interact at the $p < 0.05$ level [$F(2, 237) = 1.63, p = 0.20$]. There was no statistically significant effect on personified quality at the $p < 0.05$ level [$F(2, 237) = 0.71, p = 0.50$]. There was no statistically significant effect on brand contentment at the $p < 0.05$ level [$F(2, 237) = 1.22, p = 0.30$].

For RQ 2d, there was no statistically significant effect of message format on information seeking at the $p < 0.05$ level, [$F(2, 237) = 1.32, p = 0.27$].

For RQ 2e, there was no statistically significant effect on buying intent at the $p < 0.05$ level [$F(2, 237) = 1.46, p = 0.24$].

Once again, a complementary test for attention capturing was a cross-tabulation showing how many participants selected the marketing message section of the entire image displayed with the social media background. Of the 80 participants per message format, the category image dominant had 26 positive selections of the marketing message area. The text dominant had 21 participants who selected the marketing message. Lastly, the video format had 44 participants who selected the marketing message. All results for RQs 2a-e are shown in Table 6.

Table 6*One-way Analysis of Variance for Message Formats*

Variable	<i>M</i>	<i>SD</i>	<i>F</i> (2,237)	<i>p</i>
Attention capturing	5.23	1.06	0.89	0.41
Positive emotions				
Happy	5.85	1.20	0.58	0.56
Content	5.64	1.25	0.10	0.91
Hopeful	5.73	1.24	3.18	0.04
Pleased	5.48	1.31	0.48	0.62
Satisfied	5.64	1.39	2.08	0.13
Relaxed	5.50	1.35	0.79	0.45
Stimulated	4.88	1.75	1.57	0.21
Excited	5.06	1.67	0.06	0.94
Frenzied	5.03	1.43	1.25	0.29
Jittery	4.98	1.41	0.56	0.57
Dominant	5.03	1.46	1.24	0.29
In control	5.13	1.53	0.23	0.79
Controlling	5.07	1.64	0.89	0.41
Influential	5.13	1.54	0.06	0.94
Product liking				
Positive association	5.19	1.17	2.10	0.13
Interest to interact	4.93	1.30	1.63	0.20
Personified quality	5.16	1.10	0.71	0.50
Brand contentment	5.12	1.06	1.22	0.30

Variable	<i>M</i>	<i>SD</i>	<i>F</i> (2,237)	<i>p</i>
Information seeking	4.95	1.28	1.32	0.27
Buying intent	4.94	1.36	1.46	0.24

Note. Independent variable is format, and dependent variable are attention capturing, positive emotions mean and items, product liking dimensions, information seeking, and buying intent.

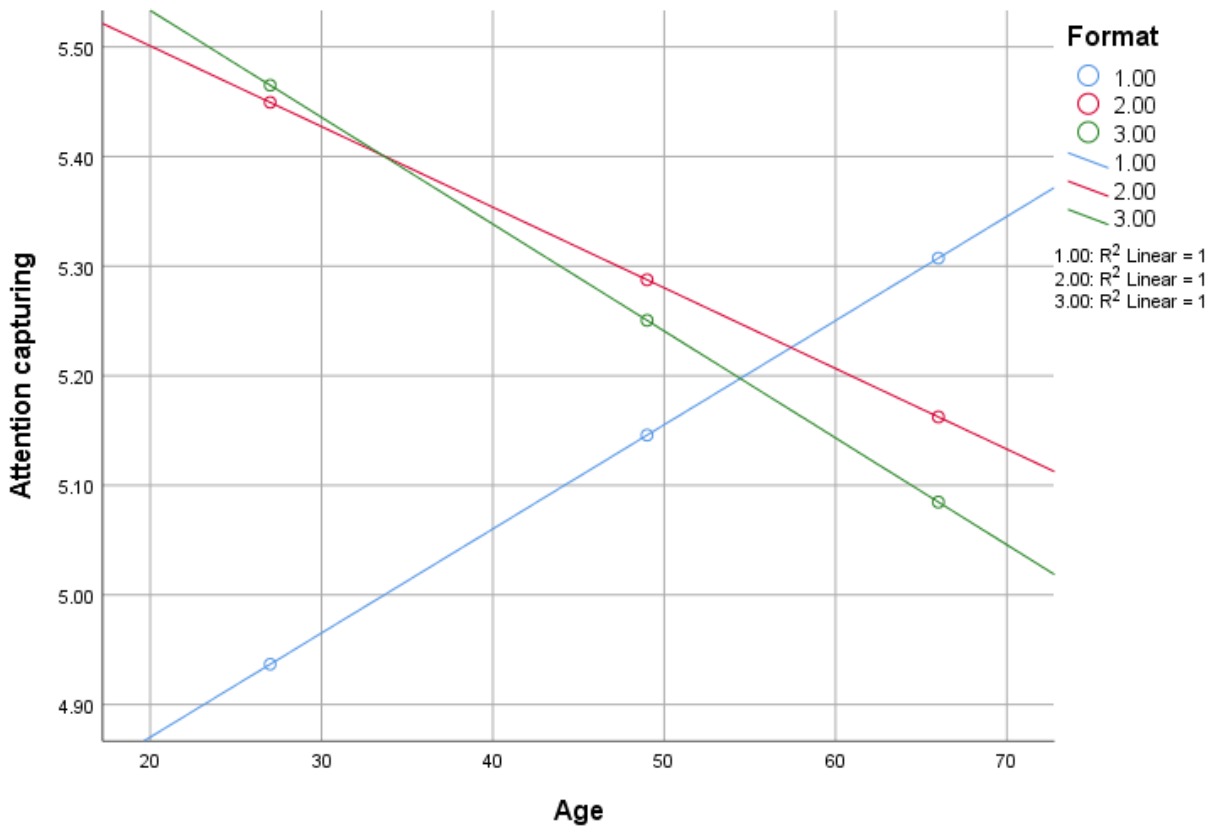
RQs 3a-e

RQs 3a-e asked if there were interaction effects of age and format on attention capturing, positive emotions, product liking, information seeking, and buying intent. I conducted a series of regression analyses to explore the interaction effects. Because format is a categorical variable with three groups (i.e., text, image, and video), dummy variables were created: Text: W1=0, W2=0; Image: W1=1, W2=0; Video: W1=0, W2=1. Therefore, the first dummy, or W1, refers to the difference between image and text. The second dummy variable, or W2, refers to the difference between video and text.

For RQ 3a, the regression model did not statistically significantly predict the outcome variable overall [$F(5, 234) = 1.38, p > 0.05$]. The regression coefficient for the interaction effect between dummy variable 1 and age on attention capturing was not significant ($B = -0.02, p = 0.08$). The regression coefficient for the interaction between dummy variable 2 and age on attention capturing was significant ($B = -0.02, p < 0.05$), which indicated that the effect of age on attention capturing differed significantly when viewing video and text. The graph in Figure 7 shows the older the participants, the more attention they paid to text, whereas the less attention they paid to videos. All results for RQ 3a are shown in Table 7.

Figure 7

Line Plot of Attention Capturing for Age and Format



Note. Format 1 = Text, 2 = Image, 3 = Video.

Table 7

Regression Analyses for Age, Message Formats, and Attention Capturing

Variable	<i>B</i>	<i>SE B</i>	<i>t</i>	<i>p</i>
Intercept	4.68	0.33	14.31	0.00
Age	0.01	0.01	1.40	0.16
W1	0.97	0.47	2.08	0.39
W2	1.05	0.48	2.21	0.28
W1 x age	-0.02	0.01	-1.76	0.08

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Variable	<i>B</i>	<i>SE B</i>	<i>t</i>	<i>p</i>
W2 x age	-0.02	0.01	-1.98	0.05
Overall R^2	0.03			0.23

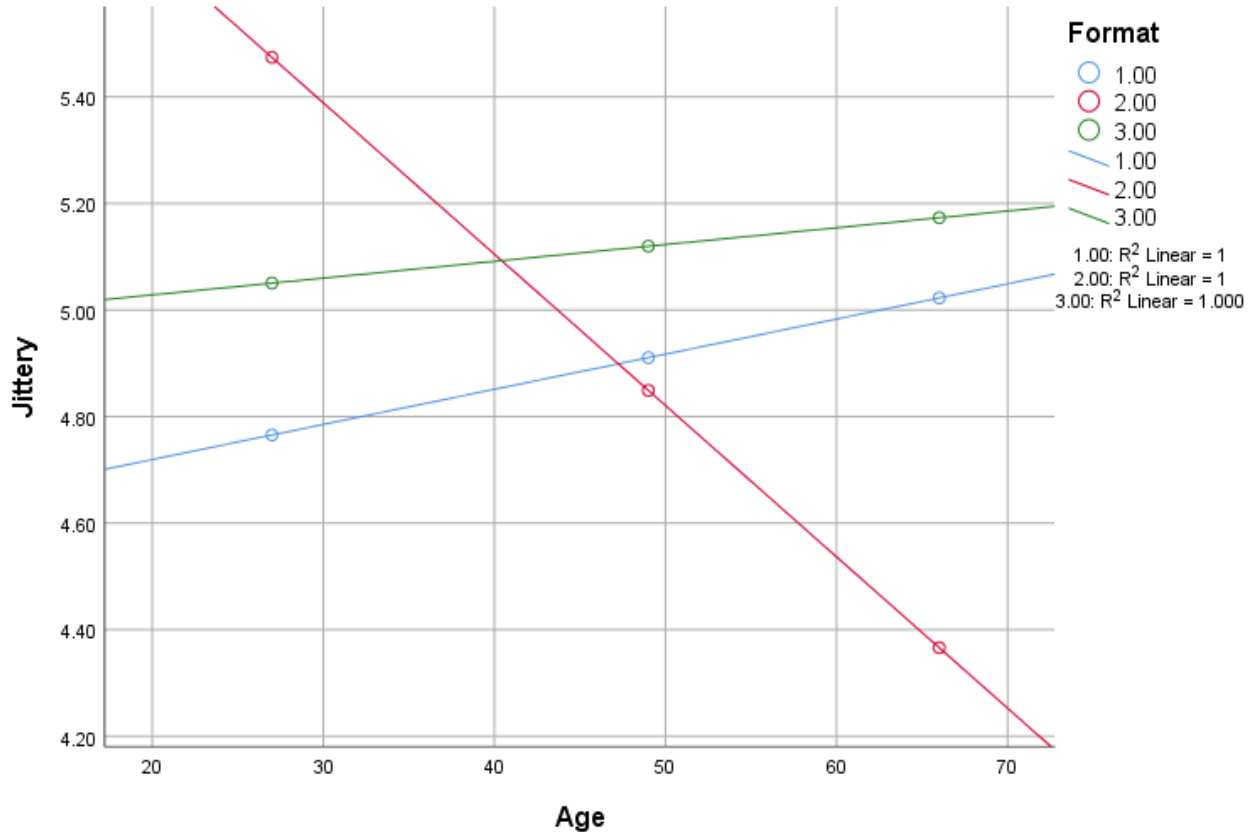
Note. Independent variable is age and dependent variable is attention capturing.

B = Unstandardized Beta

For RQ 3b, the regression model did not statistically significantly predict the outcome variable overall [$F(5, 234) = 2.12, p > 0.05$]. The regression coefficient for the interaction between dummy variable 1 and age on jittery was significant ($B = -0.04, p = 0.01$), which indicated that the effect of age on jittery differed significantly when viewing image and text. The regression coefficient for the interaction between dummy variable 2 and age on jittery was not significant ($B = -0.00, p = 0.80$). The graph in Figure 8 shows the older the participants, the less jittery they felt when presented an image, whereas they felt more jittery with text.

Figure 8

Line Plot of Jittery for Age and Format

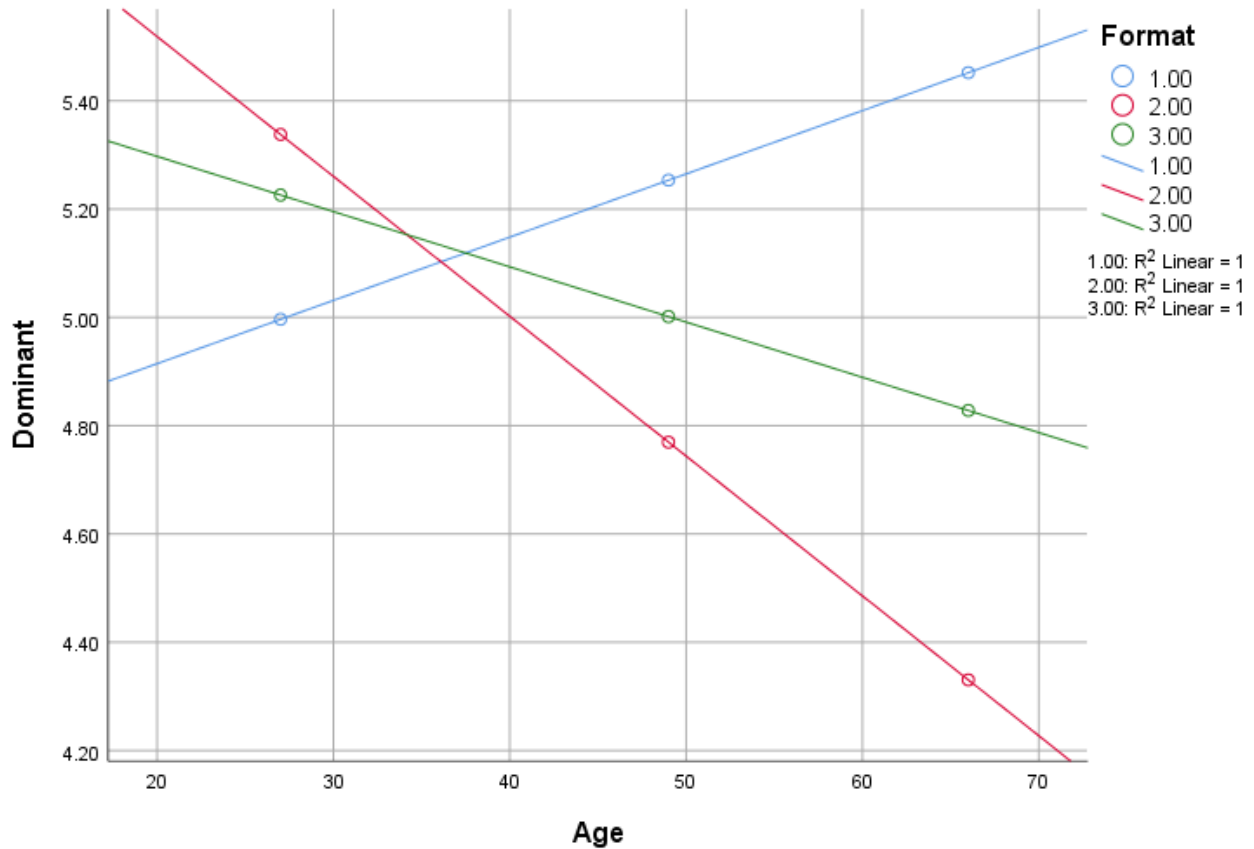


Note. Format 1 = Text, 2 = Image, 3 = Video.

For dominant, the regression model statistically significantly predicted the outcome variable overall [$F(5, 234) = 2.39, p < 0.05$]. The regression coefficient for the interaction between dummy variable 1 and age on dominant was significant ($B = -0.04, p = 0.01$), which indicated that the effect of age on dominant differed significantly when viewing image and text. The regression coefficient for the interaction between dummy variable 2 and age was not significant ($B = -0.02, p = 0.12$). The graph in Figure 9 shows such that the older the participants, the more dominant they felt with text, whereas the less dominant they felt with image.

Figure 9

Line Plot of Dominant for Age and Format

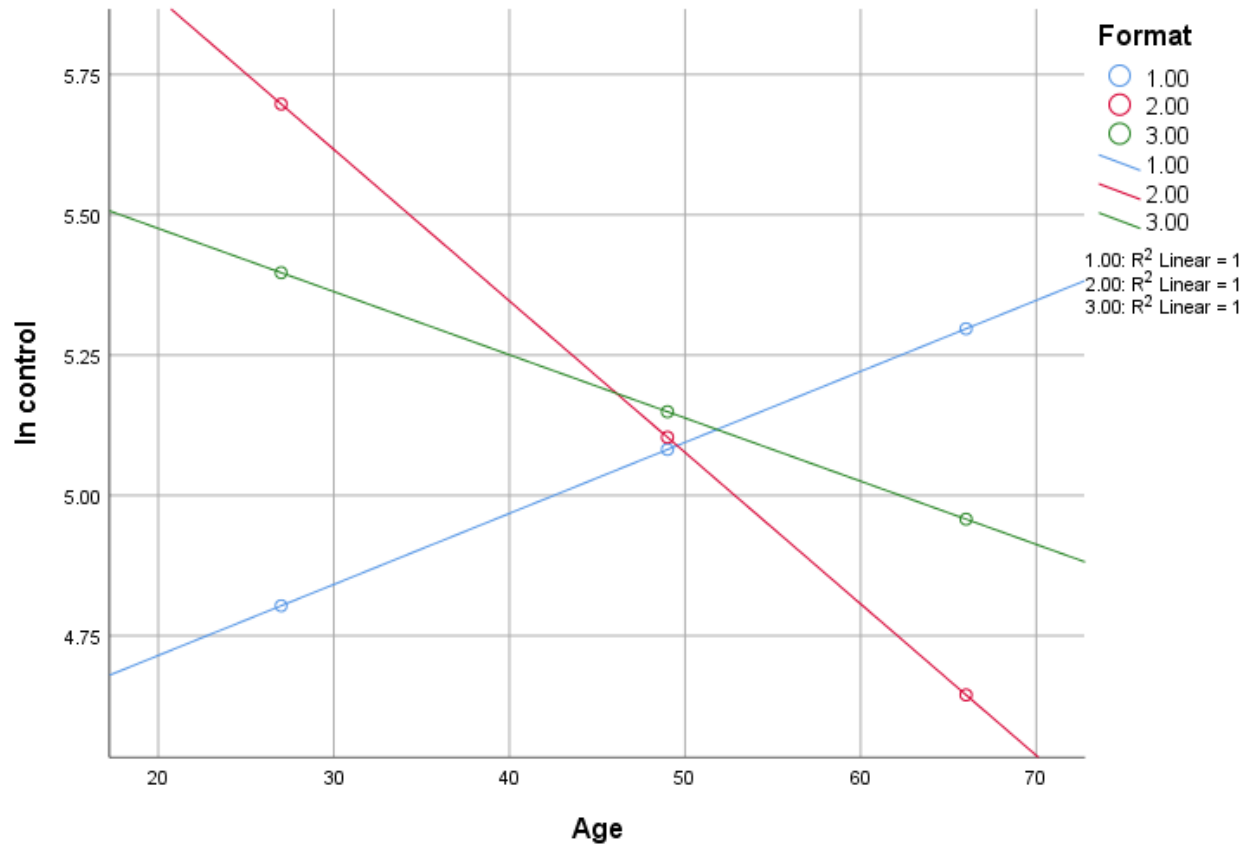


Note. Format 1 = Text, 2 = Image, 3 = Video.

For in control, the regression model did not statistically significantly predict the outcome variable overall [$F(5, 234) = 1.97, p > 0.05$]. The regression coefficient for the interaction between dummy variable 1 and age on in control was significant ($B = -0.04, p = 0.01$), which indicated that the effect of age on feeling in control differed significantly when viewing image and text. The regression coefficient for the interaction between dummy variable 2 and age on in control was not significant ($B = -0.02, p = 0.11$). The graph in Figure 10 shows the older the participants, the more in control they felt with text, whereas the less in control they felt with image.

Figure 10

Line Plot of In Control for Age and Format

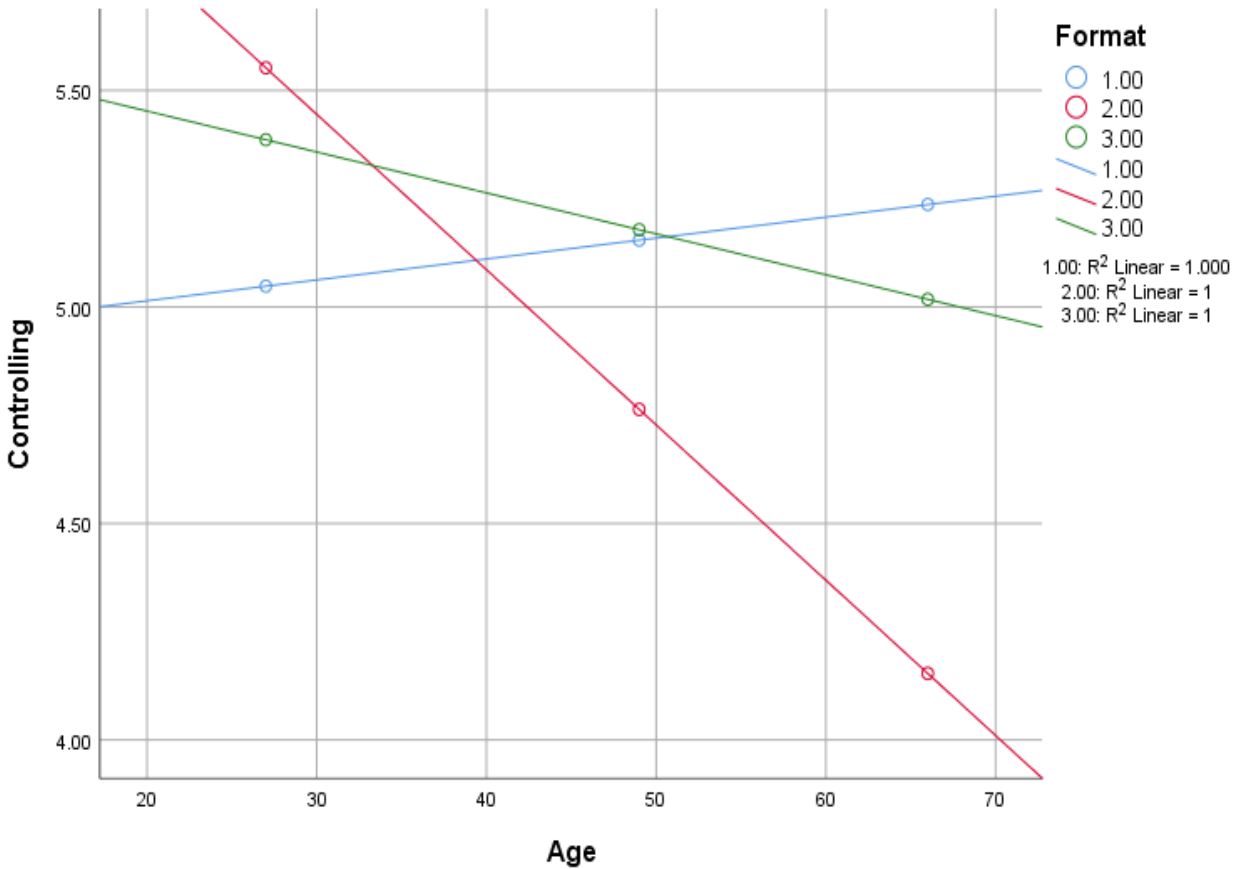


Note. Format 1 = Text, 2 = Image, 3 = Video.

For controlling, the regression model statistically significantly predicted the outcome variable overall [$F(5, 234) = 2.67, p < 0.05$]. The regression coefficient for the interaction between dummy variable 1 and age on controlling was significant ($B = -0.04, p = 0.01$), which indicated that the effect of age on feeling controlling differed significantly when viewing image and text. The regression coefficient for the interaction between dummy variable 2 was not significant ($B = -0.01, p = 0.37$). The graph in Figure 11 shows the older the participants, the more controlling they felt in text, whereas the less controlling they felt in image.

Figure 11

Line Plot of Controlling for Age and Format

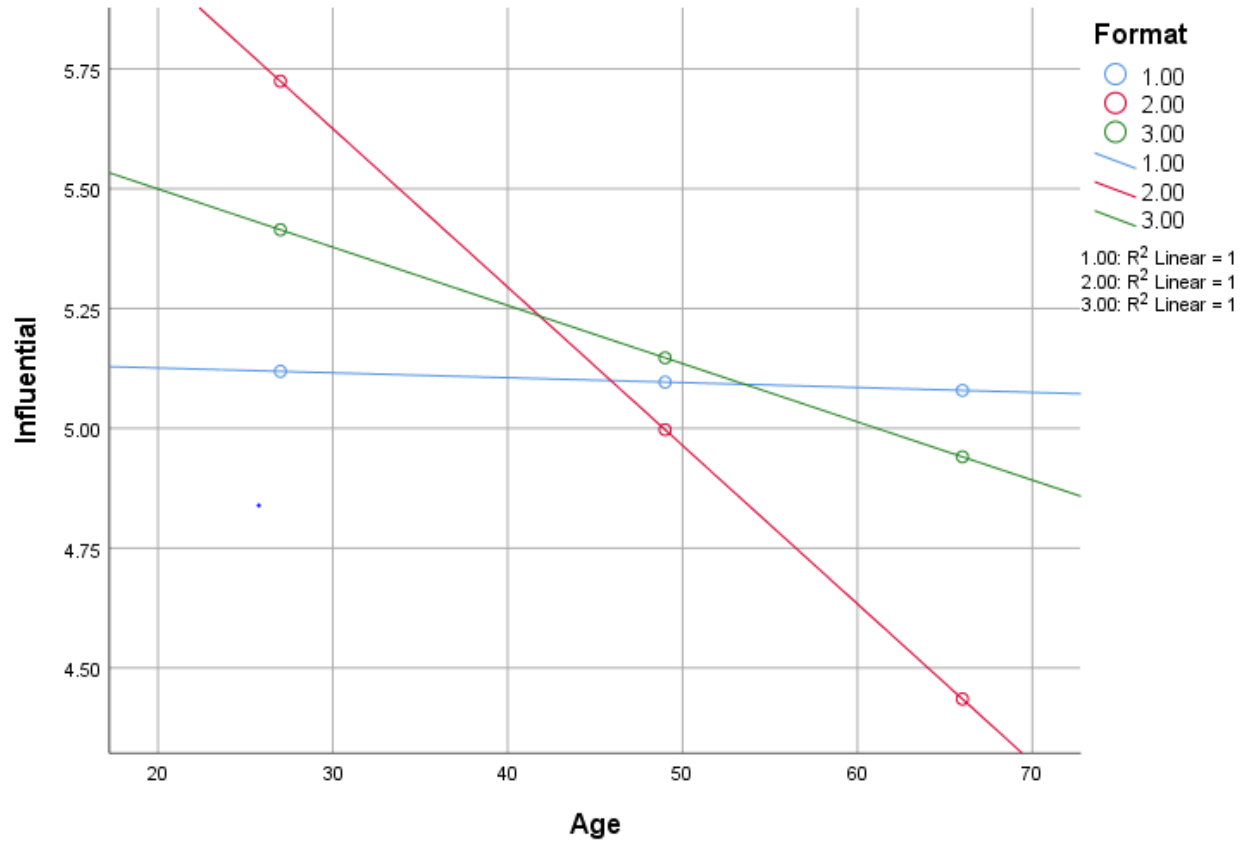


Note. Format 1 = Text, 2 = Image, 3 = Video.

For influential, the regression model statistically significantly predicted the outcome variable overall [$F(5, 234) = 2.30, p < 0.05$]. The regression coefficient for the interaction between dummy variable 1 and age was significant ($B = -0.03, p = 0.03$), which indicated that the effect of age on influential differed significantly when viewing image and text. The regression coefficient for the interaction between dummy variable 2 was not significant ($B = -0.01, p = 0.46$). The graph in Figure 12 shows the older the participants, the considerably less influential they felt with image compared to text.

Figure 12

Line Plot of Influential for Age and Format



Note. Format 1 = Text, 2 = Image, 3 = Video.

Regression coefficients for the interaction effects of age and format on the remaining positive emotions were not significant. Significant results for RQ 3b are shown in Table 8. See Appendix C for the remaining results which were insignificant on Table 13.

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Table 8

Regression Analyses for Age, Message Formats, and Positive Emotions Significant Results

Variable	Positive emotions																			
	Jittery				Dominant				In control				Controlling				Influential			
	<i>B</i>	<i>SE</i>	<i>t</i>	<i>p</i>	<i>B</i>	<i>SE</i>	<i>t</i>	<i>p</i>	<i>B</i>	<i>SE</i>	<i>t</i>	<i>p</i>	<i>B</i>	<i>SE</i>	<i>t</i>	<i>p</i>	<i>B</i>	<i>SE</i>	<i>t</i>	<i>p</i>
Intercept	4.59	0.46	9.98	0.00	4.68	0.47	9.91	0.00	4.46	0.50	8.93	0.00	4.92	0.53	9.28	0.00	5.15	0.50	10.28	0.00
Age	0.01	0.01	0.69	0.49	0.01	0.01	1.20	0.23	0.01	0.01	1.23	0.22	0.01	0.01	0.44	0.66	-0.00	0.01	-0.10	0.92
W1	1.65	0.65	2.53	0.01	1.35	0.67	2.02	0.05	1.96	0.71	2.76	0.01	1.60	0.75	2.13	0.04	1.47	0.71	2.06	0.04
W2	0.38	0.67	0.57	0.57	0.82	0.69	1.20	0.23	1.24	0.73	1.71	0.09	0.72	0.77	0.94	0.35	0.60	0.73	0.82	0.41
W1 x age	-0.04	0.01	-2.60	0.01	-0.04	0.01	-2.71	0.01	-0.04	0.02	-2.71	0.01	-0.04	0.02	-2.62	0.01	-0.03	0.02	-2.18	0.03
W2 x age	-0.00	0.01	-0.25	0.80	-0.02	0.01	-1.56	0.12	-0.02	0.02	-1.61	0.11	-0.01	0.02	-0.91	0.37	-0.01	0.02	-0.75	0.46
Overall <i>R</i> ²	0.04			0.06	0.05			0.04	0.04			0.08	0.05			0.02	0.05			0.04

Note. Independent variable is age, and dependent variable are positive emotions items.

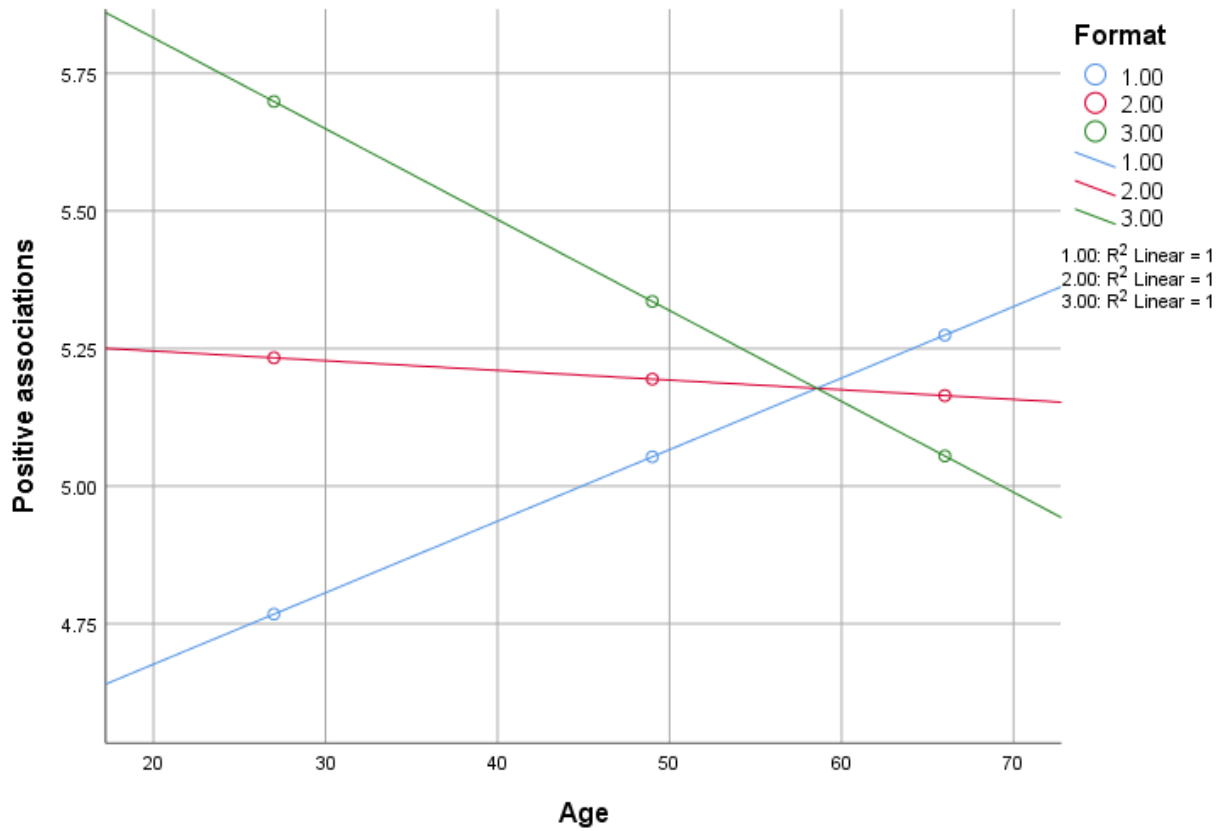
B = Unstandardized Beta

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For RQ 3c, the four dimensions were used as dependent variables in separate regression models. For positive associations, the regression model statistically significantly predicted the outcome variable overall [$F(5, 234) = 2.43, p < 0.05$]. The regression coefficient for the interaction between dummy variable 1 and age was significant ($B = -0.02, p = 0.03$), which indicated the effect of age on positive association differed significantly when viewing image and text. The regression coefficient for the interaction between dummy variable 2 and age was significant ($B = -0.03, p = 0.01$), which indicated the effect of age on positive association differed significantly when viewing video and text. The graph in Figure 13 shows the older the participants, the more positive associations they have with text, whereas the less positive associations they have with image and videos.

Figure 13

Line Plot of Positive Association for Age and Format



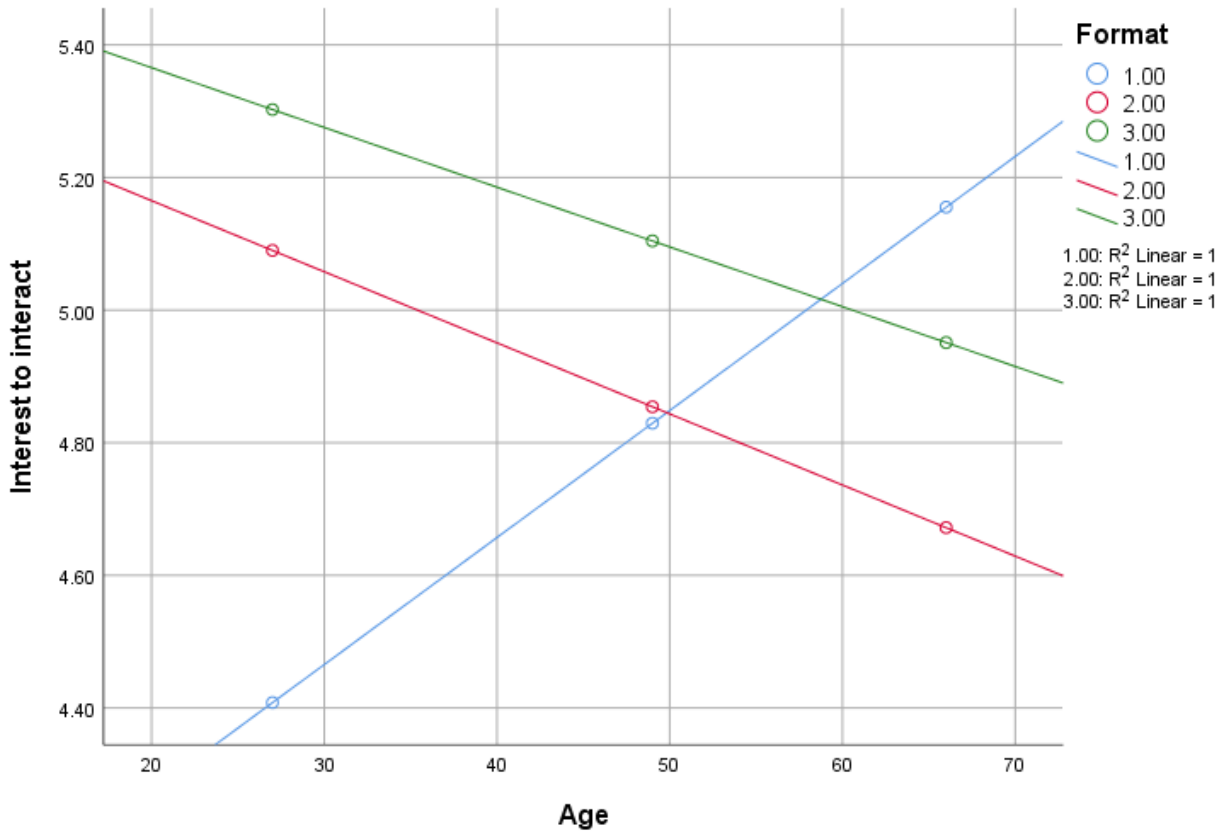
Note. Format 1 = Text, 2 = Image, 3 = Video.

For interest to interact, the regression model did not statistically significantly predict the outcome variable overall [$F(5, 234) = 2.13, p > 0.05$]. The regression coefficient for the interaction between dummy variable 1 and age was significant ($B = -0.03, p = 0.02$), which indicated that the effect of age on interest to interact differed significantly when viewing image and text. The regression coefficient for the interaction between dummy variable 2 and age on interest to interact was significant ($B = -0.03, p = 0.03$), which indicated that the effect of age on interest to interact differed significantly when viewing video and text. The graph in Figure 14

shows the older the participants, the more interest to interact they have with text, whereas the less interest to interact they have with image and videos.

Figure 14

Line Plot of Interest to Interact for Age and Format



Note. Format 1 = Text, 2 = Image, 3 = Video.

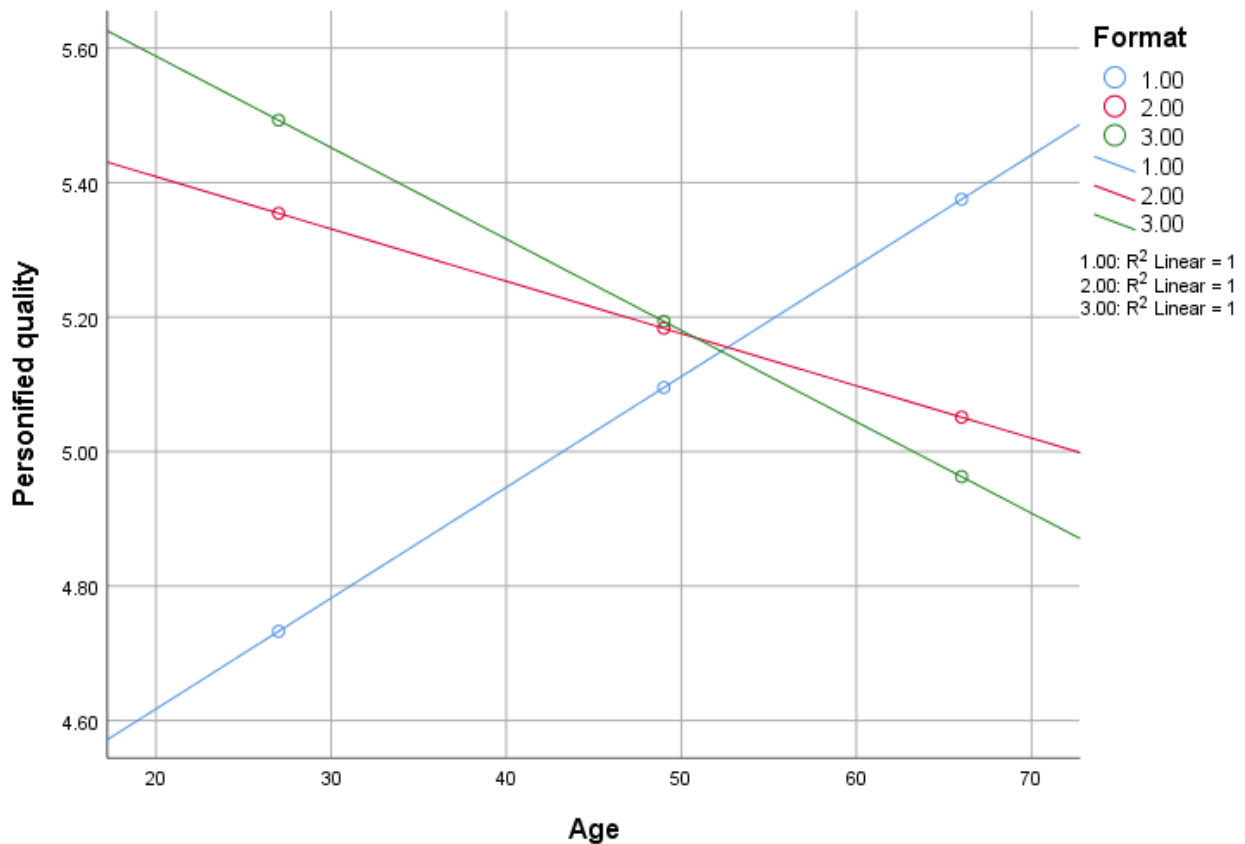
For personified quality, the regression model did not statistically significantly predict the outcome variable overall [$F(5, 234) = 2.13, p > 0.05$]. The regression coefficient for the interaction between dummy variable 1 and age was significant ($B = -0.02, p = 0.02$), which indicated that the effect of age on personified quality differed significantly when viewing image and text. The regression coefficient for the interaction between dummy variable 2 and age was significant ($B = -0.03, p = 0.01$), which indicated that the effect of age on personified quality

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differed significantly when viewing video and text. The model did not explain a significant amount of variance in the dependent variable. The graph in Figure 15 shows the older the participants, the more personified quality they perceive in text, whereas the less personified quality they perceive in image and videos.

Figure 15

Line Plot of Personified Quality for Age and Format



Note. Format 1 = Text, 2 = Image, 3 = Video.

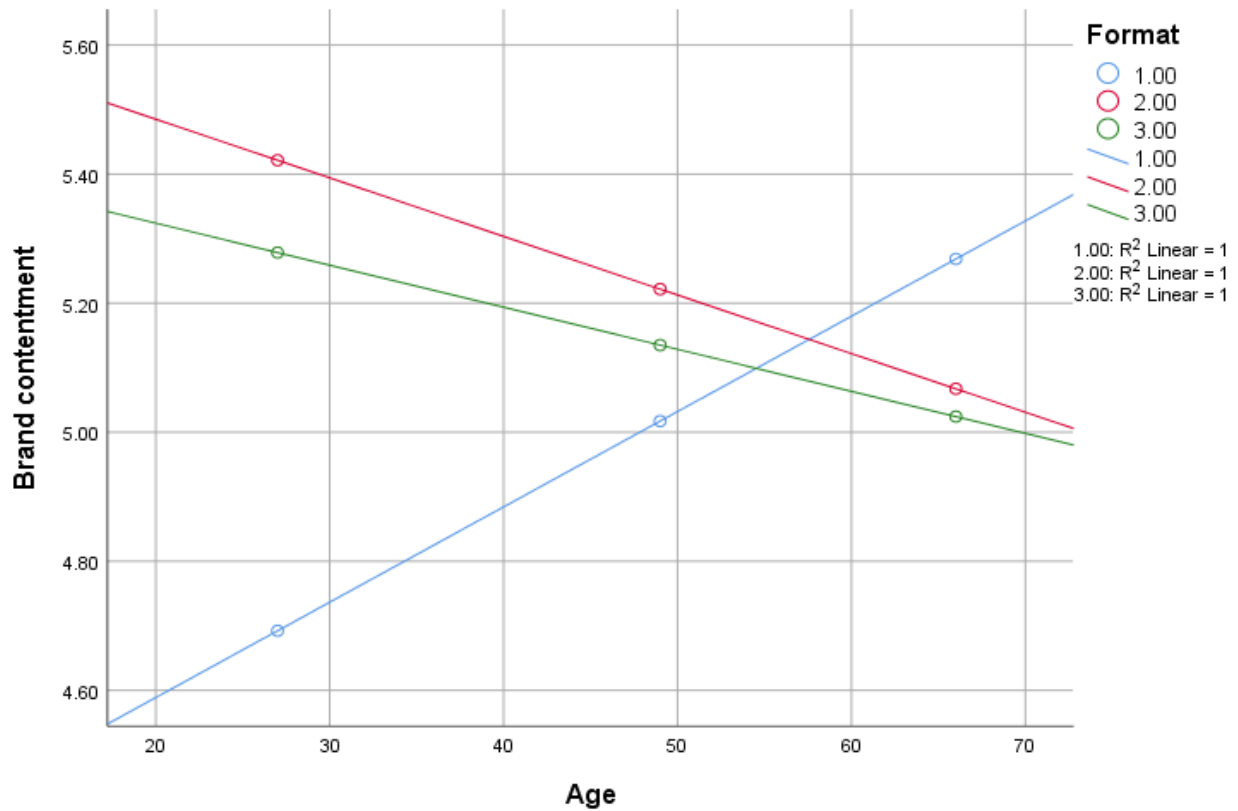
For brand contentment, the regression model did not statistically significantly predict the outcome variable overall [$F(5, 234) = 1.59, p > 0.05$]. The regression coefficient for the interaction between dummy variable 1 and age was significant ($B = -0.02, p = 0.03$), which indicated that the effect of age on brand contentment differed significantly when viewing image

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and text. The regression coefficient for the interaction between dummy variable 2 and age was not significant ($B = -0.02, p = 0.06$). The graph in Figure 16 shows the older the participants, the more brand contentment they have with text, whereas the less brand contentment they have with image. All results for RQ 3c are shown in Table 9.

Figure 16

Line Plot of Brand Contentment for Age and Format



Note. Format 1 = Text, 2 = Image, 3 = Video.

Table 9

Regression Analyses for Age, Message Formats, and Product Liking

Variable	Product liking															
	Positive association				Interest to interact				Personified quality				Brand contentment			
	<i>B</i>	<i>SE B</i>	<i>t</i>	<i>p</i>	<i>B</i>	<i>SE B</i>	<i>t</i>	<i>p</i>	<i>B</i>	<i>SE B</i>	<i>t</i>	<i>p</i>	<i>B</i>	<i>SE B</i>	<i>t</i>	<i>p</i>
Intercept	4.25	0.38	11.22	0.00	3.89	0.42	9.24	0.00	4.29	0.36	11.98	0.00	4.29	0.38	11.25	0.00
Age	0.02	0.01	2.05	0.04	0.02	0.01	2.20	0.03	0.02	0.01	2.23	0.03	0.02	0.01	1.87	0.06
W1	1.36	0.54	2.52	0.01	1.49	0.60	2.48	0.01	1.28	0.51	2.51	0.01	1.37	0.54	2.53	0.01
W2	1.71	0.55	3.10	0.00	1.66	0.61	2.70	0.01	1.57	0.52	3.02	0.00	1.16	0.56	2.09	0.04
W1 x age	-0.02	0.01	-2.16	0.03	-0.03	0.01	-2.42	0.02	-0.02	0.01	-2.31	0.02	-0.02	0.01	-2.13	0.03
W2 x age	-0.03	0.01	-2.59	0.01	-0.03	0.01	-2.25	0.03	-0.03	0.01	-2.83	0.01	-0.02	0.01	-1.88	0.06
Overall <i>R</i> ²	0.05			0.04	0.05		0.06		0.04		0.06		0.03			0.16

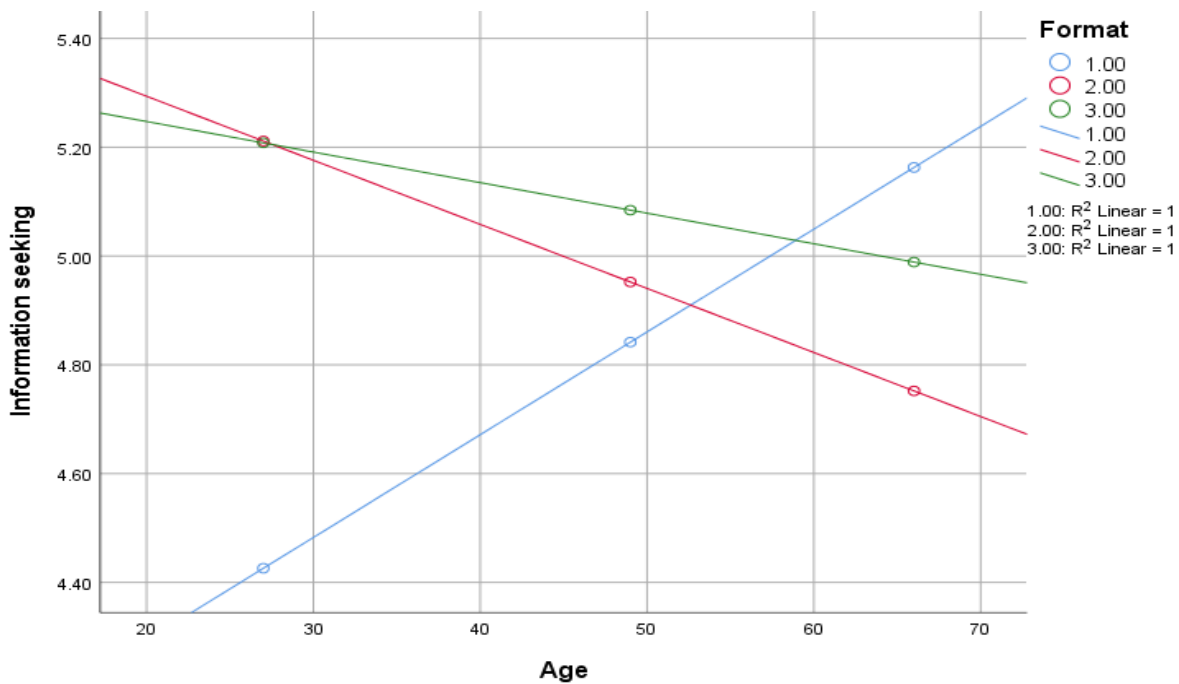
Note. Independent variable is age, and dependent variable are product liking dimensions: positive association, interest to interact, personified quality, and brand contentment.

B = Unstandardized Beta

For RQ 3d, the regression model did not statistically significantly predict the outcome variable overall [$F(5, 234) = 2.16, p > 0.05$]. The regression coefficient for the interaction between dummy variable 1 and age on information seeking was significant ($B = -0.03, p = 0.01$), which indicated that the effect of age on information seeking differed significantly when viewing image and text. The regression coefficient for the interaction between dummy variable 2 and age on information seeking was significant ($B = -0.03, p < 0.05$), which indicated that the effect of age on information seeking differed significantly when viewing video and text. The graph in Figure 17 shows the older the participants, the more willing to seek information in text, whereas the less willing to seek information in image and videos. All results for RQ 3d are shown on Table 10.

Figure 17

Line Plot of Information Seeking for Age and Format



Note. Format 1 = Text, 2 = Image, 3 = Video.

Table 10*Regression Analyses for Age, Message Formats, and Information Seeking*

Variable	<i>B</i>	<i>SE B</i>	<i>t</i>	<i>p</i>
Intercept	3.92	0.42	9.42	0.00
Age	0.02	0.01	2.20	0.03
W1	1.61	0.59	2.73	0.01
W2	1.44	0.60	2.39	0.02
W1 x age	-0.03	0.01	-2.52	0.01
W2 x age	-0.03	0.01	-1.98	0.05
Overall R^2	0.04			0.06

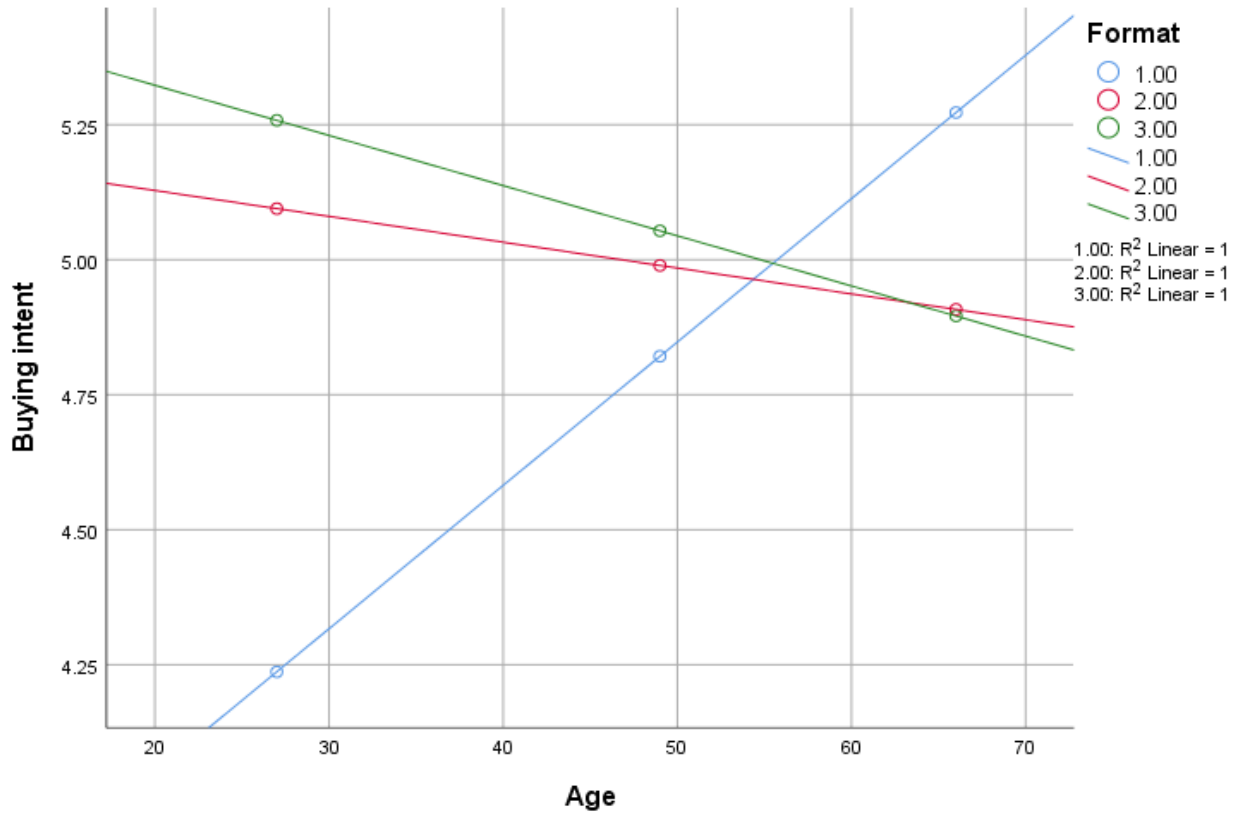
Note. Independent variable is age, and dependent variable is information seeking.

B = Unstandardized Beta

For RQ 3e, the regression model statistically significantly predicted the outcome variable overall [$F(5, 234) = 2.54, p < 0.05$]. The regression coefficient for the interaction between dummy variable 1 and age in buying intent was significant ($B = -0.03, p = 0.02$), which indicated that the effect of age on buying intent differed significantly when viewing image and text. The regression coefficient for the interaction between dummy variable 2 and age was significant ($B = -0.04, p = 0.01$), which indicated that the effect of age on buying intent differed significantly when viewing video and text. The graph in Figure 18 shows the older the participants, the more buying intent they have with text, whereas the less buying intent they have with image and videos. Results for RQ 3e are shown in Table 11.

Figure 18

Line Plot of Buying Intent for Age and Format



Note. Format 1 = Text, 2 = Image, 3 = Video.

Table 11

Regression Analyses for Age, Message Formats, and Buying Intent

Variable	<i>B</i>	<i>SE B</i>	<i>t</i>	<i>p</i>
Intercept	3.52	0.44	7.98	0.00
Age	0.03	0.01	2.91	0.00
W1	1.70	0.63	2.72	0.01
W2	1.99	0.64	3.11	0.02
W1 x age	-0.03	0.01	-2.43	0.02

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Variable	<i>B</i>	<i>SE B</i>	<i>t</i>	<i>p</i>
W2 x age	-0.04	0.01	-2.74	0.01
Overall R^2	0.05			0.03

Note. Independent variable is age, and dependent variable is buying intent.

B = Unstandardized Beta

Chapter 8 General Conclusions

The objective of this study was to investigate if age and format predict attention capturing, positive emotions, product liking, information seeking, and buying intent of products presented by social media messages and the interaction effects between age and format on the dependent variables. MRT provides a theoretical framework to rank the richness levels of different message formats, and I explored if different ages respond differently to a message in various formats. As expected, there are significant main effects of message format and age on some of the dependent variables used to measure the effectiveness of the social media marketing messages. Specifically, there was a significant influence of a user's age on how excited, controlling, and influential he or she felt. Additionally, message format influenced how hopeful a participant felt significantly. Finally, some interaction effects were found between age and format on attention capturing, positive emotions, product liking, information seeking, and buying intent. These findings are discussed in more detail below.

RQs 1a-e asked for the influence of age on the five variables that operationalized effective social media communication (i.e., Attention capturing, positive emotions, product liking, information seeking, and buying intent). The results of the regression analyses yielded significant results for RQ 1b on three outcomes: excited, controlling, and influential. First, the older the respondent, the higher the excitement score. A possible reason behind this is that older adults may be more impressed with online messages as opposed to young adults who may have used the internet for a long time. Second, for controlling and influential, as the respondents' age increases, the scores decreased for these two outcomes. Once again, due to younger respondents' familiarity with social media messages, they may feel more powerful and confident in social media communication situations because they have the technological knowledge and experience.

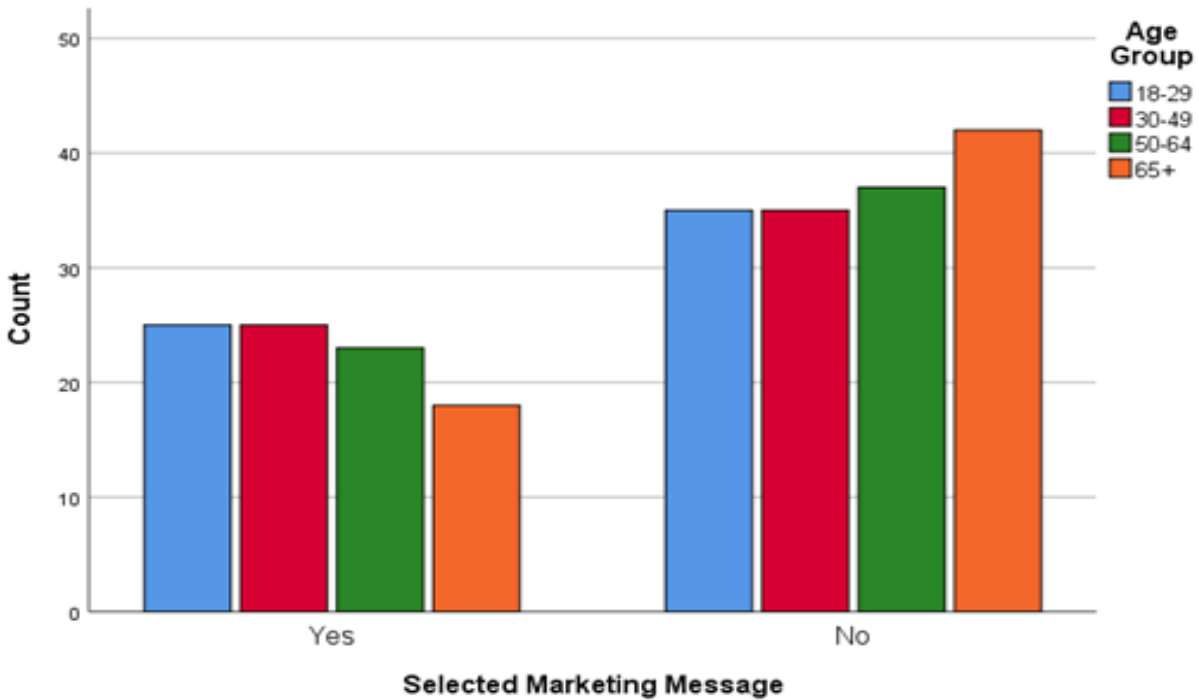
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The results of the regression analyses did not show a significant effect of age on the effectiveness of a social media message at the $p < 0.05$ level for all the remaining independent variables measured. These may be due to the non-normality of the age distribution. For example, the age category 18 to 29 only contained one participant aged 18 and one aged 19, and no participants aged 20 to 22. The majority of this age category's representatives were in the upper half of the category. Similarly, the category 65 or older had many representatives of 65 years, and very few older seniors. The uneven distribution may have resulted in the null results of RQs 1a, c, d, and e.

From the additional attention capturing measure, which asked participants to select the area in the image that captured their attention the most, there are potentially valuable findings. Although most participants did not select the marketing message as the area that grabbed their attention, this may be a result of consciously making a selection after being asked for a celebrity they support on Twitter (this area was selected the most). Descriptively, a pattern was found in those who selected the marketing message. Younger age categories 18 to 29 and 30 to 49 showed more attention than older ages 50 to 64 and 65 or older. Contrary to references mentioned before (Tarabashkina et al., 2018), the result showed younger adults gave more attention to the marketing message compared to older adults. These results can be observed in Figure 19.

Figure 19

Additional Attention Capturing Measure by Age



Note. Variables are age groups and selected marketing message (yes or no).

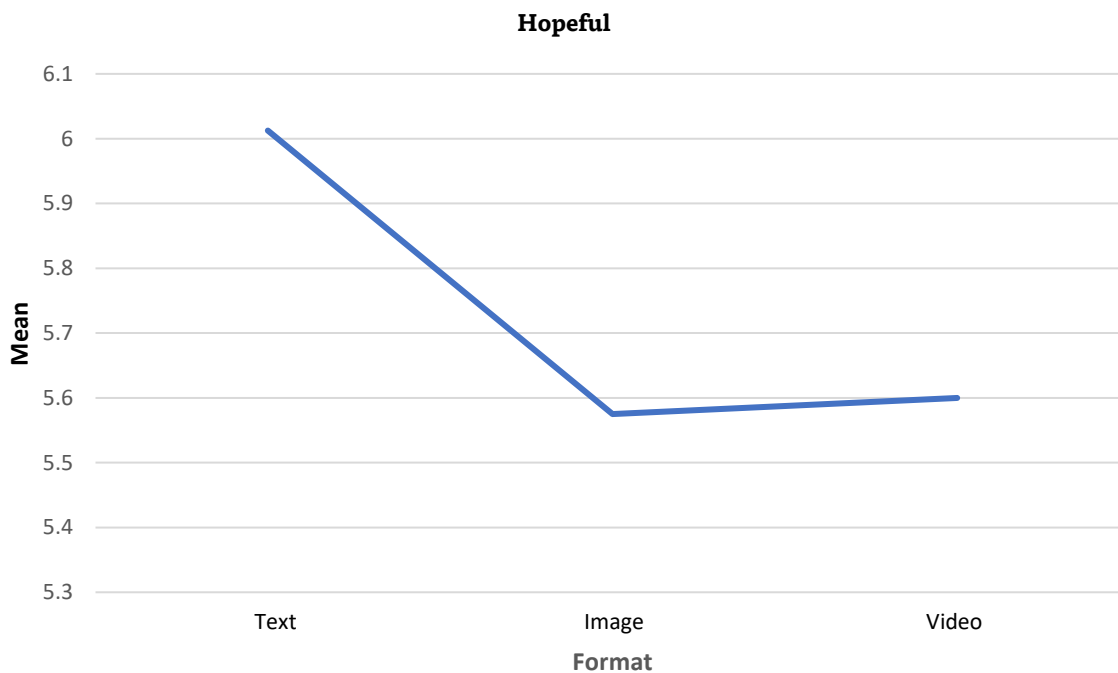
As for RQs 2a-e, one-way ANOVA tests using attention capturing, product liking, information seeking, and buying intent as dependent variables failed to reject the null hypotheses, showing no support for effects of format on these variables measured. Perhaps the three formats used in this study did not contribute to distinguish between more specific characteristics of formats. In other words, there are other formats that were not included, such as GIF images, and potential distinctions ignored among image-only, text-only, image with text, and text with image formats. Surprisingly, RQ 2b yielded a significant result for hopeful as the dependent variable. Consistent with the existing literature, text had a lower mean for attention capturing, product liking, information seeking, and buying intent. Yet, post hoc analysis showed that image and video had similar results while text had a significant higher mean. The surprising

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significant relationship between text and hopeful could be due to how transparent and direct a text format poses, giving viewers hope for the product and company. In other words, the image dominant format provided limited details about the product and only had a few bullet points in small text at the bottom of the marketing message. The video format required viewers to watch until the end and listen carefully. On the other hand, the text dominant format included all details at once, allowing viewers to read at their own pace and repeat if necessary.

Figure 20

Means Plot for Hopeful



Note. The dependent variable is hopeful. Hopeful is measured with a semantic differential scale from 1 to 7. The closer the number is to 7, the more hopeful the participant feels.

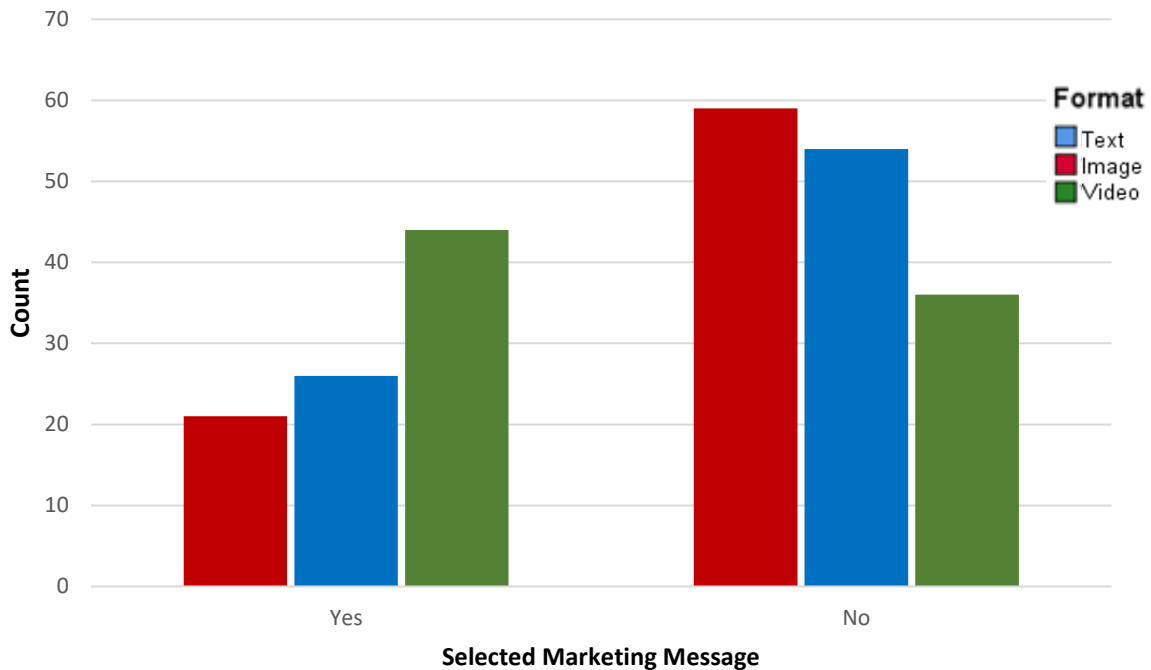
A cross-tabulation of the additional attention capturing measurement with formats revealed more participants selected the marketing message as their focal point when the format was a video. In fact, descriptively, the richer the format ranked according to MRT, the higher the

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number of respondents who selected the area with the marketing message. Text had the lowest selections, image the second, and video had the highest. These results suggested that the richer a format in social media marketing, the more attention it will capture.

Figure 21

Cross-tabulation of Message Formats



Note. Variables are message format and selected marketing message (yes or no).

For RQs 3a-e, the series of regression analyses conducted in PROCESS explored the interaction effects between age and format on the five dependent variables (i.e., attention capturing, positive emotions, product liking, information seeking, and buying intent), and yielded some significant results.

RQ 3a showed attention capturing is higher for older adults when they are presented a message in text, while it is higher in younger adults when they are presented a message in video.

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As proposed by Boardman and McCormick (2018), older adults responded more positively with text.

RQ 3b showed several positive emotions' significant interactions with age and in different formats. For jittery, the younger the respondents, the more they preferred image, while the older adults preferred text more. These results support previous literature that indicated younger adults prefer images over text (Boardman & McCormick, 2018). Older adults also felt more dominant, in control, and controlling viewing text, while younger adults felt more dominant, in control, and controlling viewing images. These results also coordinated with previous research indicating older adults have a preference for messages in text (Boardman & McCormick, 2018). For influential, video and image's ratings decreased with age. However, the richer formats had a steeper slope, showing older age affects how influential a person feels more prominently in rich formats, such as image and video, as compared to lean formats, such as text.

RQ 3c had four different dimensions of product liking as dependent variables, which had similar results. The results indicated that the effects of age on product liking differed significantly when viewing images and videos compared to texts. Product liking was higher when older adults were exposed to texts, and when younger adults were exposed to images and videos. The results supported previous findings. The dimensions measuring product liking yielded results that coordinated with findings stating older adults respond more positively to texts, whereas younger adults respond more positively to images. Additionally, these results revealed a pattern in which the reactions to image and video messages seem to be similar, but different to text messages.

RQ 3d investigated the interaction effects of age and message formats on information seeking and yielded significant results. Young adults declared higher information seeking when

presented with images or videos. On the other hand, old adults declared higher information seeking when they were presented with marketing messages in text. These results supported previous findings that older adults preferred messages in text, whereas younger adults preferred messages in image (Boardman & McCormick, 2018). Perhaps for the purposes of information seeking, older adults trust texts with data more than images that can control user's emotions, while younger adults are more easily carried away by attractive sights. Additionally, younger adults grow up in a technologically-advanced era that provides diverse options for communicating while older adults relied heavily on text. For example, older adults may use emoticons more (i.e., a representation of a facial expression using characters from a simple keyboard such as punctuation marks, numbers, and letters) whereas younger adults use emojis (i.e., a small digital image or icon of a face used to communicate). These factors might cause older adults to seek more information after viewing texts, and younger adults to seek more information after viewing images.

Lastly, the results of RQ 3e showed that young adults responded more positively to images and videos while older adults preferred messages in text in terms of buying intent. These preferences in formats may be explained by the impact of decisions adults of different ages make in their daily lives. As Berger and Messerschmidt suggested (2009), older adults make more complex and impacting decisions such as purchasing a house, selecting a life insurance provider, or investing in the right company. These important purchases require intensive amount of information, which may have helped develop older adults' message preferences in text when making purchases. Younger adults, on the other hand, may not have the responsibility of making such impactful decisions. Perhaps simple purchases such as shopping for a phone case, deciding a new hairstyle, or picking a restaurant to eat for lunch are all purchases that can be made with

information in an image or video that contains minimal text. Overall, this study presented similar interaction effects in image and video messages, which differed from the interaction of text.

Practical and Theoretical Implications

This study provides valuable implications for both research and practice. Social media usage is increasing and so is social media marketing. My findings can provide practical guidelines to marketers and communicators who can segment their customers by age and target them with different formats of social media messages. For example, organizations with the objective of increasing buying intent to a market segment that includes young adults know consumers respond positively to image and video messages but not text. Prior research related to audience attention, attitude, and behavioral intentions focused primarily on one variable (e.g., format or age) or in other contexts. The results of this study provide marketers with a more comprehensive understanding by filling the gap in research.

Furthermore, the current study advances this area of research by investigating the outcomes of marketing messages on a specific social media platform instead of simply digital media with no context for application. The similar patterns found in the study showed that image and video yielded similar results in audience responses compared to texts. This discovery can serve in decision-making for marketers when designing a marketing message or selecting a social media platform. According to the results, a post of a marketing message in an image format will yield a similar response as a video, and these will differ from a text post such as a status update. Applying the previous findings, platforms with image and video messages (e.g., Instagram and YouTube respectively) will yield a similar response by audience age as opposed to text social media platforms (e.g., Twitter and blogs).

MRT classifies formats in a way that can be perceived as subjective. Yet, the results from this study largely supported the MRT definition of format's richness. Despite numerous studies reviewing MRT, communicators were in need of a study that could confirm if there are similarities that reveal characteristics of consumers and predict the outcomes from social media marketing users. Researchers can count on MRT as an accurate ruler for richness as participants of this study ranked three formats in accordance with MRT.

Research Limitations and Suggestions for Further Research

As most research studies, this study does not lack limitations. This study in its current scope does not account for the effectiveness of social media marketing on other platforms that have distinctive characteristics. For example, a text dominant message may not be a factor in a social media platform that portrays primarily videos (e.g., Snapchat). Since Twitter was initially designed to be a text messaging platform known as tweets, there is a possible influence of the perceived main format of Twitter on the text preferences. Future studies should diversify the environment of the experiment and take into account the current platforms of the time.

The low control over the age categories that were preselected for purposes of sampling may have influenced the results in this study. An ideal sample size should include not only the same number of participants per age group, but rather an equal number of age representatives if possible.

In the same manner, only one product was used in this case. A variety of products could be used for purposes of stronger validity. Following other literature, formats can be classified into a wider range (e.g., Audio, GIF, combined text and image). Having more options as formats could potentially provide more specific guidelines.

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Although a fictitious brand and product were used to eliminate preexisting variables such as brand loyalty and effects produced by seller trust, demographic factors were not controlled. Age representation was not proportionate and future research should apply stratified sampling to control other factors such as level of education, occupation, and income. Additionally, portraying a fictitious brand does not allow viewers to benefit as they usually do with a known brand name. The results of this study may not be applicable to popular brands that already have a connection with their consumers.

Conclusion

In conclusion, the MRT provides a useful resource for examining the effectiveness of messages according to their richness. Formats were rated by participants in a manner compatible with MRT. A key result for practitioners is that now there are selected generalizations possible for communicating to their market in different formats explained by ages and dependent variables that yielded significant results.

There was a relationship found between the user's age and the message format on different positive emotions, and an interaction between age and message format influencing attention capturing, positive emotions, product liking, information seeking, and buying intent. On a deeper level, the literature review reveals more inclusive generations also witness social media marketing, and communicators need guidance for their decision-making in formats and age combinations that will forecast effective social media marketing communication.

References

- 2016 Social Media Marketing Industry Report. (2016). *Social Media Examiner*. [PDF file].
<https://www.socialmediaexaminer.com/wp-content/uploads/2016/05/SocialMediaMarketingIndustryReport2016.pdf>
- 2019 Broadband Deployment Report. (2019). *Federal Communications Commission*. [PDF link from website]. <https://www.fcc.gov/reports-research/reports/broadband-progress-reports/2019-broadband-deployment-report>
- Adelaar, T., Chang, S., Lancendorfer K. M., Lee, B., & Morimoto, M. (2003). Effects of media formats on emotions and impulse buying intent. *Journal of Information Technology-Department of Telecommunication and Advertising*, 18(4), 247-266. <https://doi.org/10.1080/0268396032000150799>
- Anderson, M., & Perrin, A. (2017). Tech adoption climbs among older adults. *Pew Research Center: Internet, Science & Technology*. <http://www.pewinternet.org/2017/05/17/tech-adoption-climbs-among-older-adults/>
- Ashley, C. & Tuten, T. (2014). Creative strategies in social media marketing: An exploratory study of branded social content and consumer engagement. *Psychology & Marketing*, 32(1), 15-27. <https://doi.org/10.1002/mar.20761>.
- Badger, J. M., Kaminsky, S. E., Behrend, T. S. (2014). Media richness and information acquisition in internet recruitment. *Journal of Managerial Psychology*, 29(7), 866–883. <https://doi.org/10.1108/JMP-05-2012-0155>
- Beatty, S.E. & Ferrell, M.E. (1998) Impulse buying: modeling its precursors. *Journal of Retailing*, 74(2), 169–191. [https://doi.org/10.1016/S0022-4359\(99\)80092-X](https://doi.org/10.1016/S0022-4359(99)80092-X)

SOCIAL MEDIA MESSAGE FORMATS AND AGE

- Berger, S. C. & Messerschmidt, C. M. (2009). Babbling before banking? Online communities and pre-purchase information seeking. *International Journal of Bank Marketing*, 27(6), 446-466. <https://doi.org/10.1108/02652320910988320>
- Boardman, R. & McCormick, H. (2018). Shopping channel preference and usage motivations: Exploring differences amongst a 50-year age span. *Journal of Fashion Marketing and Management*. <https://www-emerald-com.ezproxy.uta.edu/insight/content/doi/10.1108/JFMM-04-2017-0036/full/html#sec004>
- Bright, L. F., Kleiser, S. B., & Grau, S. L. (2015). Too much Facebook? An exploratory examination of social media fatigue. *Computers in Human Behavior*, 44(1), 148-155. <https://doi.org/10.1016/j.chb.2014.11.048>
- Casler, K., Bickel, L., & Hackett, E. (2013). Separate but equal? A comparison of participants and data gathered via Amazon's MTurk, social media, and face-to-face behavioral testing. *Computers in Human Behavior*, 29(6), 2156-2160. <https://doi.org/10.1016/j.chb.2013.05.009>
- Coyle, J. R., & Thorson, E. (2001). The effects of progressive levels of interactivity and vividness in web marketing sites. *Journal of Advertising*, 30(1), 65-77. <https://doi.org/10.1080/00913367.2001.10673646>
- Daft, R. & Lengel, R. (1986). Organizational information requirements, media richness and structural design. *Management Science*, 32. 554-571. <https://doi.org/10.1287/mnsc.32.5.554>.
- Desarbo, W.S. & Choi, J. (1998). A latent structure double hurdle regression model for exploring heterogeneity in consumer search patterns. *Journal of Econometrics*, 89(2), 423-55. [https://doi.org/10.1016/S0304-4076\(98\)00070-0](https://doi.org/10.1016/S0304-4076(98)00070-0)

SOCIAL MEDIA MESSAGE FORMATS AND AGE

- Dessart, L., Veloutsou, C., & Morgan-Thomas, A. (2016). Capturing consumer engagement: Duality, dimensionality, and measurement. *Journal of Marketing Management*, 27(7), 785-808. <https://doi.org/10.1080/0267257X.2015.1130738>
- Drolet, A., Williams, P., & Lau-Gesk, L. (2007). Age-related differences in responses to affective vs. rational ads for hedonic vs. utilitarian products. *Marketing Letters*, 18(4), 211-221. www.jstor.org/stable/40216716
- Dunaetz, D. R., Lisk, T. C., & Shin, M. M. (2015). Personality, gender, and age as predictors of media richness preference. *Advances in Multimedia*. <https://doi.org/10.1155/2015/243980>
- Danaher, P.J., Mullarkey, G.W., & Essegai, S. 2006. Factors affecting web site visit duration: A cross-domain analysis. *Journal of Marketing Research*, 43(2), 182–94. www.jstor.org/stable/30163385
- Ferry, D., Kydd, C. T., Sawyer, J. (2001). Measuring facts of media richness. *Research Gate. Journal of Computer Information Systems*, 41(4), 69-78. https://www.researchgate.net/publication/283773754_Measuring_facts_of_media_richness
- Fox, R. J., Krugman, D. M., Fletcher, J.E. & Fischer, P. M. (1998) Adolescents' attention to beer and cigarette print ads and associated product warnings. *Journal of Advertising*, 27(3), 57-68. <https://doi.org/10.1080/00913367.1998.10673563>
- Goodrich, K. (2013). Effects of age and time of day on Internet advertising outcomes. *Journal of Marketing Communications*, 19:(4), 229-244. <https://doi.org/10.1080/13527266.2011.620618>
- Google Marketing Platform. (n.d.). [Google Analytics website]. Retrieved November 28, 2019, from

https://analytics.google.com/analytics/web/provision/?utm_source=demoaccount&utm_medium=demoaccount&utm_campaign=demoaccount#/provision

Hauser, D. J., & Schwarz, N. (2016). Attentive turkers: MTurk participants perform better on online attention checks than do subject pool participants. *Behavior research methods*, 48(1), 400-407. <https://doi.org/10.3758/s13428-015-0578-z>

Howe, P., & Teufel, B. (2014). Native advertising and digital natives: The effects of age and advertisement format on news website credibility judgments. *International Symposium in Online Journalism*, 4(1), 78-90.

https://www.researchgate.net/profile/Brady_Teufel/publication/303168097_Native_advertising_and_digital_natives_The_effects_of_age_and_advertisement_format_on_news_website_credibility_judgments/links/5ba2a16292851ca9ed15d39d/Native-advertising-and-digital-natives-The-effects-of-age-and-advertisement-format-on-news-website-credibility-judgments.pdf

Hughes, A. & Wojcik, S. (2019). 10 facts about Americans and Twitter. Pew Research Center. <https://www.pewresearch.org/fact-tank/2019/08/02/10-facts-about-americans-and-twitter/>

Ishii, K., Lyons, M. M., & Carr., S. A. (2019). Revisiting media richness theory for today and future. *Human Behavior and Emerging Technologies*, 1(2), 124-131.

<https://doi.org/10.1002/hbe2.138>

ITU estimates that at the end of 2019, 53.6 percent of the global population, or 4.1 billion people, are using the Internet. (2019). [Website]. <https://www.itu.int/en/ITU-D/Statistics/Pages/stat/default.aspx>

Kahai, S. S., & Cooper, R. B. (2003). Exploring the core concepts of media richness theory: The impact of cue multiplicity and feedback immediacy on decision quality. *Journal of*

Management Information systems, 20(1), 263-299.

https://www.researchgate.net/publication/220591498_Exploring_the_Core_Concepts_of_Media_Richness_Theory_The_Impact_of_Cue_Multiplicity_and_Feedback_Immediacy_on_Decision_Quality

Kaid, L. L. (2003). Effects of political information in the 2000 presidential campaign:

Comparing traditional television and internet exposure. *American Behavioral Scientist*, 46(5), 677–691. <https://doi.org/10.1177/0002764202238492>

Karbalaei, A. (2012). Critical thinking and academic achievement. *Íkala: Revista de Lenguaje y Cultura*, 17(2), 121-128.

http://www.scielo.org.co/scielo.php?script=sci_arttext&pid=S0123-34322012000200001&lng=en&tlng=en

Kwak, H. (2012). Self-disclosure in online media: An active audience perspective. *International*

Journal of Advertising, 31(3), 485–510. <https://doi.org/10.2501/IJA-31-3-485-510>

Lazard, A., & Atkinson, L. (2015). Putting environmental infographics center stage: The role of

visuals at the Elaboration Likelihood Model's critical point of persuasion. *Science Communication*, 37(1), 6–33. <https://doi.org/10.1177/1075547014555997>

Lin, C. P., Chen, S. C., Chiu, C. K., & Lee, W. Y. (2011). Understanding purchase intention during product-harm crises: Moderating effects of perceived corporate ability and 25 corporate social responsibility. *Journal of Business Ethics*, 102(1), 455–471.

<https://doi.org/10.1007/s10551-011-0824-y>

Lohse, G. (1997). Consumer eye movement patterns on yellow pages advertising. *Journal of*

Advertising, 26(1), 61-73. www.jstor.org/stable/4189027

- Lu, Y., Kim, Y., Dou, X. Y., & Kumar, S. (2014). Promote physical activity among college students: Using media richness and interactivity in web design. *Computers in Human Behavior, 41*(1), 40-50. <https://doi.org/10.1016/j.chb.2014.08.012>
- Mandal, D. & McQueen, R. (2012). Extending media richness theory to explain social media adoption by microbusinesses. *Semantic Scholar*.
<https://www.semanticscholar.org/paper/Extending-media-richness-theory-to-explain-social-Mandal-McQueen/ad1b508199ff6aa4ccbee4fb60f76cbf5c03847a>
- Marcin, L., & Ilona, B. (2018). The influence of perceived media richness of marketing channels on online channel usage. *Baltic Journal of Management, 13*(2), 169-190.
<https://doi.org/10.1108/BJM-04-2017-0127>
- McKay-Nesbitt, J., Manchanda, R. V., Smith, M. S., Huhmann, B. A. (2011). Effects of age, need for cognition, and affective intensity on advertising effectiveness. *Journal of Business Research, 64*(1), 12-17. <https://doi.org/10.1016/j.jbusres.2009.09.013>
- Miller, L. M. S. & Bell, R. A. (2012). Online health information seeking: The influence of age, information trustworthiness, and search challenges. *Journal of Aging and Health, 24*(3), 525–541. <https://doi.org/10.1177/0898264311428167>
- Morgan-Lopez, A., Kim, A., Chew, R., & Ruddle, P. (2015). Development of Age-Prediction Algorithms for Twitter Followers. *Research Triangle Institute*. [PDF file].
http://www.aapor.org/AAPOR_Main/media/AnnualMeetingProceedings/2015/J8-3-Morgan-Lopez.pdf
- Mueller, S. & Szolnoki, G. (2010). The relative influence of packaging, labeling, branding and sensory attributes on liking and purchase intent: Consumers differ in their responsiveness.

Food Quality and Preference, 21(7), 774-783.

<https://doi.org/10.1016/j.foodqual.2010.07.011>

Nguyen, B., Ekinci, Y., Simkin, L., & Melewar, T. C. (2015). The brand likeability scale: An exploratory study of likeability in firm-level brands. *International Journal of Market Research*, 57(5), 777-800. <https://doi.org/10.2501/IJMR-2015-063>

Pechmann, C., & Stewart, D. (1990). The effects of comparative advertising on attention, memory, and purchase intentions. *Journal of Consumer Research*, 17(2), 180-191. www.jstor.org/stable/2626810

Pelsmacker, P., & Neijens, P. C. (2012). New Advertising formats: How persuasion knowledge affects consumer responses, *Journal of Marketing Communications*, 18(1), 1-4. <https://doi.org/10.1080/13527266.2011.620762>

Perju-Mitran, A. & Budacia, A. E. (2017). Age differences in responses to marketing communication techniques used in online social networks. *Journal of Information Systems & Operations Management*, 1, 385-395. <https://login.ezproxy.uta.edu/login?url=https://search-proquest-com.ezproxy.uta.edu/docview/1989487487?accountid=7117>

Perrin, A. & Anderson, M. (2019). Share of U.S. adults using social media, including Facebook, is mostly unchanged since 2018. *Pew Research Center*. <https://www.pewresearch.org/fact-tank/2019/04/10/share-of-u-s-adults-using-social-media-including-facebook-is-mostly-unchanged-since-2018/>

Perrin, A. (2015). Social Media Usage: 2005-2015. *Pew Internet & American Life Project*. <http://www.pewinternet.org/2015/10/08/social-networking-usage-2005-2015/>

- Rambe, P., & Retumetse, J. J. (2017). Impact of social media advertising on high energy drink preferences and consumption. *Journal of Applied Business Research*, 33(4), 653-668.
<https://doi.org/10.19030/jabr.v33i4.9977>
- Sajid, D. (2016). Social Media and its role in Marketing. *Business and Economics Journal*, 7(1).
<https://doi.org/10.4172/2151-6219.1000203>
- Savolainen, R. (1999). The role of the internet in information seeking. Putting the networked services in context. *Information Processing & Management*, 35(6), 765-782.
[https://doi.org/10.1016/S0306-4573\(99\)00025-4](https://doi.org/10.1016/S0306-4573(99)00025-4)
- Se-Joon, H. & Kar, Y. T. (2006). Understanding the adoption of multipurpose information appliances: The case of mobile data services. *Information Systems Research*, 17(2), 162-79. <https://www.semanticscholar.org/paper/Understanding-the-Adoption-of-Multipurpose-The-Case-Hong-Tam/538f550a3351bb34390934b06fa2520398aa7d13>
- Sheehan, K. B. (2018). Crowdsourcing research: data collection with Amazon's Mechanical Turk. *Communication Monographs*, 85(1), 140-156.
<https://doi.org/10.1080/03637751.2017.1342043>
- Sheer, V. C. (2011). Teenagers' use of MSN features, discussion topics, and online friendship development: The impact of media richness and communication control. *Communication Quarterly*, 59(1), 82-103. <https://doi.org/10.1080/01463373.2010.525702>
- Simola, J., Hyona, J. & Kuisma, J. (2015). *Perception of visual advertising in different media: From attention to distraction, persuasion, preference, and memory*. Finland: Frontiers.
<https://doi.org/10.3389/fpsyg.2014.01208>
- Social media fact sheet. (2019). *Pew Research Center: Internet & Technology*.
<https://www.pewresearch.org/internet/fact-sheet/social-media/>

Speck, P. S. & Elliott, M. T. (1997) Predictors of advertising avoidance in print and broadcast media. *Journal of Advertising*, 26(3), 61-76.

<https://doi.org/10.1080/00913367.1997.10673529>

Steuer, J. (1992). Defining virtual reality: Dimensions determining telepresence. *Journal of Communication*, 42(4), 73-93. <https://doi.org/10.1111/j.1460-2466.1992.tb00812.x>

Sundar, S. S. (2000). Multimedia effects on processing and perception of online news: A study of picture, audio, and video downloads. *Journalism & Mass Communication Quarterly*, 77(3), 480-499. <https://doi.org/10.1177/107769900007700302>

Tarabashkina L, Quester P, & Tarabashkina O. (2018). Perceived informative intention in advertising and its attenuating effect on persuasion attribution among children. *Psychology & Marketing*, 35(10), 778-789. <https://doi.org/10.1002/mar.21134>

The 10 Most Followed Twitter Accounts in 2020. (2019). [G2 Learning Hub website].

<https://learn.g2.com/most-followed-twitter-accounts>

Tseng, F.C., Cheng, T. C. E., Li, K., & Teng, C. I. (2017). How does media richness contribute to customer loyalty to mobile instant messaging? *Internet Research*, 27(3), 520-537. <https://doi.org/10.1108/IntR-06-2016-0181>

Tutaj, K. & Reijmersdal, E. A. (2012). Effects of online advertising format and persuasion knowledge on audience reactions. *Journal of Marketing Communications*, 18(1), 5-18. <https://doi.org/10.1080/13527266.2011.620765>.

Wilson, T.D., Ford, N., Ellis, D., Foster, A. & Spink, A. (2002). Information seeking and mediated searching. Part 2. Uncertainty and its correlates. *Journal of the American Society for Information Science & Technology*, 53(9), 704-15.

<https://doi.org/10.1002/asi.10082>

Appendix A Complete Questionnaire

5/21/2020

Qualtrics Survey Software

Block 1

Consent.



The University of Texas at Arlington (UTA) Informed Consent for Minimal Risk Studies with Adults

My name is Daniela Chavez Garcia, and I am asking you to participate in a UT Arlington research study titled, "New Challenges in Social Media Marketing: Exploring the Interaction Effects of Age and Message Format on Audience Attention, Attitude, and Behavioral Intentions." This research study is about social media marketing. You can choose to participate in this research study if you are at least 18 years old and utilize the social media platform Twitter.

Reasons why you might want to participate in this study include if you want to contribute your perspective to a study involving age and different message formats in social media marketing, but you might not want to participate if you do not have access to Internet and are not at least 18 years of age. Your decision about whether to participate or not is entirely up to you. If you decide not to be in the study, there will not be any punishment or penalty; whatever your choice, there will be no impact on any benefits or services that you would normally receive. Even if you choose to begin the study, you can also change your mind and quit at any time without any consequences.

If you decide to participate in this research study, the list of activities that I will ask you to complete for the research are (1) Read through this Informed Consent and then make your choice about whether to participate or not, (2) If you agree to participate, you will be shown a social media message and asked to rate to what extent you agree with the statements based on your own opinions. It should take about 10 minutes in only one visit. Although you probably won't experience any personal benefits from participating, the study activities are not expected to pose any additional risks beyond those that you would normally experience in your regular everyday life or during routine medical / psychological visits.

You will receive \$0.20 for participating in this research study, if recruited by the Amazon mTurk system, which will be given to you through the Amazon system. There are no alternative options to this research project. The Internal Revenue Service (IRS) considers all payments made to research subjects to be taxable income; this may require additional information to be collected from you for tax purposes, such as your social security number.

The research team is committed to protecting your rights and privacy as a research subject. We may publish or present the results, but your name will not be used. While absolute confidentiality cannot be guaranteed, the research team will make every effort to protect the confidentiality of your records as described here and to the extent permitted by law. If you have questions about the study, you can contact me at daniela.garcia@mavs.uta.edu. For questions about your rights or to report complaints, contact the UTA Research Office at 817-272-3723 or regulatoryservices@uta.edu.

You are indicating your voluntary agreement to participate by clicking on the "Accept" button below.

SOCIAL MEDIA MESSAGE FORMATS AND AGE

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Qualtrics Survey Software

Accept

Do not accept

Intro

Welcome. When you are ready to begin this survey click on the arrow to proceed.

Block 2

Q0. Do you use the social media platform Twitter to the degree you are familiar with it?

Yes

No

Don't use Twitter

End of questionnaire. You do not meet the requirements for this survey.

Block 3

Q1. Please indicate your age.

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Block 4

Q2. Please select your gender.

Male

Female

Prefer not to answer

Block 5

Q3. Please select a celebrity you support and follow on Twitter, or are willing to support and follow on Twitter.

Barack Obama

Katy Perry

Justin Bieber

Rihanna

Taylor Swift

Cristiano Ronaldo

Lady Gaga

Ellen DeGeneres

Donald Trump

Ariana Grande

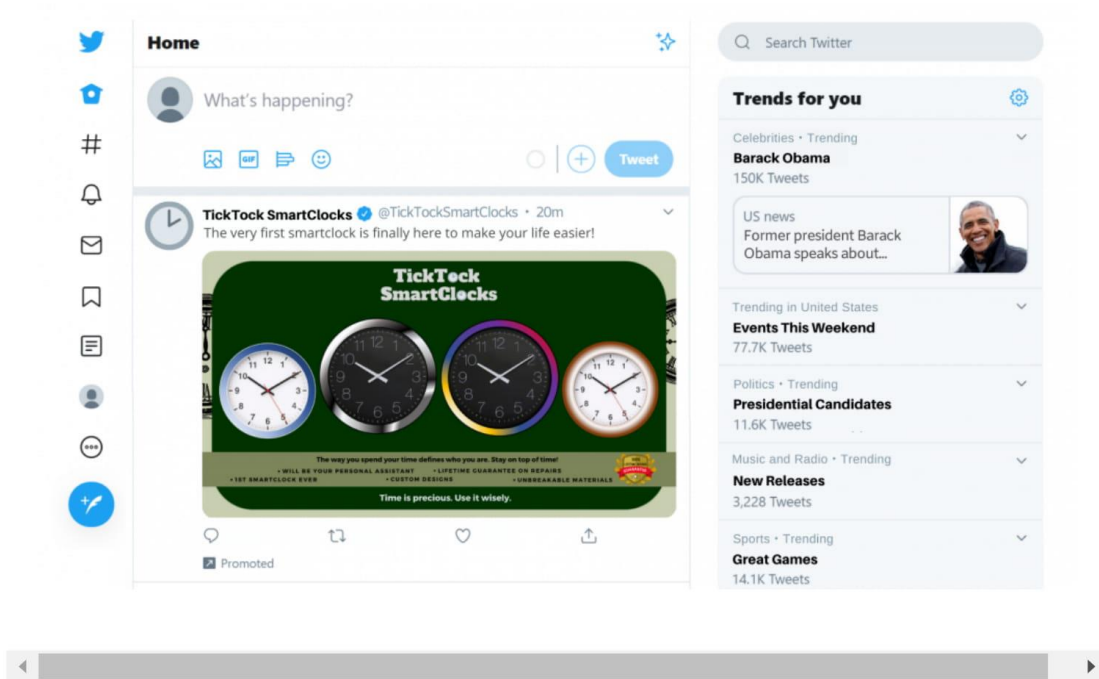
Block 6

Q4. Please click on the area that grabs your attention the most.

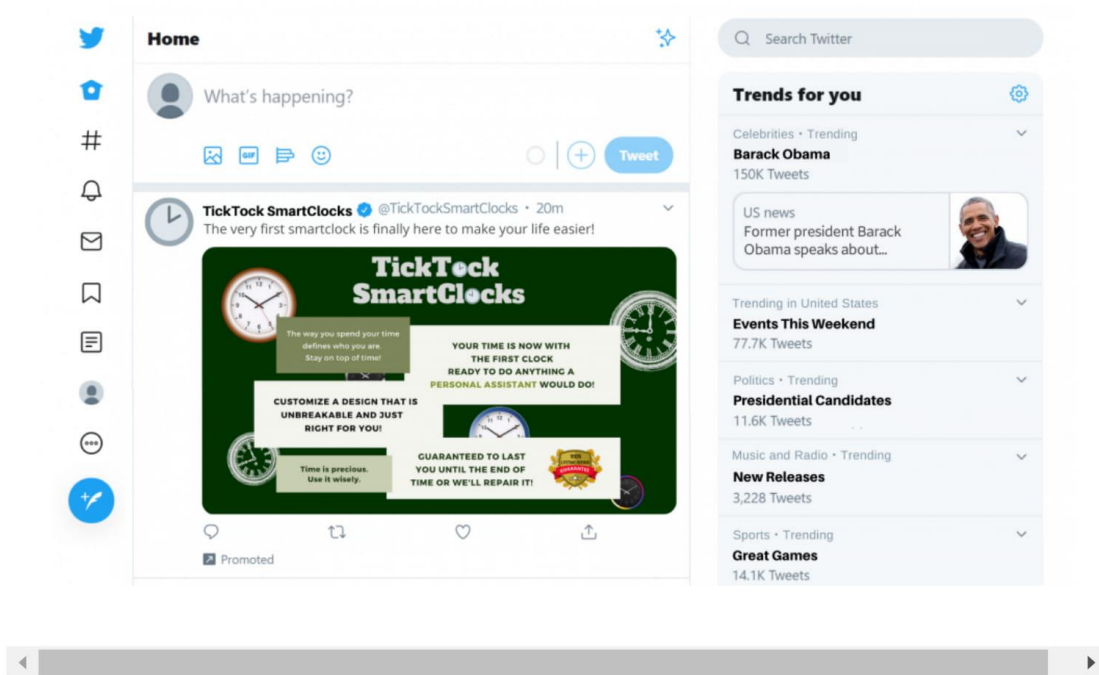
SOCIAL MEDIA MESSAGE FORMATS AND AGE

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Qualtrics Survey Software



Q4. Please click on the area that grabs your attention the most.



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SOCIAL MEDIA MESSAGE FORMATS AND AGE

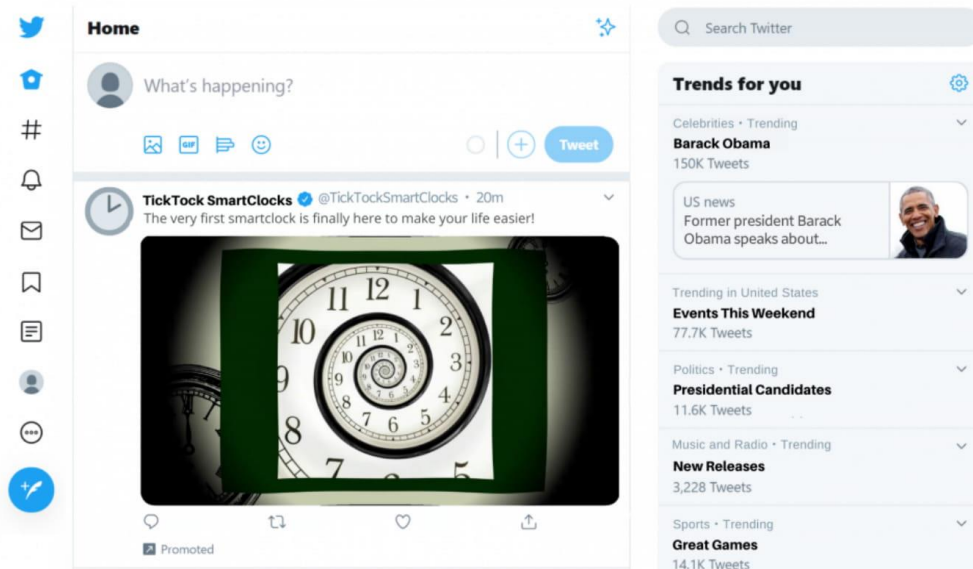
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Qualtrics Survey Software



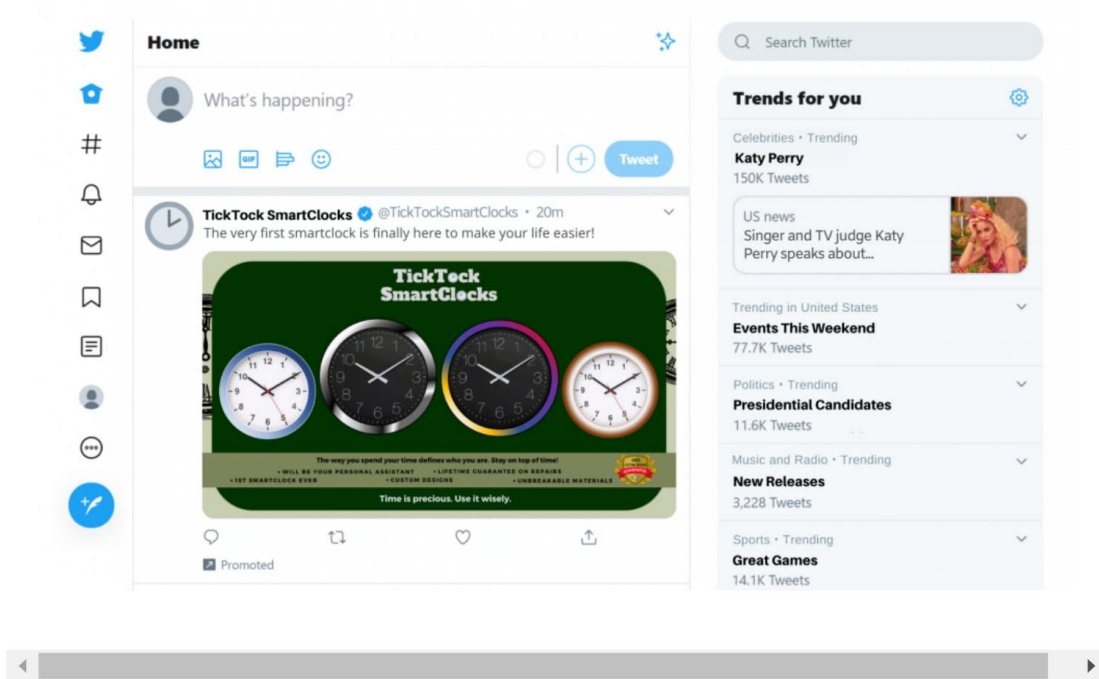
Q4.

Please click on the area below that grabbed your attention the most.



Block 6

Image. Please click on the area that grabs your attention the most.

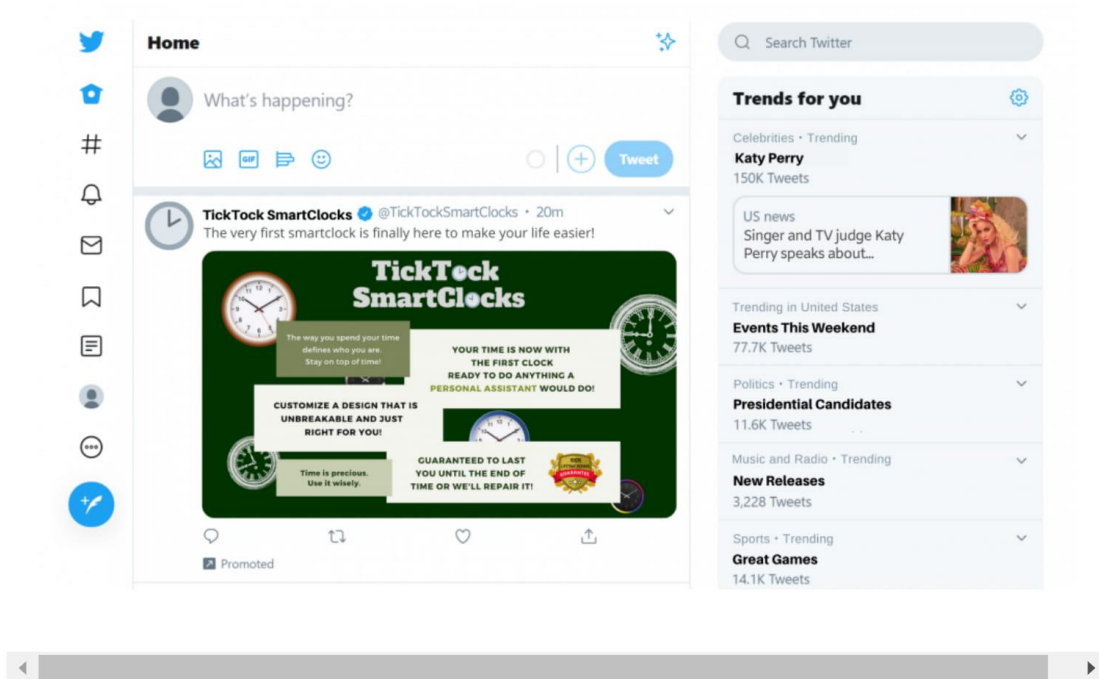


Text. Please click on the area that grabs your attention the most.

SOCIAL MEDIA MESSAGE FORMATS AND AGE

5/21/2020

Qualtrics Survey Software



Video.



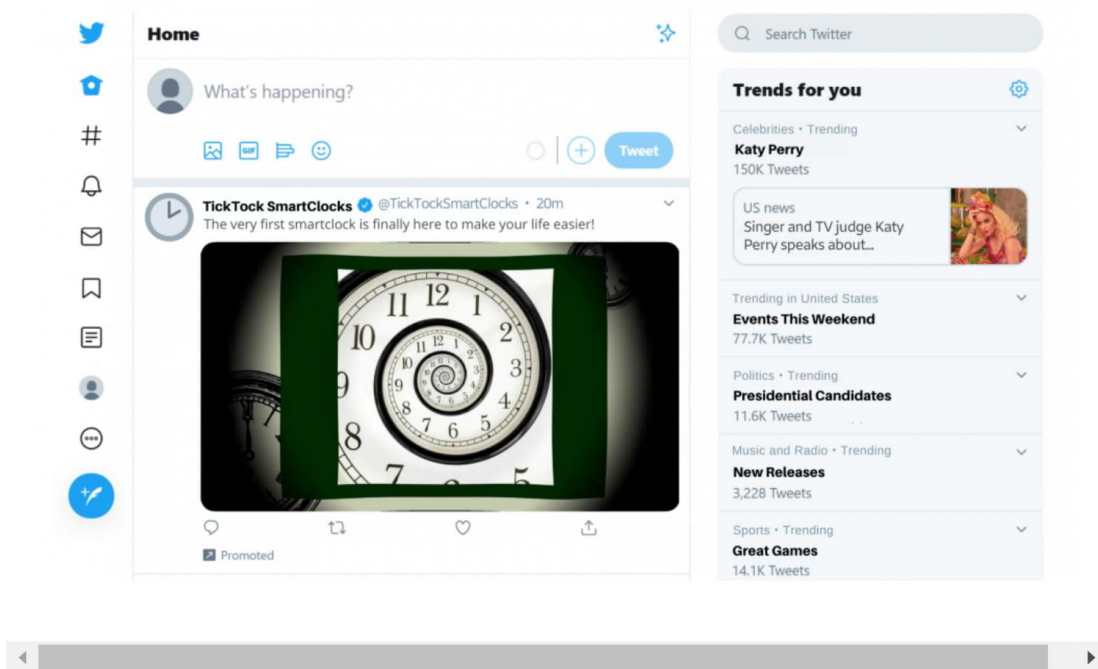
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SOCIAL MEDIA MESSAGE FORMATS AND AGE

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Please click on the image below the area that grabbed your attention the most.



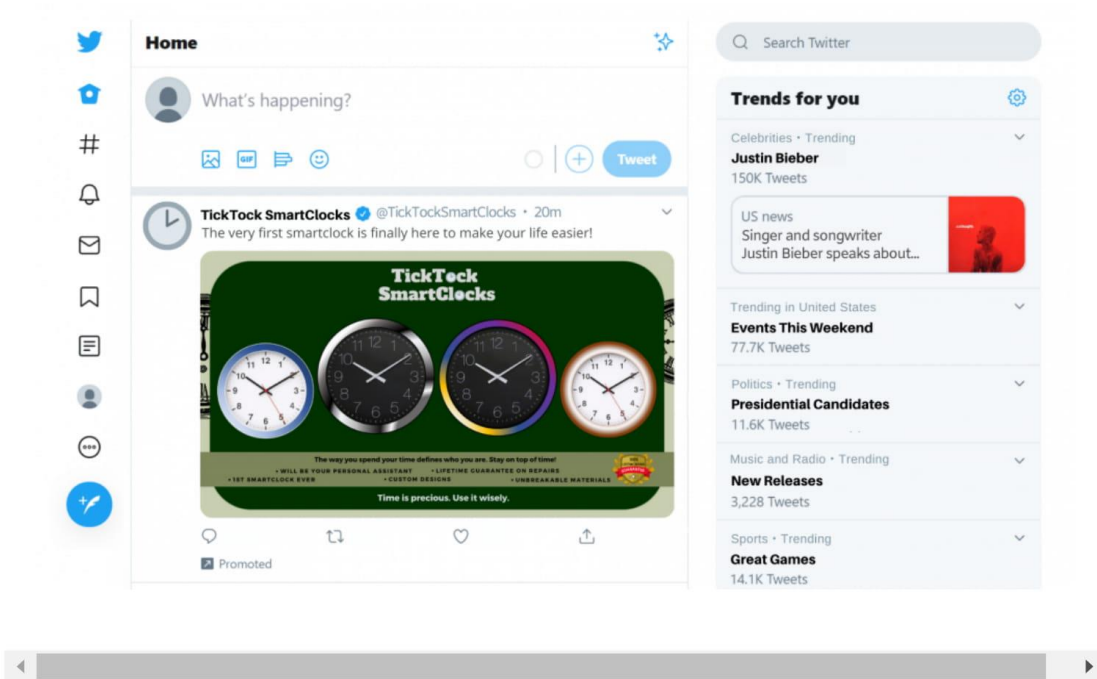
Block 6

Q4. Please click on the area that grabs your attention the most.

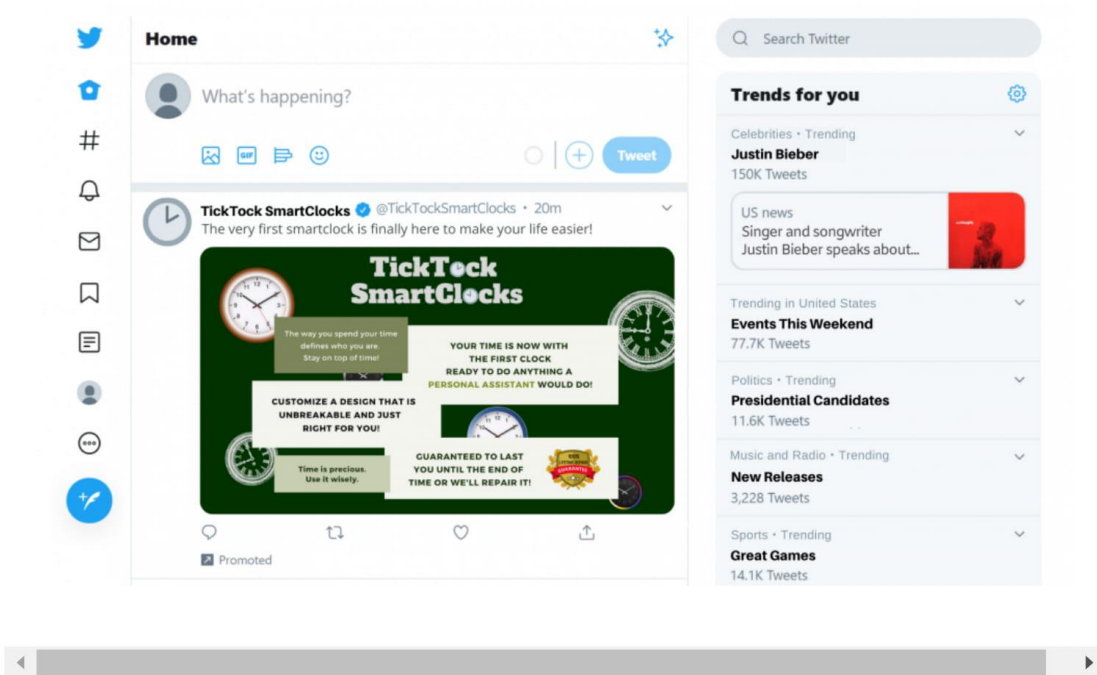
SOCIAL MEDIA MESSAGE FORMATS AND AGE

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Qualtrics Survey Software



Q4. Please click on the area that grabs your attention the most.



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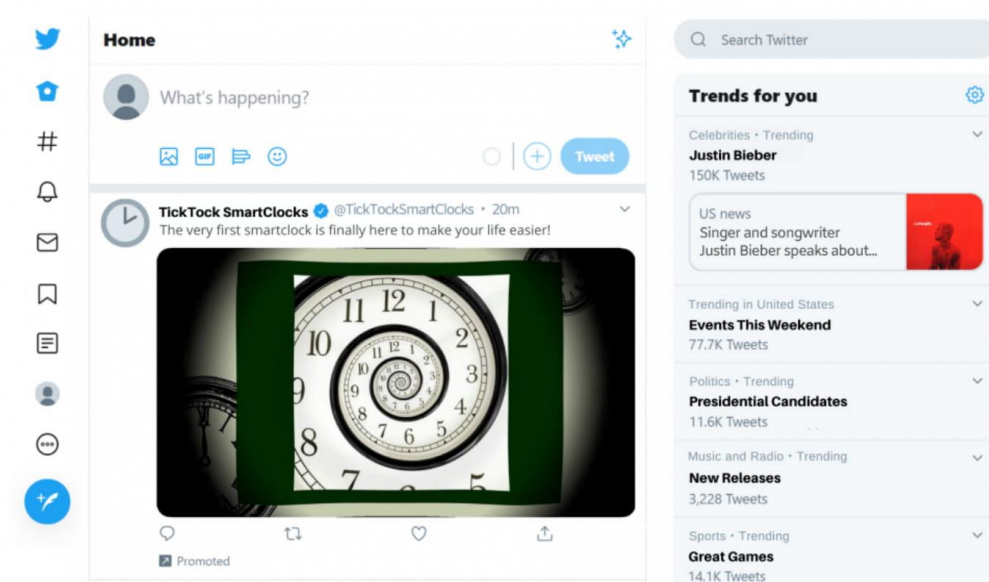
SOCIAL MEDIA MESSAGE FORMATS AND AGE

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Qualtrics Survey Software



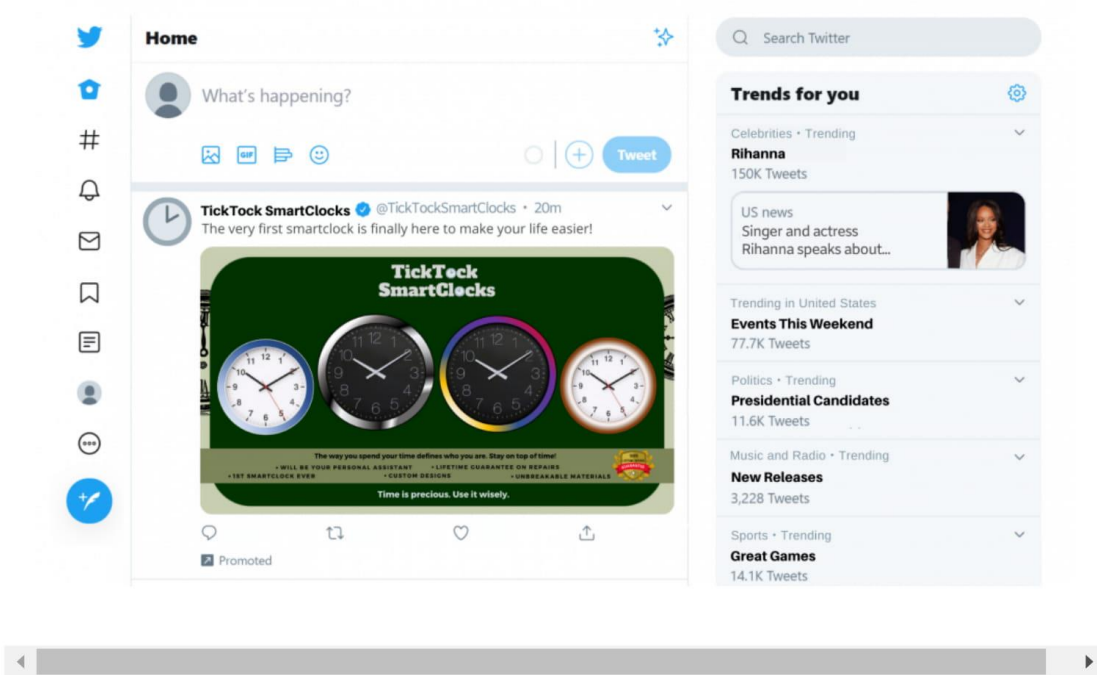
Q4. Please click on the image below the area that grabbed your attention the most.



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Block 6

Q4. Please click on the area that grabs your attention the most.

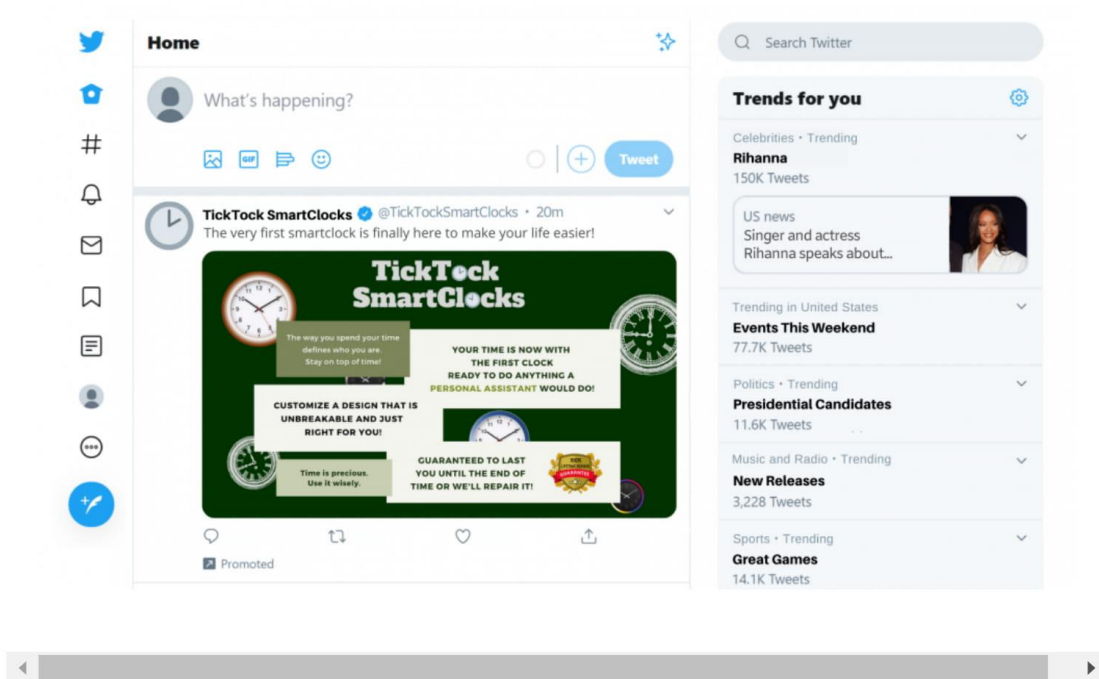


Q4. Please click on the area that grabs your attention the most.

SOCIAL MEDIA MESSAGE FORMATS AND AGE

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Qualtrics Survey Software



Marketing Message



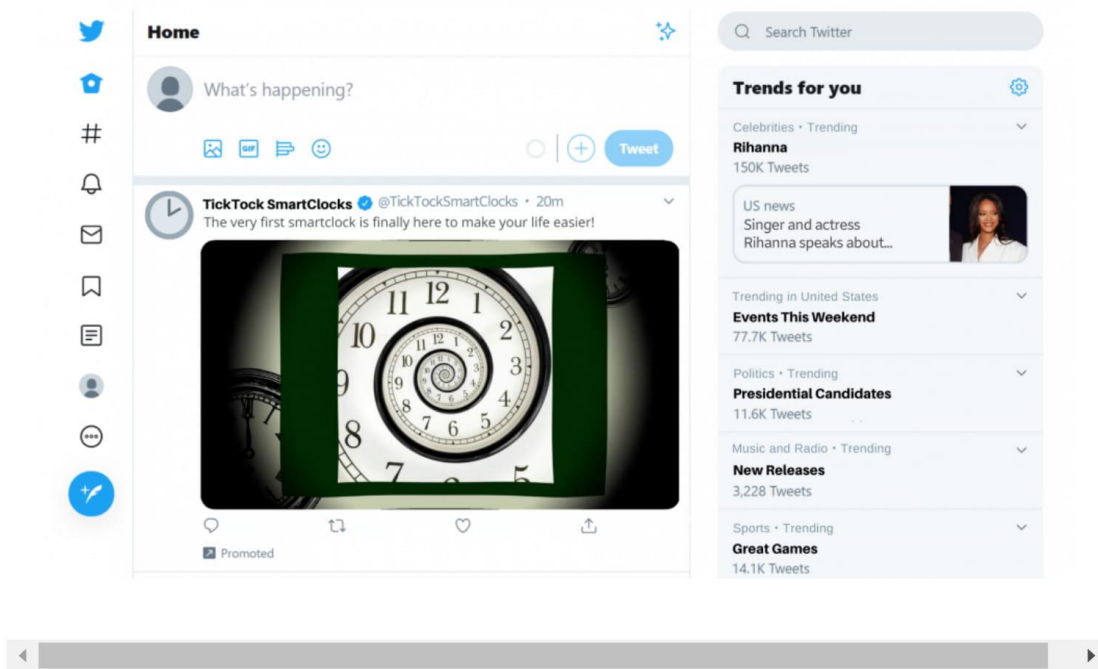
Q4.

SOCIAL MEDIA MESSAGE FORMATS AND AGE

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Qualtrics Survey Software

Please click on the image below the area that grabbed your attention the most.



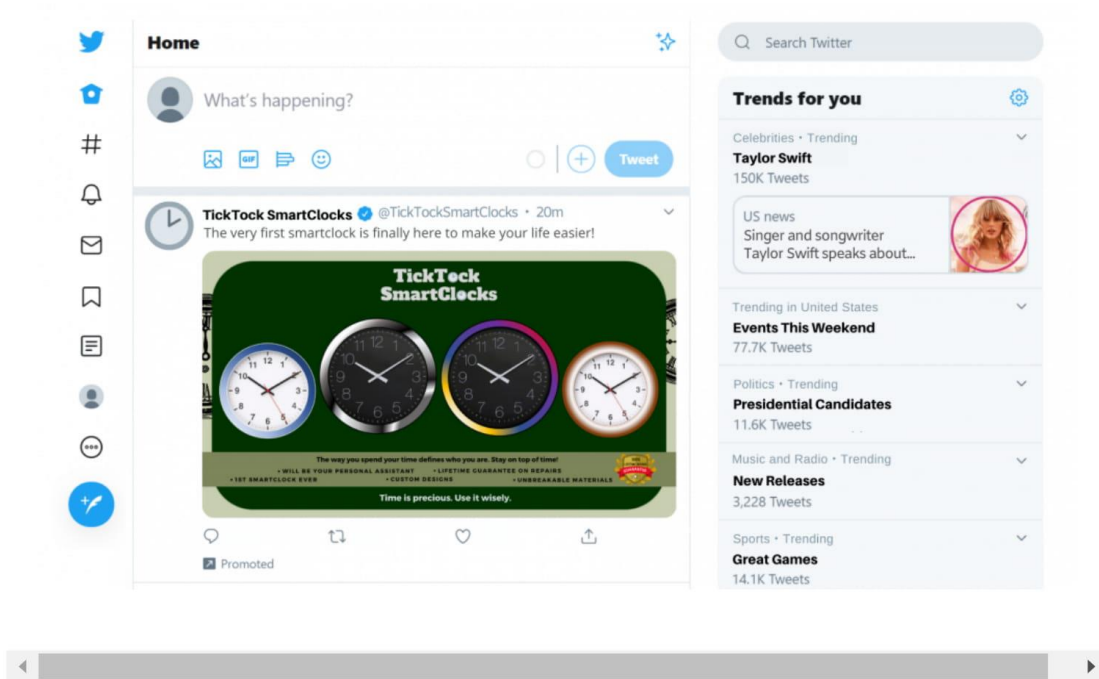
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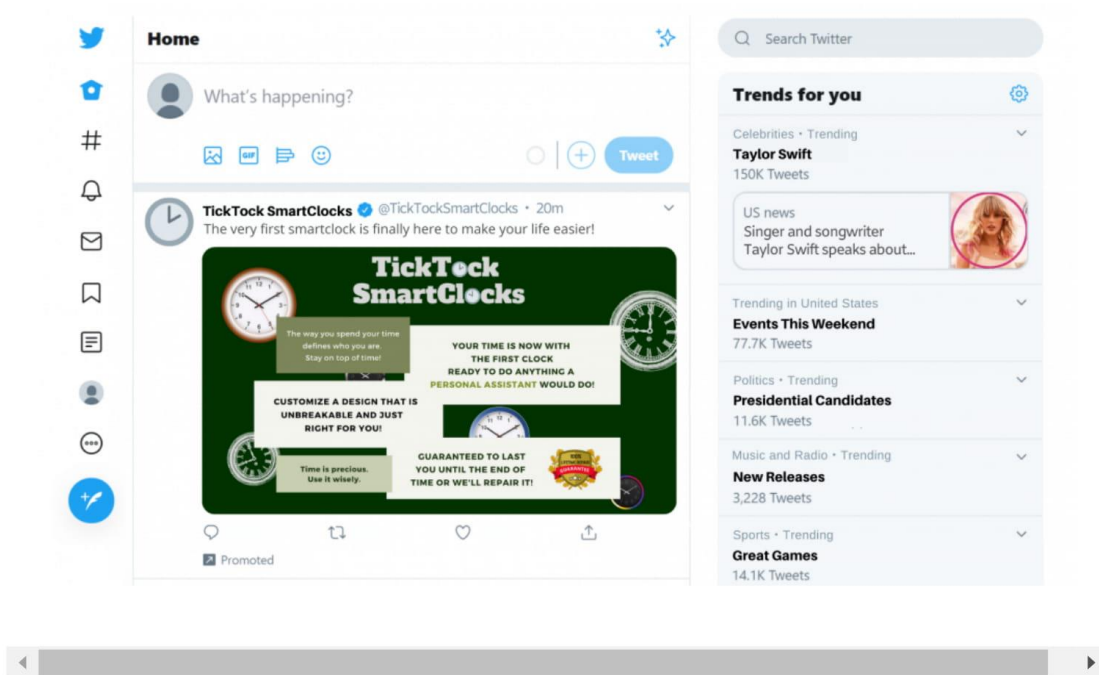
SOCIAL MEDIA MESSAGE FORMATS AND AGE

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Q4. Please click on the area that grabs your attention the most.



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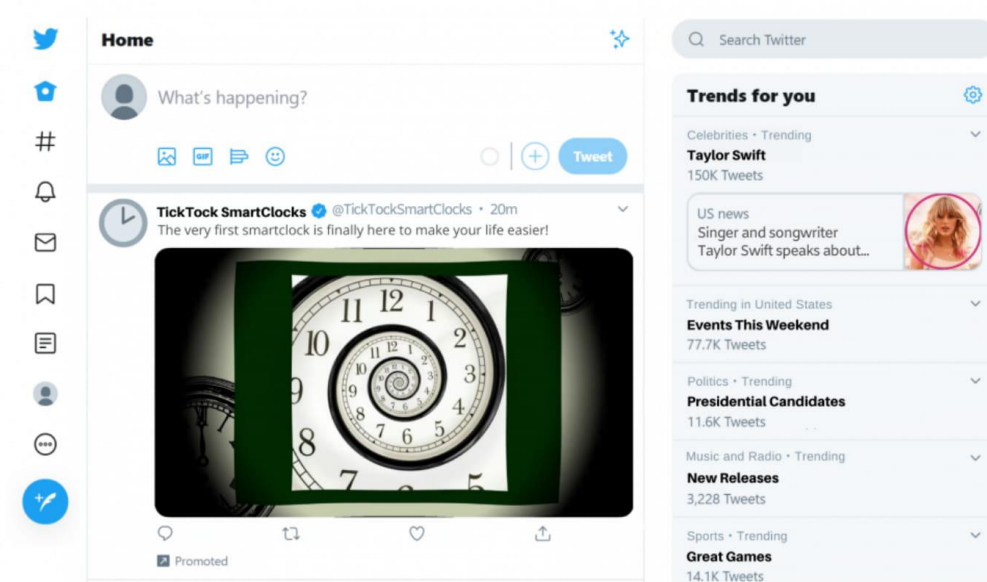
SOCIAL MEDIA MESSAGE FORMATS AND AGE

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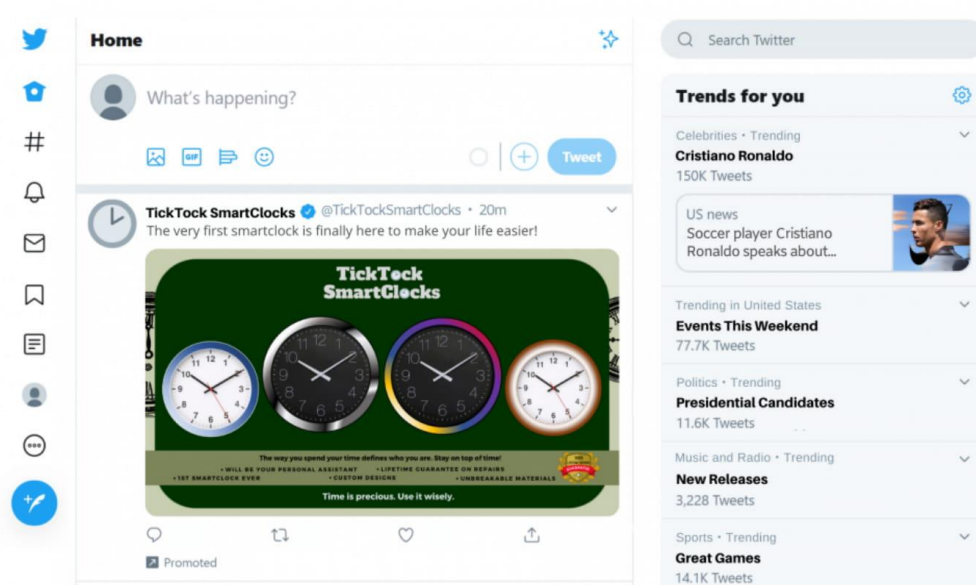
Q4. Please click on the image below the area that grabbed your attention the most.



https://utamsmr.ca1.qualtrics.com/Q/EditSection/Blocks/Ajax/GetSurveyPrintPreview?ContextSurveyID=SV_0umukrSlvPjEK9&ContextLibraryID=... 15/35

Block 6

Q4. Please click on the area that grabs your attention the most.

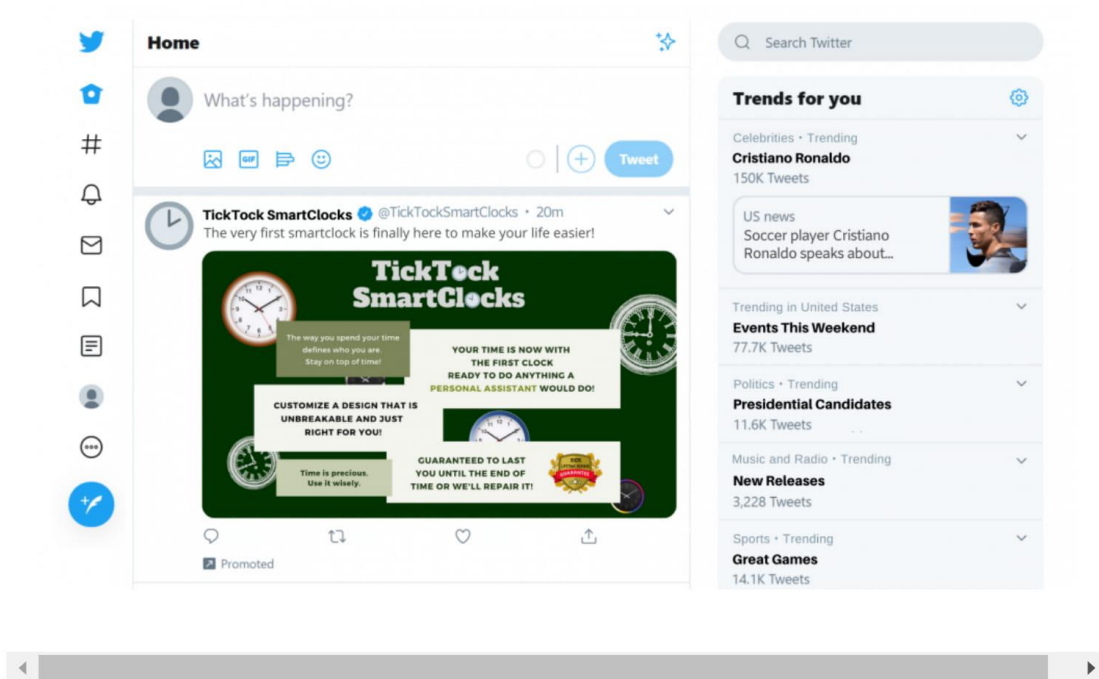


Q4. Please click on the area that grabs your attention the most.

SOCIAL MEDIA MESSAGE FORMATS AND AGE

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Marketing Message

A large rectangular placeholder for a marketing message. At the top, the text 'Marketing Message' is centered. In the center of the rectangle is a dark gray play button icon, indicating a video or audio content. The entire placeholder is enclosed in a thin black border.

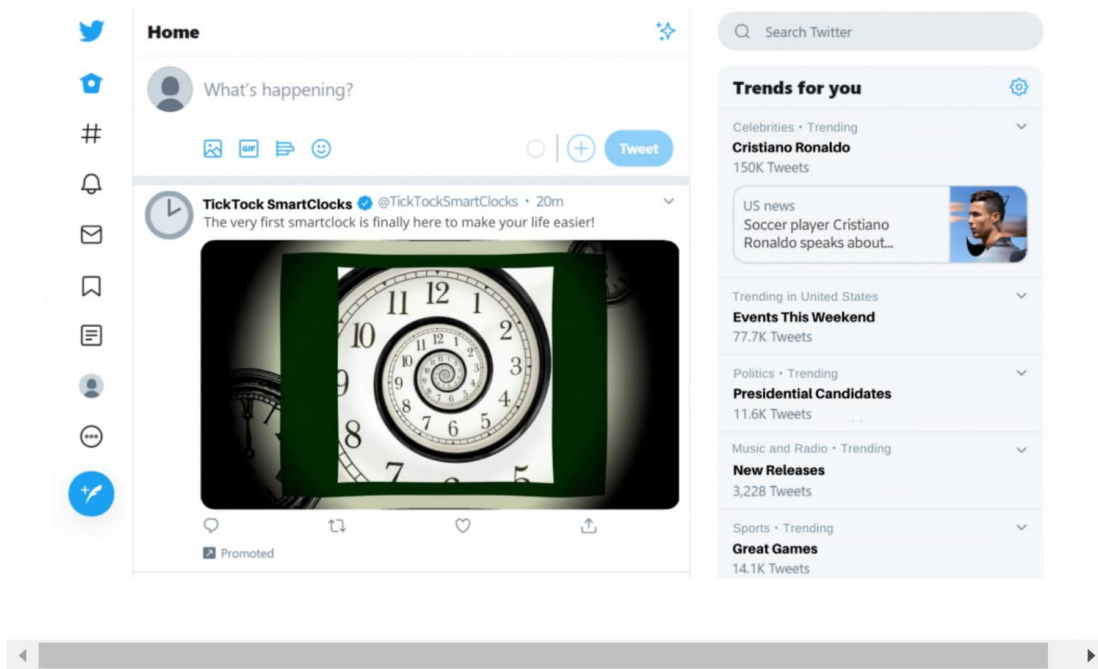
Q4.

SOCIAL MEDIA MESSAGE FORMATS AND AGE

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Please click on the image below the area that grabbed your attention the most.



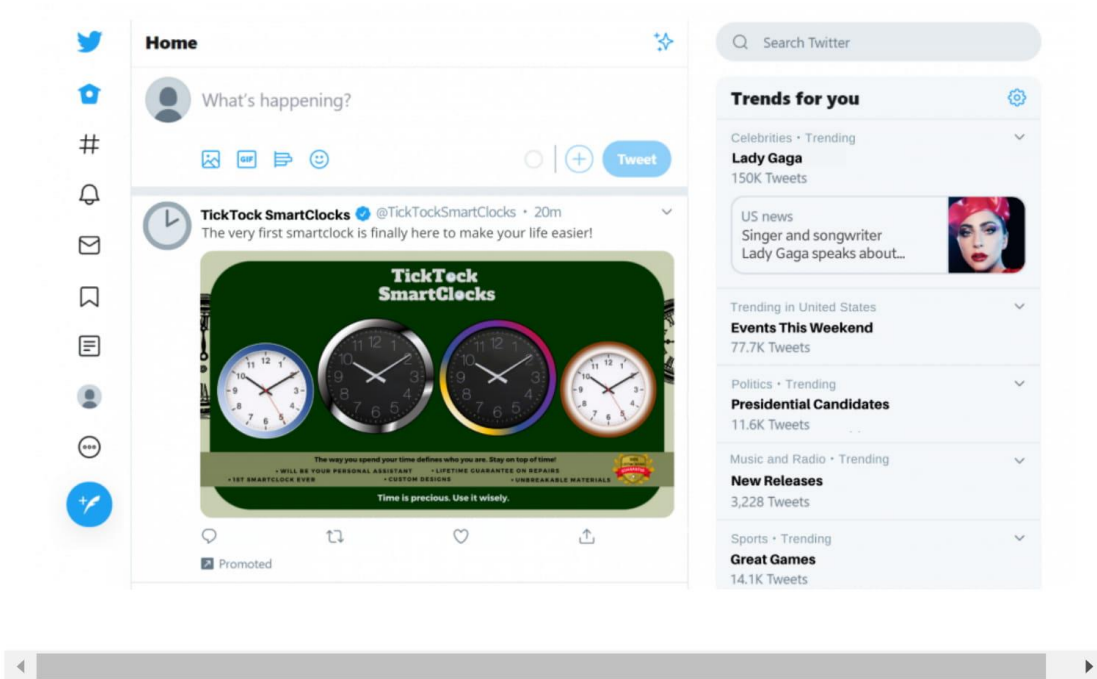
Block 6

Q4. Please click on the area that grabs your attention the most.

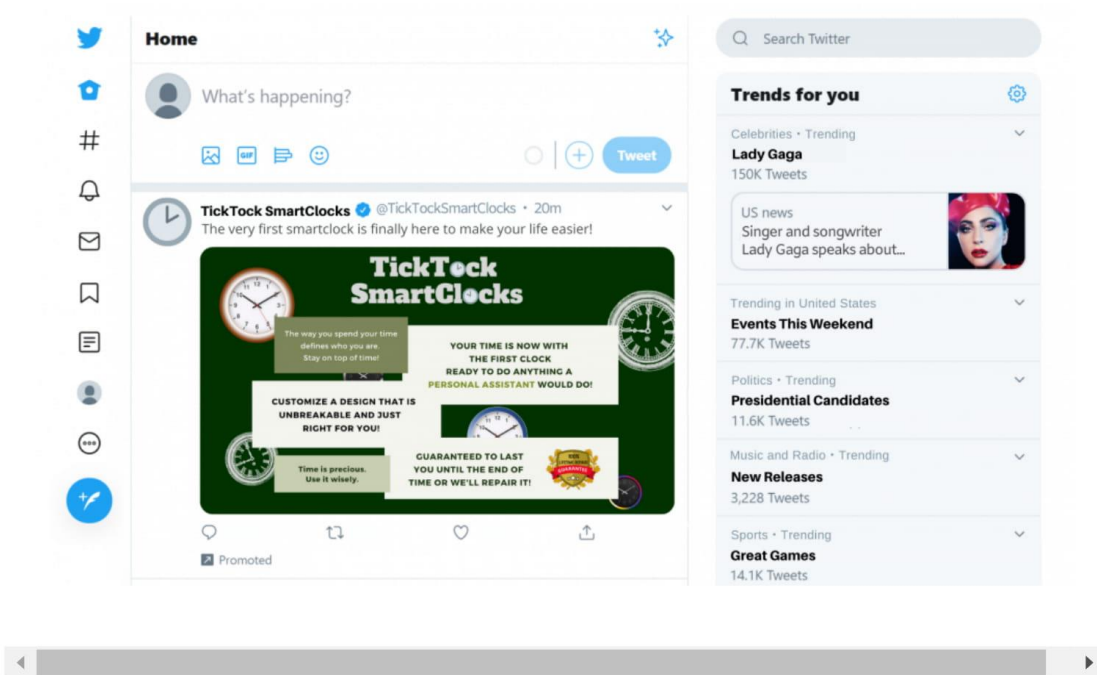
SOCIAL MEDIA MESSAGE FORMATS AND AGE

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Q4. Please click on the area that grabs your attention the most.



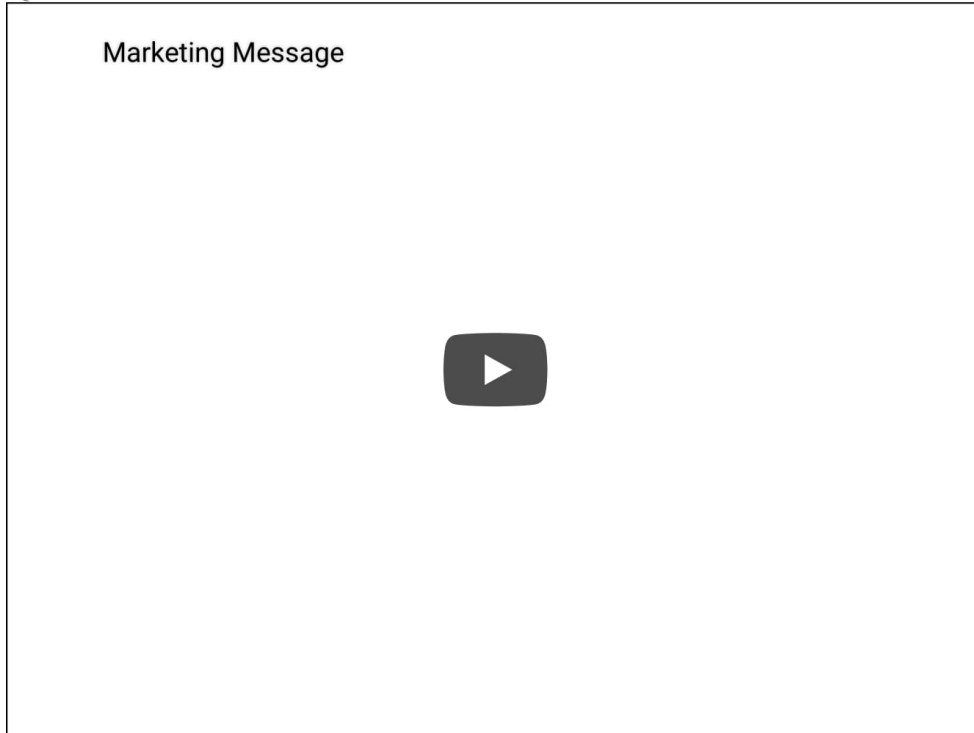
https://utamsmr.ca1.qualtrics.com/Q/EditSection/Blocks/Ajax/GetSurveyPrintPreview?ContextSurveyID=SV_0umukrSlvPjJEK9&ContextLibraryID=... 19/35

SOCIAL MEDIA MESSAGE FORMATS AND AGE

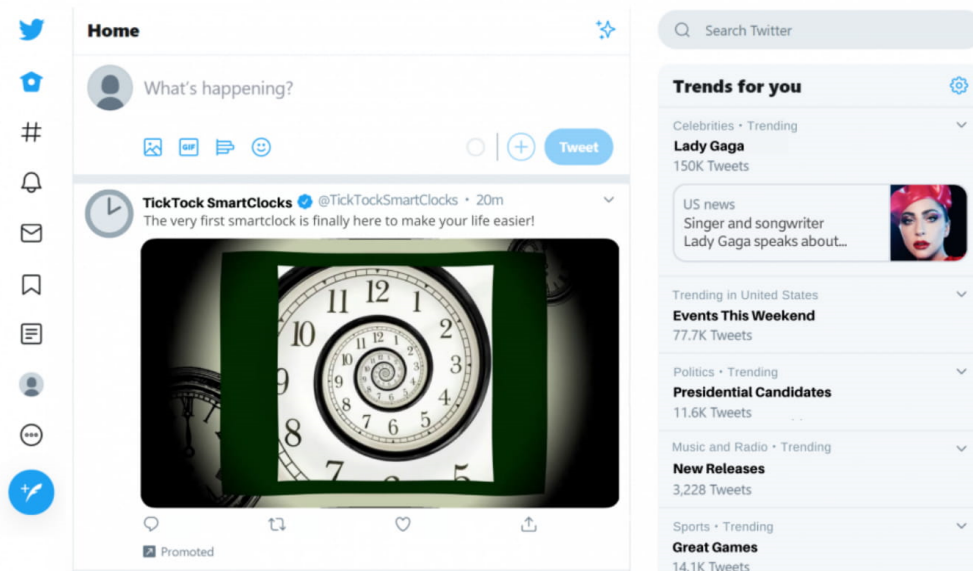
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Q4.



Please click on the image below the area that grabbed your attention the most.

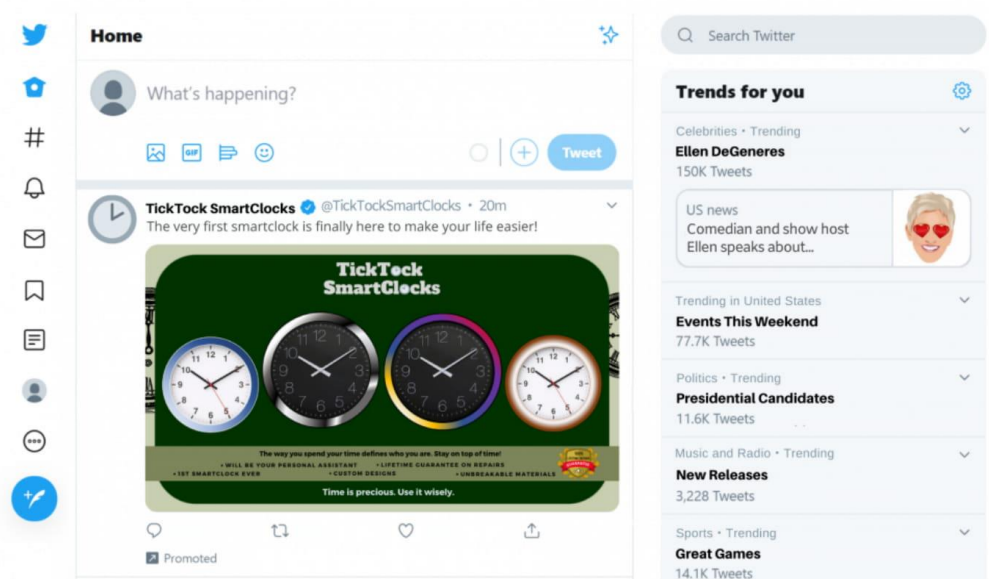


https://utamsmr.ca1.qualtrics.com/Q/EditSection/Blocks/Ajax/GetSurveyPrintPreview?ContextSurveyID=SV_0umukrSlvPdjEK9&ContextLibraryID=... 20/35



Block 6

Q4. Please click on the area that grabs your attention the most.

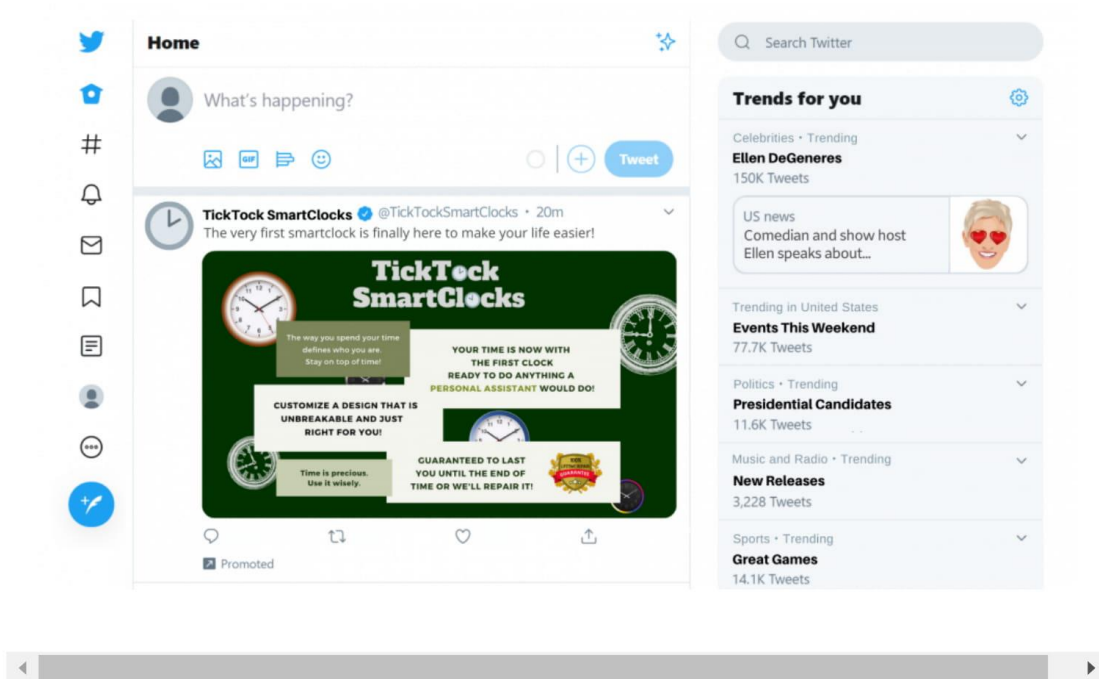


Q4. Please click on the area that grabs your attention the most.

SOCIAL MEDIA MESSAGE FORMATS AND AGE

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Q4.

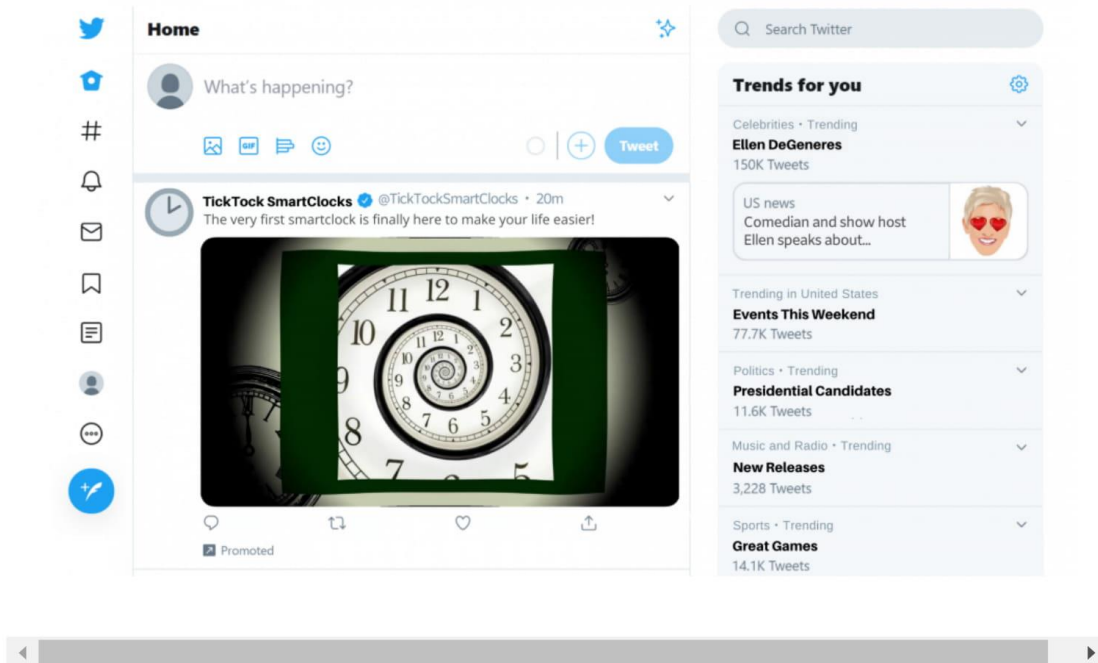
SOCIAL MEDIA MESSAGE FORMATS AND AGE

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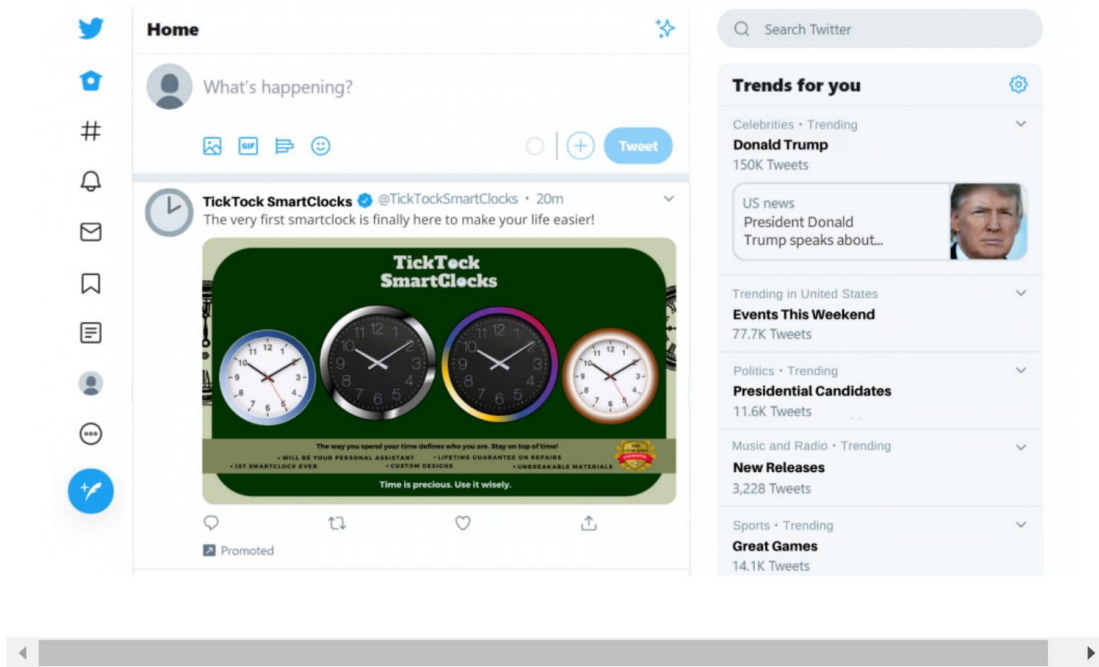
Please click on the image below the area that grabbed your attention the most.



https://utamsmr.ca1.qualtrics.com/Q/EditSection/Blocks/Ajax/GetSurveyPrintPreview?ContextSurveyID=SV_0umukrSlvPjEK9&ContextLibraryID=... 23/35

Block 6

Q4. Please click on the area that grabs your attention the most.

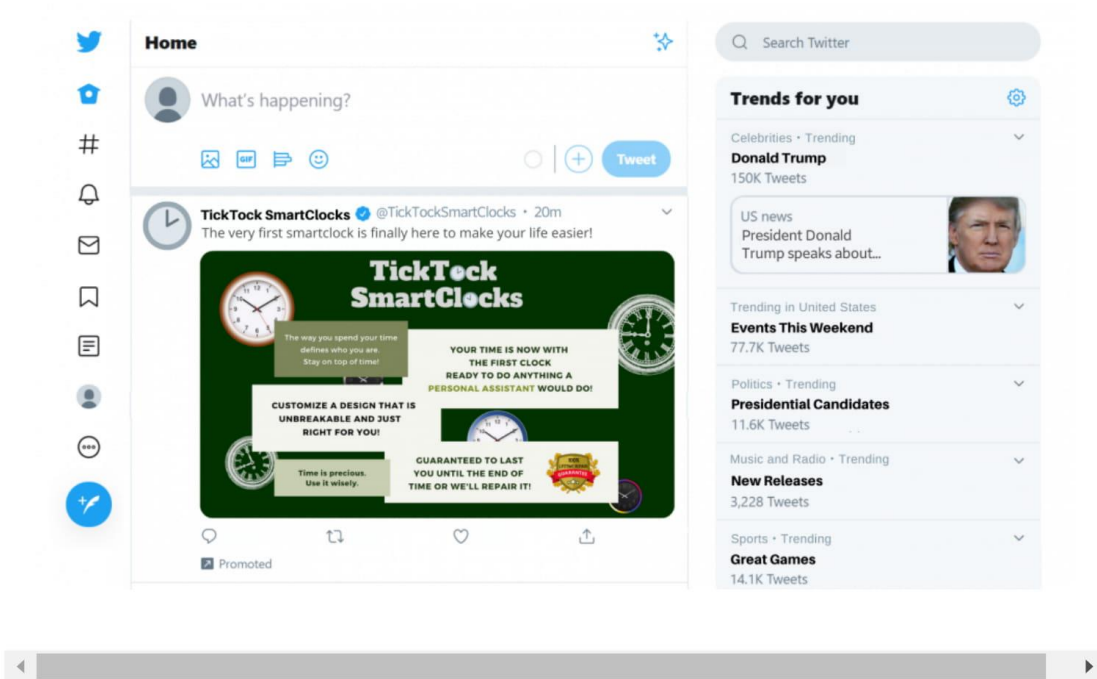


Q4. Please click on the area that grabs your attention the most.

SOCIAL MEDIA MESSAGE FORMATS AND AGE

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Q4.

Marketing Message

A large rectangular box with a thin black border. At the top left, the text 'Marketing Message' is displayed. In the center of the box is a dark gray play button icon, indicating a video player. The rest of the box is empty.

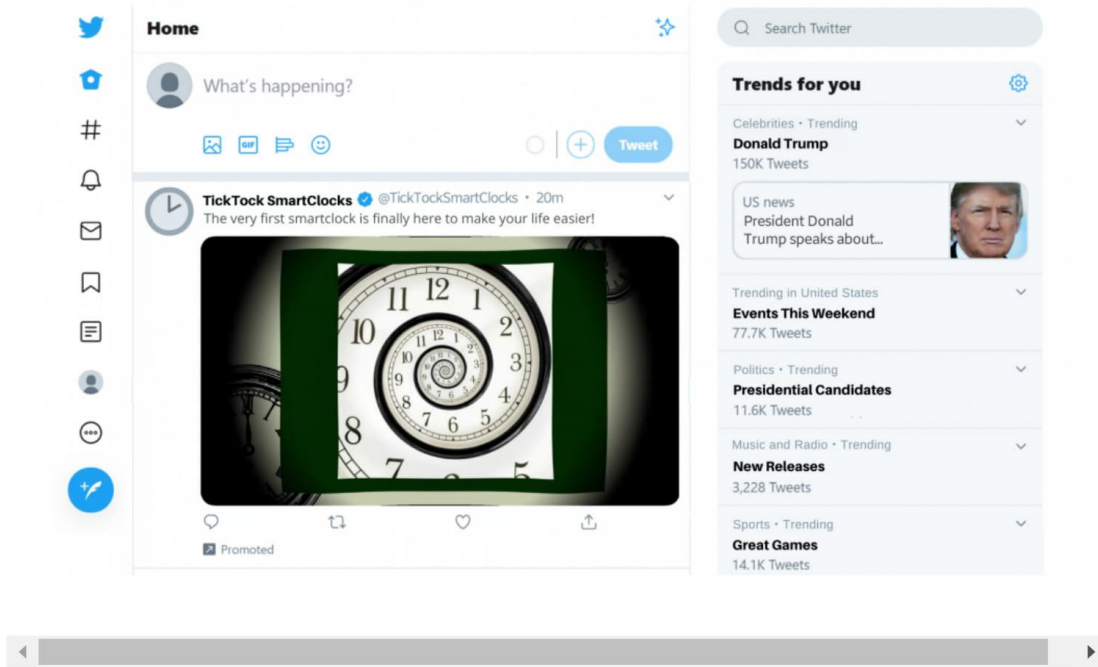
https://utamsmr.ca1.qualtrics.com/Q/EditSection/Blocks/Ajax/GetSurveyPrintPreview?ContextSurveyID=SV_0umukrSlvPjEK9&ContextLibraryID=... 25/35

SOCIAL MEDIA MESSAGE FORMATS AND AGE

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Please click on image below the area that grabbed your attention the most.



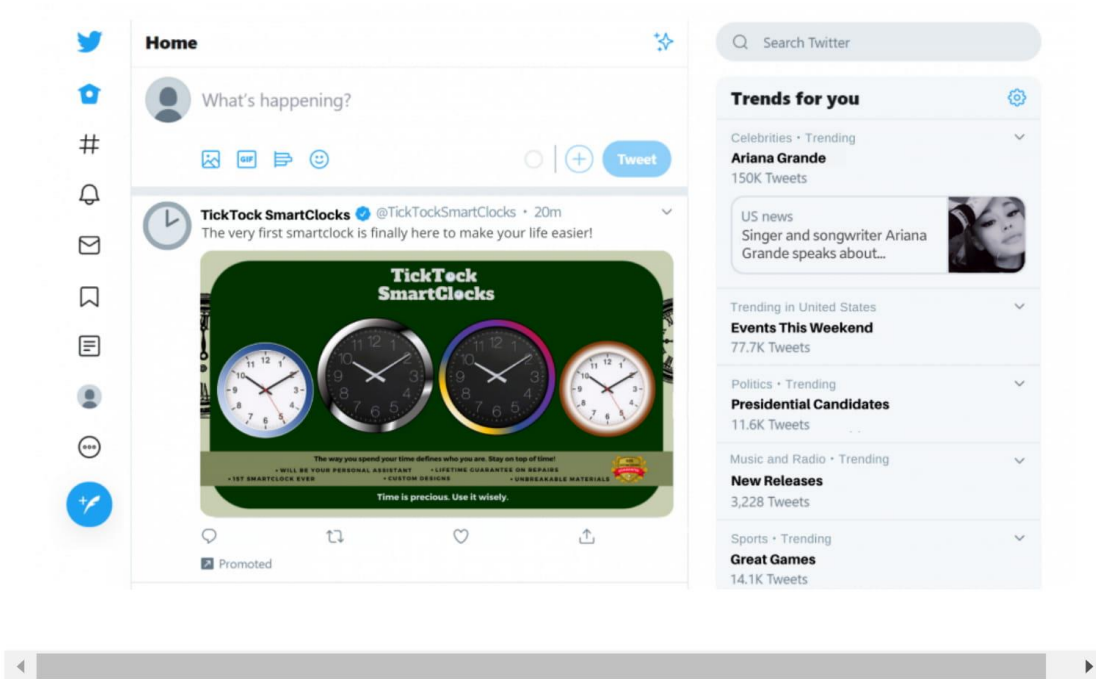
Block 6

Q4. Please click on the area that grabs your attention the most.

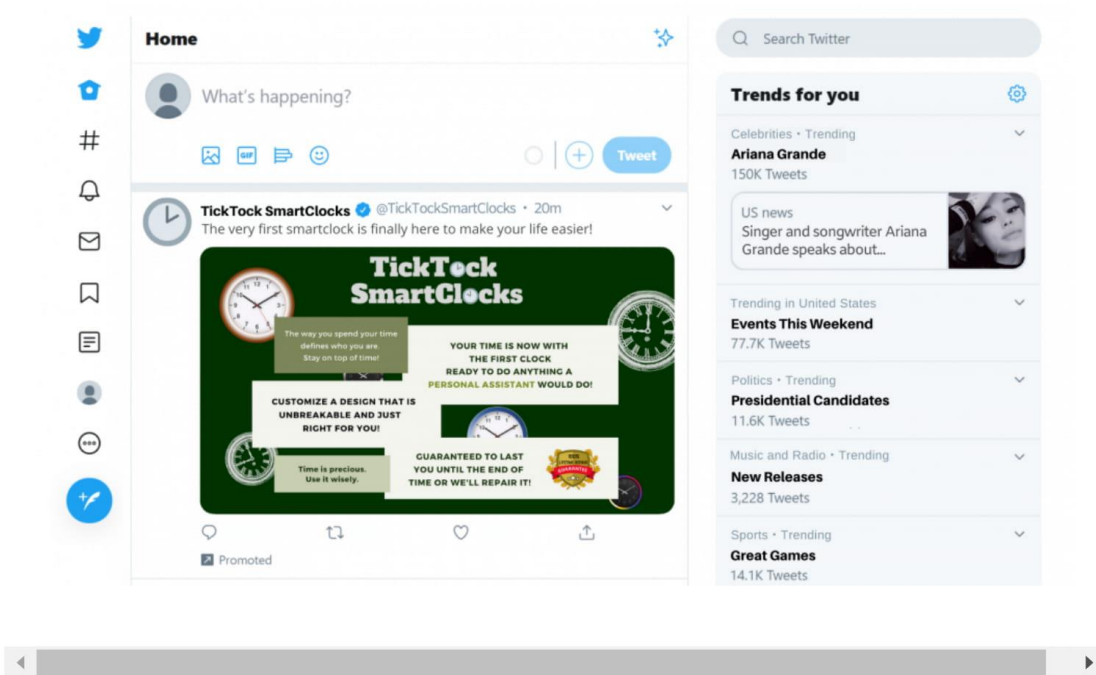
SOCIAL MEDIA MESSAGE FORMATS AND AGE

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Q4. Please click on the area that grabs your attention the most.



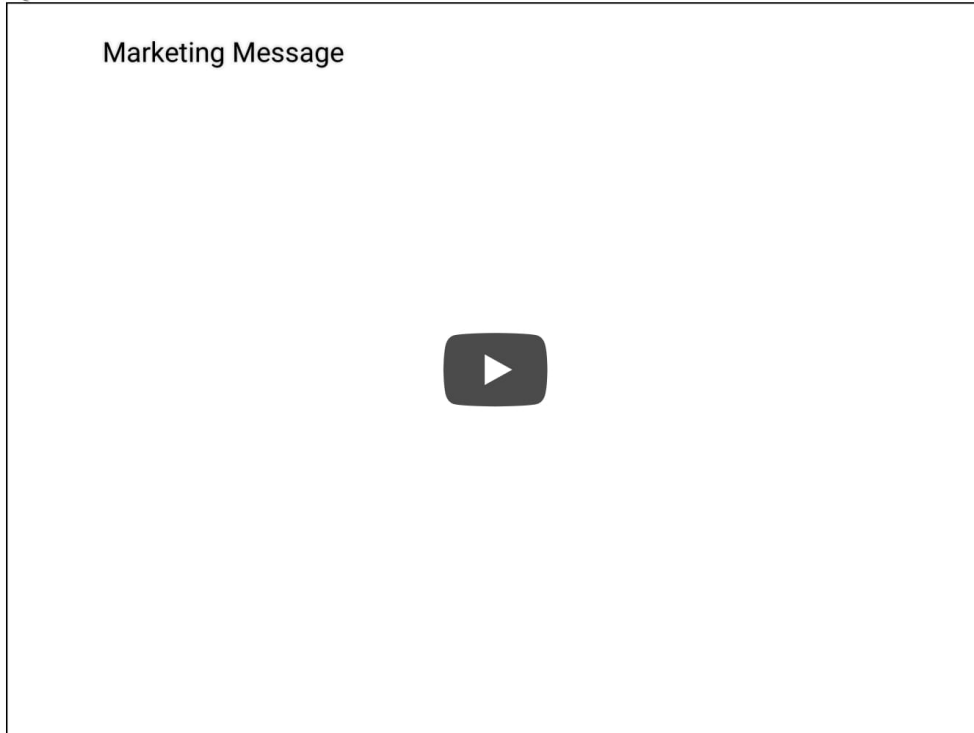
https://utamsmr.ca1.qualtrics.com/Q/EditSection/Blocks/Ajax/GetSurveyPrintPreview?ContextSurveyID=SV_0umukrSlvPjJEK9&ContextLibraryID=... 27/35

SOCIAL MEDIA MESSAGE FORMATS AND AGE

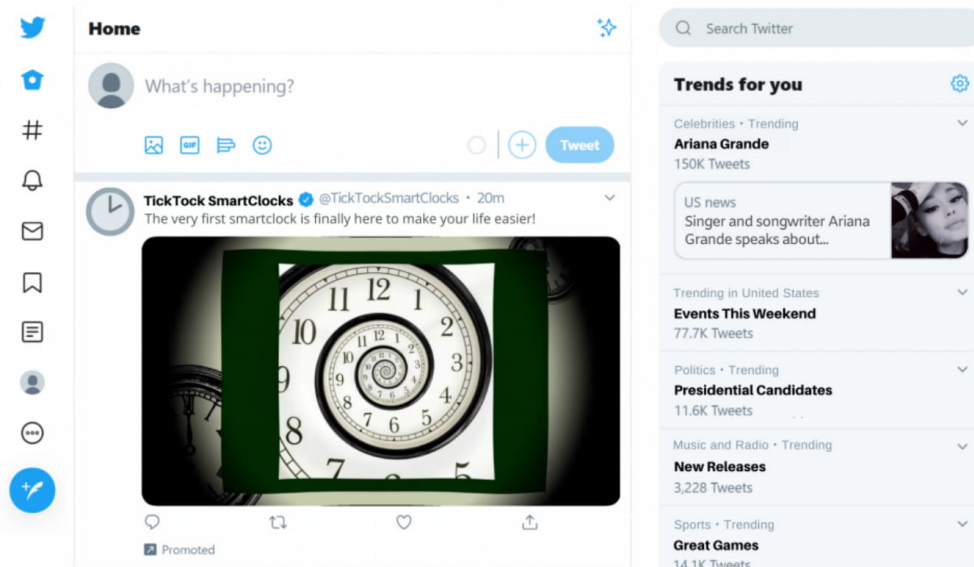
5/21/2020

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Q4.



Please click on the image below the area that grabbed your attention the most.



https://utamsmr.ca1.qualtrics.com/Q/EditSection/Blocks/Ajax/GetSurveyPrintPreview?ContextSurveyID=SV_0umukrSlvPjJEK9&ContextLibraryID=... 28/35

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Attention Capturing

Q5.

Select your answers by clicking on the appropriate circle next to each statement. Please assume you have unlimited time and money when responding.

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	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
I think this ad grabs my attention	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I spent time reviewing this ad	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I stopped what I am doing to pay attention to this ad	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Positive Emotions

Q6. Rate your feelings in the situation with the adjective pairs below. Some of the pairs might seem unusual, but you will probably feel more one way than the other. For each pair, select the circle closest to the adjective which you believe to describe your feelings better. The more appropriate that adjective seems, the closer to the adjective you should click the circle. Make sure to view all options from left to right.

https://utamsmr.ca1.qualtrics.com/Q/EditSection/Blocks/Ajax/GetSurveyPrintPreview?ContextSurveyID=SV_0umukrSivPdjEK9&ContextLibraryID=UR_2ocxagGKdi2x7P7

SOCIAL MEDIA MESSAGE FORMATS AND AGE

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	1	2	3	4	5	6	7	
Unhappy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Happy
Melancholic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Content
Despairing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Hopeful
Annoyed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Pleased
Unsatisfied	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Satisfied
Bored	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Relaxed
Relaxed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Stimulated
Calm	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Excited
Sluggish	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Frenzied
Dull	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Jittery
Submissive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Dominant
Cared for	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	In control
Controlled	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Controlling
Influenced	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Influential

Product Liking

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Q7. Select your answers by clicking on the appropriate circle next to each statement. Please assume you have unlimited time and money when responding.

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
I strongly believe that TickTock SmartClocks can keep its promise to me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
TickTock SmartClocks is associated with a positive motive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel that I am favored and given priority by TickTock SmartClocks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I believe that TickTock SmartClocks can continue to get better and better	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would stay with TickTock SmartClocks because I am dependent on them	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
I feel attached to TickTock SmartClocks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
TickTock SmartClocks openly shares information with me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would have continuous interaction with TickTock SmartClocks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would describe TickTock SmartClocks as friendly	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would say that TickTock SmartClocks is approachable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
TickTock SmartClocks is very attractive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would ask for advice because TickTock SmartClocks is knowledgeable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is important that TickTock SmartClocks has a high level of integrity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Overall, I approve of TickTock SmartClocks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would feel cheerful when shopping at TickTock SmartClocks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
TickTock SmartClocks takes care of everything for me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am grateful for the brand's offering of TickTock SmartClocks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

https://utamsmr.ca1.qualtrics.com/Q/EditSection/Blocks/Ajax/GetSurveyPrintPreview?ContextSurveyID=SV_0umukrSivPdjEK9&ContextLibraryID=UR_2ocxagGKdI2x7P7

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	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
It is important that you pay attention to this survey. Please select "somewhat disagree".	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Information Seeking

Q8. Select your answers by clicking on the appropriate circle next to each statement. Please assume you have unlimited time and money when responding.

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
I would like to watch more ads on TickTock SmartClocks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would like to watch more social media marketing on TickTock SmartClocks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would like to promote TickTock SmartClocks for free	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would like to participate in an electronic chat about TickTock SmartClocks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would like to talk with friends about TickTock SmartClocks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would like to read more about TickTock SmartClocks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would like to contact TickTock SmartClocks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

SOCIAL MEDIA MESSAGE FORMATS AND AGE

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	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
I would like to use internet for general information about TickTock SmartClocks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would like to purchase TickTock SmartClocks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would like to be an investor in TickTock SmartClocks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would like to use internet for information on smartclock technology	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would like to visit TickTock SmartClocks' website	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Buying Intent

5/21/2020

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Q9. Select your answers by clicking on the appropriate circle next to each statement. Please assume you have unlimited time and money when responding.

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
Assuming I am in need and given the chance, I intend to buy from Ticktock Clocks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Assuming I am in need and given the chance, I predict that I should buy from Ticktock Clocks in the future	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If I am in need, it is likely that I will buy clocks from Ticktock Clocks in the near future	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
oIf I am in need, I expect to buy from Ticktock Clocks in the near future	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

SOCIAL MEDIA MESSAGE FORMATS AND AGE

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Manipulation Check

Q10.

A message is rich if it is able to portray multiple information cues simultaneously. Examples of communication cues include verbal (tone and language), non-verbal (facial expressions and gestures), audio (sounds), and visual (charts and images).

Please rate the level of richness for each message format from 1 to 7.

	Most Lean	Very Lean	Somewhat Lean	Both Rich and Lean	Somewhat Rich	Very Rich	Most Rich
Text	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Image	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Video	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Survey Clarification

5/21/2020

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Clarification.

This survey contained messages that were intentionally placed with a background simulating the social media platform Twitter. The messages display a fictitious brand and were created for the sole purpose of this survey.

Please click the arrow to proceed.

Final Block

Completion Code. `{e://Field/Random%20ID}`

Copy this value to paste into MTurk. When you have copied your code, please select the arrow button to submit your survey.

Powered by Qualtrics

Appendix B Richness Perception Descriptive Statistics

Table 12

Crosstabulation for Message Formats and Richness Perception

Richness perception	Message format					
	Text		Image		Video	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
1	2	2.50	0	0	0	0
2	3	3.80	1	1.30	2	2.50
3	8	10	5	6.30	2	2.50
4	12	15	11	13.80	5	6.30
5	29	36.30	16	20	15	18.80
6	18	22.50	28	35	24	30
7	8	10	19	23.80	32	40

Note: Participants' scores for only the format they were presented was used for the manipulation check.

1= Most lean, 2= Very lean, 3= Somewhat lean, 4= Both rich and lean, 5= Somewhat rich, 6= Very rich, 7= Most rich.

Appendix C Regression Analyses

Table 13

Regression Analyses for Age, Message Formats, and Positive Emotions Insignificant Results

Variable	Positive emotions																			
	Happy				Content				Hopeful				Pleased				Satisfied			
	<i>B</i>	<i>SE</i>	<i>t</i>	<i>p</i>	<i>B</i>	<i>SE</i>	<i>t</i>	<i>p</i>	<i>B</i>	<i>SE</i>	<i>t</i>	<i>p</i>	<i>B</i>	<i>SE</i>	<i>t</i>	<i>p</i>	<i>B</i>	<i>SE</i>	<i>t</i>	<i>p</i>
Intercept	5.48	0.40	13.84	0.00	5.06	0.41	12.23	0.00	5.58	0.40	13.85	0.00	5.04	0.43	11.66	0.00	5.26	0.45	11.66	0.00
Age	0.01	0.01	0.85	0.40	0.01	0.01	1.40	0.16	0.00	0.01	-0.01	1.00	0.01	0.01	0.99	0.33	0.01	0.01	1.00	0.32
W1	0.72	0.56	1.27	0.21	0.56	0.59	0.95	0.34	0.51	0.57	0.89	0.38	0.75	0.62	1.21	0.23	1.18	0.64	1.84	0.07
W2	0.57	0.58	0.99	0.32	0.51	0.60	0.84	0.40	1.02	0.59	1.75	0.08	0.68	0.63	1.08	0.28	0.93	0.66	1.42	0.16
W1 x age	-0.01	0.01	-1.05	0.30	-0.01	0.01	-0.86	0.39	-0.00	0.01	-0.13	0.90	-0.01	0.01	-1.01	0.31	-0.02	0.01	-1.71	0.03
W2 x age	-0.01	0.01	-1.09	0.28	-0.01	0.01	-0.84	0.40	-0.02	0.01	-1.78	0.08	-0.02	0.01	-1.19	0.24	-0.03	0.01	-1.97	0.09
Overall <i>R</i> ²	0.01			0.74	0.01			0.82	0.05			0.03	0.01			0.76	0.03			0.07

SOCIAL MEDIA MESSAGE FORMATS AND AGE

Variable	Positive emotions															
	Relaxed				Stimulated				Excited				Frenzied			
	<i>B</i>	<i>SE</i>	<i>t</i>	<i>p</i>	<i>B</i>	<i>SE</i>	<i>t</i>	<i>p</i>	<i>B</i>	<i>SE</i>	<i>t</i>	<i>p</i>	<i>B</i>	<i>SE</i>	<i>t</i>	<i>p</i>
	<i>B</i>	<i>B</i>	<i>B</i>	<i>B</i>	<i>B</i>	<i>B</i>	<i>B</i>	<i>B</i>	<i>B</i>	<i>B</i>	<i>B</i>	<i>B</i>	<i>B</i>	<i>B</i>	<i>B</i>	<i>B</i>
Intercept	5.27	0.45	11.80	0.00	3.84	0.57	6.69	0.00	3.79	0.55	6.94	0.00	5.02	0.47	10.72	0.00
Age	0.00	0.01	0.39	0.70	0.02	0.01	1.48	0.14	0.03	0.01	2.40	0.02	-0.00	0.01	-0.33	0.74
W1	-0.06	0.64	-0.10	0.92	1.48	0.82	1.82	0.07	1.12	0.78	1.44	0.15	0.95	0.67	2.53	0.16
W2	0.52	0.65	0.80	0.43	0.93	0.83	1.12	0.27	0.74	0.79	0.93	0.35	0.58	0.68	1.42	0.39
W1 x age	0.01	0.01	0.45	0.65	-0.02	0.02	-1.30	0.20	-0.02	0.02	-1.52	0.13	-0.01	0.01	-0.94	0.35
W2 x age	-0.01	0.01	-0.90	0.37	-0.02	0.02	-0.88	0.38	-0.02	0.02	-0.90	0.37	-0.01	0.01	-0.72	0.48
Overall <i>R</i> ²	0.02			0.62	0.02			0.36	0.03			0.22	0.03			0.22

Note. Independent variable is age, and dependent variable are positive emotions items.

B = Unstandardized Beta