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Working Paper

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RIFI Working Paper 16-03

**Old or Yung?
Exploring the Effect of a Time Horizon
Perspective on Persuasion**

by

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September, 2016



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Old or Young?

Exploring the Effect of a Time Horizon Perspective on Persuasion

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I. Introduction

According to research in neurobiology and neuropsychology, older adults' information-processing abilities begin to decline and become less detailed and less sophisticated as they age, owing to a reduction of neuron movement (Cabeza, 2002; Raz, 2000; Reuter-Lorenz & Lustig, 2005; Salat et al., 2004). However, according to socioemotional selectivity theory (SST), one aspect of which is the time horizon perspective (THP), as people age, they place significant weight on the time remaining in their lives (Carstensen, 1992; Cole et al., 2008; Fung & Carstensen, 2003). That is, the pressure to use their remaining time well brings about different types of information processing. Older adults who perceive their time as limited tend to pursue an emotion-based orientation, whereas younger adults tend to adopt a knowledge-based orientation because they perceive a greater amount of time remaining (Carstensen, 1992; Drolet, Lau-Gesk, Williams, & Jeung, 2010; Drolet, Williams, & Lau-Gesk, 2007; Williams & Drolet, 2005).

Aging influences people's responses to various environmental stimuli

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because of their different orientations, which are dependent on their THP. For example, older adults focus more on emotional than factual messages, while the opposite is true for younger adults. The motivation to process information also differs between older and younger adults. When processing information, older adults are more motivated to maintain their current positive emotional state than to acquire new knowledge. By contrast, younger adults' primary motivation for processing information is to obtain knowledge. Older adults tend to believe that their remaining life span will not change dramatically through absorption of knowledge; thus, emotion becomes more important to them than knowledge. Conversely, younger adults want to learn for their future and therefore tend to regard the acquisition of knowledge as more important than maintaining their emotional state (Carstensen, 1995; Charles, Mather, & Carstensen, 2003). This phenomenon can be explained by emotion regulation, which Gross and Thompson (2007) defined as an effort to maintain one's positive emotional state.

According to emotion regulation and aging research, older adults regulate their emotions more than young adults do (Carstensen, Fung, & Charles, 2003; Charles et al., 2003). Consistent with SST, the majority of research related to emotion regulation asserts that the perceived importance of information type (factual, emotional) depends on aging, which is a determinant of the persuasive effect of an advertising message. Therefore, the current research posits that older adults will have more favorable attitudes toward emotional (vs. factual) messages, while younger adults will prefer factual to emotional messages.

Many factors influence information processing, one of which is the individual's goal. This study proposes that the effect of aging on persuasion depends on the association of the message with the individual's goal. When people pursue a specific goal, their information processing varies with the level of relevancy between that goal and the information available for processing (Biehal & Chakravarti, 1982; Fishbach & Labroo, 2007; Grouzet et al., 2005; Koo & Fishbach, 2008). Therefore, they might set a higher value on goal-relevant than goal-irrelevant information, pay more attention to that information than less relevant information, and process that information in minute detail. In contrast, when confronted with goal-irrelevant information, people might perceive it as unnecessary for their information processing and thus not pay attention to it (Biehal & Chakravarti, 1982). Huffman and Houston (1993) demonstrated that older adults primed with a specific goal tend to have a strong motivation for gathering information and knowledge about that goal. Consequently, they

focus on both factual and emotional types of messages.

A wealth of research indicates that being primed with information about older adults induces patterns of thinking and behavior that are similar to those of older adults, a state explained by embodied cognition theory. This theory maintains that actual bodily movement and activation of specific concepts influence thinking, judgment, and bodily responses. However, the priming of specific concepts can be activated by stereotypes associated with these concepts. We expect that the priming of older adults will not have an effect on persuasion because, according to SST, a key factor in the effect of aging on persuasion is THP, which can only be experienced by living for a long time.

This article investigates the direct effect of THP on persuasion, along with the potential moderating role of goal relevancy in this relationship. Specifically, in contrast with SST, we posit that when pursuing a goal, even if they have a limited idea of their future life span, older people will have positive attitudes toward factual (vs. emotional) messages, similar to younger people, who perceive a greater future life span.

II. Literature Review

1. Socioemotional Selectivity Theory (SST)

According to SST (Carstensen, 1992), people tend to assess their remaining life span—specifically, their THP—as being either limited or expansive. In this study, we focus on how THP influences information processing. When people perceive their time as limited, they tend to be present oriented, focusing on their experience and seeking satisfaction in the moment (Carstensen, Isaacowitz, & Charles, 1999). They might try to draw an emotional meaning from their current state of mind and pay attention to social connectedness, emphasizing aspects of emotion and intimacy in their social relationships (Drolet et al., 2007). Conversely, people with an expansive THP tend to be future oriented, believing that satisfaction, experiences, and feelings in the future are more important than those in the present; therefore, they tend to pay more attention to collecting knowledge and planning for the future. Prior research has treated aging as a determinant of THP and found that older adults have a time-limited view whereas younger adults have a time-expansive view (Carstensen, 1992; Carstensen et al., 1999; Fung & Carstensen, 2003); therefore, older adults consider the

acquisition of knowledge less important than emotional aspects and have an emotion-related orientation. By contrast, younger adults have a knowledge-related orientation because they focus on novelty seeking and the absorption of knowledge.

Fung and Carstensen (2003) showed that older adults held more positive attitudes toward products relevant to loving or caring (i.e., “Capture those special moments,” “Stay healthy for the ones you love”) than products relevant to absorption of knowledge or future success (i.e., “Capture the unexplored world,” “Stay healthy for your bright future”). Conversely, younger adults preferred factual messages associated with skills or knowledge for the future to emotional messages associated with current emotional states or experiences. Similarly, Williams and Drolet (2005) investigated the effect of THP on attitudes toward aging in relation to preferences for and memories about advertisements and examined the effect of aging on persuasion by providing 10 sentences of information about a product, each of which contained dissimilar words. For example, the first sentence of the description with an emotionally appealing message was, “If your passion is coffee, then your pleasure will be Coffea.” The first sentences for the rationally appealing message were, “For your next cup of coffee, choose Coffea. A gourmet blend at grocery store prices, Coffea provides an excellent value.” Williams and Drolet found that older adults, who had a limited THP, had more positive attitudes toward the first option and could recall relatively more information from this appeal, whereas the opposite was true for younger adults, who had an expansive THP. However, Drolet et al. (2007) found that this pattern of information processing depended on the product category type (i.e., hedonic or utilitarian) and showed that, regardless of the type of product, older adults preferred affective to rational advertisements. However, while young adults preferred affective to rational advertisements for hedonic products, they preferred rational to affective advertisements for utilitarian products.

Because older adults tend to focus on their emotional state in daily life, they usually regulate their emotions to maintain a positive state, which involves the process of cognitive control, such as inhibiting goal-irrelevant information, selecting the most important information from various stimuli, and encoding and retrieving information (Gross 1998, 1999; Gross & Thompson; 2007; Richards & Gross, 2000). Older adults have a stronger motivation for managing their emotions than younger adults; consequently, they are less likely to encode and recall a negative image than a positive image (Charles et al., 2003).

2. Goal Pursuit

Individual behavior is largely goal directed, with the goal being a desired result or end state that is realized only when people believe they have attained it (Guinote, 2007; Liberman, Idson, & Higgins, 2005; Markman & Brendl, 2000). A goal starts as a mental picture of something that people believe they can attain in the future by engaging in an action (Kruglanski & Webster, 1996). Bagozzi and Dholakia (1999) investigated the effects of goal setting and pursuit on behavior and found that people who set clear goals and have a strong desire to achieve them have a strong motivation for processing goal-relevant information, elaborating on the information received, and processing a greater amount of information. Goal setting and pursuit affect information processing because the cognitive structure of the goal comprises goal-related information, behavior, and context. The goal-setting process contains schema, stereotyping, and attitudes and leads to one or more actions (Bargh, 1990; Shah & Kruglanski, 2003). For example, on activation of the goal of saving money, people concretely generate money-saving actions. However, Custer and Aarts (2005) showed that the cue related to saving induces future action (e.g., trying to secure higher interest rates, seeking ways to increase the amount of money deposited) only when people have positive feelings about the desired end state. Thus, goal-oriented action occurs only when the goal is envisioned mentally, in addition to being activated.

A goal can arise in various ways, including consciously—with intent—and unconsciously, in which the goal comes from an environmental cue linked to memory and is only activated in certain situations (Bargh, 1990). Exposure to the specific situation activates the goal automatically through the stimulus–response conditioned mechanism. In goal setting, the motivation for pursuing the goal becomes stronger, while the means for achieving it are automatically activated. Many aspects of individual behavior, such as purchasing and decision making, are goal oriented (Huffman & Houston, 1993). Bagozzi and Dholakia (1999) investigated the effects of goal setting and pursuit on consumer behavior and showed that people who set clear goals and have a strong desire to achieve them concentrate on and categorize goal-relevant information and selectively recall memories (Austin & Vancouver, 1996; Koo & Fishbach, 2008). However, when processing goal-irrelevant information, people’s motivation for and capability of processing the information diminish. People perceive goal-relevant information as more accessible and have a stronger motivation for processing information when exposed to goal-relevant information (Föster & Higgins, 2005). Because the goal is set in accordance with the

cognitive knowledge structure, the accessibility of goal-relevant information increases (Kruglanski et al., 2002). Guinote (2007) argued that successful goal accomplishment comes from the ability to concentrate on the attainment of the goal and ignore unnecessary information.

According to transaction theory, people can take one of two stances when reading a text: efferent or esthetic (Rosenblatt, 1969, 1993). For example, when visiting a website, people who are searching with purpose adopt an efferent stance; however, people who are browsing take an esthetic stance. In particular, prepurchase deliberation is related to the searcher's purpose for visiting the website. Because searchers are purposive and task specific, they tend to glean facts rather than experience and concentrate on obtaining information efficiently and scrutinizing all information related to their goal (Huffman & Houston, 1993; Rosenblatt, 1969, 1993). People who pursue certain goals are motivated to acquire, encode, and select information (Bettman, 1979), and therefore they focus on specific features or information they can obtain (Huffman & Houston, 1993). We expect that people will have more positive attitudes toward goal-relevant than goal-irrelevant information because their motivation for information processing is higher in the former circumstance. Specifically, we believe that both older and younger adults will have more favorable attitudes toward factual (vs. emotional) messages when they are primed with certain goals.

3. Embodied Aging and Time Horizon Perspective (THP)

Prior research has shown that younger adults think and behave similarly to older adults when they are instructed to simulate older adults' behaviors, a process that can be explained by embodied cognition theory. Embodied cognition involves the representation, processing, and memory of information through physical experience (Barsalou, 1999, 2008; Glenberg, 1997), and the key to this concept is that certain sensory and motor systems of the human body influence thoughts and emotions in daily life (Davis & Markman, 2012). Therefore, previous research on embodied cognition has focused on the role of bodily perception in moving the human mind and influencing cognitive processes, such as judgment and choice (e.g., Barsalou, 2008). According to the embodied cognition perspective, actual bodily states and simulation of experience influence perception, behavior, and introspection through a modality-specific system in the brain (Niedenthal, Barsalou, Winkielman, Krauth-Gruber, & Ric, 2005).

Prior research on embodiment has indicated that embodied aging activates actual bodily responses similar to those of older adults. Bargh, Chen, and

Burrows (1996) showed that people who completed an elderly version of a scrambled-sentence task, which contained words related to older adults such as “old,” “wrinkled,” “wise,” and “retired,” walked more slowly down the hallway when leaving the experiment than people who completed a neutral version of the task. Similarly, people who were repetitively exposed to the term “basketball player” threw a heavy ball farther than people who were repetitively exposed to the term “older adults” (Follenfant, Légal, Marie Dit Dinard, & Meyer, 2005). Chambon (2009) showed that people exposed (vs. not exposed) to older adult–related words took longer to walk up the same steep hill or street. These consistent conclusions indicate that priming people with cues that bring to mind older adults evokes the perception of actually becoming older adults, resulting in the emergence of bodily responses associated with older adults.

Research on SST has shown that information processing depends on both THP and actual aging. Fredrickson (1995) found that when graduate (vs. freshman) students processed information about another person, they rated intimacy as more important and focused on emotional information, such as feelings, rather than factual information. Therefore, younger adults with limited THP focus on emotional information to maintain a relationship, whereas older adults with expansive THP tend to favor factual information. Similarly, Williams and Drolet (2005) showed that younger adults who viewed time as limited evaluated emotional (vs. rational) appeals more positively. Conversely, both older adults who viewed time as expansive and younger adults with expansive THP evaluated rational (vs. emotional) appeals more favorably. In this article, we suggest that the effect of THP on information processing depends on goal pursuit. When people pursue a specific goal, they are motivated to process goal-relevant information, engage in detailed processing, and put a great amount of effort into obtaining factual and objective information. Thus, we expect that people primed to pursue a specific goal will have more positive attitudes toward factual than emotional messages, regardless of THP orientation. In addition, we expect that the effect of THP on information processing, which previous SST research found, will not appear when people are pursuing specific goals.

4. Experiments

The goal of this research was to examine the impacts of THP and goal pursuit on persuasion. We conducted a pretest to select appropriate product categories. In Experiment 1, we investigated the effect of aging on persuasion in a sample of older and younger adults. Specifically, we

examined whether the persuasion pattern varied depending on goal pursuit and message type (emotional vs. factual). In Experiment 2, we investigated the effect of embodied aging on persuasion in a sample of younger adults only, to confirm whether the results would be consistent with those of Experiment 1. We primed half the participants in Experiment 2 with terms associated with older adults. The purpose of Experiment 2 was to examine the impact of embodied aging on persuasion by priming old age-related terminology. In Experiment 3, to investigate the effect of THP on persuasion, we manipulated participants' THP by SHOWING sentences related to life span. In Experiment 4, we examined whether emotional attachment mediated in the effect of THP on persuasion.

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