

## Self-concepts and biased information processing: The effect of self-concepts on candidate evaluation

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Self concepts are assumed to induce biased processing. Based on the fact that an emotional reaction implicates the self, Self concepts are measured indirectly via emotional responses. Self concepts are differentiated into independent and interdependent types. Granting that Asians and Westerners have divergent self-system, it is hypothesized that ego-focused emotions are more closely related to candidate evaluation in America than in Korea. Results confirmed the hypothesis that ego-focused emotions in America are more strongly related to candidate evaluation than in Korea. To elaborate, people with an independent self will attend more often to ego-focused emotions and act on the basis of them. Another finding indicates that the influence of self-system on the assessment of information for central processors is stronger than that of peripheral processors. In other words, biased processing caused by self systems is more likely to occur in the case of central processors. In sum, biased processing is closely related to self-system and is more likely to occur with central processors than peripheral processors.

**Key words:** self-concepts, ego-focused emotion, candidate evaluation.

It is important to note that in addition to the quantitative dimension of the extent of processing, information processing types can be made a more qualitative distinction between elaboration that is relatively objective versus elaboration that is more biased (Petty & Cacioppo, 1981). By relatively objective processing, they mean that the variable either motivates or enables subjects to see the strength of cogent arguments and the flaws in specious ones, or inhibits them from doing so. By relatively biased processing they mean that the variable either motivates or enables subjects to generate a particular kind of thought in respond to a message, or inhibits a particular kind of thought.

Many researchers have claimed that there are differences in selection and assessment of information even though the same information is provided. That is, certain kinds of information are more likely to be selected and assessed than others.

In this article, biased information processing

caused by differences in the selection and assessment of information will be dealt with.

We may guess that there are some mechanisms that control the selection and assessment of some pieces of information more positively and of others to a lesser extent. The self concepts developed under the influence of the social environment are presumed to serve as agents in the selection and assessment of information. That is, some pieces of information which fit the self concepts of recipients will be selected and/or assessed more positively than those which do not.

The concept of self is thought of as part of a repertoire of self-relevant schemata used to evaluate, organize, and regulate one's experience and action. As schemata, they are patterns of one's past behaviour as well as patterns for one's current and future behaviour (Neisser, 1976). Markus and Wurf (1987) called this assortment of self-regulatory schemata the self-system. Whenever a task, an

event, or a situation is self-relevant, the ensuing processes and consequences are likely to be influenced by the self-system.

Self concepts also affect information processing in various ways. Self-concepts have implications for the way people select information (e.g., selecting information that is self-relevant more frequently than information that is not), for the way they process information (e.g., sampling self-relevant information more quickly than information that is not self-relevant), and for the way they assess information (e.g., assessing more positively information that supports their current self-structure than information that challenges it). Thus, self-relevant information is more likely to be evaluated positively, and therefore accepted, if it maintains the current self-structure than if it changes it. This has implications for behaviour because self-instruction affects behaviour (Triandis, 1977, 1980). In other words, the self is an active agent that promotes differential sampling, processing, and evaluation of information from the environment, and thus leads to differences in social behaviour.

Difficulties in studying the role of self-concepts are encountered in categorizing types of self-system and grouping people in those categories. So far, the categorization of self concept has largely relied on the self-reporting or experimental method. For example, in the study of Petty and Cacioppo (1982), the self-system was identified as 'religious' (e.g., 'shrewd') or 'legalistic' (e.g., 'honest') by employing subjects' reaction times in making judgments of the self-descriptiveness of traits. However, in studying the role of self-concepts in making candidate evaluations, the experimental method presents practical difficulties as so many matters are uncertain - which types of self concepts might be important in deciding candidate, how individuals behave as a function of self concepts in this situation and how individuals can be categorized.

Identifying the type of self-concepts people have via a survey methodology is illustrated in a study by Markus and Kitayama (1991). They argued that people in different cultures have strikingly different concepts of the self, of others, and of their interdependence. These concepts can influence, and in many cases determine, the nature of individual

experience, including cognition, emotion and motivation. In particular, they compared an independent view of the self with another very different view of the self as interdependent.

### *The independent and the interdependent self*

**The independent self** This view of the self derives from a belief in the wholeness and uniqueness of each person's configuration of internal attributes (Johnson, 1985; Sampson, 1985, 1988). The essential aspect of this view involves a conception of the self as an autonomous, independent person. Thus, Markus and Kitayama (1991) refer to it as the independent self and assume that, on average, relatively more individuals in Western cultures will hold this view than in non-Western cultures. Other similar labels include individualistic, egocentric, separate, autonomous, idiocentric and self-contained (Markus & Kitayama, 1991).

The independent self must, of course, be responsive to the social environment. This responsiveness, however, is fostered not so much for the sake of responsiveness itself. Rather, social responsiveness often, if not always, derives from the need to determine strategically the best way to express or assert the internal attributes of the self. Others, or the social situation in general, are important, but primarily as standards of reflected appraisal, or as sources that can verify and affirm the inner core of the self.

**The interdependent self** In contrast, people belonging to many non-western cultures believe in the fundamental connectedness of human beings to each other (Kondo, 1982). A normative imperative of these cultures is to maintain this interdependence among individuals (De Vos, 1985). The experience of interdependence entails seeing oneself as part of encompassing social relationships and recognizing that one's behaviour is determined by, contingent on, and, to a large extent organized by, what the actor perceives to be the thoughts, feelings, and actions of others in relationships. The Asian experience of the self, therefore, includes a sense of interdependence and of one's status as a participant in a larger social unit (Sampson, 1988, Markus & Kitayama, 1991). Within such a system, the self becomes most meaningful and complete in the appropriate social relationships. The argument

of this article is that people sample two kinds of selves with different probabilities, in different cultures, with specific consequences for the selection and assessment of information.

### *Emotional Responses according to self-concepts*

In psychology, emotion is often viewed as a universal set of largely prewired internal processes of self-maintenance and self-regulation (Buck, 1988; Ekman, 1972). Granting that this is so, emotional experience and expression should vary systematically with the concept of self (Markus & Kitayama, 1991).

Emotions are presumed to vary systematically according to the extent to which they result from, and also foster and reinforce, an independent or an interdependent concept of the self. Some emotions, such as anger, frustration and pride, have the individual's internal attributes (his or her own needs, goals, desires, or abilities) as the primary referent. Such emotions have been called ego-focused (Markus & Kitayama, 1991). They result most typically from the blocking (e.g. "I was treated unfairly"), the satisfaction, or the confirmation (e.g. "I am a more rational person than the others") of one's internal attributes. These ego-focused emotions will be expressed, and perhaps experienced, more frequently by those with an independent self (Markus & Kitayama, 1991).

In contrast to ego-focused emotions, other emotions, such as sympathy and shame, have another person, rather than one's internal attributes, as the primary referent. Such emotions were called other-focused by Markus and Kitayama (1991). They typically include: being sensitive to the other, taking the perspective of the other, and attempting to promote interdependence. These other-focused emotions, in contrast to those of an independent self, will be more frequently expressed and experienced by those with an interdependent self.

In summary, self concepts can be differentiated into independent and interdependent types, and these self-systems guide the expression and experience of emotions. Granting that an emotional reaction implicates the self, the outcome of this activity will depend on the nature of the self-system. Applying for this conceptual framework, Markus et al. (1991) argued that Westerners and Asians have

strikingly different concepts of the self. Hence, Asians show less expression and have less experience of ego-focused emotions than do Americans.

Our main concern is to analyze the role of self-concepts in information processing. Self concepts can be measured indirectly via emotional responses. We will examine how such emotional reactions are related to candidate evaluation in two countries, and how much they influence each type of information processing.

### *The types of information processing*

In prior research concerning the types of information processing, Petty & Cacioppo (1981) developed Elaboration Likelihood Model (ELM). In this model, they grouped the processing types into two: the central processing which is effortful, sincere and content based processing and the other, peripheral processing, which characterized as a simple and effortless processing. So far, some research have been made concerning how self-system relates to the ELM: for example, proving the fact that the self-perception process is more likely to operate, in contrast to the dissonance process, when the elaboration likelihood is low (Petty and Cacioppo, 1986); showing the effect of self-schemata at top-down versus bottom-up message processing (Cacioppo, Petty & Sidera, 1982). However, on the ELM, little attention has been directed explicitly at analyzing how self system related to the biased processing.

In this article, we will focus on the role of self-concept, and particularly, whether it induces biased elaboration of communications and whether its effects differ according to the type of information processing.

## **Method**

### *Subjects*

595 respondents, selected according to probability sampling procedure, were questioned. The respondents were selected from Kwangju city in Korea. First, the 595 respondents were allocated to five broad administrative districts (KU) and then reallocated to each smaller administrative zone (Dong) according to the population ratio. The exact address was selected at random. Data were col-

lected by means of one-to-one interviews. In terms of basic demography, this sample represents the national adult population reasonably well, showing proper distributions of sex, age, and education.

For the U.S. analysis, the data for American Presidential Election in 1988 has been employed. There are 2040 respondents selected from person-to-person interviews with citizens of voting age.

### *The measurement of ego-focused emotion*

Abelson et al.(1982) developed an approach to the assessment of citizens' appraisals of the President, the Affect Checklist Scale, which was applied in the National Election Survey in America. Among the affective items in the Affect Checklist Scale, four ego-focused emotions (anger, fear, pride, hope) are selected based on the research of Markus and Kitayama (1991).<sup>1)</sup> In adapting their inventories for use in Korea, a brief pilot study was undertaken to assess the applicability of the scale in Korea.<sup>2)</sup>

Respondents were told: "Now I want to ask you about [candidate name]. Concentrate on your feelings when I mention [candidate name]". Regarding former presidential candidates, respondents were then asked whether "has something about that person, or something that he has done, made you have certain feelings like anger ... pride?" Subjects were asked whether they had ever felt each of the four ego-focused emotions-anger, hope, fear, pride. For each affect term, the interviewer recorded a simple "yes" or "no" response.

Exactly the same method and items were employed for measuring ego-focused emotions in Korea. Each respondent was asked to evaluate both

former Presidential candidates, Taewoo Roh and Daejung Kim.

### *The measurement of personal relevance*

The personal relevance scale was composed of 8 questions: whether the respondent had been interested in the election campaign, whether the respondent cared which party won the General Election, whether the respondent followed government and public affairs, whether respondents thought that the result of the election would influence their business, their relatives' or their own job recruitment/promotion, environmental improvements around their home, local tax and unemployment rate.

For example, respondents are asked "Do you think the result of this coming General Election will influence your business or your job?" And then respondent answered among three choices: 1. Not much 2. Some degree 3. A good deal. Total relevance score is obtained by simply summed up answers of 8 items. The reliability of internal consistency (Cronbach's Alpha) for the personal relevance scale was .90.

## **Results**

Under the assumption that self concepts lead information processors to access and that people put more weight on information which is relevant to the self concepts they have, the effect of self concepts on candidate evaluation are compared between Westerners and non-Westerners. Then the role of the self system is compared in the case of the central and peripheral processors as well.

Table 1 is the experience of four emotions which relate to independent self concepts toward American and Korean presidential candidates.

In order to obtain emotional overall score, presence-absence of the four ego-focused emotions was summed up after negative emotions were recoded in a positive direction (Cronbach's Alpha = .91). In detail, the presence of the positive emotions and absence of negative emotions were recoded as '1' and others were recoded as '0'.

Candidate evaluation was measured with the Feeling Thermometer.<sup>3)</sup> The mean Feeling thermometer score of Dukakis was 61.08 and that of George Bush was 57.73. And 24.28 for Roh Taewoo

1) These ego-focused emotions are illustrated in the research of Markus and Kitayama (1991).

2) About 40 university students were invited to take part in the validating study. Each student was asked whether he could understand each term fully and was also asked to give an example if he said "yes".

3) Overall candidate evaluation is measured by a 100-point 'thermometer scale', a device long used by National Election Studies in America. Responses range from 0 degrees (extremely unfavourable) to 100 degrees (extremely favourable): the respondent is asked to give a number for each candidate corresponding to the relative degree of favourability or unfavourability felt toward him.

and 71.66 for Kim Daejung in Korean candidates.

In the first analysis, we examined whether ego-focused emotions in America would show a greater relationship to candidate evaluation than in Korea.

Table 2 shows that ego-focused emotion has a stronger relationship to candidate evaluation in America than in Korea. The correlation coefficients for both candidates in America turn out to be significantly higher than those for Korean candidates (Roh vs Bush:  $Z=7.67>2.57$ ,  $p<.01$ ). Table 2 confirmed the hypothesis that ego-focused emotions in America are more strongly related to candidate evaluation than in Korea.

To elaborate, people with an independent self (Americans) will attend more often to ego-focused emotions and act on the basis of them, because these feelings are regarded as diagnostic of the independent self.

For the next analysis, the effects of self system on candidate evaluation are compared in the case of central and peripheral processors. In this regard, little research has been made so far. However, it is believed that the effects of self system would be stronger for central processors, since their cognitive processes are generally more sincere and effortful. If so, it can be hypothesized that, in America, the influence of ego-focused emotions which are typical to American self system on candidate evaluation would differ between central processors and peripheral processors.

Information Processing types are identified according to the two criteria: cognitive ability and motivation. As Petty and Cacioppo (1981) argued people who have high cognitive ability and high motivation are grouped into central processors and who have low cognitive ability and low motivation are grouped into peripheral processors. Therefore respondents were regarded as peripheral processors either if they scored in the bottom 33% of the personal relevance scale or if their educational background was below the middle school level. For the central processor, above college level and

top 33% of the personal relevance scale.

In Table 3, the correlation coefficients between ego-focused emotions and candidate evaluations are compared in the case of central processors and peripheral processors. Central processors are operationally defined as those who are more educated<sup>4)</sup> and, at the same time, motivated (personal relevance). As the same token, peripheral processors are defined here as those who fulfil two conditions—less educated and less motivated in election according to the definition of Petty and Cacioppo (1981). The correlation coefficients for central processors are significantly higher than those of peripheral processors (for Bush:  $Z=4.88>2.57$ , for Dukakis:  $Z=3.33>2.57$ ,  $P<.01$ ). These results indicate that the influence of self-system on the assessment of information for central processors is

Table 1 The experience of ego-focused emotions

	(%)			
	AMERICA		KOREA	
	DUKAKIS (1009)	BUSH (1009)	ROH (456)	KIM (456)
ANGRY	25.5	22.0	64.3	33.8
AFRAID	18.5	12.8	40.4	7.2
HOPEFUL	42.7	40.0	28.5	64.7
PROUD	29.7	35.6	28.1	69.1

Table 2 Correlations between ego-focused emotions and candidate evaluation

Country	Candidates	correlations
Korea	T. Roh	.39** (N=438)
	T. Kim	.35** (N=437)
America	G. Bush	.67** (N=950)
	M. Dukakis	.67** (N=921)

(\*\*  $P<.01$ )

Table 3 Correlations between ego-focused emotions and candidate evaluation

(** $P<.01$ )		
types	Candidates	correlations
Central processors	G. Bush	.79** (N=226)
	M. Dukakis	.77** (N=222)
peripheral processors	G. Bush	.49** (N=79)
	M. Dukakis	.41** (N=86)

4) The voters over college level (the top 39.3%) were assigned to the educated group and those at 0-12 grade level were assigned to the less educated group (the bottom 33.9%).

stronger than that of peripheral processors. In other words, biased processing caused by self systems is more likely to occur in the case of central processors.

In sum, biased processing is closely related to self-system and is more likely to occur with central processors than peripheral processors.

### Discussion

Despite the growing body of psychological and anthropological evidence that people hold divergent views about the self, most of what psychologists currently know about human nature is based on a particular view - the so-called Western view of the individual as an independent, self-contained, autonomous entity who (a) comprises a unique configuration of internal attributes (e.g., traits, abilities, motives and values) and (b) behaves primarily in accordance with these internal attributes (Sampson, 1988, 1989; Shweder & Levine, 1984). In this article, on the assumption that Asians and Westerners have divergent concepts of the self, the impacts of emotion were compared in the case of Koreans and Americans. It was found that the impact of ego-focused emotions on evaluation is much greater in America than in Korea. This finding suggests that self systems in two countries are different, and therefore, these divergent self systems would result in showing different behavioral patterns. Following this notion, most Americans stress attention to the self, the appreciation of the difference between oneself and others, and the importance of self-assertion. Koreans in general emphasize attention to, and fitting in with, others and the value of harmonious interdependence with them. These concepts of the self and of others are tied to the implicit normative tasks prescribed in various cultures for what people should be doing in their lives. In short, the time has come to cease depending solely on the Western view of the individual as an independent self without taking into account the variety of cultures.

Applying the fact that East and West are clearly differentiated vis-a-vis the self concept they hold sheds light on the development of cultural studies. We can take one more step away from the longstanding psychologist's distinction between West and East

simply through collectivism and individualism, by employing more psychological concepts. For instance, Markus and Kitayama (1991) argued that for those people with a more interdependent self (resting primarily on relationships with others instead of on inner attributes), positive emotional expressions are more frequently used in public actions in order to maintain interpersonal harmony and, thus, are not regarded as particularly diagnostic of the actor's inner feelings. By examining behaviour and emotional reactions typical to each type of self concept, we may increase understanding of the interpersonal behaviour of each culture. However, the self-concept is too broad a concept to define and too abstract an idea to explain a particular phenomenon. Furthermore it needs far more works: developing refined and easy methods of identifying the self concepts individuals hold, developing ways of grouping self concepts, and assessing the importance of each type of self concept in each situation.

Studies in this article leaves something to be desired. In order to infer the role of self concepts in information processing, the consequences for emotional reactions which are typical of independent self concepts are investigated based on the study of Markus and Kitayama (1991). However, the effects of the emotions for the interdependent self were not studied since the emotions typical of the interdependent self were not illustrated. If we can identify emotions typical to the interdependent self, the cross-checking of the results could have been possible.

Finally, in this article, the role of the self concept is studied at an inter-cultural level. However, if we can categorize people within the same culture according to the self-concepts they have, the influence of self concepts on information processing could be examined more directly.

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