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The effect of involvement on the reading attitude - behavior relationship

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Abstract

Recent information processing theories (for example ELM) indicate that involvement has an effect on both the attitude formation process and the assumed relationship between attitude and behavior. These theories hypothesize that the attitude-behavior relationship will increase with involvement. In this paper this moderating effect is investigated by examining the degree (expressed in the correlation coefficient) as well as the form (expressed in the regression coefficient) of the reading attitude-behavior relationship under varying levels of involvement.

For this study a quota sample ($N = 225$) of frequent and infrequent fiction readers was asked to fill in a questionnaire. Reading behavior was operationalized by four questions regarding reading frequency. Reading attitude was operationalized by twenty-one Likert-items referring to three distinct consequences of reading fiction (enjoyment, escape, and development/utility). Involvement with reading fiction was measured by Ziachkowsky's Personal Involvement Inventory.

The results indicate that frequency of reading correlates significantly with each consequence of reading. Regarding the degree of the relationship, the correlations did not vary significantly between low, moderate and high involved respondents. Regarding the form of the relationship, multiple regression analyses indicate that the reading attitude-behavior relationship is conditional with regard to involvement. The results of this study are discussed and suggestions for future research are made.

Introduction

Concerns about the attitude-behavior relation arose in response to disappointing empirical findings appeared from the 1930 onward (e.g., LaPiere, 1934; Wicker, 1969). Since then a very large amount of new research has been devoted to investigate the variables that moderate the extent and nature of the attitude-behavior relation (e.g., Fazio & Zanna, 1981; Raden, 1985; Fazio, 1986; Chaiken & Stangor, 1987; Olson & Zanna, 1993). In this paper we will make it plausible that involvement is an important variable that affects the processes by which attitudes have an impact on behavior.

A lot of variables that seem to have an effect of the attitude-behavior relationship pertain directly or indirectly to (aspects of) the attitude structure (Raden, 1985). An attitude structure is formed and changed by processing information about the attitude object. The elaboration likelihood model (Petty & Cacioppo, 1981, 1986), a comprehensive model of attitude change, indicates that the extent of cognitive elaboration on information affects what opinions and beliefs about the attitude object are stored in memory as well as how they are stored in memory. Extensive elaboration results in attitudes that are more accessible and structurally consistent, are held with greater certainty/confidence and are associated with more extensive

object related knowledge (Petty & Wegener, 1999). Consequently, cognitive elaboration has a causal impact on several variables that moderate the attitude-behavior consistency, namely: attitude accessibility (Fazio, 1988, 1990), knowledge about the attitude object (Davidson et al., 1985; Wood et al., 1995), attitude certainty/confidence (Fazio & Zanna, 1978) and structural consistency of the attitude (Norman, 1975).

According to the elaboration likelihood model, two factors affect the likelihood of elaboration, namely the ability to process information and the motivation to process information. The impact of ability to process information on the likelihood to elaborate will not be investigated here since it pertains to the knowledge about the attitude object, that can be viewed as an aspect of the attitude structure. Furthermore, the level of involvement affects the amount of knowledge one has about an attitude object (Bloch, Sherrell & Ridgway, 1986; Hoyer & MacInnis, 1997; Miesen, 1999). The motivation to process information is affected by the personal relevance (involvement) of the attitude object: Important issues elicit a higher motivation to process information than unimportant issues (Petty & Cacioppo, 1979; 1990).

The attitude-behavior consistence is not only affected by characteristics of the attitude structure, but also by processes that affect the probability that this part of the attitude structure is activated in a particular situation (Fazio, 1990). A person is not constantly aware of all the beliefs s/he has about the attitude object. However, in some situation particular beliefs are activated. Only (*deliberate of automatically*) activated beliefs can guide behavior (Fazio, 1990). Among the numerous attitudes that an individual holds, those concerning personal relevance/significance (involvement) have a larger probability of being activated. In line with this suggestion, research indicates that involvement is associated with the frequency with which people think about and discuss the attitude object (e.g., Howard-Pitney et al., 1986; Lavine et al., 1996). The attitudes of people for whom the attitude object has personal relevance (involvement) are therefore more frequently activated.

On these ground we argue that involvement is an important factor affecting the constellation of the attitude structure as well as the activation of beliefs from this attitude structure in particular situations. It is hypothesized that involvement will enhance (strengthen) the attitude-behavior relationship.

Research method

Reading fiction is an interesting attitude object since, at least in Western societies, reading fiction is a socially appreciated leisure time activity. This appreciation is advocated during socialization in the family and through formal schooling. Consequently, every adult has positive beliefs about reading while huge differences can be observed in the amount of fiction read as a leisure time activity (Knulst & Kraaykamp 1996). Furthermore, reading fiction as a leisure activity is a hobby. Hence, large differences in the involvement with reading fiction can be expected (Peter & Olson, 1987).

Respondents

This study made use of a quote sampling to ensure that about 20% of non-readers (people who haven't read a book last year) were included in the sample (N=225). A minimum age of 18 was set for participating in the study. Respondents were approached in a shopping center of Tilburg (a city in the south of the Netherlands) and asked to participate in a study about reading behavior. During all opening hours (also on Saturday and in the evening) respondents were approached to fill in the questionnaire.

Design and procedure

During the data collection period, passers-by were stopped by pollsters. If respondents met the requirements set for inclusion and agreed to participate in the study, the respondent was taken to a lunchroom where s/he was offered a cup of coffee or tea. Then the questionnaire was filled in by the respondent without interference of the pollster. The questionnaire enclosed items about reading behavior, reading attitudes, and involvement with reading. Each concept will be discussed successively.

Reading behavior

Reading behavior asked for by four closed-end questions about reading frequency, each with six response categories. These items were partly adopted from an instrument developed by Tellegen & Catsburg (1987) and Koolstra & van der Voort (1996). The internal consistency (Cronbach's alpha = 0.95) of this scale is very satisfactory (Nunnally, 1978).

Reading attitude

In line with three recent studies, reading attitude was viewed as a multidimensional construct, related to the consequences derived from reading fiction as a leisure activity (Lewis and Teale, 1980; Greaney & Neuman, 1990; Stokmans, 1999). Three types of consequences were distinguished:

1. Self-development: these consequences relate to the value placed on reading for attaining educational or vocational success for managing one's life or to gain insight into self, others, and/or life in general.
2. Enjoyment: these consequences refer to the pleasure derived from reading by entering another world and experience an adventure.
3. Escape: in these consequences, reading is regarded as a distraction or as a means of relaxing and forgetting personal worries.

These consequences were operationalized by means of 21 Likert-items (a five-point scale appended with a "don't know" response category). Reading attitude is treated as a three-dimensional construct and not as an one-dimensional construct (an overall sum-score) since research indicates that the distinguished consequences of reading have a differential impact on the frequency of reading (Stokmans, 1999) as well as the genre of fiction books read (Stokmans, 2000). The internal consistency (Cronbach's alpha) of each aspect of reading attitude was good (self-development: 0.79; enjoyment: 0.77; escape: 0.81) (Nunnally, 1978).

Involvement with reading

Numerous conceptualizations of involvement appear in the literature. However, the above indicates that involvement should pertain to the personal relevance of the attitude object to the individual and should be conceptualized as a personal characteristic that doesn't fluctuate across situations. Hence, involvement is conceptualized according to the cognitively based approach (Laaksonen, 1994). In this approach, involvement is defined as the perceived personal relevance of the attitude object to the individual in terms of his or her basic values, goals and self-concept (Zaichkowsky, 1985; Peter & Olson, 1987). It is viewed as an aspect of the knowledge structure or belief system of an individual (see, for example, Peter & Olson, 1987). Thus, both involvement and attitude are aspects of the belief system. In line with Fishbein & Ajzen (1975), it is suggested that a (reading) attitude refers to the intensity of the beliefs (how strongly the belief about reading is held, or how sure the individual is about it). Involvement refers to the centrality of these beliefs. Beliefs about oneself, one's existence, and identity are regarded as most central (Rokeach, 1968; Oskamp, 1991). According to this

viewpoint, involvement defined as the perceived personal relevance can be conceptualized as the relatedness of beliefs about the object (reading fiction) to beliefs about oneself.

Involvement was measured by means of Zaichkowsky's (1985) Personal Involvement Inventory. The scale consists of 20 seven-point bipolar items (e.g. important/unimportant, of concern to me/of no concern to me). The Cronbach's alpha of this scale is 0.95.

Results

In order to explore the effect of involvement on the reading attitude-behavior relation the sample was divided in three groups of almost equal size. The low involvement group consisted of 72 individuals with the lowest involvement score (less than 3.66), the high involvement group consisted of 66 individuals with the highest involvement score (greater than 4.26), and the moderate involvement group comprised 72 individuals whose involvement score was in between (range: 3.66 - 4.16). The mean scores of reading behavior and the aspects of reading attitude, presented in Table 1, suggest a positive relation between reading behavior and the attitude components enjoyment and development and a negative relation between reading behavior and the attitude component escape. It indicates that the three involvement groups differ in the extent they read ($F_{(2, 207)} = 58.14, p < 0.05$) as well as the intensity with which the development, enjoyment, and escape beliefs about reading are held (development: $F_{(2, 207)} = 20.64, p < 0.05$; enjoyment: $F_{(2, 207)} = 37.13, p < 0.05$; Escape: $F_{(2, 207)} = 5.65, p < 0.05$).

Table 1: The means and the correlation coefficient of reading behavior and reading attitude for each of the involvement groups.

	Involvement group			test-statistic	p-value
	low	moderate	high		
				F-value	
mean reading behavior	2.71 (1.71)	4.13 (1.59)	5.33 (0.74)	58.14	< 0.05
mean reading attitude					
development	3.57 (0.73)	3.91 (0.56)	4.24 (0.51)	20.64	< 0.05
enjoyment	3.52 (0.89)	4.03 (0.51)	4.47 (0.44)	37.13	< 0.05
escape	2.66 (1.14)	2.32 (1.08)	2.06 (0.91)	5.65	< 0.05
				Chi-square	
r_{ab}					
development	0.066	-0.082	-0.022	0.76	> 0.05
enjoyment	0.237	0.062	0.147	1.20	> 0.05
escape	-0.138	-0.083	-0.143	0.16	> 0.05

Inspection of the means doesn't indicate whether or not the attitude-behavior relation is affected by involvement. Statistically this implies two differential effects (Cohen & Cohen, 1983; Arnold, 1982). Firstly, it suggests that the strength (or degree) of the relation between attitude and behavior, expressed in the correlation coefficient, is larger for high involved individuals than for low involved individuals. The question answered by this comparison is: "Does attitude account for more of the variance in behavior in the high involvement group

than in the low involvement group?" And secondly, it suggests that the slope (or form) of the relationship, expressed in the regression coefficient, is steeper for high involved individuals than for low involved individuals. The question answered by this comparison is: "Does a change in attitude make the same amount of score difference in behavior in the low involvement group as it does in the high involvement group?"

Comparison of the (Pearson) correlations of each of the components of reading attitude with reading behavior across the three involvement groups indicate no significant differences in correlation coefficient for all the aspects of reading attitude (respectively, development: Chi-square = 1.13, df = 2, $p > 0.05$; enjoyment: Chi-square = 1.59, df = 2, $p > 0.05$; escape: Chi-square = 0.55, df = 2, $p > 0.05$). Consequently, the three groups do not differ in the degree of the relation between attitude and behavior.

The form of the relation is tested by examining the interaction effect of each of the three aspects of reading attitude with involvement on reading behavior. According to Aiken & West (1991) the predictor variables have to be centered to lessen the problem of multicollinearity between an interaction terms and the predictor variables. Furthermore, the direct effects of the interacting variables should also be estimated to provide a baseline to interpret the interaction effects. This analysis resulted in an R^2 of 0.46, (R -adjusted = 0.44) which is significant at 5%. The results of this regression analysis are shown in Table 2.

Table 2: The form of the reading attitude-behavior relationship examined by regression analysis.

Variable	standardized effect	t-value	p-value
reading attitude			
development	-0.142	-2.304	< 0.05
fun	0.123	1.674	= 0.096
escape	-0.141	-2.606	< 0.05
involvement	0.646	9.015	< 0.05
interaction effects			
involvement * development	-0.142	-2.161	< 0.05
involvement * fun	0.159	2.132	< 0.05
involvement * escape	0.030	0.549	> 0.05

Table 2 shows that all main effects are significant which indicates that reading behavior is affected by the aspects of reading attitude as well as involvement with reading. Regarding the interaction effects, the results show that the interaction between the development aspect and involvement as well as the interaction between the enjoyment aspect and involvement significantly both affect reading frequency. The sign of the interaction term indicates that slope of the relation between the enjoyment aspect of reading attitude and reading frequency is steeper for higher involved people. However, the sign of the interaction term of the development aspect and involvement indicates that the slope of the relation between the development aspect of reading attitude and reading frequency is less steep for higher involved people. These results are only partially in line with the expected moderating effect of involvement (enhancing the relation between attitude and behavior).

Discussion

The present study examined the moderating role of involvement in the consistency of attitudes and behavior. According to the Elaboration Likelihood Model (Petty & Cacioppo, 1981, 1986) the strength of an attitude is based on the amount of issue relevant thinking (elaboration) a person has done about the attitude object. The probability that a person will elaborate on the attitude object is affected by the extent the attitude object is involving (personally relevant) (Petty, Haughtvedt & Smith, 1995). Furthermore, the probability that a person will think about his/her attitude and therewith the probability that an attitude will affect behavior is also affected by the personal relevance of the attitude object (Howard-Pitney et al., 1986; Fazio, 1990).

This moderating effect of involvement is investigated by examining two aspects of the relationship between reading attitude and reading behavior over variations in involvement. Firstly, the correlation between the aspects of reading attitude and reading behavior under different levels of involvement was inspected. The results indicate that the correlations between the aspects of reading attitude and reading behavior do not differ under different conditions of involvement (low, moderate, and high). Consequently, reading attitude accounts for as much of the variance in reading behavior in the low involvement group as it does in the high involvement group.

Secondly, the standardized regression coefficient of the interaction effect of the aspects of reading attitude and involvement on reading behavior were examined. These standardized regression coefficients indicated that the interaction between the enjoyment aspect and involvement as well as the interaction between the development aspect and involvement are significantly different from zero. The sign of the coefficient suggests that a change in the enjoyment beliefs make a larger change in score difference in reading behavior as involvement increases. This result is consistent with the elaboration-consistency hypothesis that attitudes formed as a result of issue-relevant thinking are more predictive of behavior than attitudes formed as a result of more peripheral processes. However, the results regarding the development issue are contradictory to the elaboration-consistency hypothesis: A change in the development beliefs make a smaller change in score difference in reading behavior as involvement increases.

These contradictory results may be explained by attending to the main source of the enjoyment and development beliefs. Are they based on direct experience with the attitude object or based on parental influences and pressure of various groups? One can suggest that the enjoyment beliefs are mainly based on personal experience. One believes that reading is fun because one experiences positive feeling while reading fiction. On the other hand, the development beliefs are strongly advocated during (secondary) socialization. Most people believe that reading is beneficial for vocational success as well as one's general development. However, not everyone has directly and consciously experienced those benefits. Consequently, differences in the extent particular beliefs are based on direct experience are expected. Literature indicates that beliefs formed through one's own personal experience with the attitude object are stronger and more resistant to counterarguments than those formed through indirect or vicarious experiences (Fazio, 1988). A major reason for this is that beliefs based upon one's own (sensory) experiences are apt to involve primitive beliefs, which are more central in the belief structure than indirect experiences (Oskamp, 1991). This illustrates that involvement with the attitude object is probably an overall index of the centrality of the beliefs about the attitude object and can't capture the variations in centrality of these beliefs.

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