

PSYC 4105 Literature Review

The Effects of Emotional and Rational Persuasion
on Attitudes

Pat D Mackan

Algoma University College

Literature Review

Title: Attitude Formation and Change: The effects of emotional and rational persuasion on attitudes.

Definition of Problem:

This research investigates how persuasive arguments influence one's attitude.

Attitudes and their resistance to change have been the focus of investigation in psychology since the early work of Watson. This status has propelled attitude research as the basis of social psychology and formed a rich history over many decades. While always substantial, interest in attitudes has waxed and waned so that it had emerged as the most exciting area of social psychology in three separate periods of time.

A first 1920's and 1930's peaking of interest was focused on attitude measurement, followed by a 1935-1955 interlude, in which attitudes were eclipsed by group dynamics as a research focus. A second 1950's and 1960's peaking concentrated on attitude change, after which interest subsided during the period of 1965-1985, ascendancy of social perception research. A third

1980's and 1990's flourishing, centred on attitude systems, is now discernible.

Attitude researchers have been generous to a fault in clarifying attitudes by definitions and distinctions, obtaining results depending on which definition was used. In most empirical studies, specific attitudes were defined at least implicitly as responses that locate objects of thought on dimensions of judgment. As a preface to the discussion of the structure of attitudes, there are three main components; the emotional component, the rational component, and the behavior of an individual. It is these parts of an attitude that most researchers used as a measure of attitude change.

Although these terms have been interchangeable depending on the domain of research, there have been instances where definitions have led to a lack of a clear distinction between the emotional and rational components. The results of which had led to assumptions that both attitude components operated in isolation of each other and could not influence change in an attitude as a joint function.

The present research sought to investigate and clarify the roles of emotions and rational thoughts as more of a joint function. A critical assumption being made is that the notions of function, origin, and change of attitudes are intertwined and may not be as separable as prior research had suggested.

To accomplish this task, an investigation into the theory of attitude change was needed to identify the structure of an attitude by outlining different influences that impacted on each part of the attitude. As well, one must discuss change techniques and persuasion models that contrast differences between the attitude components and the consequences that each model proposes in regards to attitude change.

Theory of Attitude Components

The structure of an attitude is influenced by emotions, rational thought, and behavior, which can influence evaluations of a particular attitude object. The emotional component refers to emotions, feelings, and drives that are associated with an attitude object. In contrast the rational component refers to the beliefs, judgments, or thoughts associated with an

attitude object (McGuire, 1969). The behavioral component involves the person's gross actions, often measured by verbal reports of intended acts toward an attitude object. These components are the key factors in attitude change which serve a specific function when manipulations of persuasion are used to change an attitude.

For example, for emotional attitudes, emotional reactions exert a primary and powerful influence on an individual, and the attitude is acquired with minimal rational appraisal. For rational attitudes, domain relevant information is acquired first, and emotional factors come into play after considerable rational appraisal. Emotional processes often occur in rational based attitudes, but their role in shaping attitude development is minimal.

The theory of attitude change is one that is concerned with making a distinction between these two components, as to which is the influencing factor in the formation and change of an attitude. Since emotional and rational attitudes are two broad classes of attitudes, this distinction may not be clear and

concise. As a result, empirical investigations into the role of affect and cognition had been pursued in isolation from one another and without concern for the context in which an attitude was formed.

The theoretical precedent for the existence of a link between an attitude's origin and its susceptibility to different forms of influence was found in the functional approach to the study of attitudes (Katz, 1960; Sarnoff & Katz, 1954; Smith, Bruner & White, 1956). According to this framework, forming and modifying attitudes varied according to the psychological functions the attitudes served for the individual. Whether attitudes are formed in service of ego defensiveness, self expression, reality testing, or the pursuit of reward and punishment, all will have implications for which influence procedures will be most effective in bringing about attitude change.

The contribution of emotion and rational thought to an attitude's formation may be associated with particular motivational pressures. For example, the rational component may be dominant for attitudes acquired in service of reality testing or of a need to

explain the external world. In contrast, emotional factors may predominate for attitudes arising in response to need gratification, deprivation, threats to the self image, or unconscious motives.

Millar and Tesser (1986, 1989) posited an interaction between the two components and the means of persuasion, which occurred when the persuasive message tapped into the origins of a particular attitude. Emotional attitudes exhibited more change under emotional means of persuasion than under rational means of persuasion. Alternatively, rational attitudes exhibited change under rational means of persuasion than under emotional means of persuasion. This interaction is the basis of the present focus of this research and is the beginning point in explaining the theory of attitude change.

Change Techniques and Persuasion Models.

Attitude change techniques have focused on manipulating the emotional or rational components using persuasion techniques which are emotional or rational in nature. Such manipulations help to clarify the distinction between the components of an attitude, as

to their function and roles to change a variety of attitudes. In the context of the present research, three different approaches touched on how this could be accomplished.

The concept that was emphasized in two related studies concerned the matching hypothesis theory introduced by Wilson, Dunn, Bybee, Hyma, and Rotondo (1984) and later investigated by Millar and Tesser (1986, 1989). This theory proposed that when either the emotional or rational components and the emotional or rational appeals are matched, this interaction would increase the attitude-behavior relation. When a mismatch occurred between the attitude components and the form of appeals, a decrease in the attitude-behavior relation was observed.

For Wilson et al, the results were based on whether participants analyzed reasons for one's feelings on subsequent attitudes and behaviors, in which case their attitudes and behaviors were not congruent with each other. In comparison, participants who did not explain reasons for their attitudes,

displayed attitudes that were congruent with their behavior.

Using the same hypothesis with an emphasis on analysing reasons, Millar and Tesser (1986, 1989) observed that participants' strengthened the relation between their attitudes and subsequent behavior by focusing on either attitude component and analysing reasons for liking or disliking an attitude object during the persuasion task.

Thus, in these instances of persuasion, manipulating the same variables, but observing different results, demonstrated the variability of techniques to change a particular attitude. The emphasis assigned to the variables remains a function of the experimenter to clarify or make a distinction as to how the attitude components function.

In brief, a further instance of the use of persuasion was reported by Edwards (1990) in which the participants were primed subliminally (unconscious presentation of stimuli) or supraliminally (conscious presentation of stimuli), while varying the sequence of pictures and descriptions. A reported observation

suggested that a change in attitudes was influenced more by the emotional component, due to the persuasion attempt that made contact with the emotional origins of the attitude.

Inconsistencies in Studies of Persuasion.

Without de-emphasizing the significance of past research on attitude change as a result of persuasive interventions, the inconsistencies that were found in the present literature concerns the contradictory position regarding the matching hypothesis and the lack of consistent operational definitions.

First of all, the matching hypothesis was formulated to distinguish between the roles of both attitude components on subsequent behaviors of the participants. The contradiction between findings reported earlier concerns the emphasis placed on a request to analyze reasons about a particular object. Depending on the domain of the research, describing one's internal state can accurately reflect one's true attitude and the subsequent behavior or one can be misled about their attitudes and behavior.

Second, the operational definitions prevent researchers from making a clear distinction between the attitude components. Different research domains dictate how the variables of choice are defined and presented throughout an experiment. A lack of inconsistent definitions leads researchers to infer or make unjust assumptions concerning the formation and change in an attitude.

Procedural Objective:

My strategy to solve the problems stated earlier in this review is to adopt and modify the procedure used Millar and Tesser. The changes that will be made concern the presentation of stimuli in order to observe a significant effect of emotions and rational thoughts.

In this instance, the procedure overlaps that of Millar and Tesser, but presents the participants with a more salient and random set of stimuli to enact changes in an attitude. In doing so, it is hoped that a clear distinction about the nature of emotions and rational thoughts will offer a better understanding about the roles of each component. Subjects be primed either emotionally or rationally (a procedure intended to

place participants in a certain frame of mind) before receiving either an emotional or rational appeal.

By adopting such a procedure it is hoped that the effects that are observed and the results obtained will be due to the salience of both the priming procedure and the strength of the persuasive appeals.

Difference between Studies:

The critical difference between the present study and the research of Millar and Tesser concerns the emphasis that is placed on analysing reason for liking or disliking a particular attitude object. This form of introspection was the cause of conflicting results and contributed little to the influence of both attitude components on attitude change.

The present study places less of an emphasis on the need for analysing internal states and replaces this need by asking participants to simply make a general response to how they feel towards either of the persuasive appeals. By doing so, it is believed that the participants will be less biased in their evaluations and report behaviors that are congruent with their individual attitudes.

Another difference that is dealt with concerned the presentation of more salient stimuli and priming techniques in order to observe greater attitude change and demonstrate that both attitude components contribute to how an attitude is formed and changed.

Questions that are Unanswered

The question that remain unanswered from previous research is critical to solve if we are to better understand the relations between the emotional and rational component of an attitude and their role in persuasive studies.

The question put forth by Millar and Tesser concerns the continued use of better presentations of salient stimuli in order to identify which attitude component is responsible for change in an attitude. As well, focusing on one component or the other during persuasive tasks can effect the susceptibility of both components when making an evaluation of an attitude object. It could be that this act of analysing reasons for how we react towards something could be the interfering factor that affects the relation between an attitude and it susceptibility to change.

Annotated Bibliography

Breckler, S.J. & Wiggins, E.C. (1989) Affect versus evaluation in

the structure of attitudes. Journal of Experimental Social Psychology. v(25), 253-271.

A distinction is made between affect and evaluation in the structure of attitudes. Affect refers to emotional responses and feelings engendered by an attitude object, whereby evaluation refers to thoughts, beliefs, and judgments about an attitude object. When measured across various attitude domains, subjects responses and behaviours were related more to affect than evaluation.

Breckler, S.J., & Wiggins, E.C. (1991) Cognitive responses in persuasion: Affective and evaluative determinants.

Journal of experimental Social Psychology. v.27, 180-200.

This study focused on the recipient's attitude as a source for cognitive responses, in which a distinction was made between affective and evaluative components of an attitude. Cognitive responses were most strongly related to the affective component of precommunication of attitudes and to the evaluative component of postcommunication attitudes.

Edwards, K. (1990) The interplay of affect and cognition in

attitude formation. Journal of Personality and Social

Psychology. vol.59(2) 202-216.

The sequence of affect and cognition in an attitudes formation is an important determinant of its subsequent resistance to affective and cognitive means of persuasion. Affect based attitudes exhibited more change under affective means of persuasion than under cognitive means of persuasion. Cognition based attitudes showed equal change under both forms of persuasion.

Millar, M.G., & Tesser, A. (1986) Effects of affective and cognitive focus on the attitude-behavior relation.

Journal of Personality and Social Psychology.

v(51)2, 270-276.

It is proposed that thought may make either the affective or cognitive component of the attitude more salient and more important in the formation of the general evaluation. It is hypothesized that a match between the attitude component emphasized by thought and the attitude that drives behavior would increase the attitude-behavior relation. Alternatively, a

mismatch between the attitude components would decrease the relation.

To test this hypothesis participants focused on either the affective or cognitive component before evaluating various analytical puzzles. Results from this study support the principle hypothesis.

Millar, M.G., & Tesser, A. (1989) The effects of affective- cognitive consistency and thought on the attitude-

behavior relation. Journal of Experimental Social Psychology. v(25), 189-202.

Based on earlier research this study is concerned with the moderating role of affective-cognitive consistency on the relationship between attitudes and behavior. It was hypothesized that if the affective and cognitive components are in good evaluative agreement, then thought emphasizing either component would lead to a similar general evaluation that should be related to all behaviors. If there is no agreement between either components, there would lead to dissimilar evaluations and behaviors. Similar results were approximate to earlier findings and supported the hypothesis of the study.

Wilson, T.D., Dunn, D.S., Bybee, J.A., Hyman, D.B., & Rotondo, J.A. (1984) Effects of analysing reasons on attitude- behavior consistency. Journal of Personality and Social Psychology. v(47)1, p.5-16.

This study reports three studies that investigated the effects of analysing the reasons for one's feelings on subsequent attitudes and behaviors. Subjects who explained reason for their attitudes had significantly lower correlations between their attitudes and behaviors that subjects who did not explain reasons for their attitudes. It was concluded that analysing reason on the part of the participants resulted in attitudes which did not represent their true attitudes and subsequently affected their behaviors.

Reference List

- Breckler, S.J., & Wiggins, E.C. (1989) Affect versus evaluation in the structure of attitudes. Journal of Experimental Social Psychology. v(25), 253-271.
- Breckler, S.J., & Wiggins, E.C. (1991) Cognitive responses in persuasion: Affective and evaluative determinants> Journal of Experimental Social Psychology. v(27), 180-200.
- Edwards, K. (1990) The interplay of affect and cognition in attitude formation. Journal of Personality and Social Psychology. v(59)2, 202-216.
- Katz, D. (1960); Sarnoff, I., & Katz, (1954); Smith, M., Bruner, J.S., & White, R.W. (1956) as cited in Edwards, K. (1990). The interplay of affect and cognition in attitude formation and change. Journal of Personality and Social Psychology. v(59), 202-216.
- McGuire, W.J. (1969) The nature of attitudes and attitude change. In G. Lindzey & E. Aronson (eds.), The

handbook of social psychology. (2nd ed., vol3, pp.136-314) Reading, Ma.: Addison-Wesley.

Millar, M.G., & Tesser, A. (1986) Effects of affective and cognitive focus on the attitude-behavior relation. Journal of Personality and Social Psychology. v(31)2, 270-276.

Millar, M.G., & Tesser, A. (1989) The effects of affective-cognitive consistency and thought on the attitude-behavior relation. Journal of Experimental Social Psychology. v(25) 189-202.

Wilson, T.D., Dunn, D.S., Bybee, J.A., Hyman, D.B., & Rotondo, J.A. (1984). as cited in Edwards, K. (1991). The interplay of affect and cognition in attitude formation and change. Journal of Personality and Social Psychology.v(59),2, 202- 216.

Running Head: Attitudes

Thesis Research Proposal

The Effects of Emotional and Rational Persuasion

On Attitudes

Pat D Mackan

Algoma University College

This thesis research was submitted to the Department of Psychology of Algoma University College as a partial requirement for the degree of Bachelors of Arts.

Abstract

The present study investigated the effects of persuasive arguments on attitudes towards abortion. Forty male and female participants completed measures of their emotions and attitudes towards abortion and tolerance of abortion. Participants then read one of two communications which were intended to increase the salience of the emotional or rational component of an attitude. Afterwards, participants read an appeal which emphasized the emotional or rational aspects related to abortion. Subsequently, all participants completed a post-test which included the same measures as in the pre-test. It was hypothesized that participants for whom the emotional component was salient, would find emotional appeals to be more persuasive, whereas participants for whom the rational component was salient, would find rational appeals to be more persuasive.

This research investigated how persuasive arguments influence one's attitude. Studies of attitude formation and change have used a model that identified the structure of an attitude as being composed of two components. The emotional component includes emotions, feelings, or drives associated with an attitude object, whereas the rational component includes beliefs, judgments, or thoughts associated with an attitude object (McGuire, 1969).

An example of the function of these two components was demonstrated using emotional and rational attitudes. For emotional attitudes, emotional reactions exert a primary and powerful influence and the attitude is initially acquired with minimal rational appraisal.

For rational attitudes, domain relevant information is acquired first, and emotional factors come into play only after considerable rational appraisal.

The rationale for studying how persuasive arguments influence attitudes came in light of past research. Empirical inquiries into the roles of emotions and rational thought on persuasion had been pursued in isolation from one another and without

concern for the context in which an attitude was formed. This method of study led to contradictions in relation to the validity of the matching hypothesis and operational definitions, in order to make a distinction between the emotional and rational components of an attitude.

The present research seeks to study the roles of emotions and rational thoughts in more of a joint function. A critical assumption of the present study is that the function, origin, and change of attitudes are intertwined and may not be as separable as prior research had suggested.

The theory that was referred to in this study is a concept called the matching hypothesis. This theory proposed that when either of the attitude components and the corresponding emotional or rational appeals are matched, this interaction would increase the attitude - behavior relation. Alternatively, a mismatch between the attitude components and the forms of appeals would decrease the interaction between the attitude - behavior relation.

The importance and validity of this theory was demonstrated by Millar and Tesser (1986, 1989), in response to the earlier work of Wilson, Dunn, Bybee, Hyman & Rotondo (1984), both of whom differed in opinions concerning the analysis of reasons as decreasing the relation between attitude and behavior. Millar and Tesser demonstrated their position by stating that analysing reasons for responses increased the attitude behavior relation and influenced the evaluation of a particular attitude object.

However, evidence from Wilson, Dunn, Bybee, Hyman & Rotondo (1984) contradicted the matching hypothesis. They argued that analysing reasons for responses reduced the relation between attitudes and behavior. Such an analysis may mislead people about the nature of their internal states.

The previous statements highlighted two problems associated with distinguishing between the roles of emotion and rational thought. It was once thought that some forms of introspection were more reliable than others. Asking people to describe or observe their

internal states was thought to be more reliable than asking people to interpret and give reasons for their responses. Thus, individuals may be more likely to make inaccurate reports about their attitudes, which would affect their subsequent behavior.

It was also suggested that in the Wilson et al study, participants were specifically instructed to analyze their feelings, which misled them about how they feel. However, Millar and Tesser, asked participants to familiarize themselves with an attitude object and report their thoughts and feelings towards an attitude object.

A further example of failing to make a distinction between the roles of each attitude component concerns the operational definitions of these components. Using the domains of blood donation and abortion, Breckler and Wiggins (1989, 1991) suggested that the emotional component of an attitude referred to emotions and drives that are engendered by an object, while the rational component referred to the location of an

object of thought on one or more dimensions of judgment.

In this context, affect and evaluation can be the products of very different learning experiences. The rational component is represented primarily in verbal or semantic form, statements that can be judged to be true or false. The emotional component is primarily associated with feelings, but are not judged on whether they are true or false.

Using a domain of pictures and information, Edwards (1990), argued that the emotional component includes the emotions, feelings, and drives associated with an attitude object, whereas the rational component includes beliefs, judgments, or thoughts associated with an attitude object.

Although the distinction between the attitude components is crucial to attitude research, other inconsistencies besides operational definitions have kept researchers from making any concise and clear distinctions. The choice of methodology in studying the roles of emotions and rational thoughts separately

presents a problem for the attitude-behavior relation. By focusing on either component to explain a behavior, one is faced with explaining why one component is more influential than the other in forming and changing an attitude.

A second inconsistency that interfered with making a concise distinction is defining the roles of both components of an attitude. Past researchers have usually relied on general definitions, as was reported previously by Breckler and Wiggins and Edwards. Such generic statements would contribute little to the understanding of how the components of an attitude operate in a particular domain.

The present study is one that may resolve the above dilemmas by providing a clear distinction about the nature of emotions and rational thoughts. By suggesting that both components may operate together to influence the attitude-behaviour relation, we may have a better understanding of the nature of the roles of each component.

Furthermore, one must look at specific interactions influenced by the matching hypothesis. If the attitude components and the corresponding appeals are matched, an observable increase in an attitude would indicate that a person is clearly focused on one component, thus increasing the attitude-behavior relation. If, however, there is a mismatch between the attitude components and the forms of appeals, there would be no observable change in an attitude, which may indicate that an individual may be relying on either component as a reference point, which decreases the attitude-behavior relation.

The particular salience of either component will dictate how influential the persuasive argument will be in changing a particular attitude. It is the salience of each component which may be the key factor in making a distinction regarding the roles of each component.

Prior studies have designed experiments which did vary the sequence of stimuli given to the subjects, albeit a very weak manipulation. For example, Breckler and Wiggins and Wilson and et al, presented subjects

with a task to evaluate different analytical puzzles. Depending on the assigned group, the subjects were asked to analyze the puzzles and rate them as to why or how they feel about each puzzle.

The difference between the present study and prior studies concerns the sequence of a more stable and salient combination of stimuli to the participants to produce a more significant interaction between attitude and behavior. A combination of a salient priming procedure connected with a salient persuasive appeal would produce greater attitude change and prove that both components of an attitude contribute to the formation and change of an attitude. As well, the need for analyzing reasons for one's attitudes and behavior is not a central concern because it has led to problems in prior studies and effected the attitude-behavior relation. Thus, for the present study, it is hypothesized that for participants for whom the emotional component was salient, would find emotional appeals to be more persuasive, whereas participants for

whom the rational component was salient, would find rational appeals to be more persuasive.

Method

Participants: Forty male and female participants from Algoma University took part in the present study.

Design:

A 2 (emotional vs. rational prime) x 2 (emotional or rational appeal). The three within - subjects factors are (emotions, attitudes, and tolerance) such that each subject is measured on each of the three scales.

Procedure:

Phase 1 - Pretest Measure:

Before the participants started the study they completed measures of emotions and attitudes towards abortion, and tolerance of abortion. These measures have been used in prior attitude research and have been significant in measuring subjects' attitudes towards various domains (Edwards, 1990; Breckler & Wiggins, 1986, 1989).

Phase 2: Priming Procedure.

After the pre-test has been completed, and before receiving the persuasive appeal, the participants received either an emotional or rational prime. The primes were intended to place the participants in an emotional or rational frame of mind by requesting them to describe their initial state, either emotionally or rationally.

Phase 3: Appeals

The emotional appeal was structured in a manner so that the content outlined a wide range of emotions and feelings, such as anger, guilt, and loss of self esteem, commonly experienced by women after an abortion.

In contrast, the rational appeal outlined general information relating to the risks associated with abortion such as abortion vs. adoption, the psychological after effects of abortion, and the possible relation between abortion and child abuse.

Phase 4: Post-test Measures.

Once the appeal is read, the participants then completed post-test measures which include the same measures as in the pre-test. The dependent measure was represented by the amount of change in pre and post-test scores.

Results

The results that were found did not support the principle hypothesis: participants for whom the emotional component was salient, would find emotional appeals to be more persuasive, whereas participants for whom the rational component was salient, would find rational appeals to be more persuasive.

As can be observed in Table 1, which presents the means between the pre and post test measures, it was concluded that there was a slight degree of attitude change, but this effect was not large enough and thus non significant in concluding that the variables that were manipulated had a substantial effect on the participants of this study.

Discussion

The results reported in this study failed to provide support for the principle hypothesis: participants for whom the emotional component was salient, would find emotional appeals to be more persuasive, whereas participants for whom the rational component was salient, would find rational appeals to be more persuasive.

The results between the present study and prior studies using the same methodology was attributed to the priming procedure and the strength of the persuasive appeals. First, the priming procedure that was used requested participants to describe their initial attitude state before receiving the persuasive appeal. It could have been the case that the structure of the questions were not represented on a global basis to reflect an overall discussion of emotions and feelings.

Prior studies required participants to describe their emotional or rational state by listing them while performing a persuasive task. This method produced

results that were congruent with the participants attitudes and resulted in greater attitude change afterwards.

The other possibility that did not show support for the present hypothesis concerned the appeals themselves. In this instance, the appeals were structured by using current research and other factual information as a starting point to familiarize the participants as to the effects of abortion by women who use such a service. Thus, the content reflected a genuine portrayal of the reality of abortion in society.

Due to abortion being such a controversial topic, covered in all media outlets, the participants may have been saturated with everyday information from the media. Therefore, after being exposed to the persuasive appeals in the present study, they did not have the desired effect on the participants. Prior to entering this study, the participants may have had their individual positions, values, or morals, which might have influenced their evaluations of abortion.

Future research needs to focus on better ways to manipulate both attitude components using sequences of information that are more salient to identify which attitude component is responsible for changes in attitudes.

As well, further research on changing attitudes should present participants with persuasive information that is a neutral topic in order to lessen the degree of saturation of information that is presented to individuals on an everyday basis.

Table 1

Averaged Means of Emotions, Attitudes, and Tolerance Before and After Persuasion

Condition	Before	After
Emotions	- 6.12	-5.22
Attitudes	4.87	3.53
Tolerance	4.225	3.625

Note: For all conditions, n=40.

Attitude Change

