

THE INFLUENCE OF EMOTIONS ON SATISFACTION WITH MOVIE CONSUMPTION

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ABSTRACT

The influence of emotions on consumer satisfaction should be particularly important in the area of aesthetic products and more broadly for experiential products which should generate emotional reactions during time devoted to the consumption process. The purpose of the research presented in this paper is to analyze the influence of emotional reactions generated by a movie on the level of satisfaction associated with this movie. After introducing the theoretical framework and describing the research design, presentation of the results includes three parts: 1. validation of an emotion scale and identification of four emotional dimensions, 2. influence of these dimensions on the level of satisfaction generated by a specific movie attendance, and 3. comparative analysis of patterns of influence of durable involvement with the product category on the process of evaluation of a specific movie. Main results are: identification of four emotional dimensions: two factor structure of positive and negative emotions; quietness (or absence of arousal); surprise; evidence of a strong influence of emotional content of experience on satisfaction level; comparative analysis of the influence of generalized involvement suggests an indirect model in which emotions play a mediating role in the influence of generalized involvement on situational satisfaction.

INTRODUCTION

The influence of emotions on consumer satisfaction (Westbrook and Oliver, 1991), and more generally the existence of an "affective path" to satisfaction (Evrard, 1989) have been put in evidence. Linkages between emotions felt during the consumption process and subsequent evaluation judgements of satisfaction should be particularly important in the area of aesthetic products for which motivation goes well beyond utilitarian dimensions, and more broadly for experiential products (Holbrook and Hirschmann, 1982) which should generate emotional reactions during time devoted to the consumption process.

The purpose of the research presented in this paper is to analyze the influence of emotional reactions generated by a movie on the level of satisfaction associated with this movie. After introducing the theoretical framework and describing the research design, presentation of the results will include three parts:

1. Validation of an emotion scale and identification of four emotional dimensions.
2. Influence of these dimensions on the level of satisfaction generated by a specific movie attendance.
3. Comparative analysis of patterns of influence of durable involvement with the product category on the process of evaluation of a specific movie.

THEORETICAL FRAMEWORK

Affect and Satisfaction

Past research on the links between affect and satisfaction may be classified into three main categories:

1. Influence of general (i.e., not generated by a specific consumption situation) affective dimensions, either stable (personality dispositions) or unstable (mood); results on the importance of this influence have been mitigated (Westbrook, 1980).
 2. Influence of affect generated by a specific consumption experience on the level of satisfaction with this experience; this influence has been shown to be independent of expectations and disconfirmation beliefs (Westbrook, 1987) and it has been suggested that different patterns of influence could be identified (Westbrook and Oliver, 1991).
 3. In the framework of the "disconfirmation paradigm" of satisfaction formation, influence
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of affect generated by disconfirmation of expectations ("surprise effect"); it has been proposed that this influence is mediated by attribution processes and that different satisfaction response modes may be distinguished (Oliver, 1989).

This research follows the second of these directions: it aims at identifying and measuring the influence of emotions generated by the consumption of an experiential product (movie attendance) on the level of satisfaction generated by this consumption.

Emotions

Several taxonomies of emotions have been proposed in the psychological literature. Three of them have been applied in the context of consumer research (cf. table 1):

1. Plutchik categorization which includes 8 emotions types.
2. PAD(Pleasure-Arousal-Dominance)model which has been proposed by Mehrabian and Russell.
3. Izard DES - Scale which includes 10 main categories.

The first two have been systematically compared by Havlena and Holbrook (1986). The scale developed in this research builds on their work and combines items issued from Plutchik's eight basic emotions and from PAD paradigm.

RESEARCH DESIGN

Questionnaire

The questionnaire includes three main parts:

1. Questions specific to a movie: emotion scale (27 seven-points items); satisfaction (1 ten - points item; differentiation of response format - number of points of the scale-aims to accentuate the discrimination of satisfaction from the set of emotions versus considering satisfaction as one among the emotional

Table 1
Taxonomies of Emotions

PLUTCHIK (8)	MEHRABIAN- (3) RUSSELL	IZARD (10)
FEAR	PLEASURE	INTEREST- EXCITEMENT
ANGER	AROUSAL	ENJOYMENT- JOY
JOY	DOMINANCE	SURPRISE- STARTLE
SADNESS		SADNESS- ANGUISH
ACCEPTANCE		ANGER-RAGE
DISGUST		DISGUST- REPULSION
EXPECTANCY		CONTEMPT- SCORN
SURPRISE		FEAR-TERROR SHAME- SHYNESS GUILT- REMORSE

responses); situation (alone or not).

2. Questions dealing with the product category as a whole (a scale of "generalized involvement" including 31 five-points items, which has already been presented in an article of this journal -Evrard, 1989- and has since then been tested and validated for other product categories); as will be shown in the last part of the paper, the purpose of this scale is to explore the links between a specific consumption experience and the more stable relationship of the respondent with the product category.

3. Interviewee background data (not exploited in this paper).

Movies

This study bears on three movies which have been selected on a basis of variety to generate differentiated emotions and therefore ensure discriminating power:

1. Terminator 2 (with A. Schwarzenegger).
2. Mon pere ce heros (a french comedy with

Gerard Depardieu.

3. Van Gogh (a "film d'auteur" on the life of the famous painter, directed by Maurice Pialat and with Jacques Dutronc impersonating the title role).

Sample

The sample includes 165 interviews. Subsamples for each movie are approximately equal (movie 1 = 58; movie 2 = 56; movie 3 = 51); tests on differences on background variables between the three subsamples have been conducted.

STRUCTURE OF EMOTIONS

The structure of the emotion scale was assessed through an exploratory factor analysis followed by a confirmatory one (for the last one, Lisrel 6 was used; a satisfying - GFi = .982; RMR = .042 - orthogonal solution with four dimensions was obtained). Table 2 shows the loadings for this solution which is based on 24 items (3 items were deleted on the basis of instability of results); french wording is included in the table to allow one to check for translation validity.

These four dimensions of emotions may be interpreted as follows:

1. The first two dimensions correspond to the classical two-factor structure of emotions which has been observed in previous research: E1 is a combination of negative emotions (fear, anger, disgust,...); E2 is mainly constituted of positive emotions (joy, happiness,...), but also includes some arousal.
2. The third dimension (E3) appears to be original; it includes items from sadness and acceptance categories of Plutchik taxonomy, but also calm and relaxation which may be looked at as the absence of arousal; at least for this product category, arousal seems to be ambiguous: its positive side (stimulation) is linked with positive emotions, and is distinguished from its absence which is included in a dimension which may be labelled

as "quietness" or "relaxation."

3. E4 is a surprise dimension, but unfortunately includes only two items which precludes its use for further analysis.

Table 3 shows the value of reliability indexes (Cronbach alpha) both at each movie level and for the total sample. Results indicate a good internal consistency for E1 and E2, but are insufficient for E3, and unacceptable for E4 (it is the two - item correlation coefficient).

INFLUENCES OF EMOTIONS ON SATISFACTION WITH THE MOVIE

The next step of analysis deals with the links between these four emotional dimensions as felt during movie attendance (or at least as remembered after this experience) and resulting satisfaction level.

Table 4 shows the scores for each emotional dimension and satisfaction level (designated as *satmovie*). One may observe that:

1. More negative emotions are associated with movie 1 (Terminator); it has to be underlined that this is not necessarily bad from consumer's point of view: to be frightened may be what consumers are looking for when attending this kind of movie.
2. More positive emotions are generated by movie 2 (comedy).
3. Less quietness (or more arousal?) is observed for Terminator.
4. The highest level of satisfaction is associated with film 2.

Before using a linear model to study the links between emotional dimensions and satisfaction, we made a check on the monotonicity of these relationships. For this check, aggregate scores on emotional dimensions were calculated, rescaled on a seven - points format and split in four equal intervals; mean satisfaction level was then calculated for each interval. Results (cf. table 5)

Table 2
Emotion Structure (4 Dimensions)

	E1	E2	E3	E4
Threatened (menace)	.731	.006	-.213	-.057
Hostile (hostile)	.742	-.297	-.019	-.062
Disgusted (degoute)	.589	-.380	.064	-.096
Puzzled (embarrasse)	.580	-.121	.142	-.098
Frightened (effraye)	.673	-.086	-.314	-.012
Offended (offense)	.464	-.203	.023	-.136
Irritated (irrite)	.658	-.356	.120	-.112
Unpleasant (mal a l'aise)	.632	-.136	-.017	.048
Happy (heureax)	-.031	.717	.091	-.002
Aroused (stimule)	.152	.603	.019	.152
Cheerful (joyeux)	-.049	.647	.207	-.015
Annoyed (ennuye)	.296	-.601	.250	-.066
Delighted (enchante)	-.161	.702	.131	.136
Alert (accroche)	-.035	.593	-.051	.341
Gloomy (melancolique)	-.108	.048	.395	.072
Helped (compris)	.032	.240	.421	.178
Accepted (accepte)	-.084	.285	.553	.146
Calm (calme)	-.194	-.121	.531	.177
Trusting (confiant)	-.184	.289	.394	.200
Relaxed (detendu)	-.351	.219	.453	.058
Curious (curieux)	-.035	-.008	.021	.698
Startled (surpris)	.152	-.092	-.110	.592

show a global pattern of monotonous variation of satisfaction level with scores on emotional dimensions (for E1, it may be observed a very weak dispersion: 85% of the sample is on the lowest part of the aggregate scale).

We then turn to an additive effects model (regression like) on the latent variables, using Lisrel 6. Results are statistically good at aggregate level, but should be interpreted cautiously at each

movie level due to limitations of statistical quality of adjustment (RMR too large). Results (cf table 6) show that:

1. The dominant pattern is a two factor model based on the independent dimensions of positive and negative emotions, with a stronger influence of positive emotions (which may result, as aforementioned, from weak

Table 3
Reliability of Emotional Dimensions
(Cronbach alpha)

	E1	E2	E3	E4
MOVIE 1	.782	.640	.494	.31
MOVIE 2	.817	.722	.600	.27
MOVIE 3	.699	.732	.502	.32
TOTAL	.786	.705	.600	.31

Table 4
Scores of Emotional Dimensions and Satmovie

	E1	E2	E3	E4	SAT
MOVIE 1	2.06	3.79	2.88	4.24	6.10
MOVIE 2	1.30	4.31	4.28	3.50	6.42
MOVIE 3	1.43	3.59	4.10	4.60	6.08
TOTAL	1.61	3.90	3.73	4.10	6.20

Table 5
Satmovie = F (Emotional Level)

	E1	E2	E3	E4
LEVEL 1 (1-2.5)	6.41 (145)	4.00 (18)	5.55 (29)	5.92 (25)
LEVEL 2 (2.5-4)	5.61 (13)	5.94 (65)	6.30 (53)	6.06 (47)
LEVEL 3 (4-5.5)	2.60 (5)	6.72 (69)	6.24 (67)	6.16 (44)
LEVEL 4 (5.5-7)	4.00 (2)	7.85 (13)	6.94 (16)	6.53 (49)

dispersion of negative emotions).

- Results for E3 are mixed and deserve further analysis.
- Influence of E4 (surprise) on satisfaction is observed only for Terminator.

INFLUENCE OF "GENERALIZED INVOLVEMENT"

It has been suggested that involvement may exert an influence on consumer satisfaction (see for instance Richins and Bloch, 1991), and may be an element of differentiation in consumer

Table 6
Links Between Emotional Dimensions
and Satmovie

	E1	E2	E3	E4
MOVIE 1	-.405	.818	.001	.381
MOVIE 2	-.470	.776	.211	.030
MOVIE 3	-.337	.806	-.105	.080
TOTAL	-.239	.951	-.181	.072

post-purchase processes. The objective of the last part of this paper is to explore patterns of influences of "generalized involvement" (characterizing the stable relationship of an individual with a product/service class) on the links between emotions (only E1 and E2 were used for this part of analysis) and satisfaction level associated with a specific consumption experience. It aims to contribute to the understanding of the accumulation process which links instantaneous (experience) and durable consumer-product interactions.

Two facets characterizing "generalized involvement" were used for this analysis: "general satisfaction" with product class (Sat cine) and hedonic value associated with the category (hed cine), both measured by multi-items scales which has been tested in previous research. A test of discriminant validity of these two facets with emotions was conducted through confirmatory factor analysis. Same analysis were made for both variables and led, as we will see, to analogous results. Three patterns of influence (cf figures 1 and 2) were tested through Lisrel 6 (ULS estimates):

- An additive orthogonal model postulating that involvement has a supplementary independent effect on satisfaction.
- An oblique model postulating both direct effect of involvement on satisfaction, and indirect effects through emotions.
- An indirect model where the influence of "generalized involvement" on satisfaction is fully mediated by emotions.

Figure 1
Influences of Emotions and General Satisfaction on Sat Movie

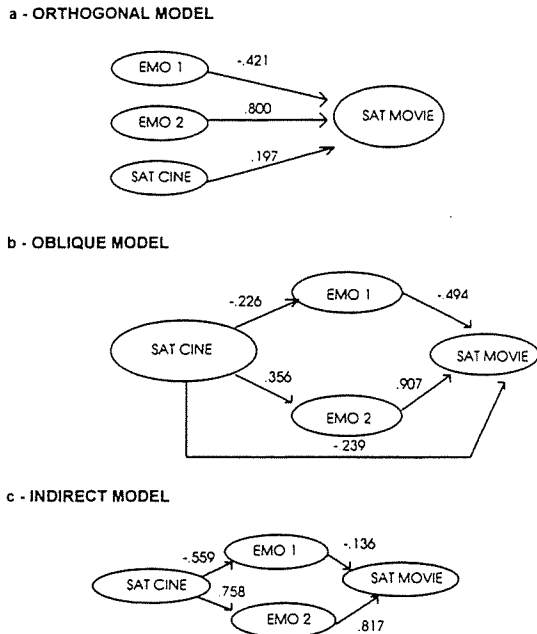
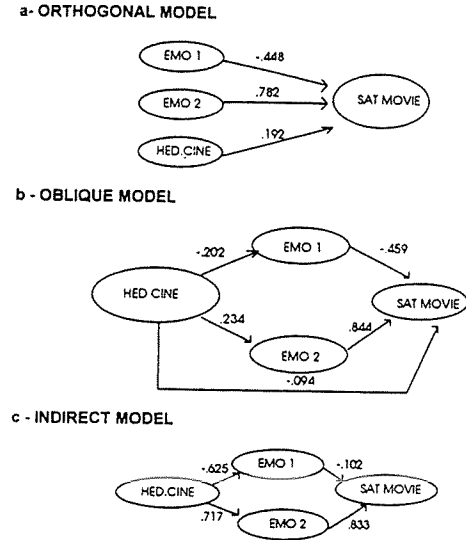


Figure 2
Influences of Emotions and General Hedonic Value on Satmovie



As mentioned before, results for this comparative analysis were analogous for both facets of generalized involvement and show clearly a superiority of the indirect model (see table 7 for statistical quality of adjustment): effect of generalized involvement on satisfaction with a specific consumption experience is mediated by emotions felt during this experience.

Table 7
Quality of Adjustment of Models of Influence of Generalized Involvement on Satisfaction

	SAT CINE			HED CINE		
	GFI	AGFI	RMR	GFI	AGFI	RMR
orthogonal	.836	.790	.151	.857	.811	.145
oblique	.886	.849	.126	.877	.834	.135
indirect	.949	.933	.084	.951	.935	.085

CONCLUSION

Main results presented in this paper are:

1. Identification of four emotional dimensions; further research is needed to improve conceptual content and measurement quality of the last two dimensions: quietness (or absence of arousal); surprise.
2. Evidence of a strong influence of emotional content of experience on satisfaction level; confirmation of preceding research leading to a dominant pattern of a two factor model based on the independent dimensions of positive and negative emotions.
3. Comparative analysis of the influence of generalized involvement on the links between emotions and satisfaction associated with a specific experience suggests superiority of an indirect model in which emotions play a mediating role in the influence of generalized involvement on situational satisfaction.

Main limitations of this research are at the measurement level:

1. Do post-experience verbal measures of emotions reflect accurately experiential

feelings or do they include, at least partly, some ex-post rationalization (this methodological problem is encountered in most research on emotions in consumer research; the alternative would be to use psychophysical measures)?

2. A weakness specific to this research is to rely on only one scale to measure satisfaction with movie attendance.

Finally, further research should also include cognitive factors and investigate their relationships with emotional dimensions.

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