



## Is the CES Theory Supported in Movie Consumption (in Cinema) Setting for Mood Regulation?

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### ABSTRACT

The purpose of this paper is to present a measurement model of mood regulation by movie consumption in cinema and to assess the effect of this mood regulation on movie repurchase intention and also is to heed moviegoers' differences in the level of the mood regulation by movie watching. Main body of the scale has inspired by Richins's (1997) Consumption Emotion Set (CES). Two different studies are conducted on moviegoers by distribution of questioners to use self report method for measuring emotions and moods. CFA and SEM are applied to analyze data. Findings indicate CES subscales as well the boredom construct are supported in movie consumption setting for mood regulation and moods induced by movie watching affect movie repurchase intention. Richins's (1997) CES adopted in the study has been developed particularly to apply in the field of consumption-related emotions and it has not ignored some critical emotions like feelings of love. Also CES has not been used before in context of mood regulation by recreation activities like movie consumption in cinema.

**KEYWORDS:** Mood regulation, Consumption emotions, Movie consumption, Repurchase intention

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### 1. INTRODUCTION

Individual differences studies about emotional process in the context of consumer behavior have been concentrated from last decades with different focuses on several subjects like consumption emotions and satisfaction, emotions and consumer decision-making, pre consumption moods and affects, affective reactions to consumption situations, and emotions created by use of specific products or services (Derbaix, & Pham, 1991; Gardner, 1985; Liljander & Mattsson, 2002; Luomala & Laaksonen, 2000; Machleit & Eroglu, 2000; Mattila & Wirtz, 2000; Richins, 1997; Sorensen, 2008; Westbrook & Oliver, 1991).

Many of theories of emotion suppose that individuals consume things to reinforce pleasurable emotions and moods and evade or repair unpleasant ones (Campos, Frankel, & Camras, 2004; Gross, 1998; Gross, 1999; Gross & Thompson, 2007; Hirschman & Holbrook, 1982; Holbrook & Gardner, 2000; Larsen, 2000; Morris & Reilly, 1987; Thayer & McClain, 1994; Zillmann, 2000; Zillmann, 2003 ).

Several scholars have strived to create a framework to relate some constructs like mood, emotion, and affect to outdoor recreation and leisure activities (Ajzen & Driver, 1992; Birkeland, Torsheim, & Wold, 2009; Cunningham, 1988; Giacobbi, Hausenblas, & Frye, 2005; Hammit, 1980; Hull, 1990; Hull, 1992; Hull & Harvey, 1989; Hull & Michael, 1995; Hull, Stewart, & Yi, 1992; More & Payne, 1978; Wilkinson & Hansen, 2006).

In the other hand mood and emotion regulation concept in concern with media consumption has appeared frequently in the literature (Bartsch, Vorderer, Mangold, & Viehoff, 2008; Chen, Zhou, & Bryant, 2007; Dillman Carpentier, Brown, Bertocci, Silk, Forbes, & Dahl, 2008; Garrido & Schubert, 2011; Greenwood & Long, 2009; Knobloch-Westerwick, & Alter, 2006; Knobloch-Westerwick, 2007; Larson, 1995; Saarikallio & Erkkilä, 2007; Vorderer, Klimmt, & Ritterfeld, 2004), and the most distinguished appearance is the mood management theory of Zillmann (Zillmann, 1988).

Movie consumption in cinema can be considered as the conjunction of media using theme and outdoor leisure activity in the subject of mood management. Therefore the subject of movie and mood has received consideration from academics (Bartsch, Appel, & Storch, 2010; Devlin, Chambers, & Callison, 2011; Forgas, & Moylan, 1987; Hubert, & de Jong-Meyer, 1990; Payne, Shaw, & Caldwell, 1998).

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Although there is a controversy about the specific set of experiential states which explain moods, and some scholar like Larsen (2000) has debated mood versus emotion in details (Larsen, 2000), others like Hull (1990) believe that apart from this dilemma, “one major task in defining mood is to identify and define the specific qualities of mood which are familiar and which we each experience.” He adopted Dimensions of Emotions: PDA, pleasure, arousal, and dominance by Mehrabian and Russell (1974) and Russell and Snodgrass (1987) as a means to describe, predict and explain mood in relation to leisure (Hull, 1990). Based upon the Hull (1990) work, Payne and associates (1998) tested PDA in the movie setting as an outdoor leisure. Greenwood and Long (2009) also have used mood regulation, emotion regulation, and affect regulation very close and woven in the meaning of the constructs to demonstrate patterns and individual differences in mood specific media use (Greenwood & Long, 2009).

Lumala and Martti (2000) have presented a rich literature review about mood definitions. They have given 33 statements of meaning of mood from 1956 to 1999. They have quoted Deniz (1984) “Moods are emotional states of mind that transcend specific situational experiences.”, or Russell and Snodgrass (1987) “We shall use the word mood to refer to the core emotional feelings of a person’s subjective state at any given moment.”, or Grunert (1991) “Mood is the label for any relatively short-lived, low intensity emotional state.”, and Kacen (1994) “Mood can be described as a temporary emotional state that is ubiquitous in nature” (Lumala & Martti, 2000).

These definitions were convincing support to search for appropriate mood or emotions dimension set to adopt and rewrite statements in the subject of mood regulation with the help of movie consumption. Richins (1997) argued that many of emotions measures have several limitations in their application to the study of consumption-related emotions. “First, all of the scales ignore some of the emotions that are particularly central in people’s lives” like feelings of love. Second, most of them contain unfamiliar terms to many consumers. Moreover she asserted that the PAD scale uses semantic differential items in which the anchor points are not always clear opposites (e.g., bored and relaxed) (Richins, 1997). Richins (1997) has developed three versions of Consumption Emotion Set (CES) to evaluate the range of emotions most frequently experienced in consumption situations. Second version includes 16 identifiable clusters comprising 43 descriptors (i.e., items) as well an “other items” category (Bearden & Netemeyer, 1999). CES has presented implicitly 8 negative emotion clusters and 7 positive clusters in addition to “Surprise” and “other items” subscales. Negative emotion clusters are Anger, Discontent, Worry, Sadness, Fear, Shame, Envy, and Loneliness besides positive emotion subscales are named Romantic Love, Love, Peacefulness, Contentment, Optimism, Joy, and Excitement (Richins, 1997). Bartsch and associates (2008) have presented an “extended process model of emotion, meta-emotion, and emotion regulation in media use” that demonstrates some emotions like joy, anger, sadness, and fear as the primary emotions; “Appraisal of emotions is shaped by an interaction of personal disposition and situational context; it takes into account media users’ emotional needs and concerns as well as media specific context factors that act as constraints on the pursuit of these concerns. Appraisal of emotions gives rise to affective reactions toward the primary emotion and motivates regulatory efforts. Depending on the valence of meta-emotion, regulatory efforts serve to maintain and approach, or to change and avoid the primary emotion. Emotion regulation can occur via interventions at any stage of the primary emotion process, starting from selective exposure to media content, through changing the focus and content of appraisal, and on to affective and behavioral self-regulation” (Bartsch, Vorderer, Mangold, & Viehoff, 2008).

This study has adopted Richins’ CES (1997) as the main scale to examine and find the answer of these questions:

1. Is the CES theory supported in movie consumption (in cinema) setting for mood regulation?
2. Does a regulated moods induced by movie watching affect movie repurchase intention?

## **2. Study 1**

### *2.1 Material and Methods*

On the whole 203 volunteer moviegoer students, 89 female and 114 male in a range of 18 to 42 and average age 25.4 years from three faculty of Art and Humanities, Basic science, and Engineering from a university in Tehran participated in the study. These volunteer moviegoers have been watching movies in cinemas at least 6 times in a year. The scale has inspired by Richins’s (1997) Consumption Emotion Set (CES), Dimensions of Emotions (PAD) of Mehrabian and Russell (1974) (Bearden & Netemeyer, 1999), Maxham and Netemeyer’s (2002, 2003) Purchase intention, and Purchase intention scale of Chandran and

Morwitz (2005) (Bruner, 2009). The scale has 28 items. 6 subscales (clusters) of Consumption Emotion Set (CES) and their descriptors directly were used and in fact Anger, Worry, Sadness, Loneliness, Love, and Joy’s descriptors were adopted to rewrite 17 items in context of movie consumption for mood regulation. The Boredom concept was taken from Dimensions of Emotions (PAD) and 6 items were written to measure this concept. 5 items of movie repurchase intention borrowed some ideas from Maxham and Netemeyer’s (2002, 2003) and Chandran and Morwitz’s (2005) Purchase intention scales and were appropriated for the scale. All items were rated on Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

In the first step test – retest reliability were performed on the scale with participation of 48 moviegoer students over two weeks interval. Pearson's correlation coefficients were computed while critical value for the coefficient at the 0.01 significant level (two-tailed) for n= 48 is 0.368. Then main experiment was conducted on 203 volunteer moviegoer students sample. Descriptive statistics, Pearson's correlation coefficients, Cronbach’s alpha, and Spearman- Brown coefficient for two-item loneliness repair scale are reported in Table 1. Therefore scale items’ homogeneity was acceptable.

Confirmatory factor analysis, Structural equation modeling and Cluster analysis were performed with SPSS Amos 20.0 in next steps.

Table 1. Means, standard deviations, Pearson's correlation coefficients, Cronbach’s alpha, and Spearman-Brown coefficient for the variables (Study 1)

Variables	Mean	Std. Deviation	Pearson Correlation	Cronbach’s alpha	Spearman-Brown
Anger Repair	2.5056	.93289	.562	.741	-----
Worry Repair	2.6190	1.02790	.703	.840	-----
Sadness Repair	2.6106	.97832	.618	.823	-----
Loneliness Repair	2.6966	1.02036	.588	-----	.749
Love Reinforcement	3.1361	1.02846	.635	.841	-----
Joy Reinforcement	3.0907	.95001	.546	.829	-----
Movie Repurchase intention	3.0439	.86697	.680	.819	-----
Boredom Repair	2.6318	.75470	.727	.751	-----

Note: Correlations are significant at the 0.01 level (2-tailed).

## 2.2 RESULTS

### 2.2.1 Measurement Model

Henson and Robert (2006) based on the results of their study and the pleas of numerous researchers (pointed by them) (cf. Comrey, 1978; Fabrigar, Wegener, MacCallum, & Strahan, 1999; Gorsuch, 1983; Kline, 1994; Russell, 2002; Thompson & Daniel, 1996; Tinsley & Tinsley, 1987; Weiss, 1971) have recommended “When prior theory exists regarding the structure of the data, CFA should be considered as an alternative to EFA” (Henson & Robert, 2006). In this study CFA was conducted to examine whether the data fit the hypothesized measurement model. Therefore anger repair, worry repair, sadness repair, loneliness repair, love reinforcement, joy reinforcement, and boredom repair were tested as reflective indicators of mood regulation by movie consumption in cinema as the latent variable.

The measurement model and standardized regression weights are shown in Figure 1. Regression weights are presented in Table 2. Goodness of fit result is 1.870 for CMIN/DF, .066 for RMSEA, .969 for GFI, .934 for AGFI, .980 for NFI, .991 for CFI, .968 for RFI, .991 for IFI, and .607 for PNFI.

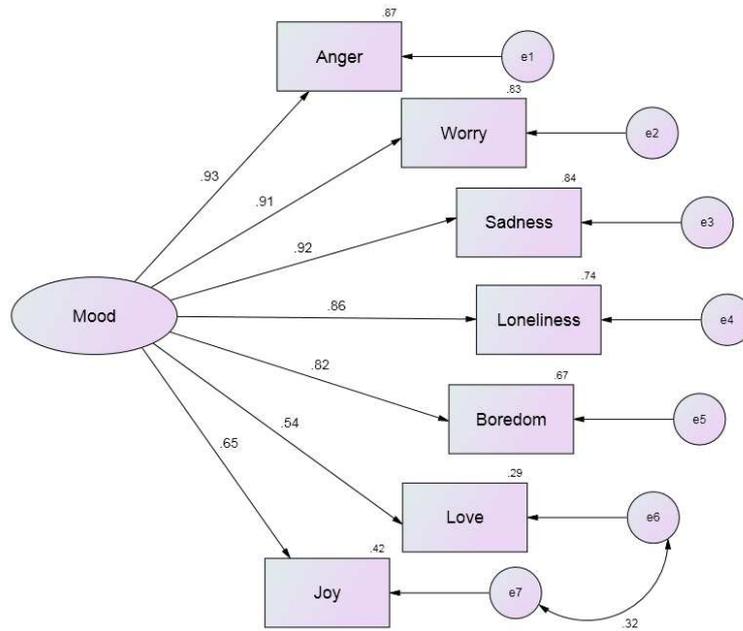


Figure 1. The measurement model of Mood regulation by movie consumption in cinema (Study 1).

Table 2. Regression weights for measurement model (Study 1)

			Estimate	S.E.	C.R.	P	Label
<b>Loneliness repair</b>	<---	Mood regulation	1.011	.052	19.507	***	par_1
<b>Boredom repair</b>	<---	Mood regulation	.708	.041	17.089	***	par_2
<b>Sadness repair</b>	<---	Mood regulation	1.033	.044	23.693	***	par_3
<b>Worry repair</b>	<---	Mood regulation	1.073	.048	22.500	***	par_4
<b>Love reinforcement</b>	<---	Mood regulation	.636	.074	8.604	***	par_5
<b>Anger repair</b>	<---	Mood regulation	1.000				
<b>Joy reinforcement</b>	<---	Mood regulation	.708	.063	11.166	***	par_6

Note: Regression weights for Mood regulation in the prediction of reflective indicators are significantly different from zero at the 0.001 level (two-tailed).

### 2.2.2 Structural Equation Modeling

In this step structural equation modeling was performed to test and estimate causal relation between Mood regulation by movie consumption in cinema and movie repurchase intention. The model and standardized regression weights are shown in Figure 2. Regression weights are presented in Table 3. Goodness of fit result is 2.238 for CMIN/DF, .078 for RMSEA, .950 for GFI, .905 for AGFI, .980 for NFI, .982 for CFI, .952 for RFI, .982 for IFI, and .657 for PNFI.

Table 3. Regression weights for structural equation modeling (Study 1)

			Estimate	S.E.	C.R.	P	Label
<b>Loneliness repair</b>	<---	Mood regulation	1.017	.052	19.498	***	par_1
<b>Boredom repair</b>	<---	Mood regulation	.714	.042	17.194	***	par_2
<b>Sadness repair</b>	<---	Mood regulation	1.033	.044	23.274	***	par_3
<b>Worry repair</b>	<---	Mood regulation	1.078	.048	22.450	***	par_4
<b>Love reinforcement</b>	<---	Mood regulation	.644	.074	8.694	***	par_5
<b>Anger repair</b>	<---	Mood regulation	1.000				
<b>Joy reinforcement</b>	<---	Mood regulation	.714	.063	11.255	***	par_6
<b>Repurchase intention</b>	<---	Mood regulation	.562	.062	9.081	***	par_8

Note: Regression weights for Mood in the prediction of reflective indicators are significantly different from zero at the 0.001 level (two-tailed).

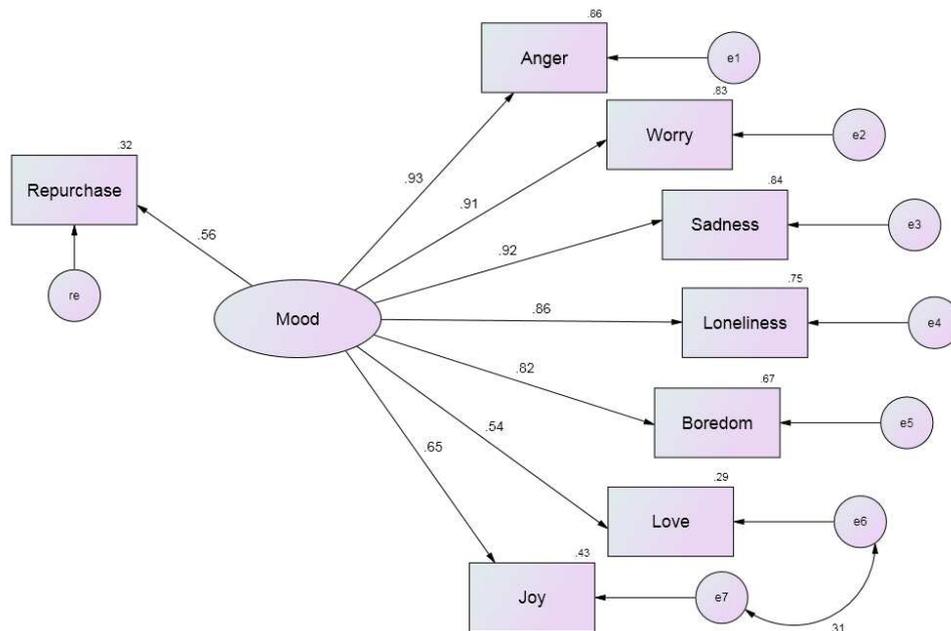


Figure2. Relation between Mood regulation by movie consumption in cinema and movie repurchase intention (Study 1).

### 3. Study 2

#### 3.1 Material and Methods

Participants were 125 female and 84 male were selected from 15 years and older moviegoers in 11 movie theaters in Tehran with purposive sampling method (range 16 –71years and mean= 30.8). These movie theaters were located in 5 different zones, in north, south, east, west, and center of Tehran. Questionnaires were distributed when moviegoers were waiting for show time. This sample differed from the sample of the first study because these moviegoers were experiencing their own special moods exactly before watching movie in cinemas.

The questionnaire’s items were as the same as Study 1. Descriptive statistics, Cronbach’s alpha, and Spearman- Brown coefficient for two-item loneliness repair scale are reported in Table 4. Therefore scale items’ homogeneity was acceptable too in this study.

Then confirmatory factor analysis, structural equation modeling, and cluster analysis were performed.

Table 4. Means, standard deviations, Cronbach’s alpha, and Spearman- Brown coefficient for the variables (Study 2)

Variables	Mean	Std. Deviation	Cronbach’ s alpha	Spearman- Brown
Anger Repair	2.6246	.93144	.711	-----
Worry Repair	2.6670	1.02997	.802	-----
Sadness Repair	2.6515	.93162	.745	-----
Loneliness Repair	2.6325	1.01012	-----	.559
Love Reinforcement	3.0429	1.06803	.842	-----
Joy Reinforcement	3.1933	.87491	.749	-----
Movie Repurchase intention	3.3108	.83213	.721	-----
Boredom Repair	3.0938	.75286	.796	-----

3.2 Results

3.2.1 Measurement Model

In study 2 CFA was conducted and the measurement model and standardized regression weights are shown in Figure 3. Regression weights are presented in Table 5. Goodness of fit result is 1.060 for CMIN/DF, .017 for RMSEA, .985 for GFI, .959 for AGFI, .989 for NFI, .999 for CFI, .977 for RFI, .999 for IFI, and .471 for PNFI.

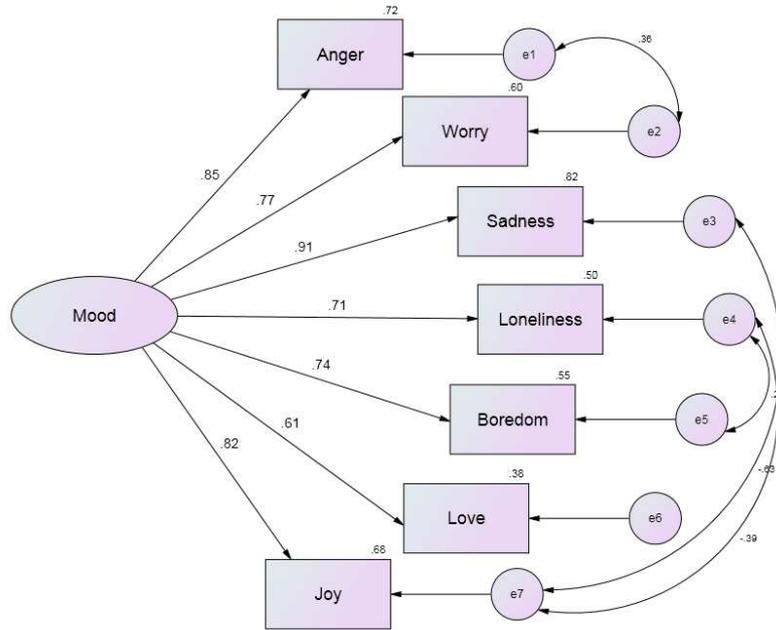


Figure 3. The measurement model of Mood regulation by movie consumption in cinema (Study 2).

Table 5. Regression weights for measurement model (Study 2)

			Estimate	S.E.	C.R.	P	Label
<b>Loneliness repair</b>	<---	Mood regulation	.904	.079	11.441	***	par_1
<b>Boredom repair</b>	<---	Mood regulation	.710	.055	12.875	***	par_2
<b>Sadness repair</b>	<---	Mood regulation	1.069	.066	16.229	***	par_3
<b>Worry repair</b>	<---	Mood regulation	1.009	.059	17.023	***	par_4
<b>Love reinforcement</b>	<---	Mood regulation	.830	.084	9.924	***	par_5
<b>Anger repair</b>	<---	Mood regulation	1.000				
<b>Joy reinforcement</b>	<---	Mood regulation	.912	.068	13.394	***	par_6

Note: Regression weights for Mood regulation in the prediction of reflective indicators are significantly different from zero at the 0.001 level (two-tailed).

3.2.2 Structural Equation Modeling

Structural equation modeling was performed and the model and standardized regression weights are shown in Figure 4. Regression weights are presented in Table 6. Goodness of fit result is 2.257 for CMIN/DF, .078 for RMSEA, .963 for GFI, .912 for AGFI, .968 for NFI, .982 for CFI, .940 for RFI, .982 for IFI, and .519 for PNFI.

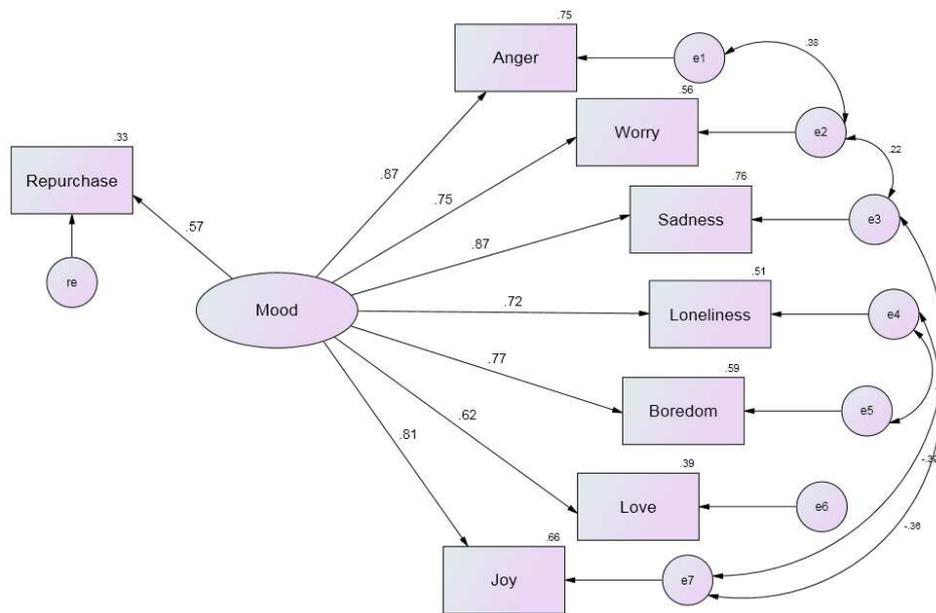


Figure 4. Relation between Mood regulation by movie consumption in cinema and movie repurchase intention (Study 2).

Table6. Regression weights for structural equation modeling (Study 2)

			Estimate	S.E.	C.R.	P	Label
Loneliness repair	<---	Mood regulation	.899	.077	11.686	***	par_1
Boredom repair	<---	Mood regulation	.719	.053	13.498	***	par_2
Sadness repair	<---	Mood regulation	1.011	.062	16.327	***	par_3
Worry repair	<---	Mood regulation	.957	.060	15.885	***	par_4
Love reinforcement	<---	Mood regulation	.826	.082	10.095	***	par_5
Anger repair	<---	Mood regulation	1.000				
Joy reinforcement	<---	Mood regulation	.877	.063	13.872	***	par_6
Repurchase intention	<---	Mood regulation	.593	.065	9.064	***	par_11

Note: Regression weights for Mood regulation in the prediction of reflective indicators are significantly different from zero at the 0.001 level (two-tailed).

#### 4. DISCUSSION

The results reported indicate that Anger repair, Worry repair, Sadness repair, Loneliness repair, Boredom repair, Love reinforcement, and Joy reinforcement in both studies define strongly Mood regulation by movie consumption in cinema and CES as well the boredom construct are supported in movie consumption setting for mood regulation. The standardized regression weight for love reinforcement in study 1 is .54 and in study 2 is .61. In fact love reinforcement has the least effect in defining mood regulation by movie watching in cinema. Moreover love subscale of CES and its indicators i.e. loving, sentimental, and warm hearted emotions are used to write items and using of indicators of romantic love i.e. sexy, romantic, and passionate emotions was avoided for the reason of cultural considerations. In spite of this effort love reinforcement has the least effect. It is assumed that Iranian movies' content and form (which are screened in cinema) cannot intensify the emotion or mood of love sufficiently (in compare with other emotions) because these movies avoid bringing up romantic love theme clearly. Another new study can examine love or romantic love reinforcement effect in mood regulation by movie consumption at home when individuals consume foreign motion pictures products.

The effect of mood regulation by movie consumption in cinema on movie repurchase intention was .56 in study 1 and .57 in study 2. Therefore some new questions can be proposed. Which themes can be adopted in movies to assure moviegoers that they can regulate their mood especially negative ones by watching

movies? Do they prefer to be confronted with sources of their negative mood to feel empathy or to cope with problems? Or they need to experience different theme (like positive or comic ones) to meet escapism. Devlin and associates suggested in their study's results "Men reported higher appeal and purchase intentions for trailers whose genre (serious or comedic) differed from their mood (positive or negative), while women showed a pattern of congruency. Women in negative moods responded better to serious trailers and showed dislike towards comedic trailers. However, when they were in a good mood, they responded positively to the comedic trailer (Devlin, Chambers, & Callison, 2011). Relation between mood regulation patterns and movie's them and genre can be tested in future studies based on CES. Furthermore CES can be used similarly about other recreation activities like music concerts.

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