

OPTIMISM-PESSIMISM AND EMOTIONAL REACTIONS TO UNPLEASANT MOVIE SCENES

UDC 791.2:15.942

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Abstract. *The aim of this research was to examine if there are some differences in a way optimists and pessimists react to unpleasant movie stimuli. The sample was convenient and it consisted of 42 (F=90%) students of psychology, from the Faculty of philosophy in Nish. Age range in the sample was from 18 to 20 (M=19, SD=.541). Instruments used in this research were: Life orientation test (LOT-R: Scheier, Carver, & Bridges, 1994) and Brief Mood Introspection Scale (BMIS: Mayer, & Gaschke, 2013) in order to operationalize the mood of the respondents. The stimulus was a scene from the movie Sophie's Choice, which aimed at inducing a negative affect. From the results we can conclude that the mood of the optimists, after watching movie stimuli, is corrupted, while the mood of the pessimists isn't.*

So, in the further studies which examine emotion induction through movies, we suggest the inclusion of optimism-pessimism as a control variable.

Also, for further studies we suggest the involvement of actors and testing how they react to film stimuli.

Key words: *movies, unpleasant movie scenes, optimism-pessimism, positive affect, negative affect.*

1. INTRODUCTION

When we talk about films, it's important to point out that television (and films and TV shows as some of its programs) covers a big part of the day of the average individual in Serbia. More precisely, statistical data show that Serbia is the second country in Europe judging by the average time spent in front of a TV (Statista¹) and that people spend almost five and a half hours in front of a TV every day. This data is invaluable

Received April 2019 / Accepted May 2019

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¹ Statista (2015/2016). Tv daily viewing time in Europe. Retrieved from: <https://www.statista.com/statistics/422719/tv-daily-viewing-time-europe/>

because it shows that television is a quite important factor of socialization in our country. It is also important to mention the phenomenon *binge watching*. Also called marathon-viewing, it is the practice of watching television for a long time span, usually a single television show, or a series of films². This data points out the importance of researching the impact that films and television have on us.

The research of films impact on audiences is not a new topic in psychology. Studies regarding film can be traced back to Arnheim (Arnheim 1993) who was the first author to consider the film an art. He compared film with other forms of art, as painting, dance and music, and points out that all these forms of art can but do not necessarily lead important artistic products, so much as film (Arnheim 1993). With such comparisons Arnheim actually wanted to show that film is an art just like painting, dancing or music, even if most of his contemporary authors did not think so. On the other hand, the situation today is quite different. Film is being accepted as a genuine form of art, and there are many psychological studies regarding its impact.

Research about film, that interests us in this paper, refers to films as a means of inducing emotion. Namely, there are quite a few papers which show that emotions can be induced by films and separated scenes from films (Brown et al. 1977, as cited by Hagemann et al. 1999; Gross & Levenson 1995; Engel et al. 1984; Philippot 1993; Pillard et al. 1974; Rottenberg, Ray, & Gross 2007; van Rooijen and Vlaander 1984). Some authors even mention that films are probably the most effective way of emotion induction in experiments, better than smells, imagined or relived scenes from one's life, better even than music and hypnosis (Rottenberg, Ray & Gross 2007). It has been shown, in many studies that movies are effective in inducing a wide specter of emotions, like anxiety (Pillard et al. 1974) anger (Brown et al. 1977, as cited by Hagemann et al. 1999) depressive mood (van Rooijen & Vlaander 1984), and, also sadness (Engel et al. 1984). There are also studies which successfully induced several moods in their respondents, like the study by Gross and Levenson (Gross & Levenson 1995) that successfully induced the feeling of "fun", sadness and neutral emotional state. In one other study (Philippot 1993) the author presented segments of commercial films to respondents and induced several emotions in them, like anger, disgust, sadness, happiness and fear. By all the results presented here it is clear that films are quite good at changing the mood of the viewers.

There are interesting studies which show that movies don't just change our psychological state, but also lead to certain physiological changes. It has been proved that movies successfully induce all aspects of emotions, including behavior components, but also automatic and central physiological reactions (Gross & Levenson 1995). Besides showing that movies can induce certain moods by using self-assessment questionnaires, authors also measured physiological responses to movies (like pulse or skin conductance), and they showed that movies can really lead to changes in our physiological responses (Mewborn & Rogers 1979).

There are also authors who examine the mechanism by which movies can induce emotions. For example, one group of authors discovered that movies can induce our emotions through empathy (Davis, Hull, Young & Gregory 1987). More precisely, they discovered that cognitive empathy plays an important role in pleasant emotional reactions to movie stimuli, while emotional empathy has an important role in unpleasant emotional

² <https://en.wikipedia.org/wiki/Binge-watching>

reactions to movie stimuli. Another study, shows that identification with movie characters is the mechanism through which movies can induce emotions to the members of the audience (Tannenbaum & Gaer 1964).

Besides film, another variable in our research was optimism-pessimism. Namely, previous studies show that the optimist and the pessimist differ from one another in terms of a number of psychological factors and variables. To begin with, studies show that the optimist and the pessimist differ when it comes to coping with stressful situations (Scheier, Weintraub & Carver 1986), and unpleasant emotions which are, of course, a core part of all stressful situations. Such results are a reason to examine differences between optimists and pessimists when it comes to reaction to unpleasant film stimuli, but not the only reason. There are many other studies suggesting major differences between these two groups of people. Previous studies showed that optimism (measured with LOT scale) among college students is associated with: lower levels of chronic anger and lesser suppression of anger (Ausbrooks, Thomas & Williams 1995), fewer perceived hassles and more positive psychological adjustments (Blankstein, Flett & Koledin 1991), less stress, fewer depressive symptoms and higher satisfaction with life (Chang, 1998a; Chang 1998b), fewer daily hassles (Nelson, Karr & Coleman 1995), lower stress levels (O'Brien, van Egeren & Mumby 1995) and lower trait anxiety (Schuller 1995; Sumi, Hofie & Hayakava 1997). Results have also evinced that optimism (measured with LOT scale) among adults is associated with: fewer mood related symptoms (Fontaine & Seal 1997), more internal locus of control (Guarnera & Williams 1987), less stress and greater positive well-being (Khoo & Bishop, 1997), lower anxiety and higher job satisfaction (Long, Kahn & Schutz 1992), less depression (Marshall & Lang 1990) and greater general well-being (Sweetman, Munz & Wheeler 1993). All these results can be summed up in one conclusion: the optimists have more positive emotions than pessimists do. Moreover, although there weren't any studies which examined how pessimists and optimists react to unpleasant film stimuli, from the results of a few studies we can draw some conclusions. Namely, previous studies showed that pessimists show best levels of functioning and problem solving, when induced negative emotions which lead to more positive prefactual thoughts ("What could be"), while optimists function best and solve problems most effectively when induced positive emotions (Sanna 1998). With all these results in view, it is clear that there are major differences between optimists and pessimists.

On account of everything we have mentioned, and because papers examining specific emotional reactions of optimists and pessimists to unpleasant movie stimuli could not be found, the aim of this research was to examine if there are differences in the way optimists and pessimists react to unpleasant movie stimuli.

2. METHOD

2.1. The sample

Final sample was convenient and it consisted of 42 (F=90%) students of psychology, from the Faculty of Philosophy in Niš. Age range in the sample was from 18 to 20 (M=19, SD=.541). Before examining the differences between optimists and pessimists in the final sample, from the first sample (N=80), only extreme optimists and extreme

pessimists were chosen for the final sample. The sample was consisted of equal number of optimists and pessimists.

2.2. Instruments

Instruments used in this research were:

- *The Life Orientation Test* (Life orientation test–Revised: LOT-R, Scheier, Carver, & Bridges, 1994) was used in order to operationalize optimism-pessimism. This scale consisted of 10 items, out of which 3 operationalize pessimism, 3 optimism and the rest 4 items are filters used to attract attentions from the items operationalizing optimism-pessimism.
- *The Brief Mood Introspection Scale* (BMIS, Mayer & Gaschke 2013) in order to operationalize mood of respondents. This scale consisted of 17 items, out of which 16 refer to different moods, while the final 17th item refers to the general mood of respondents. Both positive and negative affect scores can be calculated on account of these 16 items.

2.3. Stimuli

The stimulus was a scene from the movie *Sophie's Choice*, which aimed at inducing a negative affect. This scene was chosen because the previous study at the Faculty of Philosophy proved that this scene can successfully induce negative affect to respondents (Janjić & Goljović 2018).

2.4. Procedure

Respondents first filled in the questionnaire regarding optimism-pessimism. After that, only extreme optimists and extreme pessimists were taken into account for the final sample. First the respondents filled in the questionnaire regarding their current mood. After that they watched the selected scene from the film, and filled in the questionnaire operationalizing current mood again.

2. RESULTS AND DISCUSSION

Table 1 Positive affect and negative affect levels before and after watching movie among optimists

T test	Mean Before a movie	Mean Before a movie	Mean difference	p
<i>Positive affect</i>	2.70	2.39	.32	.000
<i>Negative affect</i>	2.47	2.59	-.12	.137

The results showed that statistically significant differences ($p < .001$) exist between levels of positive affect among optimists before and after watching a movie. Positive affect is statistically significant lower after watching a movie. The results also showed that there are no statistically significant differences between levels of negative affect among optimists before and after watching a movie.

More precisely, it can be seen that film corrupts mood in optimists, which is in accordance with previous studies proving that movies can induce negative moods in respondents (Pillard et al. 1974; Brown et al. 1977, as cited by Hagemann et al. 1999; Engel et al. 1984; van Rooijen and Vlaander 1984).

Table 2 Positive affect and negative affect levels before and after watching movie among pessimists

T test	Mean Before a movie	Mean Before a movie	Mean difference	P
Positive affect	2.38	2.35	.03	.367
Negative affect	2.51	2.48	.03	.576

The results in Table 2 show that there are no statistically significant differences between levels of negative affect among pessimists before and after watching a movie. The data from the previous table show that neither positive nor negative affect are changed statistically significantly on subsample of pessimists after watching a movie. This could be explained by the fact that pessimists are already in a bad mood, and they may need much more intense stimuli in order to corrupt that mood even further.

Table 3 Differences between optimists and pessimists in positive affect and negative affect levels before and after watching movie

T test	Mean Optimists	Mean Pessimists	Mean difference	p
Positive affect before e movie	2.70	2.38	.32	.000
Negative affect before e movie	2.39	2.35	.04	.653
Positive affect after e movie	2.47	2.51	.04	.714
Negative affect after e movie	2.59	2.48	.11	.347

The results in Table 3 show that there are statistically significant differences between optimists and pessimists in the level of positive affect before watching a movie. Positive affect is statistically significantly higher ($p < .001$) among optimists before watching a movie.

When results from all the previous tables are taken into account, we can draw some conclusions. It can be seen that optimists and pessimists differ when it comes to positive affect before watching scene from the movie, which is in accordance with previous studies proving that pessimists have lesser amounts of positive emotions than optimists do (e.g.: Chang 1998a; Chang 1998b; Sweetman, Munz & Wheeler 1993). So those differences were expected. It can also be seen that optimists and pessimists do not differ in positive affect after watching a movie. This means that the mood of the optimists was corrupted and dropped to the level of the normal mood of pessimists. These results show us that unpleasant movie stimuli can affect optimists more than pessimists. Pessimists could, actually, be more resistant to unpleasant stimuli because of their natural negative moods. When we take into account the results of previous papers demonstrating that pessimists show better functioning when induced a negative mood (Sanna 1998), from the results of this study we can draw the conclusion that pessimists are indeed more resistant to negative and unpleasant stimuli, and that those stimuli affect more intensely optimists, who, on the other hand, show better functioning when induced a positive rather than a negative mood (Sanna 1998).

3. CONCLUSION

Taking into account these results we can conclude that after watching movie stimuli the optimists' mood is corrupted while the mood of the pessimists isn't. Novelty of this research, as opposed to previous studies which showed that movies can induce emotions, is that the results prove that changing the mood based on the film stimuli does not occur in the same way for optimists and for pessimists. At least when we speak about unpleasant movie stimuli. So, in the further studies which examine emotion induction through movies, we suggest inclusion of optimism-pessimism as a control variable.

The theoretical contribution of this paper refers to deeper understanding of the way optimists and pessimists react to movie stimuli.

Practical contributions can be found in the usefulness of film for everyday purposes. For example, as it was shown that movies can induce emotions they can be used in order to lessen the prejudice against some groups of individuals, of course, taking into account that people prone to positive emotions (optimists) could react more intensely to all unpleasant stimuli.

The disadvantage of this research is, first of all, a small sample, so we suggest a larger sample for the further studies. The disadvantage may also be the uneven distribution of the sex of the respondents, so for the further studies we propose the inclusion of an equal number of women and men in the sample. Also, for further studies we suggest the involvement of actors and testing how they react to film stimuli.

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OPTIMIZAM-PESIMIZAM I EMOCIONALNE REAKCIJE NA NEPRIJATNE FILMSKE SCENE

Cilj ovog istraživanja je bio da se ispita da li se optimisti i pesimisti razlikuju u pogledu reakcije na neprijatne filmske stimulus. Uzorak je bio prigodan i činilo ga je 42 ($\bar{Z}=90\%$) studenta psihologije, sa Filozofskog fakulteta u Nišu. Raspon starosti u uzorku išao je od 18 do 20 godina ($AS=19$, $SD=.541$). Instrumenti korišćeni u ovom istraživanju bili su: Skala životne orijentacije (Life orientation test-Revised, LOT-R: Scheier, Carver, & Bridges, 1994) kao i Kratka skala introspekcije raspoloženja (Brief Mood Introspection Scale, BMIS: Mayer, & Gaschke, 2013) radi operacionalizacije raspoloženja ispitanika. Stimulus je činila scena iz filma Sofijin izbor, radi indukcije negativnog afekta. Rezultati pokazuju da se raspoloženje optimista kviri posle gledanja isečka iz filma, dok ovo nije slučaj kod pesimista. Usled ovoga za dalja istraživanja indukcije emocija putem filmova predlažemo dodavanje optimizma-pesimizma kao kontrolne varijable. Takođe, za dalja istraživanja predlažemo uključivanje glumaca i ispitivanje njihovih reakcija na filmske stimuluse.

Ključne reči: *filmovi, neprijatne filmske scene, optimizam-pesimizam, pozitivan afekat, negativan afekat.*