



Using emotional persuasion for changing attitudes towards entrepreneurship: An interpersonal perspective



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ABSTRACT

Can a person's emotional expressions, influence attitudes towards entrepreneurship of individuals who observe those expressions* One hundred and seventy nine participants were assigned to watch a short film conveying positive affect about business startup, a short film conveying both positive and negative affect and a short film with no affect. Participants completed attitude measures before watching, and after watching the films. Controlling for the effects of individual differences and film characteristics, results showed that individuals in the positive affect group had more favorable attitudes towards entrepreneurship, after watching the short film, unlike their mixed affect or control group counterparts.

1. Introduction

In the entrepreneurship literature, the importance of entrepreneurial intentions as antecedents to planned behavior (such as starting a new venture) has been emphasized (Bird, 1988; Linan and Chen, 2009). Consistent with this, various entrepreneurial intention models have been proposed. As an alternative to the personality theories, the attitude approach (Robinson et al., 1991) has become widely used, with Ajzen's theory of planned behavior (TPB) (Ajzen, 1991) being one of the most often used theoretical frameworks for the prediction of the intention to found an enterprise (Krueger et al., 2000; Schlaegel and Koenig, 2014). Briefly, the TPB postulates that an individual is motivated to perform a particular behavior (intention-INT) to the extent that she expects to have control over performing that behavior (perceived behavioral control-PBC), has a positive attitude toward that behavior (ATT) and a perceived social pressure to perform the behavior (subjective norm-SN) (Krueger et al., 2000; Linan and Chen, 2009; Schlaegel and Koenig, 2014).

When the TPB is applied to entrepreneurship, there is wide recognition that attitudes towards entrepreneurship represent one of the main antecedents of entrepreneurial intent explaining a significant amount of the variance in entrepreneurial intentions (Autio et al., 2001; Schlaegel and Koenig, 2014). As such, increasing attitudes towards entrepreneurship (i.e., increasing the attractiveness of starting one's own business) has a direct impact on entrepreneurial intentions. Moreover, attitudes are considered relatively less stable than personality traits, and can change both across time and across situations through interactive processes with the environment (Bohner and Dickel, 2011). Although attitudes are open to change, existing research concerning the change of attitudes towards entrepreneurship (i.e., through entrepreneurship education) provides inconclusive results (Bae et al., 2014).

The importance of emotional strategies for persuasion has been widely acknowledged and emotions stemming from persuasive messages can influence decision making and evaluative judgments such as attitudes (Crano and Prislin, 2006; Petty and Briñol, 2015;

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Van Kleef, 2016). In this study, we adopt a social function approach to emotions (Van Kleef, 2009, 2016) and seek to understand the interpersonal influence of emotions on the change of attitudes towards entrepreneurship. Specifically, we investigated how a source's emotional expressions influence the attitudes towards entrepreneurship of students who observe those expressions. According to Emotion as Social Information (EASI) model (Van Kleef, 2009) emotional expressions have important social functions in that they influence the people who observe them, by providing information.

2. Background literature

Attitudes towards entrepreneurship are beliefs and perceptions with respect to personal desirability of starting a business, which are in turn connected to expectations of how outcomes resulting from business startup, will affect the individual (Ajzen, 1991). Attitudes are different from other evaluative conditions, such as affect (i.e., moods and emotions) with the latter being ephemeral and cannot be stored, while attitudes are not constrained by time and may be either temporary or enduring (Clare and Schnall, 2005).

Although affective information is a key component of attitudes (including cognition and behavioral information-Eagly and Chaiken, 1993) yet there has been disproportionate preoccupation with the cognitive and behavioral components. Moreover, affect plays an important role in how people organize and express their attitudes toward various social objects (Forgas, 2008). Persuasive messages induce more attitude change when their arguments match the affective and cognitive content of the recipient's attitude toward the issue (Haddock and Maio, 2004).

Two distinct strategies of affective persuasion can be identified: (a) persuasion through arousal of emotions, which emphasizes the intrapersonal effects of affective states on persuasion and (b) persuasion through appeal to anticipated emotions (Miceli and Castelfranchi, 2014), where, the persuader's message is meant to modify the recipient's beliefs by anticipating the emotion recipient will feel as a result of his or her own choices, as a means for activating the recipient's goal of (not) feeling that emotion. In line with the EASI model, anticipated emotions provide information to observers, which may in turn, influence their attitudes. An anticipation of emotion may either favor the “pre-feeling” of what the individual will (presumably) feel at that future time (Gilbert and Wilson, 2007) or elicit some other emotion about the anticipated emotion (Miceli and Castelfranchi, 2014). Anticipated emotions can also be used as arguments. As such, the persuasive effects of anticipated emotions will depend on the predominant valence (positive or negative) of the recipient's issue-relevant thoughts.

The main objective of the study is to examine whether the extent that the recipient is led to have primarily positive cognitive responses (by watching a short-film with positive anticipated emotions), attitudes towards entrepreneurship change in a positive way. Moreover, considering that messages about entrepreneurs are not always conducive to entrepreneurship, presenting a negative image of entrepreneurial people who are shown as criminal and greedy (e.g., Radu and Redien-Collot, 2008) a second objective was to examine the effects on attitudes towards entrepreneurship of a short-film with both positive and negative anticipated emotions.

3. Method

3.1. Data collection and participants

In April 2015 email messages were sent to students from two public universities in Greece. The email was accompanied by a link to an online questionnaire, which contained: (a) the “t1 questionnaire” with questions about demographic data, attitudes towards entrepreneurship (Att1), state positive affect (PA1) and negative affect (NA1), (b) a link to a short film and (c) the “t2 questionnaire” with questions about Att2, PA2, NA2, and other exploratory theoretical constructs. After completing the first set of questions, students were instructed to watch the short-film. Then, students were asked to answer the second set of questions. A summary of the study findings was offered to participants as an incentive to participate. The study was approved by the university's institutional review board.

We received matched questionnaires from 179 students (60% women). The overall response rate was 16%. The mean sample age was 23.72 years ($SD = 4.04$). Sixty two participants were postgraduate students. Thirty seven percent of the participants reported that one of their parents owned a full time business most of the time while they were growing up, 83% reported that they know an entrepreneur in their close environment.

3.2. Stimuli

Three versions of a short film were created in cooperation with an independent film-maker. The first version contained primarily positive anticipated emotions (positive group – film duration: 3 min 24 s; <https://vimeo.com/131299657> – password: article) ($N = 63$), the second both positive and negative anticipated emotions (mixed group, film duration: 4 min 38 s; <https://vimeo.com/131333311>) ($N = 61$). A final film, served as a control condition, with no anticipated emotions (flat group – film duration: 3 min 10 s; <https://vimeo.com/131226134>) ($N = 55$). The short films are also available from the YouTube channel of the EMO-ENTRE project (<https://www.youtube.com/channel/UC8lYPsgvEGDd172oO2cEikQ>). All participants were randomly assigned to each film version.

Each version featured the same context: a girl sitting in a coffee shop who is reading the employment ads of a newspaper. The entrepreneur-owner enters and the girl recognizes him because she has seen his face in a business magazine. It was an interview. She starts reading the interview (see Table 1 for the basic characteristics of the three films). We hear the voice of an entrepreneur describing how the entrepreneurial process felt like and at the same time we watch the girl imagining herself in the future, being in the position of the entrepreneur and expressing different vocal emotional displays for each film version (anticipating positive affect,

Table 1
Characteristics of the films (stimuli) used.

Stimuli	Positive group	Mixed group	Flat group
Duration:	3 min 24 s	4 min 38 s	3 min 10 s
Voiceover	<i>Entrepreneur's voice:</i> "I remember that my thoughts and my focus was always there. I had to find a place that would express the whole idea of my business. When we finally found it, I felt great joy. I believed that I had already succeeded. Profit wasn't my goal. I wanted excellence-to be good at what I do. My goal was to make things which will make me proud". <i>Girl:</i> "This is it! ! A good idea and determination...if you believe in it, love it and do it your own way, then you will feel proud and fulfilled."	<i>Entrepreneur's voice:</i> "I remember that my thoughts and my focus was always there. I had to find a place that would express the whole idea of my business. When we finally found it, I felt great joy. I believed that I had already succeeded. My goal was to make things which will make me proud. Profit wasn't my goal. I wanted excellence-to be good at what I do. I knew what I wanted but nothing is easy. I often felt bad-negative and angry, when I started my business. What frightens me is the possibility of failure, which can be expressed either as a business failure or a personal failure. There are a lot of things that you can't control, and you can never be sure about the future. I was afraid many times". <i>Girl:</i> "Nothing is easy. You are confronted with your fears, your anxiety and you just have to face them."	No voice
Girl's projection in the place of entrepreneur	Yes	Yes	No
Observation of the failing restaurant.	No	Yes	Yes
Reaction to the space for rent	Tears off the sign	Tears off the sign	No reaction

or positive and negative affect or no reference to anticipated affect). Facial emotional expressions were the same for all versions.

3.3. Manipulation checks

We used state positive and negative affect before (PA1 and NA1) and after (PA2 and NA2) the short file to assess whether the short film manipulation was successful.

3.4. Measurement of constructs

3.4.1. Attitudes towards entrepreneurship (Att)

We used the five item scale from [Linan and Chen \(2009\)](#) on a 7-point Likert-type scales (1 = strongly disagree, 7 = strongly agree). Cronbach's reliability for this scale was 0.897 at t1 (Att1) and 0.926 at t2 (Att2). Confirmatory factor analysis (CFA) suggested that the CFA model had an acceptable fit to the data for both t1 and t2.

3.4.2. State positive affect (PA) and negative affect (NA)

We used 10 items of the short version of Positive Affect and Negative Affect Schedule (Thompson, 2007). Respondents were asked to indicate their current experience of positive and negative affect on a 5-point scale (1-very slightly or not at all to 5-extremely). The PA states were: alert, inspired, determined, attentive, and active. Cronbach's reliability coefficient PA1 was 0.836 and for PA2 was 0.869. The NA states are: upset, hostile, ashamed, nervous, and afraid. Cronbach's reliability coefficient for NA1 was 0.790 and 0.746 for NA2. CFA results suggested an acceptable fit to the data for both t1 and t2.

3.4.3. Control variables

We considered the following control variables. (a) Attitudes towards the film (Att-film), (b) source credibility (source) ([Sussman and Siegel 2003](#)), (c) respondents' Need for affect ([Appel et al., 2012](#)) and (d) Need for cognition ([Cacioppo et al., 1984](#)).

4. Results

One way ANOVA analyses suggested that the conditions were equal in terms of students' demographic variables (gender, age, entrepreneurial parents, know an entrepreneur) and pretest measures (Att1, PA1, NA1) before watching the films. Within the flat emotion group, no significant change occurred in state PA and state NA. In the positive emotions group, there was a significant decrease in NA [$M_{NA1} = 1.81$, $SD = 0.78$; $M_{NA2} = 1.59$, $SD = 0.63$; $t(62) = 3.694$, $p = 0.000$; Cohen's $d = 0.51$] but no change in PA. Finally in the mixed emotions group, we have found a significant decrease in PA [$M_{PA1} = 3.04$, $SD = 0.88$; $M_{PA2} = 2.88$, $SD = 0.89$; $t(60) = 2.389$, $p = 0.02$; Cohen's $d = 0.32$] and an increase in NA ($M_{NA1} = 1.65$, $SD = 0.67$; $M_{NA2} = 1.80$, $SD = 0.70$; $t(60) = -1.962$, $p = 0.05$; Cohen's $d = 0.25$).

In order to compare the post-test scores of Att2 between groups, we used analysis of covariance (ANCOVA), with the post-test scores (Att2) as dependent variable and pre-test scores (Att1) as covariate. This procedure removes the effects of pre-test scores and it

is recommended for pre-test post analyses compared to repeated measures analysis of variance (see Dugard and Todman, 1995). Results of ANCOVA – (Levene's test indicated equal variances $F(2, 176) = 0.076, p = 0.927$) – suggested that there was a significant effect of the sort film on Att2, after controlling for the effects of Att1, Att-film, source credibility, need for affect and need for cognition [$F(2, 170) = 5.252, p = 0.006, \text{partial } \eta^2 = 0.058$]. Only the effects of Att1 [$F(1, 170) = 465.367, p = 0.000$], PA2 [$F(1, 170) = 6.237, p = 0.013$], and source credibility [$F(1, 170) = 3.983, p = 0.048$] on Att2 were found to be significant. Pairwise comparisons suggested that attitudes were more favorable only in the group with the positive anticipated emotions compared to the flat and mixed emotion groups. The flat and mixed emotion groups did not significantly differ in attitude change. Students' change in attitudes towards entrepreneurship in the positive emotions group before ($M = 4.55, SD = 1.19$) and after ($M = 4.78, SD = 1.12$) watching the film, was accompanied by a medium effect size (Cohen's $d = 0.36$).

We have found no differences in attitude change, between male and female students. State positive affect after watching the film decreased for students with no entrepreneurial parents [$(M_{PA_{before}} = 3.20, SD = 0.88), (M_{PA_{after}} = 3.078, SD = 0.92), t(112) = 2.352, p = 0.02$] and for students who knew no entrepreneurs in their close environment [$(M_{PA_{before}} = 3.18, SD = 0.90), (M_{PA_{after}} = 2.947, SD = 0.83), t(29) = 2.432, p = 0.02$].

5. Discussion

The objective of the present study was to analyze whether inducing emotions from new business creation in short films, would make students' attitudes towards entrepreneurship more favorable. Our results point to a significant and positive direct effect of a films' positive affect on attitudes towards entrepreneurship, after controlling for individual differences such as (Need for affect and Need for cognition), and film characteristics (source credibility and attitudes towards the film). The current study adds to a growing literature linking affect and persuasion and the ways cognitive processes impact attitudes (Miceli and Castelfranchi, 2014; Petty and Briñol, 2015). Moreover, these results represent an effort to actually consider the persuasion process from a persuader's perspective. Towards this end, the knowledge of anticipated emotion may provide a valuable means to affect individuals' (students in particular) decision making. This theoretical development is of particular relevance to entrepreneurship education, because there are incentives for entrepreneurship educators to engage in the attempts at increasing students' positive affect and create teaching and learning environments that are effective (Zampetakis et al., 2015).

We need to stress however, that there are several explanations that can be advanced for the effects found in this study. The first is that these effects are mediated by changes in students' attitudes towards the film. Favorable attitudes toward the film, translate into favorable attitudes toward entrepreneurship. Our results point to a partial mediation effect suggesting that additional processes may be at work. A second explanation is that these effects are mediated by differences in the beliefs and thoughts that students have about entrepreneurship. Compared to the flat and mixed emotions films, the positive emotions film elicits more positive affect which in turn triggers more positive beliefs and thoughts about entrepreneurship, which when integrated into summary evaluations, would result in more favorable attitudes. Our results however, suggest that in the positive emotions group after the film, there was a significant decrease in state negative affect and no change in positive affect. A third explanation posits students may interpret their feelings experienced during the film exposure as being indicative of how much they like or dislike entrepreneurship (affect-as-information model-Clore and Schnall, 2005). Although our study provides evidence for a direct effect, given that these processes are likely to operate jointly, future research could use study designs that separate the impact of informational processes from the potential influence of emotional contagion (using for example, negatively framed scenarios).

The study should be read with the following limitations in mind. Although the characteristics of the treatment and control groups were not different, we did not have actual control on participants, because of the online questionnaires used. Moreover, future research could benefit from the use of more sensitive to change tools, such as visual analogue scales. Measuring the change in attitude only a few minutes after seeing the film is clearly a limitation for practical implication of the findings. Is the change in the attitude stable or effective in longer period of time? We believe that this question relates to attitude strength, that is the representation of an attitude's long-term stability and consequential nature (Krosnick et al., 1993). Considering that in general, weaker attitudes show substantial evidence of change, if our results are evidence that attitudes towards entrepreneurship are strong attitudes then this change could be effective over relatively long periods of time. Nevertheless, these are important questions for future research.

6. Conclusion

To conclude, contemporary entrepreneurship research focuses primarily on the results of individuals' intrapersonal effects of affective states. By contrast, the experience of anticipated future events (i.e., anticipated emotions) and how it relates to entrepreneurship has received limited attention. At a broader theoretical level, the present study suggests that emotions should not be treated as irrelevant cues but as signals that may help individuals inform their attitudes.

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