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Brief Report:

Into the wild? How a film can change adolescents' values

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Abstract

In adolescence, behavior and attitudes are constantly rethought and value priorities are established. Still, there is hardly any research addressing how values are shaped throughout this sensitive period. We employed an experimental design, testing whether adolescents' values can be influenced by exposure to a film. In our study, 154 German adolescents (80 females, ages 13-15) were randomly assigned to an experimental group that watched excerpts from the film "Into the wild" or to a control group. Value change was assessed in a pre-post-test design with a one-week interval. As hypothesized, values changed in the direction of those displayed by the film's protagonist: Universalism values increased significantly and conformity values decreased significantly as compared to the control group. Our findings suggest that single exposure to a film may initiate value change, indicating that not only major live events, but also everyday experiences significantly affect adolescents' values.

Keywords: values, value change, adolescence, experiment, intervention, film

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Adolescents spend a high amount of their time watching TV (e.g., an average of 113 minutes per day in Germany[1]), where films and serials are particularly popular among teenagers. Films have shown to influence important areas of young people's lives such as drug use (a film containing smoking scenes increased adolescents' intent to smoke, Pechmann & Shih, 1999) and sexuality (teenagers' pregnancies were predicted from previous exposure to sexual content, Chandra et al., 2008). Also beliefs about a person's own identity seem to be susceptible to films. For example, exposure to the thin-ideal in the media was found to deteriorate young persons' body image (Grabe, Ward & Hyde, 2008), and the value of fame was found to be uptaken from TV-shows and YouTube videos (Uhls & Greenfield, 2012).That means, films have a shaping influence in this period of life, which Erikson (1968) described as key stage of identity formation. Adolescence as a core developmental period is not only characterized by constant negotiation of behavior, rules, and attitudes towards specific objects or topics, but also involves shaping of what is considered important in life – people's values. Has a film the power to change adolescents' values? To the best of our knowledge, this has never been researched so far. The present study is the first to employ a film in an experimental design in order to try and initiate value change in adolescents.

Our study is embedded in the most prominent theory of personal values, as developed by Schwartz (1992). Schwartz defined values as trans-situational goals of varied importance that function as guiding principles for the individual. He identified ten basic value types (Table 1) that have been cross-culturally replicated in hundreds of samples (Schwartz & Sagiv, 1995). Values were traditionally regarded as being relatively stable (Rokeach, 1973). Still, recent research has shown that values do

change over longer periods of time (Tulviste & Tamm, 2014; Bardi, Lee, Hofmann-Towfigh & Soutar, 2009) or following major life events. Schwartz's (1992) model (see Figure 1) proved to straightforwardly predict dynamics of change: Values tend to change according to the compatibility of their underlying motivational goals. As one value becomes more important, compatible (i.e., adjacent) values become more important as well, opposing values become less important, and orthogonal values remain unaffected (Bardi et al., 2009). For example, the terrorist attacks of 9/11 (Verkasalo, Goodwin & Bezmenova, 2006) and the second Israeli-Lebanese war (Daniel, Fortuna, Thrun, Cioban & Knafo, 2012) were found to affect adolescents' value priorities, where after these life-threatening events anxiety-based values such as security became more important and anxiety-free values such as stimulation became less important. Whether and how value change in adolescents can be induced experimentally, remains open.

A few studies with young adults speak to the potential of the experimental approach. In Arieli, Grant and Sagiv's (2014) studies, benevolence values and willingness to volunteer to help others were increased by a 30 minute intervention. Similarly, Maio, Pakizeh, Cheung and Rees' (2009) studies showed that various priming procedures changed values and value-expressive behavior (e.g., cleanliness, competitiveness, and curiosity).

Bardi and Goodwin (2011) identified two routes to value change: An automatic route via simple activation and an effortful route via re-evaluation of the value. They proposed identification with key figures as a main facilitator of value change that works on both routes: Exposure to key figures' values makes these salient and causes a person to think about these values, challenge them, and possibly change their importance for himself or herself. We hypothesize that watching a film is one

example of this process, so that a film with an appealing protagonist who clearly states his or her values would change the values of the adolescents watching it in the direction of the protagonist's values.

"So many people live within unhappy circumstances (...) because they are conditioned to a life of security, conformity, and conservatism" – these are the values as expressed by the protagonist of the film "Into the wild" (Penn, 2007). The film's popularity among adolescents and the salience of the values transported (namely stimulation, self-direction and universalism) predestine it for a value-changing experimental intervention. We selected scenes where the protagonist is engaging in self-selected exciting activities such as hitchhiking and kayaking. Most of the scenes show beautiful landscapes such as the seaside or the mountains portraying the protagonist's independent life outdoors[2].

We hypothesized the following: In an experimental group where adolescents watch "Into the Wild" as compared to a control group with no intervention, (1) the importance of values that the protagonist emphasizes, namely stimulation and self-direction, will increase, (2) the importance of values that are opposed to the protagonist's values, namely conformity and security, will decrease, and (3) the importance of universalism values as the key content of the moving pictures will increase.

Method

Sample. The sample was composed of 154 adolescents (80 females) aged 13 to 15 (*M*=13.56, *SD*=0.56) who attended grade eight of a German high school, with 82 adolescents (44 females; mean age of 13.57 years, *SD*=0.55) in the experimental group and 72 adolescents (36 females; mean age of 13.56 years, *SD*=0.58) in the control group.

Measure. Values were assessed with the Portrait Values Questionnaire 40 (PVQ-40, Schwartz et al., 2001).

Procedure*.* We employed a pre-test post-test design. All participants completed the PVQ-40. One week later, participants were randomly assigned to either experimental or control group. The cover story stated that, for this last day before school holidays, we had prepared interesting activities. However, there would not be enough space for all participants in one room, so they would have to draw a raffle ticket indicating in which of two rooms to go. The experimental group watched the film (see Appendix) and filled in the again PVQ-40 directly afterwards. The control group filled in the PVQ-40 first and then engaged in a quiz not related to the study. To prevent response bias, the PVQ items were presented in a different ordering in pre- and post-test. No participant in the experimental group had seen the film or parts of it before.

Data management*.* The data of all participants met the criteria required by Schwartz[3]: Each completed PVQ-questionnaire did not contain more than ten missing answers or more than 32 answers of the same category. Scores for each of the ten value types were computed as means of the items belonging to it. The data were corrected for individual differences in scale use by centering the individual's scores of the value types around the individual's mean score of all items[4]. Difference scores were then computed as post-test minus pre-test score (see Maio et al., 2009; Bardi et al., 2009; Myyry, Juujärvi & Pesso, 2013).

Results

As expected, values of stimulation, self-direction, and universalism became more important whereas values of conformity and security became less important in the experimental group after having watched the film (see Table 2). In order to

compare value change after exposure to the film to naturally occurring value change over time, we checked if the difference scores in the experimental group were higher (stimulation, self-direction, and universalism) respectively lower (conformity and security) than in the control group: Compared to the natural changes occurring in the control group, the difference score of the experimental group was significantly higher for universalism and significantly lower for conformity than in the control group. The difference scores of all other value types, including those we did not hypothesize about, did not differ significantly for the two groups. All pre- and post-test scores are included in the Appendix.

Discussion

Our simple 33-minute film intervention affected adolescents' value priorities. Value change in the experimental group reflected value priorities that were expressed by the film's protagonist. Adolescents' values changed alongside motivational compatibilities and incompatibilities in Schwartz's model, which parallels the findings on value change in experimental settings with adults (Maio et al., 2009; Arieli et al., 2014). More important, the importance of universalism values increased significantly more in the experimental group than in the control group. Likewise, values of conformity decreased significantly more in the experimental group than in the control group. The effect sizes of .40 for universalism and -.53 for conformity sizes are comparable in size to those yielded in other brief intervention studies (e.g., .53 and .37 for benevolence in the experiments of Arieli and colleagues (2014)).

Identification with the protagonist is the most likely facilitator of value change in our study. The single exposure to a film changed the audience's values in the direction of those transported by the film, at least short-term. As Bardi and Goodwin (2011) explained, repeated exposure to a set of values results in long-term value

change due to schema change. In our experiment, participants could not influence which film they watched. In real life, in contrast, adolescents may choose films according to their values, which then are reinforced by the content of the selected films. Value-shaping media and value priorities may thus mutually affect one another. In line with these ideas, recent research has portrayed media as learning environments (Uhls & Greenfield, 2012), wherein adolescents internalize values through observation, but also deepen their understanding through active participation (e.g., posting own videos in social networks and receiving feedback). Future research may study the long-term effects of these interactive processes.

Footnotes

[1] http://www.mpfs.de/fileadmin/JIM-pdf11/JIM2011.pdf

[2] We did not include the tragic end of the film in the scenes shown to the participants.

[3] http://essedunet.nsd.uib.no/cms/topics/1/4/2.html

[4] http://essedunet.nsd.uib.no/cms/topics/1/4/4.html

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Table 1

Schwartz's Value Types

Higher-Order Value Type	Value Type	Definition
Self-Transcendence	Universalism	Understanding, appreciation, tolerance, and protection for the welfare of *all* people and for nature
	Benevolence	Preservation and enhancement of the welfare of people with whom one is in frequent personal contact
Conservation	Tradition	Respect, commitment, and acceptance of the customs and ideas that traditional culture or religion provide
	Conformity	Restraint of actions, inclinations, and impulses likely to upset or harm others and violate social expectations or norms
	Security	Safety, harmony, and stability of society, of relationships, and of self
Self-Enhancement	Power	Social status and prestige, control or dominance over people and resources
	Achievement	Personal success through demonstrating competence according to social standards
Openness to Change	Hedonism	Pleasure and sensuous gratification for oneself
	Stimulation	Excitement, novelty, and challenge in life
	Self-Direction	Independent thought and action—choosing, creating, exploring

Table 2

Value Change in Experimental and Control Group

Value Type	Value Change		Differences in Value Change Between Experimental and Control Group	
	Experimental Group	Control Group	*t*-value	Cohen's *d*
Stimulation (+)[a]	**0.13 (0.61)**	**0.05 (0.65)**	**0.79**	**0.13**
Self-direction (+)	**0.09 (0.47)**	**0.04 (0.51)**	**0.54**	**0.10**
Universalism (+)	**0.07 (0.40)**	**-0.08 (0.35)**	**2.43***	**0.40**
Benevolence	-0.07 (0.48)	-0.13 (0.56)	0.61	0.12
Tradition	0.08 (0.45)	-0.04 (0.61)	1.43	0.23
Conformity (-)	**-0.11 (0.50)**	**0.17 (0.58)**	**-3.29****	**-0.53**
Security (-)	**-0.15 (0.52)**	**0.02 (0.84)**	**-1.55**	**-0.25**
Power	0.13 (0.60)	0.23 (0.68)	-0.89	-0.16
Achievement	-0.07 (0.55)	-0.08 (0.54)	0.16	0.02
Hedonism	-0.05 (0.51)	-0.11 (0.68)	0.69	0.10

Note. Value change was computed as the mean score at T2 minus the mean score at T1. A positive score thus indicates that a value type became more important, and a negative score indicates that a value type became less important. Standard deviations appear in parentheses. Significance is reported for one-tailed *t*-tests that were computed for stimulation, self-direction, universalism, conformity, and security values. *$p < .01$, which corresponds to the Bonferroni corrected α-level of .05 with five t-tests being computed. **$p < .002$, which corresponds to the Bonferroni corrected α-level of .01 with five t-tests being computed. Findings for value types that we expected to change in the experimental group are printed in bold letters. [a] (+) Value type was expected to become more important in the experimental group. (-) Value type was expected to become less important in the experimental group.

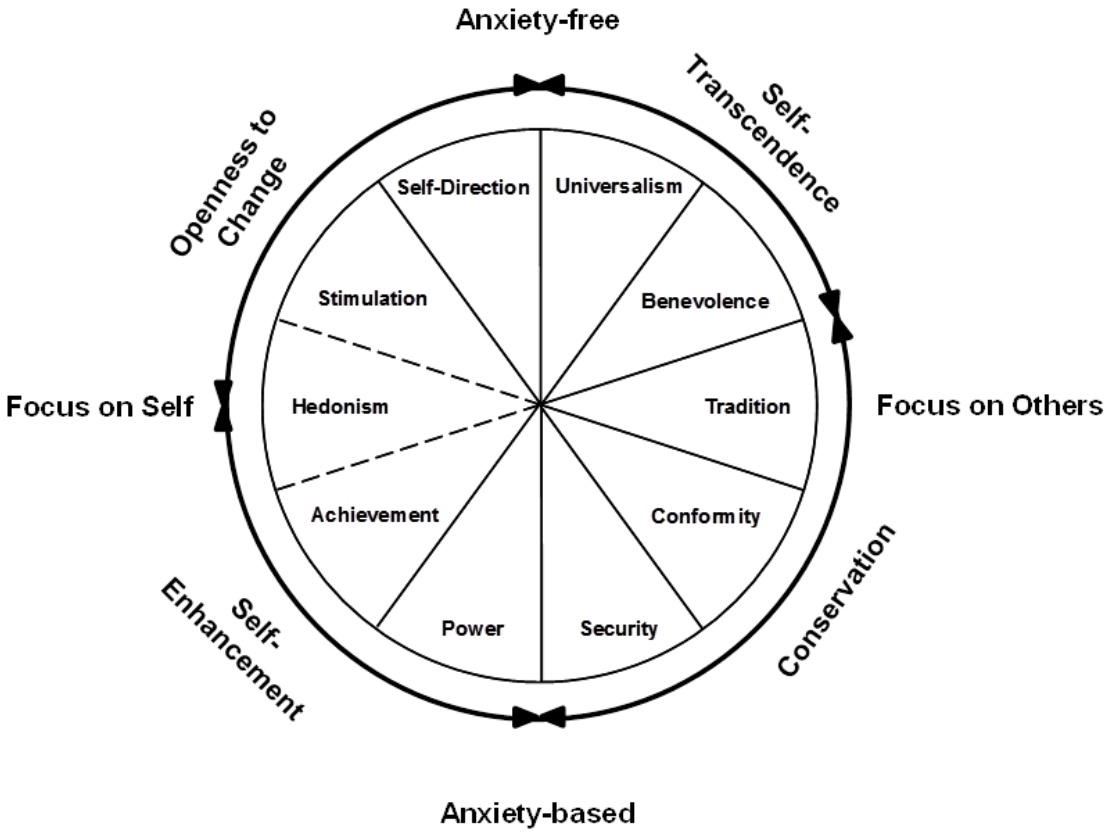

Figure 1. Schwartz's model of values.

Appendix

Content of the film: Excerpts from “Into the Wild”:

We composed a 33-minute sequence of adventure and nature scenes that convey a positive attitude to life and search for stimulation, adventures, and challenges. The film’s basic plot is still recognizable in this sequence: The protagonist (about 20 years old) leaves his childhood home to travel the world. He starts a life as hitchhiker and daytaler, and enjoys the beauty of nature.

Table A1

Pre- and Post-Test Scores for the Value Types by Group

Value Type	Pre-Test Score		Post-Test Score	
	Experimental Group	Control Group	Experimental Group	Control group
Stimulation	0.21 (0.94)	0.22 (1.03)	0.33 (0.92)	0.27 (0.93)
Self-direction	0.52 (0.49)	0.44 (0.54)	0.61 (0.44)	0.48 (0.53)
Universalism	0.16 (0.66)	0.18 (0.71)	0.22 (0.64)	0.09 (0.68)
Benevolence	0.58 (0.71)	0.68 (0.62)	0.51 (0.61)	0.55 (0.66)
Tradition	-0.58 (0.72)	-0.43 (0.77)	-0.50 (0.70)	-0.47 (0.72)
Conformity	-0.18 (0.62)	-0.24 (0.80)	-0.29 (0.72)	-0.06 (0.66)
Security	-0.27 (0.63)	-0.44 (0.61)	-0.42 (0.65)	-0.41 (0.90)
Power	-1.11 (1.04)	-1.14 (0.94)	-0.98 (1.00)	-0.92 (0.94)
Achievement	-0.03 (0.77)	0.00 (0.90)	-0.10 (0.83)	-0.08 (0.88)
Hedonism	0.64 (0.84)	0.68 (0.79)	0.59 (0.77)	0.57 (0.66)

Note. Standard deviations are presented in parentheses. Paired samples two-tailed t-tests showed that pre- and post-test scores differed significantly for conformity (p=.014) and power (p=.006) in the control group and for conformity (p=.041), security (p=.012), and power (p=.048) in the experimental group.