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Brief Report: Early Adolescents' Value Development at War Time

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Abstract

Values are considered relatively stable individual characteristics, and there is little research to date on the conditions that underlie value-priorities change. This small-scale short-term longitudinal study tested whether a major life event of war changes the priority that early adolescents assign to values. Thirty-nine Israeli adolescents completed the Schwartz Values Survey on four occasions—at the beginning, middle, and end of the 2006 Israeli-Lebanese war during which their hometown was bombed. As hypothesized, anxiety-based values of tradition, power, and security increased in importance, while conformity values decreased in importance. Anxiety-free values of benevolence, universalism, self-direction, stimulation, and hedonism decreased in importance. Achievement values decreased and then increased in importance. Despite methodological limitations, the findings demonstrate that value development, at least during early adolescence, can take place rather quickly under circumstances of major traumatic events such as war.

Key words: Values, value development, early adolescence, war

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What circumstances change value-priorities during adolescence? Value-priorities are relatively stable individual characteristics, shaped largely during adolescence (Erikson 1968). Therefore, early-adolescents' value-priorities may be more sensitive to environmental inputs than adults' values (Bardi & Schwartz, 1996). However, little research has specifically focused on value change during early-adolescence (Bardi & Goodwin, 2011).

We hypothesized that during this formative period adolescents will show value change due to traumatic life events. Data was collected during and after the 2006 Israeli-Lebanese war at four time points among adolescents residing in bombed areas.

Values are abstract concepts or beliefs conveying what people hold important (Schwartz, 1992). Ten value types were consistently identified across cultures. Each value is characterized by a central motivational goal (Table 1), holding relations of compatibility and conflict with other values (Figure 1). Schwartz (2010) distinguished between two subsets of values: *anxiety-based* and *anxiety-free values* (similar to Shah & Higgins, 2001). Anxiety-based values are guided by threat-evoked motivations, in an attempt to cope with uncertainty, whereas anxiety-free values promote personal growth.

Value change can be initiated by external environmental cues requiring adaptation to a situation (Bardi & Goodwin, 2011). It can also result from reinforcement contingencies in the environment. Individuals will further pursue reinforced values, while downgrading the importance of unattainable values (Schwartz, & Bardi, 1997). Values are stable across time (Adults' six-week test-retest reliability ranging between $r = .62$ and $r = .82$; Schwartz, 2005). However, major public events, especially traumatic ones, can act as environmental triggers to value change (Janoff-Bulman, 1989).

Effects of war. Little is known about the effects of war on values. The 9/11 events were associated with a greater sense of community, trust in government, and closeness to others

(Morgan, Wisneski, & Skitka, 2011), possibly reflecting shifts in values (e.g., security, benevolence, tradition). Adolescents' security values immediately following 9/11 were higher than pre-attack values in matched samples, (though later returned to pre-attacks levels; Verkasalo et al., 2006).

We hypothesized that value-importance will change at war times. Specifically, we hypothesized that: (1) War will strengthen the importance of anxiety-based values, as individuals confronted with their own mortality are more likely to reinforce their cultural viewpoints (tradition values; Pyszczynski, Greenberg, & Solomon, 1999); to compensate for reduced sense of security (security values; Schwartz & Bardi, 1997; Verkasalo et al., 2006); and for loss of personal control. War will also legitimize power assertion as a solution (power values). Tradition, security and power values were aggregated, to create a combined anxiety-based values score.

(2) Conformity values will increase or decrease in importance. War creates a threat to social norms, potentially raising the need to reinforce these norms by supporting conformity values. Alternatively, war can enhance feelings of distrust in societal institutions, reducing beliefs in conformity values. Public reaction in Israel toward the war and the ceasefire resolution was mixed (Nir & Knafo, 2009). Thus we did not set a specific hypothesis regarding the influence of the war on conformity values.

(3) Anxiety-free values (hedonism, stimulation, self-direction, universalism and benevolence) were hypothesized to decrease in importance, as during war times, individuals focus on survival and self-interest, rather than growth and other-interest. Moreover, this decrease will complement the increase in anxiety-based values, as conflicting values change in opposite directions (Bardi, Lee, Hofmann-Towfigh, & Soutar, 2009) (4) As achievement values can be anxiety-based and anxiety-free, no hypotheses were set regarding their trajectory.

Method

Participants were 39 (53.8% females) Israeli adolescences (mean age = 13.49, $SD = .64$) from small towns in Jezreel Valley, populated mostly by middle class families (Israeli Central Bureau of Statistics, 2006). During the Second Israeli-Lebanese War (Appendix 1) this region was subject to rocket attacks, forcing civilians to leave or take cover in bomb shelters.

Procedure. Adolescents left their homes after 12 war days to attend a pre-planned four-week summer camp in Detroit, Michigan. They received daily updates about the war, and kept contact with their families, but were not directly exposed to the media. The war was salient in their daily conversations. They returned to Israel as planned shortly after the ceasefire. Adolescents reported their values four times, during and after the war (Table 2). Although the study was not originally planned to address the effects of the unpredictable war, this short-term longitudinal design enabled investigation of war's effects on adolescents' values.

Measure. We used a 44-item version of the Schwartz (1992) Values Survey, including items that were found cross-culturally equivalent in meaning. Participants rated values according to their importance as guiding principles in their lives using a scale ranging from -1 (*opposed to my principles*) to 7 (*of supreme importance*). Values were centered around individuals' mean score to correct for bias in scale use (Schwartz, 1992)¹.

Due to program constraints, several adolescents could not respond at the third ($n=2$) and fourth ($n=8$) measurements. Data were not missing at random, Little's MCAR test $\chi^2(1052) = 20159.52, p < .01$. Missing values were imputed using multiple imputation (Mplus 6.11; Muthén & Muthén, 2010).

¹ The structure of the value system was examined using Weak Confirmatory Multi Dimensional Scaling (Borg & Groenen, 2005). Due to the small sample, the structure was examined at the level of the aggregated values, which were ordered as postulated in Schwartz's (1992) theory, indicating that adolescents understood the values well (Stress I = .28, .32, .28, .30 for T1- T4, respectively). The only value deviating from the structure was hedonism, located between universalism and benevolence values in T1, T2, and T4.

Results

Table 3 presents means and standard deviations. Values' test-retest (T1-T4) reliabilities were: anxiety-based $r = .49$, conformity $r = .56$, anxiety-free $r = .58$, achievement $r = .32$. Latent growth curve analysis examined models of change in value importance over time. For each value type, we estimated a model including an intercept and a linear slope, and then one adding a quadratic slope. Quadratic slopes are reported only when significant. For all values, significant variability was found in the intercept, but not the slope². All models fit the data well (Table 4, Figure 2).

Anxiety-based values increased in importance during the war, $b = .65, p < .01$. In contrast, the importance of conformity values dropped with time, $b = -.27, p < .02$. Anxiety-free values decreased in importance, $b = -.11, p < .02$. The model estimating the linear trajectory of achievement values did not fit the data well, and the linear slope was not significant. Adding a quadratic slope improved the fit, $b_s = -1.23, p < .01, b_q = 1.16, p < .01$. Participants initially decreased and subsequently increased in importance of achievement values. Mostly, no correlation was found between the intercept and the slope. As an exception, there was a marginally significant negative correlation between the intercept and the slope for anxiety-free values.

Discussion

Adolescents' values changed over the two months of war. As hypothesized, anxiety-based values increased in importance, representing craving for security and control over an unpredictable situation. Conformity values decreased in importance, suggesting that lack of trust in societal institutions, rather than threat to social norms, was the motivating force.

Anxiety-free values decreased in importance, representing decreased focus on growth and

² Models including sex as a predictor indicated that sex was not a significant predictor of the variance in the slope for any of the value types.

other's interests (Schwartz, 2010). Achievement values decreased, and then increased in importance.

Early-adolescents explore value-priorities to form their own commitments, while mid and late adolescents explore new values less (Klimstra, Hale, Raaijmakers, Branje, & Meeus, 2010). Thus, early adolescents' values may be especially susceptible to environmental change. Indeed, rank-order value stability was lower than previously reported for adults. This hypothesis should be further investigated by comparing change rates across ages.

Change in beliefs due to traumatic events may be relatively temporary, due to later, unrelated events (Vertzberger, 1997). Indeed, Finnish adolescents reported different values days versus weeks following 9/11 (Verkasalo et al., 2006). Long-term value change may require repeated exposure (Bardi & Goodwin, 2011) as in the Israel-Lebanon war. Indeed, values in this study did not return to initial levels within the study period. However, measurement after a longer period of time is still required, and may indicate how lasting value changes are.

The interaction between the intercept and the slope of change in anxiety-free values indicated that anxiety-free values decreased in importance more among adolescents valuing them more initially. Future studies should replicate this result, and examine which specific value priorities make adolescents more susceptible to value change.

This preliminary study has several strengths and limitations. The sample is unique, investigating repeatedly the values of early-adolescents at war times. Thus, it offers a glance into rarely studied processes. However, the sample is small, reducing statistical power. Moreover, there was no pre-war assessment, and thus the baseline levels cannot be controlled. These shortcomings result from the unique circumstances of an unexpected war. In addition, adolescents were only directly exposed to the war at the beginning and then were away at camp, although they were also constantly aware of their loved ones' and

communities' status. Trauma increases as exposure levels increase (Bonanno, Brewin, Kaniasty, & La Greca, 2010). That said, previous studies demonstrated effects of indirect exposure to war and terror on psychological measures (Eisenberg & Silver, 2011; Goodwin, Wilson & Gaines, 2005).

Our findings demonstrate the flexibility of the value system during early adolescence, when value hierarchy is reshaped. Values change, at least temporarily, due to major life events. As noted by Verkasalo et al. (2006), understanding responses to war and terror presents researchers with (unfortunate yet valuable) opportunities to study the most fundamental aspects of individual stability and change.

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Appendix 1.

The Second Israeli-Lebanese War: Major Events

On July 12, 2006, the guerilla forces of the Shi'ite movement *Hezbollah* launched a rocket attack across the Lebanese–Israeli border, targeting towns in northern Israel and military outposts nearby, simultaneously killing several Israeli soldiers and taking hostages. In retaliation, Israeli Defense forces (IDF) launched massive air strikes, and later ground attacks, on Hezbollah outposts and strongholds as well as Lebanese civilian infrastructure. Hezbollah forces sustained counter attacks, launching thousands of rockets on Israeli civilian targets in northern Israel. The fighting caused massive casualties on both sides as well as the displacement of hundreds of thousands of Lebanese and Israeli civilians. To solve the crisis, the United Nations Security Council drafted a ceasefire resolution to which both Israel and the Lebanon government agreed. The resolution took effect on August 14, 2006.

Table 1.

Definitions of the Ten Schwartz Values, and their Classification as Anxiety-based or Anxiety-Free

| Value | Definition | Anxiety-based (AD) or Anxiety-free (AF) |
|----------------|--|--|
| Power | Aspiration for social status through gaining control and dominance over other people and resources | AD: control threats |
| Security | The need for protection, safety, harmony, and stability of the social structure, of relationships, and of the self | AD: achieve predictability |
| Conformity | Limiting actions and urges that might violate social expectations likely to upset or harm others | AD: Avoid conflict |
| Tradition | Respect, commitment, and acceptance of the costumes and ideas provided by the traditional culture or religion | AD: Maintain social order |
| Hedonism | Pursuit of pleasure and sensual satisfaction | AF |
| Stimulation | Valuing variety, aspiration for change, challenge, and excitement | AF |
| Self-direction | Importance of independent thought and action | AF |
| Universalism | Understanding, appreciation, tolerance, and protection of the welfare of all people and of nature | AF |
| Benevolence | Caring for the welfare of the others with whom one is in frequent social contact | AF |
| Achievement | Acquiring personal success through demonstrating competence according to social standards | AD or AF |

Note. Achievement values can be considered both anxiety-based and anxiety-free values, since successfully meeting social standards both affirms one's sense of competence and may also control anxiety (Schwartz, 2010).

Table 2.

Timing of Measurement Points: Spring to Autumn 2006.

| Time Point | Date | State of the war |
|------------|----------------------------|---|
| Time 1 | July 24 th | 12 Days after the initial events of the war |
| Time 2 | August 5 th | Midst of the war |
| Time 3 | August 21 st | 7 days after the ceasefire |
| Time 4 | September 27 th | A month and a half after the ceasefire |

Table 3.

Means and Standard Deviations of the Values by Sex across Time.

| Values | T1 | | T2 | | T3 | | T4 | | <i>Cohen's d T1-T4</i> |
|---------------|-------------|-----------|-------------|-----------|-------------|-----------|-------------|-----------|--------------------------------|
| | <i>Mean</i> | <i>SD</i> | <i>Mean</i> | <i>SD</i> | <i>Mean</i> | <i>SD</i> | <i>Mean</i> | <i>SD</i> | |
| Boys | | | | | | | | | |
| Anxiety-Based | 3.41 | .43 | 3.48 | .37 | 3.6 | .41 | 4.05 | .75 | 1.49 |
| Conformity | 4.64 | .60 | 4.47 | .75 | 4.57 | .75 | 4.34 | .77 | -.50 |
| Anxiety-Free | 4.2 | .25 | 4.12 | .22 | 4.11 | .21 | 4.05 | .28 | -.60 |
| Achievement | 4.8 | .73 | 4.65 | .65 | 4.13 | 1.00 | 4.48 | .63 | -.44 |
| Girls | | | | | | | | | |
| Anxiety-Based | 3.22 | .40 | 3.38 | .53 | 3.61 | .39 | 3.76 | .74 | 1.35 |
| Conformity | 4.58 | .65 | 4.38 | .68 | 4.28 | .70 | 4.26 | .56 | -.49 |
| Anxiety-Free | 4.28 | .29 | 4.25 | .33 | 4.12 | .26 | 4.14 | .27 | -.48 |
| Achievement | 4.4 | .85 | 4.18 | .69 | 4.36 | .62 | 4.58 | .75 | .21 |

Table 4.

Results of Latent Growth Curve Analyses for Trajectories of Value Change across Time.

| Value Type | χ^2/df | CFI | TLI | RMSEA | Intercept | Var intercept | Linear Slope | Var linear slope | Quad slope | Var quad slope | I-S corr | I-Q corr |
|-------------------------|-------------|------|-----|-------|-----------|---------------|--------------|------------------|------------|----------------|-------------------|----------|
| Anxiety-based | 6.77/5=1.61 | .97 | .97 | .09 | 3.31** | .12** | .65** | -.08 | | | .02 | |
| Conformity | 9.35/5=1.87 | .92 | .90 | .15 | 4.57** | .24** | -.27* | .29 [†] | | | -.03 | |
| Anxiety-free | 8.38/5=1.51 | .96 | .95 | .13 | 4.20** | .07** | -.11* | .03 | | | -.03 [†] | |
| Achievement (linear) | 7.33/5=1.47 | .89 | .86 | .11 | 4.44** | .35** | .04 | .15 | | | -.13 | |
| Achievement (quadratic) | .23/1=.23 | 1.00 | 1.2 | .00 | 4.60** | .28 | -1.23** | -4.04 | 1.16** | -6.01 | .32 | -.41 |

Notes. Var = variance. Quad = quadratic. I-S = intercept-linear slope. I-Q intercept-quadratic slope; Good/acceptable fit: $\chi^2/df < 2$, CFI > .95/.90, TLI > .95/.90 (Hu and Bentler, 1995; Tabachnick, & Fidell, 2007); [†] $p < .10$ * $p < .05$. ** $p < .01$.

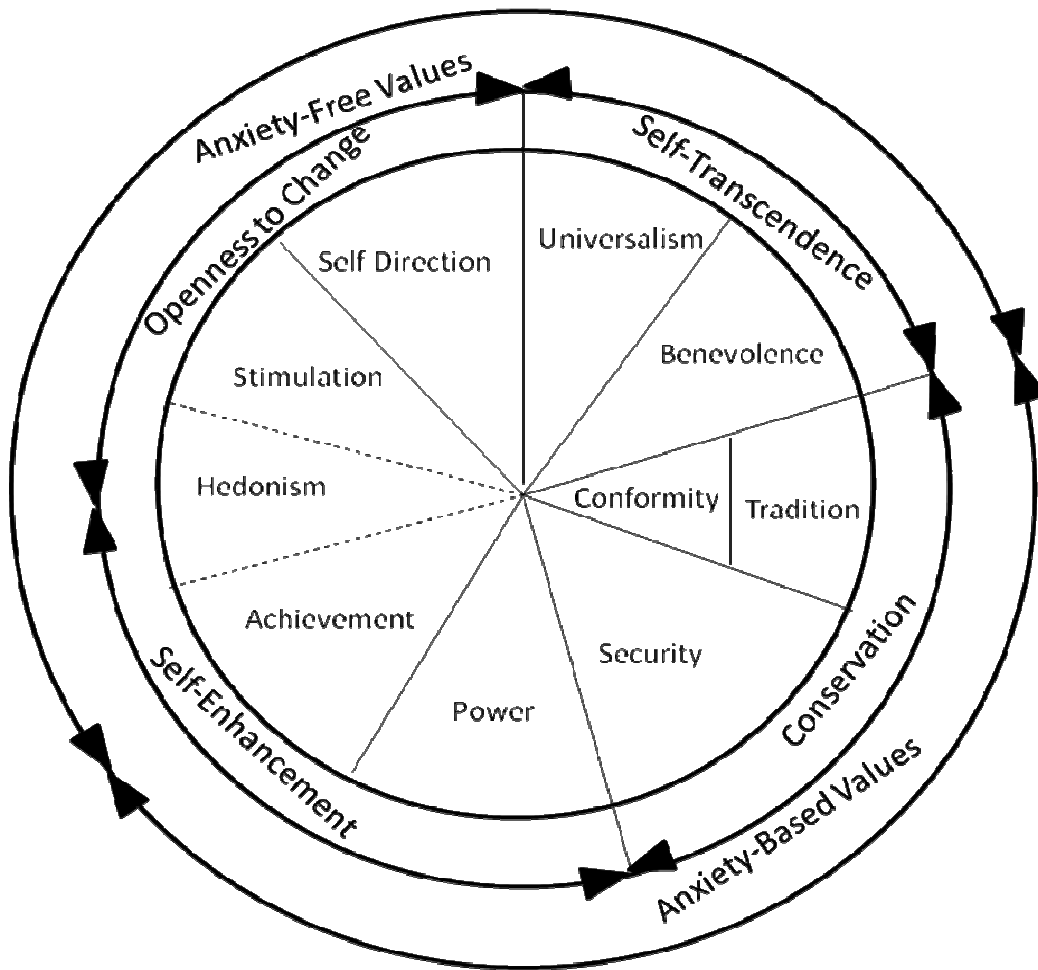


Figure 1. Theoretical model of the structure of relations among ten motivational types of values (Schwartz, 2010).

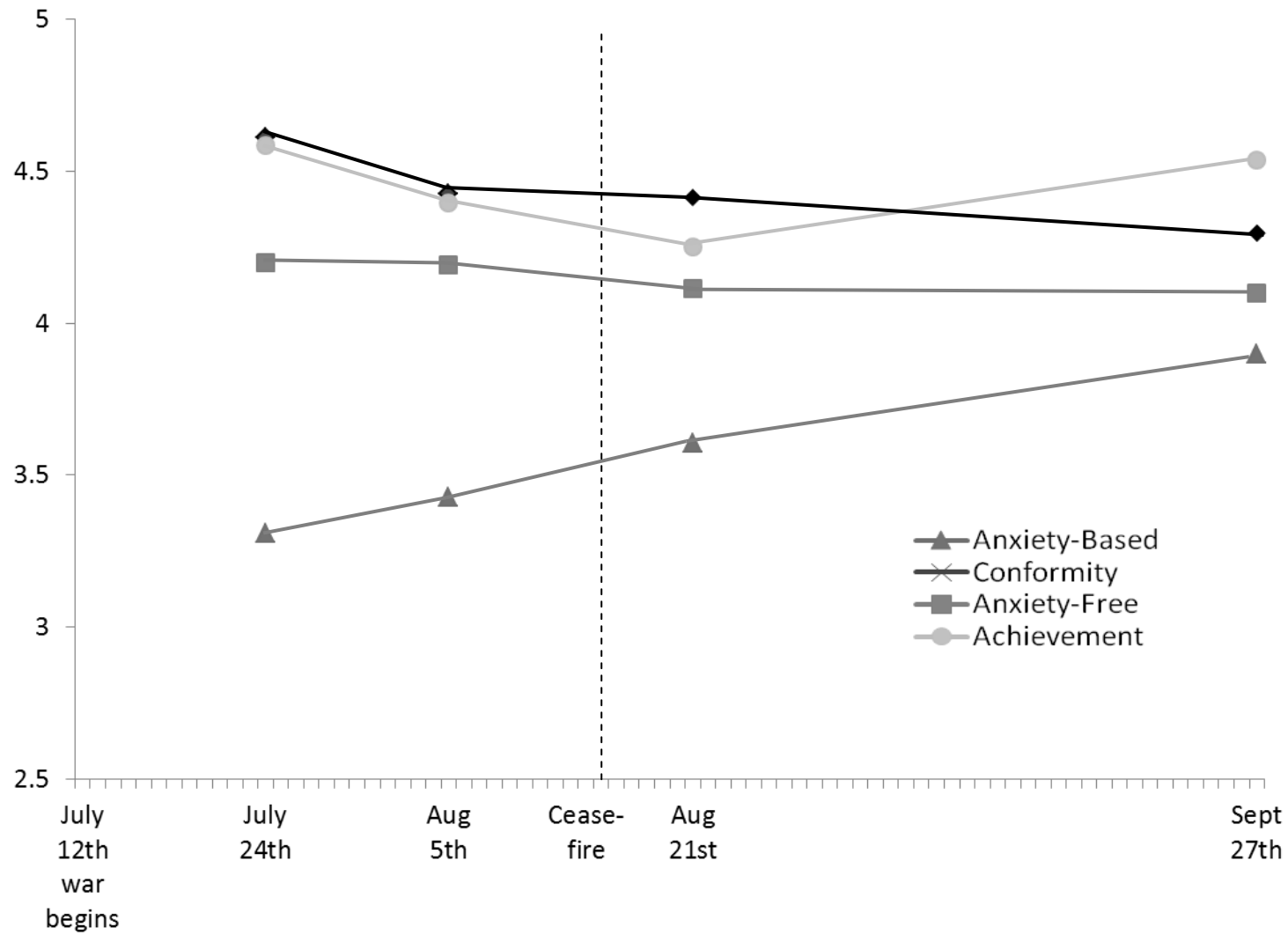


Figure 2. Change in mean rating of value importance over the measurement times.