Badania i Rozwój Młodych Naukowców w Polsce

Psychologia i socjologia
3. **Moderating effect of locus of control on the relationship between Schwartz’s security value and cynical hostility among university students**

Bagińska Paulina\(^{(1)}\), Mąkinia Aleksandra\(^{(1)}\), Mokosińska Monika \(^{(1)}\), Sawicki Artur \(^{(1)}\), Atroszko Bartosz \(^{(2)}\)

\(^{(1)}\) Institute of Psychology, Faculty of Social Sciences, University of Gdańsk

\(^{(2)}\) Institute of Pedagogy, Faculty of Social Sciences, University of Gdańsk

Bagińska Paulina: baginska@ymail.com

Keywords: mistrustfulness, internal control, need for safety

**Abstract**

The aim of this article is to summarize and supplement previous research that reveals more about the nature of cynical hostility and its possible predictors. Cynical hostility is a trait characterized mainly by negative attitude towards others and mistrust. Values in Schwartz’s theory are trans-situational, cognitive representations of goals and aspirations of a person. Locus of control (LoC) represents expectation of individual about causality of events. Perceiving events as controllable and dependable on one’s actions is labeled as internal locus of control. It was hypothesized that the relationship between cynical hostility and security is positive among people lower on internal control, while there is no such relationship among people higher on internal control. The study was conducted among 244 students (151 women, 89 men, 4 people did not report gender), with mean age \(M = 21.33\) (SD = 2.80). Cook-Medley Hostility Inventory – Brief, Short Schwartz’s Value Survey, and Levenson Locus of Control – Brief (LOC-Brief) scale were used. The results were partially consistent with the hypotheses. Locus of control moderated the relationship between cynical hostility and security – with positive relation for low internal control and negative relation for high internal control. It is congruent with previous findings concerning the relationship between cynicism, socioeconomic status and need for security (Mokosińska et al. 2016).

**1. Introduction**

The world today may be viewed as a place as unpredictable as never before. A sense of living in an unstable and threatening habitat leads to redefining security standards and a higher need for safety. In ensuing conditions people prefer familiarity and preserving existing social arrangements to fulfill the urge for reality to remain perceptibly consistent and stable (Jost et al. 2007). An increase in conservatism can result in inhibiting social change, sustaining inequality and many types of biases (Jost et al. 2003). Perceiving the environment as uncertain and unreliable also lowers our capacity to believe we are enabled to make a difference or are active participants in the following events (Levenson 1974). Social capital plays a crucial role in today’s economic development, as continuous growth is associated with a wide range of valuable social networks based on reciprocity, cooperation and trust (Putnam 2001). Beneficial outcome arises from collective action and dynamic information exchange in organizations, education, science, but also among neighbors, friends, family members and other. Cynicism has negative consequences spreading among societies due to its negative impact on social behavior – it affects trust, happiness, well-being and health, markedly lowers cooperation and social support (Smith et al. 2004). The relationship between cynical hostility and security value appears to be multi-faceted. Previous studies supported the hypothesis of subjective socioeconomic status being a possible moderator of the relationship between cynical hostility and security value (Mokosińska et al. 2016). In the presented article locus of control is considered to be another significant factor related to security value and cynical hostility.

According to the Swartz’s Value Theory, values are defined as desirable, trans-situational goals, varying in importance, that serve as guiding principles in people’s lives.
Factor analysis showed that there are ten values situated on two dimensions. First bipolar dimension ranges from Self-Enhancement to Self-Transcendence and the second ranges from Openness to change to Conservation (Schwartz 2012). Security value is described by its central motivational goals such as safety, harmony, and stability of society, of relationships, and of self (Schwartz 2012). The theory specifies the dynamic relations among values. Some of them oppose one another and cannot be accepted by one person at the same time (e.g., benevolence and power). Whereas other are compatible with each other (e.g., achievement and power). People value more the values they can readily attain and less the ones which pursuit is blocked (Schwartz & Bardi 1997). Nevertheless, as the values that concern material well-being (including power) and security are blocked their importance increases. For instance, people who suffer economic hardship and social upheaval attribute more importance to power and security values than those who live in relative comfort and safety (Inglehart 1997).

Locus of control was introduced by Rotter in social learning theory as a one of the personal traits that represents general expectations of individuals about the consequences of an event, that is, whether it is within or outside of his or her control and understanding (Rotter 1966). Individuals who perceived a reinforcement (e.g. a reward) as not being entirely contingent upon his action are labelled by external locus of control. That individuals believe that various events depend on luck, chance, fate or are under the control of powerful others. The person who perceives that events depend on his behaviour or his own characteristic has internal locus of control. Levenson, basing on Rotter’s theory, proposed the multidimensional conceptualization which differentiates between two types of external orientation. She distinguished belief in unordered and random nature of the world and predictability of the world coupled with the expectancy that powerful others are in control (Levenson 1981). It is possible that person may believe in control of powerful others and purposeful actions at the same time. The concept of Levenson’s theory is based on the assumption that those who believe in powerful others (one external orientation) are cognitively and behaviourally different from those who perceive world as unpredictable (a second external orientation).

Cynical hostility, defined as an enduring, negative attitude toward others involving cognitive, affective, and behavioral components, has progressively been established as a psychological characteristic with a negative impact on health and recently its importance is starting to be recognized in educational studies (Sawicki et al. in press). One of the main components of cynical hostility is cynicism which is characterised by distrust in others' motives and believing that people act mainly for their own interests or even can use someone to their advantage. Another components are mistrust and hostile attributional style – cynics expect other people to mistreat them and often interpret others' actions as hostile (Smith et al. 2004). There is also strong evidence that cynical hostility is negatively related to social support and health (Smith et al. 2004).

It has been shown that locus of control among students had become more external over time (years 1960-2002) (Twenge et al. 2004). According to the authors of that meta-analysis, it is caused by increases in negative social indicators and the tendency to blame one’s misfortunes on outside forces (self-serving bias). That phenomenon is related to greater cynicism and mistrust among young generations (Pharr et al. 2001; Putnam 2001). Isolation theory (Twenge et al. 2004) provides possible explanation of a mechanism concerning forming external locus of control during socialisation in individualistic cultures. In Poland the number of negative social indicators (e.g. suicides, divorces, economic crimes) increased over the last 25 years (Eurostat). Furthermore, media coverage of uncontrollable, negative social events increased and 24-hour news channels had been initiated. Watching TV strongly influences thoughts, values and behaviours of receivers (Anderson et al. 2014). Such negative narration may result in feelings that reality is unpredictable, dangerous, and insecure. This may lead to the development of a higher external locus of control among people as a defence mechanism (Furnham 2009).
Previous studies suggested that cynical hostility can be perceived as a specific defence mechanism, making people focus on preserving their own resources (Sęktas et al. 2016). It was also hypothesised that cynical hostility is linked to the need for security, and that assumption was not confirmed directly. Since the need for security depends on both the objectively possessed resources and subjective feeling of being in control of one’s own life, moderating role of internal control is possible. Belief that one’s life and security is controlled by outside forces may result in lack of trust to that forces (e.g. powerful people). On the basis of previous research and theoretical frameworks it is hypothesized that internal control moderates the relationship between security value and cynical hostility (H1); in the group with lower internal control relationship between security value and cynical hostility is positive – the more the “external” person needs security the more cynical he/she is (H1a); in the group with higher internal control there is no relationship between security value and cynical hostility (H1b).

2. Methods

Participants. Two hundred and forty four students took part in this study: 151 women (61.9%), 89 men (36.5%), 4 persons (1.6%) did not report gender. Their mean age was M = 21.22 years (SD = 2.80). These individuals were studying at the universities from Pomerania Region in Poland: the University of Gdańsk, and Technical University of Koszalin. Students were from different faculties, courses of study, years and modes of study.

Measures. Cynical hostility was measured with Cook Medley Hostility Inventory - Brief, developed on the basis of five items from Cook-Medley Hostility Inventory (Cook & Medley 1954). It is a tool widely used in large scale surveys concerning health and psychosocial functioning. The response alternatives range from completely disagree (1) to completely agree (6). It showed good validity and reliability in previous studies (Clarke et al. 2008). For the present sample the Cronbach’s alpha reliability coefficient was .76.

Security value was measured with Short Schwartz Values Survey (Lindeman & Verkasalo 2005), a 10-item tool with 9-point Likert response scale which showed good psychometric properties in previous research (Lindeman & Verkasalo 2005). One of the items measures security value. The scale has the following instruction: “Please, rate the importance of the following values as a life-guiding principle for you. Use the 8-point scale in which 0 indicates that the value is opposed to your principles, 1 indicates that the value is not important for you, 4 indicates that the value is important, and 8 indicates that the value is of supreme importance for you.”

Locus of control was measured with Levenson Locus of Control – Brief (LOC-Brief) scale. In present study short, 7 item version was used (Levenson 1974; Shewchuk, Foelker, Camp et al. 1992). It consists of two factors: Internal Control, and Powerful Others. The response alternatives range from completely disagree (1) to completely agree (6). It showed good reliability and validity in different samples of university students. Also, a two-factor structure has been confirmed among polish university students (Atroszko 2015).

Procedure. Data collection used convenience sampling. Students were invited to participate anonymously in the study during lectures or classes. More than 90% of all present students agreed to do so. One hundred ninety eight (81.1%) participants filled in ‘paper and pencil’ questionnaires and forty six (18.9%) students completed online versions of the questionnaires. Participation in the study was anonymous and no monetary or other material rewards were offered.

Statistical analyses. Means, standard deviations, percentages and correlation coefficients were calculated. Hierarchical regression analysis was conducted. An interaction term between security and locus of control was created. Cynical hostility was dependent variable. Independent variables added in the first step were sex and age. In the second step internal control and security value were added. Step three included only one variable: interaction term between security and internal control. Three benchmarks were set for locus of control, based on mean score and standard deviation: mean score, mean score minus one
standard deviation, and mean score plus one standard deviation. Tests of significance of regression slopes at these benchmarks were conducted. Bootstrap method with bias corrected 95% confidence intervals and 10,000 bootstrap samples was used. All tests were two-tailed, and the significance level was set to $\alpha = .05$. Unstandardized regression coefficients were reported. All statistical analyses were conducted in IBM SPSS 23.

3. Results

Tab. 1 presents mean scores, standard deviations, percentages for the study variables as well as their interrelationships.

| Tab 1. Mean scores and standard deviations, percentages, and correlations between the study variables. |
|----------------------------------|----------------------------------|----------------|----------------|-------------|
|                                | $M (SD)$%                        | 2.              | 3.        | 4.           |
| 1.Age                           | 21.33 (2.80)                     | .08             | .14*      | .04         | .19**       |
| 2.Sex$^a$                       | 36% men                          | -.05            | -.05      | .28**       |
| 3.Internal Control              | 13.92 (2.14)                     | -.05            | .05       |
| 4.Security                      | 5.40 (1.85)                      | -.07            |           |
| 5.Cynical hostility             | 19.02 (4.39)                     |                 |           |

$^a0 =$ women, $1 =$ men.

The regression analysis for cynical hostility showed that the independent variables added in step 1 explained 12.1% of the variance ($F_{2,226} = 15.56$, $p < .001$). Two independent variables added in step 2 explained 0.6% of the variance ($F_{2,224} = .77$, $p = .46$). Interaction term added in step 3 explained 3.4% of the variance ($F_{1,223} = 8.98$, $p < .01$). The independent variables explained a total of 16.1% of the variance of cynical hostility ($F_{5,223} = 8.55$, $p < .001$). Significant independent variables in step 3 were sex, showing that men scored higher on cynical hostility, age, internal control, security value, and interaction between internal control and security (see Table 2).

Figure 1 shows interaction plot. Conditional effects of focal predictor (security value) at benchmark values of the moderator variable (internal control) showed that for low internal control there was positive but statistically non-significant relationship between security value and cynical hostility ($B = .40$, $p = .065$, 95% CI [-.02, .82]), there was no relationship between these variables for mean internal control ($B = -.03$, $p = .844$, 95% CI [-.32, .26]) and the relationship was reversed and statistically significant for high internal control ($B = -.44$, $p = .020$, 95% CI [-.83, -.07]).

| Tab 2. Results of hierarchical multiple regression analyses in which age, sex, internal control, security value, and interaction between internal control and security were regressed upon the scores on cynical hostility (unstandardized regression coefficients are reported). |
|----------------------------------|-----------------|-------|---------|
| Step                             | Predictor       | $B$   | $\Delta R^2$ |
| 1                                | Age             | .28** | .12**   |
|                                 | Sex$^a$         | 2.63**|
| 2                                | Age             | .26** |
|                                 | Sex$^a$         | .66** |
|                                 | Internal control| .15   |
|                                 | Security        | - .07 |
| 3                                | Age             | .30** |
|                                 | Sex$^a$         | 2.67**|
|                                 | Internal control| 1.28**|
|                                 | Security        | 2.77**|
|                                 | Interaction     | - .20**|
| Total $R^2$                      |                 | .161**|

$^a0 =$ women, $1 =$ men.

*p < .05, **p < .01.
4. Discussion

Hypothesis 1a was confirmed. In the group with lower internal control there was a positive relationship between security value and cynical hostility. The results show that cynical hostility increases in the conditions of deprivation of security, but only if one’s perceive events as uncontrollable. Therefore, the results show that belief in external causality of events with unsatisfied need of safety and predictability may contribute to the development of a cynical attitude. The results are compatible with cynical hostility theory, in which it is suspiciousness based trait. In situation of losing sense of social coherence or predictability of economic status cynics can act defensive or even aggressive. Up against failure cynical one’s can blame others more often than themselves. It can impede cooperation and lead up to conflicts in work or even in personal life. In a broader perspective it can lead to unhealthy and unproductive atmosphere in work where trust is necessary. Trust can work as a heuristic and allows people to conserve cognitive resources (Uzzi 1997). Given that, for cynical people functioning in social environment can be expensive as far as psychological resources are concerned.

Hypothesis 1b was not confirmed. In the group with higher Internal Control the relationship between security value and cynical hostility was negative. This study shows that the negative attitude towards others is amplified by high internal control and feeling of safety. The group of students with high internal control who did not value security high, was the most cynical of the examined. In this case, it can be assumed that low security value to much degree stems from the fact that they feel relatively safe due to belief of self-efficacy. High sense of security and stability may lead to social passivity and indifference in relation to seeking for social support. Moreover, internal locus of control can escalate the feeling of independence. Research shows that more internal beliefs are associated with greater academic achievement (Findley et al. 1983) which can result in a greater, well-paid career in the future. In the previous study the most cynical hostile students placed themselves high on the social ladder and at the same time did not value security high (Mokosińska et al. 2016). High socioeconomic status can complete the portrait of a cynical hostile person. Living in relative comfort and safety but concentrating on materialistic well-being exposes young people to isolation from parents who are focused on their career. Such environment, filled with emotional, cognitive and behavioural disturbances, including substance use, anxiety and depression, makes the children with high SES more distrustful and hostile in general (Luthar & Latendresse 2005).
Studying the potential predictors of cynical hostility and various relationships between them is not a popular area in the field of psychology, especially in the context of young people such as students. The Authors' aim is to take notice of issues related to cynical hostility and to inspire to take action to prevent socially disruptive attitudes. Nonetheless, the study has its advantages and limitations. Firstly, to the Author's knowledge it is the first study to investigate the moderating effect of locus of control on the relationship between safety value and cynical hostility. The instruments used showed sufficient validity and reliability. However, the major limitation of this study was a small and homogeneous sample, that is to say, university students from different faculties. In consequence, the results cannot be generalized to a larger population. Another constraint is that the data is based entirely on self-report. Also other possible variables, including confounding factors and alternative moderators of the probed effect were not controlled. In order to build a coherent, predictive and broadly applicable theory, future research investigating this subject should include longitudinal studies conducted on larger and diversified participants' groups. They cannot omit other variables possibly related to personality, cognitive abilities or family. One of the available new aspects in the field is to consider other of Schwartz values as moderators.

5. Literature


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