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Prace zostały wydrukowane zgodnie z przesłanym tekstem, na odpowiedzialność ich autorów.

#### **4. Moderating effect of subjective socioeconomic status on the relationship between Schwartz's power and achievement values and cynical hostility among university students**

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Keywords: mistrustfulness, social hierarchy, need for safety

##### **Abstract**

The aim of the study was to investigate the moderating effect of socioeconomic status (SES) on the relationship between self enhancement values (power and achievement) and cynical hostility. Cynical hostility is a trait characterized mainly by enduring negative attitude towards others and mistrustfulness. Values in Schwartz's theory are trans-situational goals, guiding principles in one's life. Subjective socioeconomic status represents one's sense of his/her position on social ladder. It was hypothesised that external attribution of success related to low SES will account for stronger positive relationship between security value and cynical hostility, compared to high SES. 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, MacArthur Scale of Subjective Social Status and standard measures of objective SES were used. The results mostly confirmed hypotheses. Positive relationship between achievement and cynical hostility was stronger in low-SES group. Similar results (non-significant) were noted for power value. Results add to the existing literature of social inequalities and distrust. While pursuing better life conditions, ambitious people low on social ladder are vulnerable to cynical beliefs that may hinder their success and wellbeing.

##### **1. Introduction**

Social integration becomes a more and more important issue both globally and locally. A universal mission is to cooperate and find solutions to achieve various sustainable development goals such as improved well-being, reduced inequalities, responsible consumption and production or partnerships for the goals. As the hierarchy of values reflects cultural framework of needs and motives, it is applicable in assessing priorities of solving problems among the societies. Experiencing poverty in an environment that conforms to hierarchy and copes with anxiety by minimizing uncertainty, responds to higher need for achievement and power (Imm Ng et al. 2007). In stressful situations (e.g. resource limitation) it is crucial to adopt productive strategies in order to maximize profits. Hostility is connected to competition strategy in negotiations, which leads to reduced communication, negative attitudes and suspicion of one another's intentions, critical rejection, seeking to increase power and therefore seeing other's power as threat, and escalation of conflict (Deutsch, 2000). Apprehending the relationships between values, SES and hostile attitudes may have practical use for fulfilling the basic needs of others and becoming more independent of selfish motives.

Socioeconomic status (SES) is a concept that involves indicators such as wealth, income, occupational status and education. It plays an essential part in shaping personality, beliefs, and values, which in turn may influence wellbeing. Apart from studies concerning causes and consequences of objective SES, researchers started to investigate how subjectively individuals place themselves on the social ladder. In many circumstances it is more important how a person feels about his/her socioeconomic position than that position itself. Despite that subjective SES foundation is based in objective conditions of living, the psychological nature of that feeling cannot be ignored. Two key beliefs play significant roles in this concept:

satisfaction with life standards and belief in own financial security in the future (Adler et al. 2000).

Cynical hostility, defined as an enduring, negative attitude toward others involving cognitive, affective and behavioural 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. 2016). 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).

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 (Schwartz 1994, p. 21). 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). Each of value contain motivational purposes to which they are targeted. In this research authors take into consideration two values - power and achievement which are both situated on Self-Enhancement. For those who value this type of values the most important is own relative success and dominance over others. Power value is described by its central motivational goals such as control or dominance over people and resources whereas achievement is described by need of high social status, prestige and authority.

Life circumstances are crucial in forming people's values. They give opportunities to pursue some values more easily than others. Values are internalized by two mechanisms – acclimation and compensation. Acclimation means that individuals value more the values they can readily attain and less the ones which pursuit is blocked (Schwartz & Bardi 1997). Values that concern material well-being (such as power and achievement) are internalized by compensation. When such values 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). Research show that children living in a low SES environment focus on material values and are less likely to concentrate on values reflecting autonomy, relatedness and growth motivations (Cohen & Cohen 1996). Moreover, it is also known that socioeconomically disadvantaged backgrounds lead to negative emotional states such as anxiety, depression, and hostility, and this results in poorer relationships with family members and friends (Bradley & Corwyn 2002). This can be the basis on which cynical hostility develops.

There is no certainty what determines one's subjective sense of his/her position on the social ladder, but giving the fact that students are at the beginning of their careers and adult life it is natural for them to rely on their parents' social position. There is some evidence for distress and adjustment disturbances among affluent young people. It is caused mainly by achievement pressures (Luthar & Latendresse 2005) combined with emotional disconnection from parents (Luthar & D'Avanzo 1999). Many of young people are driven to succeed not only in academics but also in many other activities. That kind of maladaptive perfectionism starts early in school (Luthar & D'Avanzo 1999). Education system in Poland is based on constant evaluation of students' knowledge and achievements. Individuals who value power and achievement are more prone to failure in cooperation (Schwartz 1996). That might result with increased competitiveness and reluctance among youngsters who build their self-esteem on individual accomplishments instead of positive relationships with others.

Power and achievement values represent self-centered aims of social superiority and esteem. According to Schwartz these values are anxiety-based and developed in order to control one's environment (Schwartz 2012). Achievement, authority and ability to influence others may result in a sense that world is predictable and threats can be avoided. Cynical

hostility, as a trait that focuses one's attention on preserving resources is positively related both to power and achievement values (Sektas 2016). In post-communist countries such as Poland social capital is low, tradition and hierarchy values are important (Schwartz & Bardi 1997). It is common to attribute success to immoral actions, deceptions and remaining influences based on position occupied in communist regime. It can develop beliefs that success is based on selfish motives, not in cooperation and trust. Among less well-off there are more people disappointed in change of the political system (Badora CBOS 2014). That belief may result in a sense of mistreatment. People in poor socioeconomic position are also more distrustful (Boguszewski CBOS 2014). Taken all that into account, it is assumed that among people less well-off self-enhancement values have stronger influence on negative attitudes towards other people.

In line with previous research and theoretical frameworks, it is hypothesized that subjective socioeconomic status moderates the relationship between achievement value and cynical hostility (H1). The positive relationship between these traits is stronger in low subjective SES group comparing to high subjective SES group (H1a). It is also hypothesized that subjective SES moderates the relationship between power value and cynical hostility (H2). Positive relationship between these two traits is also stronger in low subjective SES group comparing to high subjective SES group (H2b).

## **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 values is not important for you, 4 indicates that the values is important, and 8 indicates that the value is of supreme importance for you."

Parents' education and income were used as indicators of objective SES. Mother's and father's education was measured on a 7-point scale from incomplete primary education to PhD. Total both parents' monthly pretax income was measured on 10-point response scale with 17,000 PLN intervals from 0 to 17,000 to more than 170,000.

Subjective SES was measured with MacArthur Scale of Subjective Social Status (Adler et al. 2000). Participants were given a drawing of a ladder with 10 rungs that was described as follows: "Think of this ladder as representing where people stand in our society. At the top of the ladder are the people who are best off, those who have the most money, most education, and best jobs. At the bottom are the people who are the worst off, those who have the least money, least education, and worst jobs or no job." They were asked to place mark on the rung that best represents where they think they stand on the ladder in comparison to other people in Poland.

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. Two hierarchical regression analyses were conducted. An interaction term between achievement value and subjective SES was created. In second analysis an interaction term between power value and subjective SES was created. Cynical hostility was dependent variable. In both analyses independent variables added in the first step were sex and age. In the second step subjective SES, mother’s education, father’s education, and parents’ monthly gross income, and achievement value were added. Sex, age and objective SES were used as potential confounding variables. Step three in first analysis included only one variable: interaction term between achievement and subjective SES. In second analysis step three included interaction term between power and subjective SES. Three benchmarks were set for subjective SES 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 and percentages for the study variables as well as their interrelationships.

**Tab 1.** Mean scores and standard deviations, percentages, and Pearson correlation coefficients between the study variables.

	<i>M (SD)/%</i>	2.	3.	4.	5.	6.	7.	8.	9.
1.Age	21.22 (2.80)	.08	-.00	-.04	.09	.19**	.06	.22**	.19**
2.Sex <sup>a</sup>	37.1% <i>men</i>		-.04	-.04	.01	.02	.04	.25**	.28**
3.Father’s education	4.33 (1.38)			.56**	.50**	.17*	-.02	-.02	-.11
4.Mother’s education	4.69 (1.24)				.49**	.15*	.00	-.04	-.09
5.Parents income	4.96 (2.98)					.40**	-.01	.06	-.07
6.Subjective SES	5.46 (1.72)						.15*	.20**	.01
7.Achievement	5.62 (1.75)							.56**	.14*
8.Power	3.60 (2.16)								.17**
9.Cynical hostility	19.02 (4.39)								

<sup>a</sup> Point-biserial correlation coefficient (0 = women, 1 = men). \* $p < .05$ , \*\* $p < .01$ .

The regression analysis for cynical hostility as dependent variable showed that the independent variables added in step 1 explained 15.5% of the variance ( $F_{2,185} = 16.99$ ,  $p < .001$ ). Five independent variables added in step 2 explained 2.5% of the variance ( $F_{5,180} = 1.11$ ,  $p = .36$ ). Interaction term added in step 3 explained 2.8% of the variance ( $F_{1,179} = 6.42$ ,  $p < .05$ ). The independent variables explained a total of 20.9% of the variance of cynical hostility ( $F_{8,179} = 5.91$ ,  $p < .001$ ). Significant independent variables in step 3 were sex ( $B = 2.94$ ,  $p < .001$ ) showing that men scored higher on cynical hostility, age ( $B = .32$ ,  $p < .01$ ), subjective SES ( $B = .95$ ,  $p < .05$ ), achievement value ( $B = 1.458$ ,  $p < .01$ ), and interaction between subjective SES and achievement ( $B = -.203$ ,  $p < .05$ ) (see Table 2). Figure 1 shows interaction plot. Conditional effects of focal predictor (achievement value) at benchmark values of the moderator variable (SES) showed that for low SES there was positive and statistically

significant relationship between achievement value and cynical hostility ( $B = .68, p < .01, 95\% \text{ CI } [.24, 1.13]$ ), there was a positive relationship between these variables for mean SES ( $B = .35, p < .05, 95\% \text{ CI } [.01, .69]$ ) and there was no significant relationship for high SES ( $B = .02, p = .94, 95\% \text{ CI } [-.39, .42]$ ).

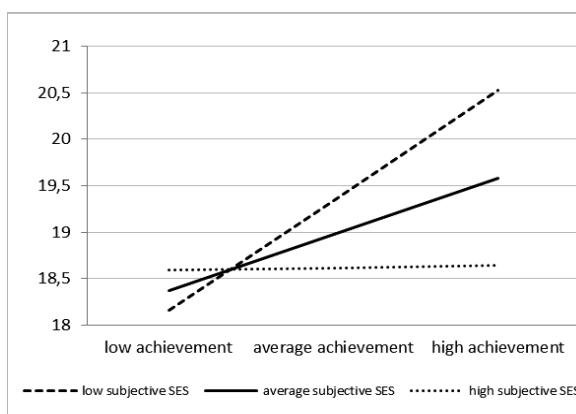
**Tab 2.** Results of hierarchical multiple regression analyses in which age, sex, objective SES, subjective SES, achievement value, and interaction between subjective SES and achievement value were regressed upon the scores on cynical hostility (unstandardized regression coefficients are reported).

Step	Predictor	$B$	$\Delta R^2$
1	Age	.27**	.155**
	Sex <sup>a</sup>	3.18**	
2	Age	.28**	.025
	Sex <sup>a</sup>	3.01**	
	Mother's education	.00	
	Father's education	-.04	
	Parents income	-.08	
	Subjective SES	-.16	
	Achievement	.31	
3	Age	.32*	.028*
	Sex <sup>a</sup>	2.94**	
	Mothers education	.09	
	Fathers education	-.04	
	Parents income	-.11	
	Subjective SES	.95*	
	Achievement	1.46*	
Interaction			-.20*
Total $R^2$			.209**

<sup>a</sup>0 = women, 1 = men.

\* $p < .05$ ; \*\* $p < .01$ .

The regression analysis for cynical hostility as dependent variable showed that the independent variables added in step 1 explained 15.5% of the variance ( $F_{2,185} = 16.99, p < .001$ ). Five independent variables added in step 2 explained 1.9% of the variance ( $F_{5,180} = .85, p = .517$ ). Interaction term added in step 3 explained 1.1% of the variance ( $F_{1,179} = 2.41, p = .123$ ). The independent variables explained a total of 18.6% of the variance of cynical hostility ( $F_{8,179} = 5.10, p < .001$ ). Significant independent variables in step 3 were sex ( $B = 2.94, p < .001$ ) showing that men scored higher on cynical hostility, and age ( $B = .30, p < .01$ ) (see Table 3).



**Fig.1.** Moderating effect of subjective SES on the relationship between achievement value and cynical hostility.

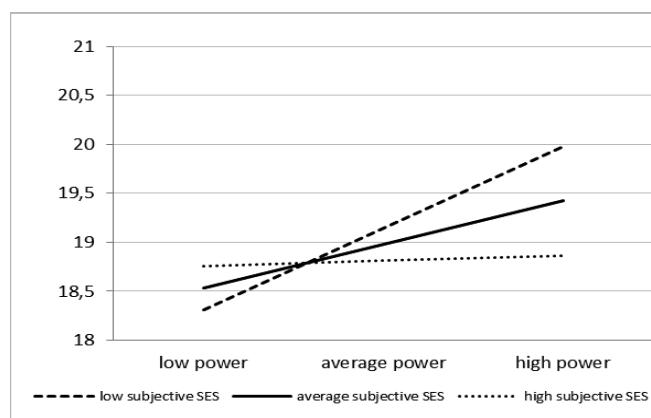
**Tab 3.** Results of hierarchical multiple regression analyses in which age, sex, objective SES, subjective SES, power value, and interaction between subjective SES and power value were regressed upon the scores on cynical hostility (unstandardized regression coefficients are reported).

Step	Predictor	B	$\Delta R^2$
1	Age	.27**	.155**
	Sex <sup>a</sup>	3.18**	
2	Age	.27**	.019
	Sex <sup>a</sup>	2.91**	
	Mother's education	.04	
	Father's education	-.06	
	Parents income	-.10	
	Subjective SES	-.15	
3	Power	.21	.011
	Age	.30*	
	Sex <sup>a</sup>	2.96**	
	Mothers education	.10	
	Fathers education	-.07	
	Parents income	-.13	
	Subjective SES	.30	
	Power	.80	
	Interaction	-.11	
Total $R^2$			.186**

<sup>a</sup>0 = women, 1 = men.

\* $p < .05$ ; \*\* $p < .01$ .

Figure 2 shows interaction plot. Conditional effects of focal predictor (power value) at benchmark values of the moderator variable (SES) showed that for low SES there was positive relationship between power value and cynical hostility ( $B = .39, p < .05, 95\% \text{ CI } [.02, .76]$ ), there was non-significant relationship between these variables for mean SES ( $B = .20, p = .163, 95\% \text{ CI } [-.08, .49]$ ), and there was no significant relationship for high SES ( $B = .02, p = .895, 95\% \text{ CI } [-.35, -.40]$ ).



**Fig.2.** Moderating effect of subjective SES on the relationship between power value and cynical hostility.

#### 4. Discussion

Hypothesis 1 was partially confirmed. In low SES group there was a positive relationship between achievement value and cynical hostility. In high SES group there was no such relationship. People who perceive their social status as low may reveal cynicism in pursuance of achievement. People who regard their social position as high do not reveal

negative attitudes towards others or mistrust in their pursuance of achievement. That phenomenon may be a result of personal affordances (Gibson 1979). Most probably affluent young people (or their parents) already possess enough resources to aim beyond his/her personal capabilities. In that situation hostility may hinder their possibilities of growth. Necessity of cooperation can reduce competitiveness and interpersonal bias (Gaertner et al. 1990). People less prosperous are probably at the beginning of building their social position and possessing resources. Therefore, people who strike for authority and power focus on themselves. Egoistic tendencies reveal the need of controlling the environment and result in competitiveness, which are important in development of cynical hostility. Although hypothesis 2 was not confirmed, similar tendency was observed suggesting analogous explanations.

As far as the Authors are aware, the present study is the first to investigate the moderation effect of subjective SES on the relationship between self-enhancement values and cynical hostility among large and fairly well defined in terms of demographics group in the society, mainly the university students. Therefore, the paper adds to the existing literature. The instruments and measures used in the present study showed adequate validity and reliability. One of the major limitations of the study was a relatively small sample of university students, so the findings cannot be generalized to the population without some reservation. Furthermore, the design of the present study was cross-sectional and hence it is not possible to draw valid conclusions about causes and effects. Also, all data in the present study were based on self-report. Possible confounding variables related to personality, cognitive abilities and family were not controlled in this study. Future studies should use longitudinal designs, and more confounding variables should be controlled. Future studies should also use larger and more representative samples. Future research should focus on more environmental and developmental predictors of cynical hostility such as family closeness or attachment styles. Also, cynicism among affluent young people who possess psychological and physical resources should be examined giving the fact that power and achievement values are not related to cynical hostility among people well off.

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