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# Relationship between cynical hostility and socioeconomic status from educational perspective. Preliminary research

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## Abstract:

Studies systematically show that socioeconomic status (SES) is related to many psychological variables and well-being, including health. Today more researches than ever is conducted in order to identify causes and consequences of social and economic inequalities. More and more investments are made in programs of interventions directed to improve the situation of socioeconomically disadvantaged groups. The aim of the study was to investigate the relationship between socioeconomic status and cynical hostility, which is a trait characterized by negative attitude toward others, mistrustfulness and ill will. It was hypothesised that low SES, particularly low SES in childhood is positively related to cynical hostility among university students. The study was conducted among 244 students (151 women, 89 men, 4 people did not report gender), with mean age  $M = 21.33$  ( $SD = 2.80$ ). Cynical hostility was measured by *Cook-Medley Hostility Inventory - Brief*, a short version of *Hostility Scale* (Cook & Medley 1954). Hierarchical regression analysis showed that childhood SES was related to cynical hostility in adulthood. From the educational perspective cynical hostility is a trait which can squander social capital and the potential of young people. Education process is based on relations with teachers and peers, and distrust may hinder both of them.

## 1. Introduction

The development of science has changed societies and economy in a remarkable way. In the past economic strength was associated with agriculture and industry, today the information is the most valuable asset. The future and development are related to a new phenomenon which Peter Drucker called “the knowledge economy”. It is a new, fresh glance in which a number of things become more important. One of them is social capital, an accurate indicator of societies condition in terms of trust and reciprocity. Wide collaboration between people, institutions, companies, universities, and countries is becoming a crucial ingredient of social development, especially in science and economy. In that optic finding risk factors of low social capital seems to be necessary in striving for happiness, well being, and health. One of such risk factors is socioeconomic inequality (Evans 2002). It could be argued that to some extent social phenomena reflect thoughts and behaviours of individuals, and from this point of view following questions should be asked: “which beliefs lead to squandering of social capital or hindering its growth?” and “which social groups does it affect mostly?” Socioeconomic status (SES) plays an essential part in shaping personality, beliefs, and values. At the same time, these individual psychological characteristics play a crucial role in meliorating one’s social position. The study is focused on the relationship between SES and cynical hostility from educational perspective. Previous studies showed

that low SES hinders education, and among others it negatively affects learning-related attitudes and behaviours in students (Atroszko & Atroszko 2013). Low SES may have negative impact on education process through specific beliefs, attitudes and behaviours such as distrust and negativity towards others, including peers and teachers.

Socioeconomic status is a concept that involves a number of indicators, such as income, education, occupation and wealth. Resultant of those characteristics is described as a measure of objective socioeconomic status, which is placing person in comparison with the rest of society. Examining its impact on functioning is not only important in economics, but also in psychology and health sciences. Relationship between low SES and frequency of feeling anxiety and need for safety can be explained by frequent deprivation of basic human needs and requirements such as food, clothes, shelter etc. From the perspective of the Maslow's hierarchy of needs (Maslow 1943), poverty can be understood as a situation of necessity to satisfy person's survival needs, so it may contribute to a stronger self-interest motivations. Apart from developing and refining objective measures of SES, researchers started to investigate another way of placing individuals on the social ladder. In many contexts, e.g. in relation to health outcomes, it is more important that a person feels socioeconomically disadvantaged than his/her objective socioeconomic position. Examining one's subjective vision of his/her place in the social hierarchy can be even more important than the objective place itself. Every person is involved in multiple hierarchies at the same time and may favour some of them instead of objective social position. Subjective SES is formed on the basis of objective conditions of living, but its psychological nature cannot be ignored. Two key beliefs play a role in this concept: satisfaction with life standards and belief in own financial security in the future (Adler et al. 2000). The impact of childhood life conditions on personality and behaviour has been systematically studied (Lynch 1997). Owing to that fact, childhood SES is a useful indicator of person's life-history. Dwelling place ownership is associated with both greater assets and income (Long & Caudill 1992), and health (Cohen et al. 2004). Measuring parents' ownership of person's dwelling place during childhood is a valid way of studying his/her socioeconomic status early in life (Cohen et al. 2004; Lynch et al. 1997; Christensen et al. 2004).

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 potential role is starting to be recognized in educational studies (Sawicki et al. in press). Psychological functioning of a hostile person is based on the belief that others are motivated by selfish concerns (cynicism), expectation that people are frequent source of mistreatment (mistrust), and interpreting others' actions as involving aggressive intent (hostile attributional style)(Smith et al. 2004). Hostile person is focused on preserving one's own resources. That tendency can be observed in motivational aspects of cognition, such as striving for power and achievements (Şektas et al. 2015), which combined with mistrustfulness can lead to overinvesting resources on protecting oneself from potential deceit, avoiding cooperative projects, and focusing energy on preserving one's own status. There is also strong evidence that cynical hostility is negatively related to social support. Cynical people also report more conflicts and experience more stress both objectively and subjectively. Due to exaggerated cardiovascular and neuroendocrine responses to potential stressors, they also experience them as more unpleasant (Smith et al. 2004). Recent study showed that relationship between cynical hostility and stress is fully mediated by ineffective coping strategies, congruent with the hostile attitude (Sendal et al. 2015). Cynical hostility was related to the tendency to disengage from the stressful situation, not searching for emotional or instrumental social support, lack of planning solutions for the problems, lack of positive reinterpretation of the situation, and not searching for comfort in spirituality.

There is some evidence concerning negative relationship between SES and cynical hostility. There are multiple mechanisms in which that association may operate. Problems with health (Smith et al. 2004) might be one of the explanations of why cynical individuals report lower income. Another factor is the fact that hostility is related negatively to higher education (Lynch et al. 2007), a foundation of one's status in society. A longitudinal studies conducted on representative groups from USA (2 years, 9 years) and Germany (9 years) showed that cynical beliefs about human nature can be detrimental for individuals' income (Stavrova & Ehlebracht 2015). Cynicism may inhibit progress in obtaining higher earnings. People with lower cynicism increased their income after 9 years, while earnings of cynical people tend to stay at the same level. That effect proved to be independent of individual differences in the Big Five personality dimensions, sociodemographic variables, self-esteem, and health, traditionally connected with differences in income. Nonetheless, in some sociocultural contexts the cynical views of others are well justified - the negative effect of cynicism on economic outcomes is likely to disappear or even reverse in societies with higher murder rates (Stavrova & Ehlebracht 2015). Reverse causal path between SES and cynicism is also plausible. Experiencing economic hardship throughout life, low family SES, and recalled childhood poverty is positively associated with cynical hostility (Lynch et al. 1997). Childhood SES is related with functioning in adult life, such as little education, blue collar work, higher job and financial insecurity, more unemployment and work injuries, drinking more alcohol, smoking more cigarettes, eating less nutritious diets, also less hope for the future, and more cynical view of the world. Moreover, it has been shown that lower income groups have less social support (Turner & Marino 1994), which one of the basic outcomes of cynical hostility (Smith et al. 2004).

To the knowledge of the authors of this article, thus far there are no studies which would examine the relationship between cynical hostility and different measures/aspects of SES, including objective, subjective and childhood SES at the same time, as well as there are no studies related to this topic which would concern the particular large but fairly well defined in terms of demographics group in the society, mainly the university students. There is fair amount of data showing the relationship between social distrust and the socioeconomic measures, but they usually encompass relationships which hold for the whole societies, and not specific groups within it (Boguszewski 2014). It can be assumed that day-to-day economic hardship, feelings of inferiority and uncertain position in social hierarchy are associated with more cynical views of society and lack of trust in others' fair intentions: subjective SES is negatively associated with cynical hostility in students (H1). It is presumed that cynical thinking starts to develop early in life and childhood life conditions affect social functioning in adulthood: childhood SES is negatively associated with cynical hostility in students (H2). Poor education and/or income may result in increased self-interest motivations and mistrustfulness: objective SES is negatively associated with cynical hostility in student (H3).

## 2. Methods

*Participants.* Two hundred and forty four students took part in this study: 151 women (62%), 89 men (36%), 4 persons (2%) 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.

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.

Childhood SES was measured with one indicator. Participants were asked whether their parents owned the house or flat in which the family lived during participants' childhood (age 0-7). This measure demonstrated validity in previous studies (Cohen et al. 2004).

*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. All tests were two-tailed, and the significance level was set to  $\alpha = 0.05$ . Cynical hostility was dependent variable. Independent variables added in the first step were sex and age. In the second step both subjective and objective socioeconomic status were added: mother's education, father's education, and parents' monthly gross income. Step three included only one variable: childhood SES. All statistical analyses were conducted in IBM SPSS 22.

### 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 correlations between the study variables

	<i>M (SD)</i> %	2.	3.	4.	5.	6.	7.	8.
1. Age	21.22 (2.80)	.08	.00	-.04	.09	.19**	.16*	.19**
2. Sex <sup>a</sup>	36% males		-.04	-.04	.01	.02	.03	.28**
3. Father's education	4.33 (1.38)			.56**	.50**	.17*	-.01	-.11
4. Mother's education	4.69 (1.24)				.49**	.15*	-.07	-.09
5. Parents income	4.96 (2.98)					.40**	-.11	-.07
6. Subjective SES	5.46 (1.72)						-.07	.01
7. Dwelling place ownership <sup>b</sup>	67.1% owners							.11
8. Cynical hostility	19.02 (4.39)							

\* $p < .05$ , \*\* $p < .01$ ; <sup>a</sup>0 = women, 1 = men; <sup>b</sup>0 = yes, they were owners, 1 = no, they were not owners.

The regression analysis for cynical hostility showed that the independent variables added in step 1 explained 17.4% of the variance ( $F_{2,182} = 18.33, p < .001$ ). Four independent variables added in Step 2 explained 0,8% of the variance ( $\Delta F_{4,178} = .43, p = .79$ ). Step 3

explained 1.4% variance ( $\Delta F_{1,177} = 3.15, p = .078$ ). The independent variables explained a total of 19% of the variance of cynical hostility ( $F_{7,177} = 5.30, p < .001$ ). Significant independent variables in Step 3 were sex ( $\beta = .17$ ), showing that men scored higher on cynical hostility, age ( $\beta = .35$ ), and childhood SES ( $\beta = .12; p = .078$ ) (see Table 2).

Tab 2. Results of hierarchical multiple regression analyses in which age, sex, objective SES, subjective SES and childhood SES were regressed upon the scores on CMHI.

Step	Predictor	$\beta$	$\Delta R^2$
1	Age	.36**	.168**
	Sex <sup>a</sup>	.18**	
2	Age	.36**	.008
	Sex <sup>a</sup>	.20**	
	Mother's education	.02	
	Father's education	.03	
	Parents income	.06	
	Subjective SES	-.05	
3	Age	.35**	.014
	Sex <sup>a</sup>	.17**	
	Mothers education	-.03	
	Fathers education	.04	
	Parents income	-.05	
	Subjective SES	-.04	
	Childhood SES	.12	
Total $R^2$			.190**

\* $p < .05$ , \*\* $p < .01$ ; <sup>a</sup> 0 = women, 1 = men; <sup>b</sup> 0 = yes, they were owners, 1 = no, they were not owners

#### 4. Discussion and conclusions

Hypothesis 1 was not confirmed, cynical hostility was not associated with subjective SES. Hypothesis 2 was confirmed, lower childhood SES was positively associated with cynical hostility in adulthood. Hypothesis 3 was not confirmed, cynical hostility was not associated with objective SES. These results might be explained by several factors. The most important ones may include the homogeneity of the participants' group and the fact that objective SES was measured through indicators of students' parents SES. University students are in the middle of major life changes, such as leaving family home. They are independent in many aspects of their life, but at the same time often dependent on their parents' will. They may perceive their status as only temporary. Young people striving for higher education might see their social position through their ambitions and plans for the future life as well as their achievements so far. Therefore, cynical students with low objective SES and low childhood SES may not necessarily put themselves lower on the social ladder, as they may see their position as changed into a better one, in comparison to parents' economic and educational situation. At the same time they may project their subjective SES into the future for which they hope the best. Nonetheless, results once again confirmed the importance of childhood conditions of life in relation to the psychosocial functioning of a person in future life. If parents do not own their dwelling place and additionally have at least one child, they are more likely to be in an insecure situation. Uncertainty about financial stability and diminished feeling of control over the future are strong stressors and can lead to chronic anxiety which consequences are vast. Anxiety might be generalized, it even may become a default reaction to situations and events in social functioning context. Contacts with other people influenced by anxiety might be full of distrust, caution and cynicism – in a threatening world the best reaction is to be careful, and it is better not to trust anybody. Every



situation when a guard is low is a potential risk of losing something valuable. Parents' attitudes and behaviours are inevitably influencing child's beliefs, values, and behaviour.

According to Self-Determination Theory (Ryan & Deci 2000), human functioning depends on fulfilling three basic psychological needs: (1) the need for autonomy, (2) the need for competence, and (3) the need to maintain positive relations with others – need of relatedness. The unmet needs of autonomy, competency and relatedness can lead people to their compensation in a way that can have negative consequences. Studies show that effectiveness of teaching is correlated with the level of students-school integration. The average level of motivational integration proves to be the strongest correlate of achievement (cf. Atroszko & Atroszko 2014). From this perspective cynical hostility is a trait that might hinder positive attitudes not only towards school and education process, but also towards other people and institutions. This may significantly diminish social capital. Cynical hostility is associated with greater interpersonal conflicts (Smith et al. 2004). A hostile student in school will probably have problems in shaping friendships and positive relations with teachers, which means that his/her need for relatedness will be unfulfilled. Because of that student will have difficulties in developing internal motivation to learn which in conjunction with the fact that he or she is obliged to attend school might result in interpreting school environment as hostile. This may strengthen negative attitudes against education process and other people in general, and may become the basis for the development of psychological trait of cynical hostility in adulthood.

Investments in next generations are surely one of the most important ones. Education process should be focused more on shaping functional attitudes and values, such as trust, benevolence and cooperativeness. Previous researches showed that cynical hostility and low SES are related to difficulties in professional career, poor social relations and most of all health problems. Cynical hostility might be a particularly widespread phenomenon in Poland, as it was showed that living under communist regimes may have encouraged both social cynicism and power values (Schwartz & Bardi 1997). Searching for relationships between cynical hostility, SES, and other aspects of human psychosocial functioning can provide a solid ground and a good starting point for understanding basic mechanisms of distrust and negative attitudes towards others.

As far as the Authors are aware, the present study is the first to investigate the relationship between cynical hostility and different measures of SES, including objective, subjective and childhood SES measured as dwelling-place ownership when participant was seven years old or younger. To the Authors knowledge, it is also the first study related to this topic which concerns the particular large but 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 were standardized and showed adequate validity and reliability. One of the major limitations of the study was a relatively small sample of university students, therefore, the findings cannot be generalized to other populations 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, thus the results may have been influenced by the common method bias. Possible confounding variables related to personality, cognitive abilities and family were not controlled in this study. Future studies should use longitudinal designs, controlling for more confounding variables and using more elaborate and adequate measures of objective SES in order to assess the directionality between the concepts. In addition, future studies should use larger and more representative samples.

## 5. Literature

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