

Altruist, egoist or competitor: The level of social values orientation among Czech adult society

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Abstract

Social value orientation refers to a pattern of behavior individuals exhibit based on their preferences and interests. The Social Value Orientation (SVO) questionnaire categorizes respondents into four groups: egoists, altruists, competitors, and undetermined. This study aimed to identify variables that may affect the stability of the SVO questionnaire and lead to variations in behavioral patterns. Data collection was conducted using a Google questionnaire on a sample of Czech adults (N = 183; 114 women, 69 men). The translated version of the SVO questionnaire demonstrated high reliability, with a Cronbach's alpha value of 0.95. Content validity was confirmed through expert evaluation of the research tool. Significant effects were observed for variables such as status (student/non-student), perceived attractiveness, and self-perception of power on respondents' social value orientation. These findings are discussed in detail in the conclusion section of the study.

Keywords: altruism, competition, egoism, psychometric properties, social orientation.

Альтруист, эгоист или конкурент: уровень ориентации на социальные ценности в чешском взрослом обществе

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Аннотация

Ориентация на социальные ценности относится к устойчивым моделям поведения, которые индивиды проявляют в соответствии со своими предпочтениями и интересами. Опросник «Social Value Orientation» (SVO) делит респондентов на четыре группы: эгоисты, альтруисты, конкуренты и неопределившиеся. Данное исследование было направлено на выявление переменных, способных влиять на устойчивость результатов опросника SVO и вызывать вариации в поведенческих паттернах. Сбор данных осуществлялся через Google-опросник на выборке взрослых жителей Чехии (N=183; 114 женщин, 69 мужчин). Переведённая версия опросника SVO продемонстрировала высокую надёжность с коэффициентом альфа Кронбаха 0.95. Контент-валидность была подтверждена методом экспертной оценки исследовательского инструмента. Обнаружено статистически значимое влияние таких переменных, как статус (студент/не студент), субъективная оценка привлекательности и самооценка уровня влияния на социальную ценностную ориентацию респондентов. Эти результаты детально обсуждаются в заключительном разделе исследования.

Ключевые слова: альтруизм, конкуренция, эгоизм, психометрические свойства, социальная ориентация.

Introduction

Nowadays, value systems, along with the social value orientation (SVO) of individuals based on them, are undergoing rapid changes (Hall et al., 2018; Wang et al., 2023). Technologies and social media platforms play a significant and influential role in this transformation (Caldwell et al., 2017). Without social interaction and feedback from friends, colleagues, and others, individuals may struggle to develop social behaviors, potentially leading to egoistic tendencies (Nowacka et al., 2021; Wang et al., 2023).

The aim of this study was to identify variables that disrupt the stability of the SVO questionnaire and contribute to variations in behavioral patterns. Van Lange (1999) developed the Social Value Orientation (SVO) tool to measure how individuals allocate resources between themselves and others. He defined SVO as a stable trait that governs how a person distributes valuable resources among themselves and others.

Social value orientation refers to behavioral patterns that individuals follow based on their interests (Van Lange, 1999). According to the author, external factors also influence these patterns. For instance, an individual's behavior may prioritize societal benefits, group welfare, family interests, or self-interest. Social interaction preferences reflect whether individuals favor behaviors that benefit themselves or others (Van Lange, 1999). This concept divides individual behavior into three categories:

Cooperation: Maximizing mutual benefits for oneself and others.

Individualism: Maximizing benefits solely for oneself.

Competitiveness: Prioritizing winning over others (Messick & McClintock, 1968).

This typology has inspired various models of social interaction with differing details. One notable division categorizes social orientation into altruists, egoists, and competitors – forming the basis of this study (e.g., Sattler & Kerr, 1991; Van Lange & Kuhlman, 1994).

At the same time, social behavior patterns may not only result from personal values and social orientation but may also be influenced by other factors. For example, Derks et al. (2014) examined the influence of gender on social value orientation and found no significant difference in social orientation with respect to respondents' gender. Similarly, other studies have demonstrated an insignificant effect of gender ($t = 1.70$; $p = 0.08$) on types of social value orientation (Declerck & Bogaert, 2008).

Although Grosch & Rau (2017) and Zheng et al. (2021) did not confirm a significant difference in gender-related social orientation, they observed higher prosocial (altruistic) behavior in women compared to men ($t = 0.71$). Contrasting results were reported by Tinghög et al. (2016), who found that men scored higher in altruistic behavior than women. Conversely, Horak (2016) identified egoistic behavior as more prevalent among men, while Cheng & Wang (2015) noted that egoistic behavior is more typical of women and altruistic behavior is more typical of men. Mieth et al. (2017) demonstrated that women, unlike men, tend to make decisions that are more social and less rational from an economic perspective. Similar results were found in the study of Sugiura et al. (2017).

Cultural differences in social orientation were explored by Moon et al. (2018), who compared American and South Korean populations. They concluded that individualism and egoistic social orientation were more prevalent among Americans, whereas prosocial social interactions were more frequent among South Koreans.

Perceived attractiveness was investigated by Bhogal et al. (2017), who found no influence on cooperation among respondents. In contrast, Norman & Fleming (2019) showed that considerate altruists were significantly more attractive than neutral altruists; however, heroic altruists did not differ significantly from neutral or considerate characters.

The aim of this study was to examine the impact of selected variables on SVO and to identify differences in behavioral patterns. The variables were chosen based on prior research studies published on the topic. Additionally, the aspect of sustained attention was considered, ensuring that the questionnaire completion time did not exceed 30 minutes, as prolonged durations may reduce attention and compromise the accuracy of responses. This assertion is supported by findings from authors such as Bunce et al. (2010) or Peker et al. (2018).

To achieve the study's aims, the initial step involved translating and validating research tools. Subsequently, the influence of selected variables on SVO was analyzed.

Methodology

Respondents

The research data was collected on a sample adult society in Czech Republic. Participation in the research was voluntary and the anonymity of the respondents was

guaranteed. Respondents could fill in the questionnaire using a PC or a mobile phone. The research was approved by the ethics committee of the Faculty of Education, UJEP, 2/2022/01. Respondents provided informed consent to print the link.

183 people participated in the research, almost all being university students at the time of completing the questionnaires ($n = 165$). The rest of the respondents had an employment status ($n = 18$). The average age of the respondents was 22.27 ($SD = 2.09$). Of these participants, 114 were women and 69 were men. At the time of completing the questionnaire, 75 respondents stated that they had no partner and 108 respondents had been in a relationship. The social orientation of the respondents was a significant variable. Based on the points reached (see chapter "Research instrument"), respondents were allocated into four groups. First group was named the "Undetermined" ($n = 27$), then the "Altruists" ($n = 81$), the "Egoists" ($n = 62$) and also the "Competitors" ($n = 13$).

Research instrument

The research instrument was designed as a questionnaire to assess the social orientation of respondents. Participants were presented with the following scenario:

"Imagine a situation where a randomly assigned person, labelled 'Someone Else,' is paired with you. You will not interact with or meet this person in the future. Both you and 'Someone Else' will independently select one of three options (A, B, or C). Your choice determines the points earned for yourself and 'Someone Else,' and vice versa. Each point carries monetary value, meaning more points benefit both parties."

Point Allocation Rules

Option A: You earn 500 points, and 'Someone Else' earns 100 points.

Option B: You earn 500 points, and 'Someone Else' earns 500 points.

Option C: You earn 550 points, and 'Someone Else' earns 300 points.

Participants were instructed to prioritize their own point accumulation while acknowledging that 'Someone Else' would similarly benefit from their own choices. They were reminded that "there are no correct or incorrect answers—choose the option you prefer most. The more points you accumulate, the better for you (and vice versa for 'Someone Else')."

Social Orientation Classification

Respondents' choices across nine scenarios categorized them into four groups:

Undetermined (inconsistent or neutral preferences)

Altruists (prioritizing others' gains)

Egoists (prioritizing personal gains)

Competitors (maximizing relative advantage over others)

Translation and Adaptation

The instrument was translated from Van Lange & Kuhlman's (1994) original using a back-translation procedure to ensure linguistic and conceptual equivalence.

Additional Variables

The research tool included other demographic variables like age, gender, relationship status (single/in a relationship), financial situation, physical attractiveness, social status, and perceived power.

Methodological note: A final item recorded whether participants completed the questionnaire via computer or mobile phone. This addition was introduced by the study authors, while all other variables were retained from the original instrument.

Data analysis

Since the research tool had not been previously utilized in the Czech Republic, it was essential to conduct initial psychometric analyses. Consequently, the reliability, face validity, and construct validity of the translated version of the instrument were examined.

Reliability Analysis

The reliability of the tool was assessed using Cronbach's alpha (α) coefficient. Participants' raw responses were converted into numerical data to facilitate calculations. The resulting α value of 0.95 indicated high reliability, exceeding the commonly accepted threshold for research instruments ($\alpha > 0.70$) as defined by Nunnally (1978) and Taber (2018).

Validity

Face validity was evaluated through expert appraisal by two specialists. Additionally, comparisons were made between the instrument's social orientation results and findings from similar studies to further support its validity. The specialists on this problematic took into account the age of respondents and according to their suggestions were made changes, which were by stylistic character. By the using of face validity, we complied with standards of face validity (e.g., Nevo, 1985; Sireci & Faulkner-Bond, 2014).

Construct validity was confirmed by correlating the results of the questionnaire with selected variables of interest based on previous literature. The main results of the analysis of the relationships between SVO and variables of interest confirm construct validity.

Analysis of Variables

The obtained data had got nominal character, so the complex analyses were not allowed. The chi-square analyses for independent studies were used. The relationship between variables affecting respondents' social orientation was analyzed using Pearson's chi-square test of independence (χ^2). This test determines whether a significant relationship exists between two traits. To quantify the degree of dependence between observed variables, the Cuprov contingency coefficient (K) was calculated. Values of $K = 0$ indicate complete independence, while $K = 1$ signifies total dependence; intermediate values represent varying degrees of dependence.

The previous subchapter includes information about reliability of research tool. The Cronbach alpha coefficient (α) was used, it is with concordance of methodological literature, that supported to use Cronbach alpha coefficient for nominal data (e.g., Malkewitz et al., 2023; Zhang & Yuan, 2016)

Results

The device used to administer the questionnaire did not play a significant role in assessing the effect of each variable ($\chi^2 = 0.14$; $p = 0.93$), indicating that the data could be evaluated independently of the device that was used at the time the survey instrument was administered. Conjointly, the relationship between the social orientation of the respondents and the facility was also profoundly weak ($K = 0.14$).

There was no significant difference between men and women (gender variable) ($\chi^2 = 6.56$; $p = 0.09$). The correlation between gender and social interaction indicated a moderate but not strong moderate relationship between the two variables ($K = 0.33$).

However, a significant factor was whether the respondent was a student or not ($\chi^2 = 14.89$; $p < 0.01$). In an additional analysis using z-scores, we found that non-studying respondents were more undetermined compared to studying ones ($p < 0.001$). Similarly, the relationship between the two variables signalled their interdependence ($K = 0.41$). The score distribution is shown in Figure 1.

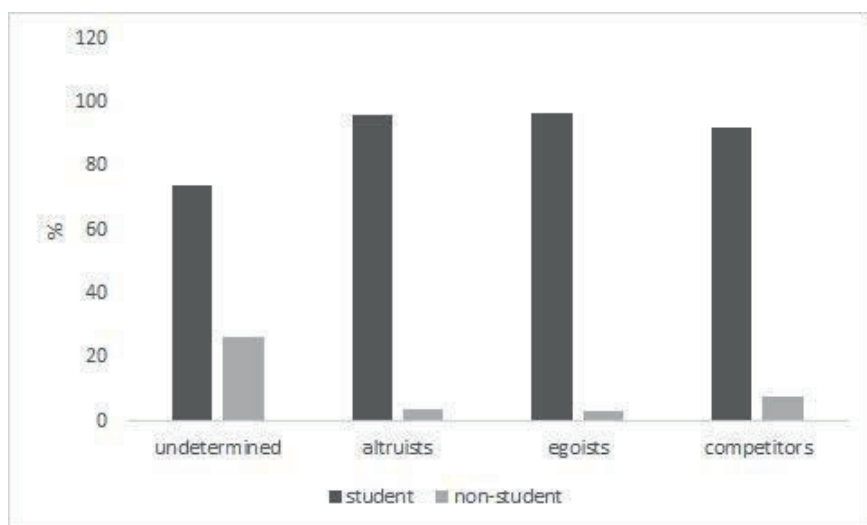


Figure 1. Distribution of scores for individual types of social orientation with respect to whether respondents are currently studying

A significant difference was also found for respondents' education level ($\chi^2 = 16.53$; $p < 0.05$). An additional analysis using z-scores revealed that respondents with completed primary education were more undetermined compared to the non-completed education ($p < 0.01$). The relationship was $K = 0.35$.

The assessment of one's own financial situation proved to be insignificant ($\chi^2 = 4.54$; $p = 0.60$). Whether the respondents assessed their financial situation positively or negatively did not affect their social orientation ($K = 0.25$). Oneself perceived attractiveness had a significant effect on the SVO ($\chi^2 = 17.25$; $p < 0.01$). An additional z-score analysis identified that respondents who considered themselves unattractive were more undetermined compared to attractive ones ($z = 2.13$; $p < 0.05$). The relationship between the two variables was at the level of $K = 0.35$. The score distribution is shown in Figure 2.

The perception of one's own position proved to be insignificant ($\chi^2 = 8.00$; $p = 0.24$). Whether the respondents assessed their position in society as significant or insignificant did not affect their social orientation, which was confirmed by the weak relationship between the two variables ($K = 0.29$). The perception of one's own power had a significant effect on SVO ($\chi^2 = 18.42$; $p < 0.01$). An additional analysis using z-scores revealed that respondents who perceived themselves as more powerful were more undetermined compared to who perceived themselves as no much powerful ($p < 0.05$). The relationship between the two variables was at the level of $K = 0.36$. The score distribution is shown in Figure 3.

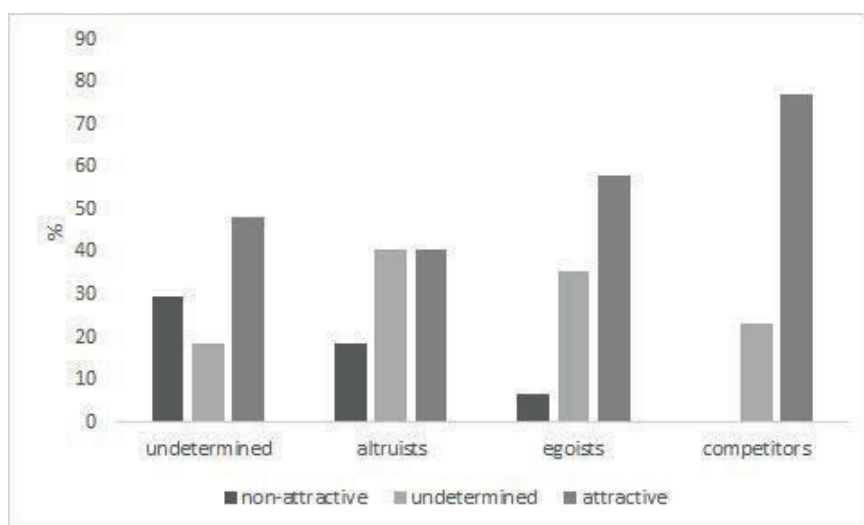


Figure 2. Distribution of scores for each type of social orientation with respect to the perceived attractiveness of respondents

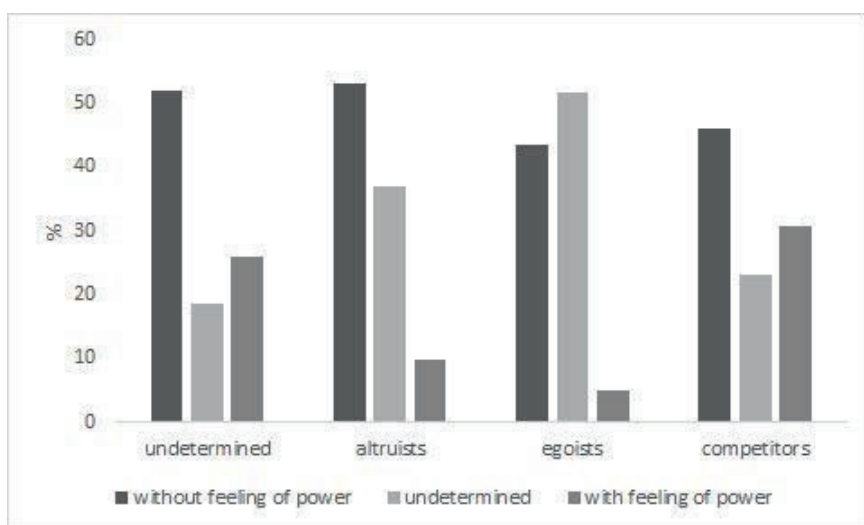


Figure 3. Distribution of scores for each type of social orientation with respect to respondents' perception of their own power

The effect of whether or not the respondent had a partner at the time of completing the research instrument proved to be insignificant ($\chi^2 = 4.36$; $p = 0.23$). The relationship between these variables was at the level of weak to slightly moderate ($K = 0.30$).

Discussion

The aim of the study was to determine the effect of selected variables on SVO and identify causes for differences in behavior patterns. Reliability values, determined using

Cronbach's alpha coefficient, indicated that the research instrument could be labeled reliable. The resulting value was $\alpha = 0.95$, which significantly exceeds the established cut-off value (Ercan et al., 2007; Iacobucci & Duchacek, 2003; Nunnally, 1978). The research tool focused on the social value orientation was previously used on the similar age population, so only the based validation mechanism were used (face and construct).

The effect of gender on respondents' social orientation was found to be insignificant, aligning with findings from other authors investigating the same variable (e.g., Grosch & Rau, 2017). However, whether a respondent was a student emerged as a significant factor, with non-student respondents being significantly more undetermined compared to their student counterparts. This phenomenon can be explained by the tendency of student respondents to form groups with individuals exhibiting similar behaviors, thereby sharing a dominant social orientation (Antonio, 2001). Consequently, no significant differences were observed within individual types of social orientation. Non-student respondents may encounter diverse individuals in their work environments, leading to the development of mixed social orientations defined as "undetermined."

The highest level of education also proved to be a significant factor. Respondents with only primary education were significantly more undetermined than others. This can be attributed to their exposure to diverse opinions in semi-economic or industrial fields where spiritual work is less common (Lerner & Malmendier, 2013). In contrast, respondents with higher education tend to interact with individuals from similar backgrounds, assimilating into a predominant type of social orientation based on prevalent group dynamics.

Perceived attractiveness also emerged as a significant variable. Respondents who considered themselves unattractive were significantly more undetermined than those perceiving themselves as attractive (Pham et al., 2014). Attractive individuals tend to cluster in groups with similar self-perceptions, reinforcing shared social orientations.

Finally, the perception of one's own power was identified as a significant factor. Respondents who perceived themselves as powerful were more undetermined compared to those who did not. This may be due to interactions among powerful individuals who share similar worldviews.

Limitations of Study

The study has got some limitations. The first of them is the presentation only of some variables, which could influence social value orientation. We examined the influence of age, gender, relationship presence, perceived of own power, perception of own attractiveness and study presence. Other factors could influence the social value orientation, for example socio-economic status, personality types, family completeness, the presence of siblings and others. These factors could provide the holistic view on social value orientation of examined samples. The logically, the more complex statistical analysis would be used like inferential statistics (t-test, ANOVA) respectively multidimensional statistics (regression model, factor analysis (determination of construct validity)). Other kinds of research, for example, longitudinal study could uncover the change of social values orientation from childhood through adolescence till adulthood.

Conclusion

The study focused on social orientation within the context of the Czech Republic. The basic psychometric properties of the research instrument, such as reliability, were determined using Cronbach's alpha coefficient. Validity was assessed through content validity and construct validity.

Future research on this topic could expand its scope by working with larger samples and identifying significant differences using statistical methods such as regression

analysis. The SVO test is a simple and effective tool for analyzing social behavior, categorizing respondents into the following groups: undetermined, egoistic, altruistic, and competitive. Based on our findings, it is particularly suitable for use with respondents from general environments. Consequently, it can be applied to studying the behavior of members of specific social or socio-economic groups, in behavioral tests, behavioral economics, or even clinical practice. However, in clinical applications, the respondent's background must be carefully considered.

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