

ECONOMICS

Sociology

Kostelić, K., & Fleşeriu, C. (2023). Causal agency and influences on transitional choices: Comparison of Croatian and Romanian youth. *Economics and Sociology*, 16(2), 11-25. doi:10.14254/2071-789X.2023/16-2/1

CAUSAL AGENCY AND INFLUENCES ON TRANSITIONAL CHOICES: COMPARISON OF CROATIAN AND ROMANIAN YOUTH

Katarina Kostelić

*Juraj Dobrila University of Pula,
Pula, Croatia*

E-mail:

katarina.kostelic@unipu.br

ORCID 0000-0002-7107-1696

Cristina Fleşeriu

*Babes-Bolyai University, Faculty of
Business,*

Cluj-Napoca, Romania

E-mail: cristina.fleseriu@ubbcluj.ro

ABSTRACT. This research aims to provide insight into groups of influences on youth's transitional choices and examine the patterns of those influences. The self-reported influences on transitional choices were collected from Croatian and Romanian students. The analysis examines the interconnectedness of influences, differences arising from age and gender, and the heterogeneity of personal influence. Assuming that the approach to examined decisions is transferable to other social and economic choices, the results of this explorative study show that causal agency in decision-making should not be assumed *a priori*. This calls for further research and potential revision of the standard approach to individual decision-making.

Received: July, 2022

1st Revision: March, 2023

Accepted: June, 2023

DOI: 10.14254/2071-
789X.2023/16-2/1

JEL Classification: D91, J13,
Y80

Keywords: choices, influences, youth, causal agency, Croatia, Romania

Introduction

Youth is commonly used to describe persons in the transitional stage of life between childhood and adulthood. As characteristics of the life stages change along with the changes in social and economic factors and global trends, the age boundaries also change and vary. So, it is not unexpected that research on youth varies in the choice of age frame for their respondents from a lower bound of 15 to an upper bound of 35. According to the Croatian National Youth Programme (2014), youth are persons from 15 to 30 years old. According to Romanian Youth law (2006), young people are aged 14 – 35. In both countries, youth reach the majority and voting age at 18 and the criminal responsibility age at 14 (source: youthpolicy.org). Our approach limits the age reference to respondents from 18 to 30 years old, taking the legal age as a lower bound and the overlap in definitions by Croatian and Romanian programs for the youth as an upper bound.

Youthhood denotes a transitional stage in life, meaning people undergo changes and make decisions that shape their long-term well-being. The transition refers to the life changes regarding higher education choices and education finalization, career and job choices, entrance to the labor market, detachment from the family home, partnership formation, and the likelihood of having children (King & Williams, 2018). With economic empowerment enabled by the transition into employment, persons also increase their consumption, so consumption-related behavior and decisions constitute a research interest (Duffet, 2017; Flurry & Swimberghe, 2016; Almosawy, 2015; Shim, 1996).

The transition is a combination of life choices that (should) result in social and economic self-sufficiency in full adulthood. Therefore, transitional decisions directly or indirectly impact an individual's long-term well-being, which creates a clear motivation for investigating individual choices in the youth period. However, these transitions are not necessarily linear or progressive, and during that period may occur "ruptures," "discontinuities," and "yo-yo" transitions (King & Williams, 2018).

Even though it is commonly assumed that life choices are autonomous (specifically, by the law), meaning that one is acting according to one's own priorities or principles (Shogren et al., 2017), previous researchers offer a variety of influencing factors, some of them very specific and topic-oriented, while others use groups of influences. Moreover, there is a distinction between intrinsic and external influences. Frequently examined groups of external influences are family and parents, friends and peers, community and environment, and government measures. While examining intrinsic drives, recent research focuses on self-determination, "the ability to take primary control of one's life" and to do so in personally meaningful ways (Pierson et al., 2008).

Autonomy refers to "acting according to one's priorities or principles" (Wehmeyer, 1992). Autonomy is part of self-determination, which is the "ability to take primary control of one's own life and do so in personally meaningful ways" (Pierson et al., 2008). Self-determination Theory (Deci & Ryan, 2002; Shogren et al., 2017; Reis et al., 2018) treats autonomy as one of the three basic psychological needs among relatedness and competence. According to that approach, autonomy is not an action per se but a need that a person's activity must satisfy. Shogren et al. (2017) state that self-determined actions "enable a person to act as a causal agent." According to the same authors, "people who are causal agents are people who make or cause things to happen in their lives, rather than others (or other things) making them act in certain ways," while the causal agency has three characteristics: "volitional action, agentic action, and action-control beliefs."

The causal agency does not imply control over outcomes. Still, it assumes the person's willingness to act or make a decision that aligns with their interest, motivation, and beliefs. However, people are subjected to different kinds of influences, whether perceiving them consciously or not. This research aims to examine the self-reported influences of Croatian and Romanian youth.

The methodology section includes information on data collection and analysis. Results and discussion examine possible implications of the findings. The conclusion section summarizes the research findings with suggestions for further research.

1. Literature review

An extensive list of research is devoted to examining the influences on previously stated transitional choices. Initial insights are gained through the databases Crossref (metadata), Google Scholar, SSRN, and Web of Science, using transitional decisions, youth, and influences as the keywords. A further search of the theoretical bases was based on snowball sampling,

searching by the references from the relevant articles. Table 1. provides an overview of the previous research grouped by the major influences.

Table 1. Systematization of research of groups of influences and transitional choices

Groups of influences/ transitional choice	education	career	health	residence	partner- ship	consump- tion	self- determination
Family and parents	Leonard et al. (2017), Guo et al. (2015), Smith et al. (2016), Gerard & Booth (2015), Carey (2016), Nyamwange (2016), Walther et al. (2015), Hegna & Smette (2017), Galliot & Graham (2015), Hemsley-Brown & Oplatka (2015)	Bozgeyikli et al. (2009), Nota et al. (2007), Smith et al. (2016), Fouad et al. (2016), Galliot & Graham (2015), Guan et al. (2016), Nemova et al. (2016)	Leonard et al. (2017), Wang et al. (2017), Reicks et al. (2015)	Leonard et al. (2017), Kolawole & Boluwatife (2016), Moskal & Tyrell (2016), Dettling & Hsu (2018)	Carol (2016). Mooyaart & Liefbroer (2016)	Shim (1996), Flurry & Swimberghe (2016), Valkenburg (2000), Almassawi (2015), Drever et al. (2015), Tang et al. (2015)	Van Petegem et al. (2015), Harper (2007), Deci & Ryan (1995)
Friends, peers, and partners	Dodge et al. (2006), Smith et al. (2016), Nyamwange (2016), Albert & Steinberg (2011)	Smith et al. (2016)	Wang et al. (2017), Albert (2011)	Kolawole & Boluwatife (2016)	Suleiman & Deardorff (2015)	Shim (1996), Duffett (2017), Lachance & Choquette-Bernier (2004)	Reis et al. (2018), Gardner & Steinberg (2012)
Personal (causal agency)	Pierson et al. (2008), Guo et al. (2015), Kolawole & Boluwatife (2016), Shogren et al. (2017), Malinauskas (2019), Smith et al. (2016), Nyamwange (2016), Albert (2011), Hemsley-Brown & Oplatka (2015), Laughl & Booÿ et al. (2015)	Hodkinson & Sparks (1997), Shogren et al. (2017), Smith et al. (2016), Laughland-Booÿ et al. (2015)	Stiffman et al. (2004)	Kolawole & Boluwatife (2016), Shogren et al. (2017), King & Williams (2018)	Albert (2011), Carol (2016), Allendorf & Thornton (2015)	Lachance & Choquette-Bernier (2004)	Reis et al. (2018), Shogren et al. (2017), Shogren et al. (2015), Scott & Steinberg (2002), Swatt et al. (2019)

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(Socio)Economic situation/ status/ SES	Leonard et al. (2017), Hemsley-Brown & Oplatka (2015), Laughland-Booÿ et al. (2015)	Hodkinson & Sparks (1997), Bozgeyikli et al. (2009), Laughland-Booÿ et al. (2015)	Leonard et al. (2017), Plenty & Mood (2016)	Leonard et al. (2017), King (2017)	Allendorf & Thornton (2015)	Shim (1996), Valkenburg (2000)
Government/ Institutions/ measures	Leonard et al. (2017), Dodge et al. (2006), Hemsley-Brown & Oplatka (2015), Balogh et al. (2013)	Galliot & Graham (2015), McMillan & Marks (2003), Balogh et al. (2013)	Patton et al. (2016)	Leonard et al. (2017)	Engel & Stein (2016), Straughan (2012)	Hodkinson & Sparks (1997)

Source: authoresses' systematization based on literature review in Supplementary file 1.

The previous research overview enables the deduction of the assumption that each decision is influenced by intertwined personal influence (causal agency) with external influences. This research aims to examine the self-reported influences of Croatian and Romanian youth. The overview identified the main groups of influences and transitional decisions, which were the basis for the questions compilation. For accessibility, the causal agency is referred to as a personal influence in research questions and the survey.

Most previous research focuses on specific influences (or a combination of a few influences) and examines one or a small set of transitional decisions. However, to understand the influences on transitional youth decisions, one must consider a combination of influences (or at least groups of influences). To make a step closer to understanding the complexity of influences variety and interconnection while making transitional choices, without ignoring the relevance of causal agency, this research strives to comprehend all stated influence groups on chosen transitional choices.

The previous research provides a basis and support for the following assumptions:

- for a causal agent, personal influence should be more expressed than other influences for each choice
- personal influence should increase, and external influence decrease as people age;
- some differences regarding gender are expected;
- it is assumed that influences mutually correlate;
- it is expected to find differences in influences on transitional youth choices given the country;
- it is assumed that the collected sample points to heterogeneity and contains subgroups.

2. Methodological approach

This research will examine the transitional choices regarding education, job/ career, residence, and partner choice. In addition, consumer choice will be explored through a question about a specific choice (car purchase). The goal is not to examine particular decisions in detail but to get insight into the influences on each choice. To achieve that, influences were attributed to each choice with an assigned scale. The groups of influences are parents and family, friends and peers, partners, personal, economic situation (own/ close environment), and government (institutions, measures, incentives). The choice range for possible influence is a symmetric interval from strong negative influence (-3), no influence (0), to strong positive influence (3).

The questionnaire was distributed online in April 2019 to youth enrolled in higher education in Croatia and Romania, and self-reported assessments of influences on their transitional choices were collected. The data provides an empirical base for influence quantification and validation of theoretical assumptions. Such an approach enables the examination of the influences as the respondents "see" them. Our approach limits the age reference to respondents from 18 to 30 years old.

After excluding incomplete questionnaires, 903 filled-in responses remained. Despite a large number of responses, the sample is convenient given the collection method.

There are 356 complete responses collected from the Croatian (Pula) and 547 from the Romanian (Cluj-Napoca) young people. The average age is 21.18 with a standard deviation of 2.38 years for Croatian and 21.39 years with a standard deviation of 1.78 years for the Romanian sample. There are 58.99% female respondents in the Croatian sample and 57.58% in the Romanian sample (Table 2). The respondents were incentivized to complete the survey through a class assignment.

Table 2. Demographic characteristics of the sample

		Croatian		Romanian	
Age	N (903)	356		547	
	Mean	21.18		21.389	
	Std. Error of Mean	0.126		0.076	
	Median	20.000		21.000	
	Mode	19.0		21.0	
	Std. Deviation	2.38		1.778	
Gender		Frequency	Percent	Frequency	Percent
	Male	146	41.01	232	42.42
	Female	210	58.99	315	57.58
	Total	356	100	547	100

Source: Own calculation.

The explorative analysis is applied following the set of theoretically derived assumptions and preliminary data insights. However, the formal analysis requires a set of testable hypotheses, which originate from the assumptions:

H_1 ... Personal influence is most expressed in comparison to other influences;

H_2 ... There is no statistically significant difference between the groups of influences I regarding the country C (where $I = \{\text{Family and parents, Friends and peers, Partner, Personal, Economic situation, Government/ institutions/ measures}\}$, and $C = \{\text{Croatia, Romania}\}$);

H_3 ... There is no difference between the groups of influences I given the gender G (where $I = \{\text{Family and parents, Friends and peers, Partner, Personal, Economic situation, Government/ institutions/ measures}\}$, and $G = \{\text{Female, Male}\}$);

H_4 ... There is no correlation between personal influence and age, e.g., correlation coefficients are equal to zero for each country;

H_5 ... There is no correlation between the groups of influences on transitional choices I, e.g., correlation coefficients between the influences are mutually equal and equal to zero (where $I = \{\text{Family and parents, Friends and peers, Partner, Personal, Economic situation, Government/ institutions/ measures}\}$);

H_6 ... The observed groups of respondents are homogenous regarding personal influence.

The descriptive statistics, in combination with nonparametric tests, allow for a conclusion about the differences in the influences between countries. The correlation analysis with bootstrap based on 1000 samples (strata by age and gender) is applied to reveal possible

influences interconnectedness, as well as their relationship to age and gender. In addition, a cluster analysis provides subgroups of the Croatian and Romanian respondents, which accounts for in- and between-sample heterogeneity.

3. Results and discussion

3.1. The differences in the influences regarding the country and the gender

The average influences on all transitional decisions for the Croatian and Romanian samples are available in Supplementary file 2. Table 3. shows an average expression of the influences. The values are calculated based on the average influence over all observed choices. For example, the value of family and parents' influence per respondent is calculated as the average of that influence on education, career, residence, partner, and consumer choice.

Table 3. Average influences' expression

Country	Influence	Mean	Std. Error of Mean	Median	Mode	Std. Deviation	Skewness
Croatia (n=356)	Family and Parents	0.931	0.05	0.857	0.857	0.949	0.032
	Friends	0.328	0.062	0.286	0.000	1.178	-0.164
	Partner	0.514	0.059	0.571	0.000	1.108	-0.344
	Personal	1.667	0.060	2.000	2.571	1.132	-1.075
	Economic situation	0.467	0.061	0.429	0.000	1.155	-0.027
	Government/institutions/measures	0.039	0.073	0.000	0.000	1.367	-0.027
Romania (n=547)	Family and Parents	0.248	0.049	0.429	0.714	1.135	-0.471
	Friends	-0.198	0.05	0.000	0.000	1.164	-0.541
	Partner	0.413	0.046	0.571	0.571	1.081	-0.317
	Personal	2.193	0.037	2.429	3.000	0.855	-1.416
	Economic situation	0.969	0.040	1.000	1.000	0.945	-0.413
	Government/institutions/measures	0.288	0.048	0.286	0.000	1.112	-0.299

Source: Own calculation.

As averages diminish the differences, the values appear more neutral. However, this approach enables a more straightforward comparison of generalized influences on Croatian and Romanian youth. The perception of influences by Croatian respondents remains positive for all influences, and the average personal influence is between weak and moderate. The same value for the Romanian respondents is slightly higher. Romanian respondents perceive the friends' and peers' influence as mildly negative, and the family and parents' influence is less expressed than for Croatian peers.

At this point, it can be concluded that personal influence is the most expressed influence for respondents, thus not rejecting H_1 . The Wilcoxon signed rank test shows additional confirmation of the statistically significant difference in the expression of the personal influence compared to all other influences for the samples from both countries ($p < 0.0000$). That means respondents perceive themselves as causal agents – at least to a certain point.

Although the data provides insight into the topic, further statistical analysis is required to shed light on the complexity of influence combination (H_2, H_3).

The test reveals statistically significant differences between the samples for each influence except the partner influence (median test: $\chi^2=0.056$, $p=0.8666$; Kruskal-Wallis: $\chi^2=0.988$, $p=0.3203$). Revealed statistically significant differences exist for the family and parental influence (median test: $\chi^2=39.836$, $p=0.0000$; Kruskal-Wallis: $\chi^2=67.734$, $p=0.0000$), friends and peer influence (median test: $\chi^2=12.845$, $p=0.0004$; Kruskal-Wallis: $\chi^2=32.832$, $p=0.0000$), personal influence (median test: $\chi^2=37.422$, $p=0.0000$; Kruskal-Wallis: $\chi^2=59.74$, $p=0.0000$), economic influence (median test: $\chi^2=30.862$, $p=0.0000$; Kruskal-Wallis: $\chi^2=47.885$, $p=0.0000$), government/ institutions/ measures (median test: $\chi^2=14.37$, $p=0.0001$; Kruskal-Wallis: $\chi^2=10.642$, $p=0.0011$). Although the countries have many similarities, the results reveal that young people perceive groups of influences differently (thus partially rejecting H_2). Those differences occur over almost all influences, so it may be assumed that they also arise from the cultural differences between the countries. Such interpretation of the finding aligns with Hodkinson and Sparks (1997), as they point out that significant influences also arise from the culture. Such a finding indicates the necessity of the different approaches to youth in the two countries and, consequently, the different youth policies.

Kolmogorov-Smirnov and independent samples median tests are applied separately to Croatian and Romanian samples, given gender as a treatment variable. The hypothesis is that there is no difference in the medians and the distribution of perceived influences given the gender. The tests reveal no statistically significant differences in perceived influences given the gender for the Croatian sample. However, the tests reveal a statistically significant difference in both medians ($p=0.0441$) and distributions ($p=0.018$) of perceived personal influence for Romanian respondents. When the independent samples median test given the gender is applied for combined data (with Monte Carlo method, 1000 samples), two statistically significant differences occur: parental influence (Chi-squared=6.133, $p=0.01599$), and personal influence (Chi-squared=8.053, $p=0.0056$). In both cases, females have higher median values. Previous research points out inconclusive results regarding the differences in parental influence and causal agency regarding gender. While these results do not offer unequivocal results either, they point out to H_3 rejection in the case of personal influence for Romanian respondents, where the influence is more expressed for female respondents. That indicates a possible cultural basis for the differences in personal influences.

3.2. The correlations between the Influences

The Pearson correlation coefficient with assigned p-values is reported in Table 4. Most of the statistically significant correlations are positive and weak to moderate but nevertheless only partially support rejecting H_5 .

It is especially interesting to notice the moderate and positive correlation between the family and parents, partners, friends, and peers. That combination points out that the more susceptible a person is to family and parental influence, the more is susceptible to friends, peers, and partners (and vice versa). If an individual is susceptible to one of those influences, they will likely be susceptible to all of them.

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Table 4. Correlation of the influences for the Croatian sample (above the diagonal) and Romanian sample (below the diagonal)

	Cro						
Ro	Family and parents	Friends and peers	Partner	Personal	Economic	G/i/m	Age
Family and parents		.590** (.0000)	.555** (.0000)	.353** (.0000)	.365** (.0000)	.357** (.0000)	-0.105* (0.048)
Friends and peers	.637** (.0000)		.667** (.0000)	0.07 (0.1849)	.388** (.0000)	.625** (.0000)	-0.017 (0.7460)
Partner	.528** (.0000)	.561** (.0000)		.162** (.0022)	.470** (.0000)	.541** (.0000)	0.002 (0.9691)
Personal	-0.003 (0.9462)	-.134** (.0017)	0.024 (0.5825)		.239** (.0000)	-0.125* (0.0182)	-.152** (.0039)
Economic	.277** (.0000)	.224** (.0000)	.227** (.0000)	.353** (.0000)		.514** (.0000)	-0.106* (0.0453)
G/i/m	.335** (.0000)	.359** (.0000)	.267** (.0000)	.140** (.0011)	.620** (.0000)		-0.004
Age	-0.097* (0.0231)	-0.042 (0.3236)	.132** (.0021)	-0.082 (0.0543)	-0.01 (0.8239)	-0.07 (0.1026)	

Note: for statistically significant coefficients, statistical significance is denoted in the brackets, 5% and 1% levels of statistical significance are denoted * and **, respectively.

Source: Own calculation.

The weak correlation of parental to personal influence in the Croatian sample may support previous research conclusions that parental influence may be a precondition for autonomous action in some cases (Hegna & Smette, 2017). In that light, if the youth unemployment rate is considered, the explanation for this influence may be cohabitation with parents or financial dependence, which can relate to a prolonged, nonlinear youth period. That relationship may be used to enhance the policy, education, and business approach. For example, student counseling and providing education, job, and career information to students and their parents could improve educational and career choices and result in a diminishing unemployment rate. The same relationship may prove to be beneficial for consumer behavior development and promotional purposes (in terms of word of mouth).

Age is negatively correlated to parental influence in both samples, as expected. Generally, all external influences are expected to diminish as people age. There might be such variation, but it is not expressed enough to appear statistically significant for all influences. It is worrying that the personal influence is negatively correlated with age in both samples (though not statistically significant for the Romanian sample and with a negative direction for the Croatian sample), thus not rejecting H_4 .

The unexpected correlation is the weak negative correlation between personal influence and age. It might be interpreted that as respondents age, they perceive to have less personal influence on their own choices, which may indicate a certain level of hopelessness.

There is a weak negative correlation between friends and personal influence in the Romanian sample: if friends' and peers' influence is expressed more, the personal influence is less represented. The data suggests that Romanian respondents are more susceptible or aware of negative peer influence concerning their causal agency, while such a situation does not occur for Croatian respondents.

The data indicates that the economic situation and government/ institutions/ measures' influences are weak and positively correlated with personal influence in the Romanian sample. At the same time, the latter has a negative sign in the Croatian sample. The more expressed government/institutions/measures influence a Croatian respondent perceives, their causal agency is less expressed. The more expressed positive influence a Romanian respondent

perceives from economic and/ or government/institutions/measures, the more positive personal influence is expressed. This might indicate that current incentives in Romania encourage causal agency, which could be used as an example of good practice.

3.3. The subgroups of respondents given the personal influence (causal agency)

A k-means cluster analysis reveals subgroups, meaning that the groups of respondents are not homogeneous regarding their perceived personal influence while making transitional choices (H_6). The analysis is conducted separately for Croatian and Romanian samples. The data was not standardized for the analysis and comprised expressed personal influences for residence, education, job/ career, and car (consumption) choices. A five-cluster analysis is reported as a compromise between detail insight and conciseness (Table 5, Figure 1).

Table 5. The subgroups of the respondents based on the personal influence on transitional choices

Personal influence on transitional choices		Cluster (final cluster centers)				
		1	2	3	4	5
Croatia	Residence choice	0.950	0.250	-0.735	-0.600	2.455
	Education choice	0.233	2.313	2.122	-0.340	2.418
	Job/ career choice	0.867	2.531	2.347	-0.180	2.709
	Partner choice	1.033	2.344	2.429	-0.620	2.418
	Car (consumption) choice	1.000	-0.031	2.633	-0.500	2.467
	Number of cases	60	32	49	50	165
	Percentage of cases	16.85%	9%	13.76%	14.04%	46.35%
Romania	Residence choice	1.831	2.262	1.165	0.596	2.756
	Education choice	1.958	1.929	1.352	0.135	2.777
	Job/ career choice	1.859	2.452	2.451	0.192	2.856
	Partner choice	2.000	2.405	1.648	0.039	2.684
	Car (consumption) choice	1.887	-0.81	2.429	-0.115	2.76
	Number of cases	71	42	91	52	291
	Percentage of cases	12.98%	7.68%	16.64%	9.5%	53.2%

Note: (-3) denotes strong negative influence, (0) denotes no influence, and (3) denotes strong positive influence. Source: Own calculation.

The subgroups reveal the heterogeneity of the respondents regarding personal influence. The first subgroup of Croatian respondents demonstrates a group of 60 respondents who (Figure 1, left, yellow), on average, reported the personal influence on their transitional choices as weak and positive. This might indicate the indecisiveness of the respondents, the perception that they can have little influence on their own life in all observed aspects, or that the respondents feel to be controlled. That indicates the absence of causal agency. The fourth subgroup of Romanian respondents (52 respondents, Figure 1, right, gray) contains values of personal influence on transitional choices close to zero (on average), which points out to an almost complete lack of personal influence on the transitional choices in their own life, and consequently, the lack of the causal agency. On average, the fourth subgroup of the Croatian respondents (Figure 1, left, gray) reveals very weak (close to zero) negative personal influence. That may indicate an almost complete absence of the causal agency. In contrast, the negative sign indicates the perception of "bad" choices (as their motivation, interests, and preferences negatively influence the choices). If the latter is the case, this indicates a potentially vulnerable group(s) that requires help regarding their decision-making development. Those three subgroups would benefit from the guided development of the causal agency and self-determination, which aligns with Pierson

et al. (2008) and Wehmeyer's (2015) suggestion for including self-determination in educational outcomes.

The second and third subgroups of Croatian respondents (Figure 1, left, blue, and green, respectively) and the first three subgroups of Romanian respondents (Figure 1, right, yellow, blue, and green, respectively) show a variety of weak to moderate expressions of personal influence on transitional choices.

Both fifth (Figure 1, orange), largest subgroups of Croatian and Romanian samples reveal respondents whose own motivation, interests, and preferences, on average, have a moderate-to-strong positive influence on their transitional choices. That shows the perception of expressed volitional action according to intrinsic drives, which indicates autonomy (Wehmeyer, 1992) and causal agency (Shogren et al., 2017; Pierson et al., 2008).

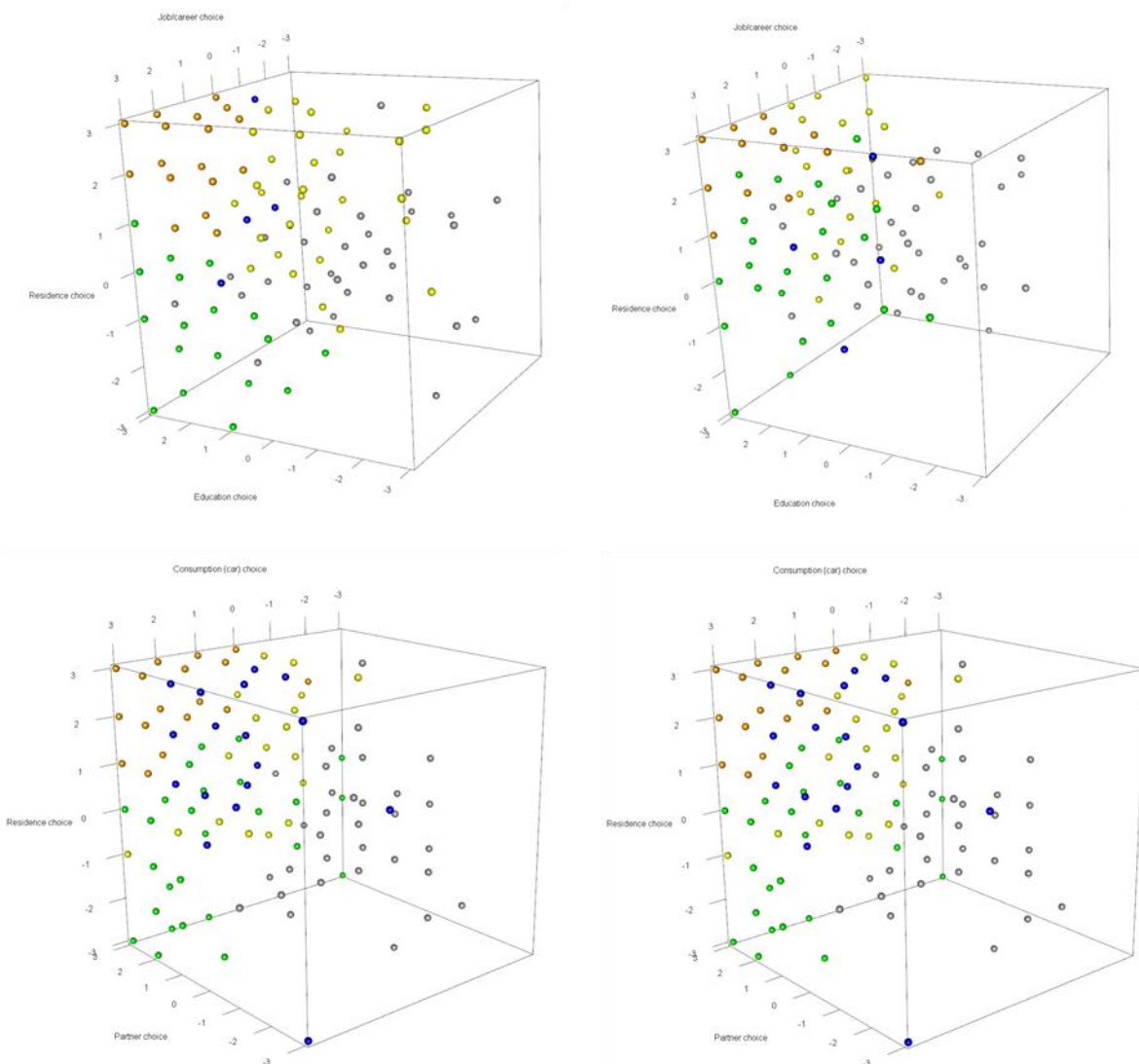


Figure 1. 3D visual representation of the clusters (Croatian respondents left, Romanian respondents right)

Notes: Clusters are denoted by color: 1-yellow, 2-blue, 3-green, 4-gray, 5-orange; graphical representations are created in R using the rgl package; visualization comprises a part of observations for a more transparent preview. The interactive version of this figure and

simplified cluster representation based on cluster centers (2-dimensional) are available in Supplementary file 3.

Conclusion

The transitions that shape people's adulthood regard changes involving choices, which have either direct or implicit economic impacts on individuals' welfare. After reaching the majority age, it is assumed that people make autonomous choices as causal agents. Based on the identified groups of influences and transitional choices from the literature, empirical insight from Croatian and Romanian samples was offered to provide insight. While some of the respondents report substantial causal agency, the other part shows none-to-mildly expressed causal agency. Assuming that the approach to decisions is transferable to other social and economic decisions, the causal agency and autonomy in decision-making should not be assumed a priori, indicating the need to revise the standard approach to individual decision-making. An individual is not an isolated rational agent in a vacuum but a part of the social network in an economic and political environment, where the elements of that environment influence individual life choices. To the authors' knowledge, there is no such comprehensive study that involves various groups of influences and transitional choices.

However, self-reported perceptions of the influences are used. As beneficial to the insights into individuals' perception of the influences on the choices, it is a limitation because it does not measure the objective influence. An implicit measurement should be derived and applied to examine the influences more objectively in future research. In addition, the conclusions are derived based on pre-COVID-19 data, and study replication could shed light on the possible lingering changes in the influences due to the pandemic and lockdown. Also, this study examined a convenient sample of only two countries, so additional generalization and cross-country validation are preferable.

Supplementary file 1: <https://osf.io/wng9m>

Supplementary file 2: <https://osf.io/rmezn>

Supplementary file 3: <https://files.de-1.osf.io/v1/resources/34vmz/providers/osfstorage/640465ab52d061011ad2430e/?zip=>

Acknowledgment

We are grateful to the respondents for their cooperation.

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