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# **„Človek a spoločnosť v čase multikríz: Minulosť, súčasnosť a budúcnosť“**

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# **Institutions, Technology, and Labor Market Polarization: Towards a Shared Prosperity**

This contribution explores the complex interplay between institutions, technology, and labor market polarization in the context of global income inequality and economic development. Drawing on recent empirical evidence, it examines the causes and consequences of inequality both between and within countries. The analysis begins with historical trends in global inequality, identifying a shift from between-country to within-country inequalities since the 1980s. It emphasizes the foundational role of institutions in shaping economic outcomes, highlighting the persistence of extractive versus inclusive institutional frameworks stemming from colonial legacies. These institutional differences are shown to influence long-run prosperity and democratic resilience. The discussion then turns to recent threats to inclusive institutions, with an alarming rise in autocratization and democratic backsliding globally. The contribution further examines how globalization and technological change—particularly automation and AI—have reshaped labor markets, leading to job displacement, declining labor shares of GDP, and stagnating or declining real wages for routine and middle-income workers. Data from the Secure Data Laboratory underpin analyses of wage trends and occupational shifts in major European economies, revealing the asymmetric impact of automation across income and education levels. Finally, the contribution advocates for a renewed focus on building inclusive institutions and addressing the social consequences of economic transformation. It calls for policies that restore human dignity and ensure a fairer distribution of technological gains, aligning with the broader goal of shared prosperity. The insights contribute to the ongoing policy debate on reconciling economic growth with social cohesion in the age of technological disruption.

## **Funding**

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**Sympóziu:**  
**In the Shadow of Rationality: Con-**  
**spiracy Theories, Alternative Be-**  
**liefs, and Dark Politics**

Ústav experimentálnej psychológie, CSPV SAV, v. v. i.

# Perceived social norms and belief in conspiracy theories

The current increased interest of the media and the public in the issue of conspiracy theories may create a false impression that conspiracy beliefs are far more widespread in society than representative population surveys actually suggest. The main goal of this study was therefore to examine perceived social norms in relation to belief in conspiracy theories. Building on several preliminary studies, this research (N = 730) tested personality-metacognitive (conspiracy mentality, need for uniqueness, overconfidence) and socio-psychological (interpersonal trust, social media use) moderators of these variables to better understand the psychological mechanisms through which perceived social norms influence people's attitudes and behaviors regarding belief in conspiracy theories. A better understanding of the mechanisms underlying the relationship between social norms and belief in conspiracy theories may not only contribute to new scientific insights but also serve as a first step toward practical implications. Specifically, it may inform the development of a relatively quick, low-cost, and easily adaptable approach for public institutions to communicate social norms in ways that help reduce belief in selected conspiracy theories within society.

## Funding:

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Ústav experimentálnej psychológie, CSPV SAV, v. v. i.

# **Longitudinal and cross-country perspectives on the associations between economic anxiety and conspiracy beliefs**

The contribution presents our recently published findings about relationships between conspiracy beliefs (CBs) and economic anxiety over various cultural settings and time. In the first study, we examined the extent to which CBs predicted economic anxiety using the European Social Survey data, round 10, from 17 countries. In the second study, we employed a cross-lagged panel analysis to determine the direction of the association between adherence to CBs and economic anxiety. Study 1 revealed that adherence to CBs was significantly associated with higher levels of economic anxiety across cultural contexts. Study 2 showed that adherence to CBs increased the sense of economic anxiety over time, whereas the reverse causal path from economic anxiety to CBs was consistently nonsignificant. This work provides evidence that adherence to CBs may be increasingly associated with adverse subjective appraisals of economic realities.

## **Funding:**

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Ústav experimentálnej psychológie CSPV SAV, v. v. i.

# **Belief in conspiracy theories and reasoning: A cross-cultural replication of the plausibility effect**

People who endorse conspiracy theories interact with new information in a limited fashion, relying on small samples when making decisions and on intuition over reflection. Previous research with US samples (e.g., Hattersley et al., 2022, Cognition) has found that these relationships exist with belief in implausible conspiracy theories (e.g., "climate change is a lie"), but not belief in plausible ones (e.g., "the Russian Federation poisoned Sergei Skripal").

The present research tests this relationship cross-culturally using samples from Slovakia, Czechia, Hungary, and Poland. Conspiracy theories seen as ridiculous in Western European or North American societies may be regarded less scornfully in other societies, meaning that they appear to generalise better to the available information within these societies. We hypothesise, therefore, that reasoning biases (e.g., reduced information sampling, less reflective reasoning) will not be associated with belief in "implausible" conspiracy theories as measured in previous studies, but will be correlated with belief in other conspiracy theories that are seen more scornfully within those societies, and potentially even those deemed "plausible" in Western societies.



Ústav experimentálnej psychológie CSPV SAV, v. v. i.

# **Ked' štandardné nestačí: využívanie doplnkovej a alternatívnej medicíny na Slovensku**

Napriek nedostatočným dôkazom o účinnosti a bezpečnosti používania doplnkovej a alternatívnej medicíny (ďalej len CAM), má jej vyžívanie v Európe rastúci trend. Na Slovensku sa vyžívaniu CAM venuje len malá výskumná pozornosť. V príspevku priblížim predbežné výsledky dvoch štúdií zameraných na prediktory vyžívania CAM. Prvá štúdia s reprezentatívnou slovenskou vzorkou (N = 1038) skúma vzťahy vyžívania CAM a socio-demografických premenných a faktorov zdravého životného štýlu. Druhá štúdia na reprezentatívnej slovenskej vzorke (N = 944) skúma socio-kognitívne a štrukturálne prediktory vyžívania CAM. Výsledky oboch štúdií potvrdzujú rolu socio-demografických premenných – ženského pohlavia a vyššieho vzdelania. Výsledky prvej štúdie poukazujú na slabý vzťah vyžívania CAM a faktorov zdravého životného štýlu. Výsledky druhej štúdie poukazujú na rolu sociálnych faktorov ako vnímané sociálne normy, na rolu presvedčení o nadužívaní štandardných liekov ako aj na rolu bariér v prístupe k štandardnej zdravotnej starostlivosti. Zistenia pomáhajú porozumieť faktorom ovplyvňujúcim vyžívanie CAM na Slovensku. Môžu slúžiť ako východisko pre ďalší výskum a podporiť informovanú komunikáciu o rôznych formách zdravotnej starostlivosti.

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Casey Klofstad

Ústav experimentálnej psychológie, CSPV SAV, v. v. i.

# **Dark Politics: Assessing the impact of dark psychological traits on nonnormative political attitudes and behaviors**

Social scientists have begun to focus on nonnormative behaviors, such as support for, and engagement in, political violence. However, prominent theories of political behavior, largely developed from observations of mostly normative political behaviors to explain normative political behaviors, may not be suitable for explaining nonnormative political behaviors. We therefore seek to contribute to the theorization of nonnormative political behaviors. Specifically, we hypothesize that 'dark' personality traits (e.g., psychopathy), which are associated with norm-violating interpersonal behaviors, are (i) separate from other prominent explanations of individual-level political attitudes and behaviors and, in some instances, (ii) more predictive of nonnormative political attitudes and behaviors than such explanations. Using a 2022 U.S. survey, we find support for both hypotheses and replicate our findings with a 2024 survey. Our findings suggest that elite vitriol motivates citizens with dark personality traits to act politically as they do otherwise: nonnormatively.

**Sympóziu:**  
**Migration and integration policies:**  
**data, challenges and policy les-**  
**sons**

Prognostický ústav CSPV SAV, v. v. i.

## Migration in Slovakia in 2023

Migration in Slovakia is a dynamic process. Historically, there was high emigration which led Slovaks across different countries around the world. At present, more foreigners, especially those from Ukraine, find their place in the country due to labour market demand and regional military conflicts. Official data for 2023 indicate a continuous increase in both inflow and outflow, with net migration (calculated on the basis of change of permanent residence) rising from 995 in 2022 to 1,401 in 2023. Mostly, migration continues to come from Europeans, reflecting regional ties. The number of third-country nationals has increased considerably, especially those with temporary and tolerated status. By that year, more than 255,000 third-country nationals were staying in Slovakia—a notable leap from the years before. The gender distribution of migrating individuals became more balanced with Europeans still dominating overall flows. Though smaller in number, Asian and African migrants are gradually increasing. At the same time, irregular migration has surged, largely due to the war in Ukraine, with illegal crossings rising sharply. The globalization trend has affected the tertiary education sector, resulting in an increased flow of both students and academics across borders. Cooperative VR/AR learning environments, VR-based simulations that can also be accessed remotely offer opportunities to deliver Sustainable Development Goals (SDGs) and the globalisation of teaching by providing wide access to education in flexible learning environments (SDG10). Foreign labour plays a key role in Slovakia's economy, with over 100,000 foreign workers employed, especially in the automotive, engineering, and ICT sectors. Meanwhile, readmissions and voluntary returns fluctuate, with a growing number of migrants returned from the Czech Republic and Poland. Understanding these trends is essential for shaping effective migration policies and integration strategies. As migration continues to reshape Slovakia's social and economic landscape, further research is needed to assess its long-term impacts and ensure sustainable governance.

### Funding:

VEGA 2/0013/24

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Anna Muhkina

Spoločenskovedný ústav CSPV SAV, v. v. i.

# **Academic persistence, NEETs, and Support Systems for Ukrainian Youth in Slovakia: Insights into Their Challenges and Needs**

This study examines the academic persistence and challenges faced by Ukrainian youth in Slovakia, focusing on university students in Košice and NEETs (Not in Employment, Education, or Training). It addresses factors influencing enrollment, academic persistence, dropout risks, and future educational intentions. **Methods:** A mixed-method approach was used, including focus groups, interviews, and a survey with university students in Košice. This provided both qualitative insights and quantitative data on students' experiences and challenges. **Preliminary Findings:** Initial findings indicate that enrollment motivations were influenced by factors such as easy admission and institutional support. Academic persistence was supported by peer networks and scholarships, while dropout risks were linked to financial stress, isolation, and mental health issues. Students' future plans varied, with some considering staying in Slovakia, returning to Ukraine, or migrating elsewhere. **Conclusion:** The study highlights the importance of support systems, including financial assistance and mental health services, to improve retention and success. These insights offer valuable implications for higher education institutions and policymakers working with Ukrainian youth in Slovakia. **Keywords:** Ukrainian Youth, academic persistence, dropout risks, institutional support.

## **Funding:**

The study was supported by the International Visegrad Fund (#22330013), titled Challenges Faced by Ukrainian Refugees in Secondary Cities in Central and Eastern Europe: Promoting Inclusion and Social Cohesion through Inclusive Public Spaces and by the Slovak Academy of Sciences Postdoctoral Grant Program "PostdokGrant" No. APD0061: Navigating Complexity: Enhancing Integration Pathways for Ukrainian Refugees in the CEE Region

# **The role of active labour market policies in integration of immigrant women**

Women with immigrant background in Europe experience lower participation at the labour market compared to their native-born counterparts in Western democracies (e.g., Gorodzeisky and Semyonov, 2017; Diop-Christensen and Pavlopoulos, 2016) mainly due to child-rearing duties. The research shows that social policies play a significant role in labour market integration of immigrants as they shape employment prospects (Duman et al., 2022; Guzi et al., 2018), but have not looked at their specific impact of women with immigrant background. The aim of this research is to examine the role of inclusiveness of active labour market policies (ALMPs) in the labour integration of immigrants in 16 European economically advanced countries between 2000-2020 using Immigrant Exclusion from Social Programs Index and panel data analysis (FE model). Furthermore, the effects of specific types of ALMPs are explored as the features of policy design may yield varying impact on the immigrant integration (Hagen-Zanker et al., 2023). The results show that more inclusive ALMPs towards foreign-born women are associated with more favourable labour market outcomes. On the other hand, the research also indicates that increased expenditures spent on training programmes and direct job creation may have a negative impact on closing the native-foreign born gaps between men, while direct job creation and start-up incentives increases the gap between foreign- and native-born women.

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Jana Papcunová

Prognostický ústav CSPV SAV, v. v. i.

# **Studying decision-making of African migrants coming to the fringes of Europe: The case of Slovakia**

This paper studies decision-making process of African migrants that have arrived to Slovakia, and the factors that influence their decisions along their migration journeys. Due to its geographical location, closed policy toward refugees and asylum seekers, and rigid labour migration policy, Slovakia is not a traditional destination for African migrants. However, African community has been steadily growing, which provides an interesting laboratory to understand which migrants might find ways to come to Slovakia, and how they embed themselves in the country. The study is based on over 30 interviews with African migrants coming mostly from the sub-Saharan Africa, focusing on their choice of destination, their migration route and their experiences after arriving to Slovakia from the perspective of economic, institutional and social integration. We focus on understanding individual life experiences and how these interact with specific institutional and policy context, resulting in varied decisions with respect to ongoing migration, return or settlement in Slovakia. The main contribution lies in studying a new group of migrants in a country entering migration transition period, moving from a country of emigration to an immigration country.

## **Funding:**

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Prognostický ústav CSPV SAV, v. v. i.

# Limits of Sociographic Mapping of Roma Communities and the Risks of an Uncritical Approach

The debate on integration policies is often framed as a complaint about the absence of precise and reliable data that would allow for the quantification of problems and the practical illustration of their impacts. However, the state of the data about the situation of people living in marginalized Roma communities in Slovakia, who undoubtedly belong to the most disadvantaged groups, can challenge this claim.

In recent years, data availability on marginalized Roma communities in Slovakia has significantly improved, primarily due to the implementation of two unique data collection efforts—the Sociographic Mapping of Roma Communities and the EU-SILC MRK survey. Both represent unique data-collection initiatives that were developed and implemented in Slovakia.

The Sociographic Mapping of Roma Communities, also known as the Atlas of Roma Communities, has become a key data source for public policy formulation and the allocation of financial resources aimed at Roma inclusion programs. The significance and practical application of sociographic mapping results are indisputable.

The first sociographic mapping, conducted in 2004, provided an overview of the spatial distribution, infrastructure conditions, and demographic characteristics of Roma settlements and introduced the first qualified estimates of their population size. It introduced a novel methodological approach that shifted the focus from identifying individual Roma to identifying marginalized Roma settlements, with their size and population estimates subsequently extrapolated based on available data. These data significantly challenged the information published by the Statistical Office of the Slovak Republic, highlighting that traditional census methods applied in those days had proven inadequate in capturing the reality of this population.

The newly obtained estimates on the Roma population in Slovakia provided strong arguments for increasing financial resources allocated to integration policies. Over time, data



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from the Atlas of Roma Communities became a fundamental reference in almost every discussion regarding the situation of Roma in Slovakia. While this ensured the relevant allocation of financial resources, it also led to an increasingly dogmatic perception of sociographic mapping data, pushing critical discussions on its limitations into the background. Given the results of the 2021 Census of Population, Houses, and Dwellings and advancements in information technology that allows for new possibilities in data collection and processing—compared to 2004, when the sociographic mapping of Roma communities was first introduced—it is crucial to reopen a critical discussion on the limitations of sociographic mapping. The findings of such discussions should be reflected in the use of data for public policy-making. This paper presents key arguments supporting the necessity of such a critical debate.

## **Funding:**

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**Sympóziu:**  
**Slovak Social Sciences and Open**  
**Science: Meta-scientific analysis**  
**of the current state**

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Matúš Adamkovič, Peter Babinčák, Gabriel Baník, Bočanová, J., Denisa Fedáková, Richard Gamrát, Samar Issmailová, Kačmariková, K., Pavol Kačmár, Michal Kentoš, Marcel Martončík, Pekarčík, A., Ivan Ropovik, Benjamin Šimsa, Lenka Vargová

Spoločenskovedný ústav CSPV SAV, v. v. i.

# **Stav slovenskej vedeckej literatúry publikovanej v rokoch 1993 - 2022: Bibliometrický prehľad so zameraním na spoločenské vedy a humanitné odbory**

Transparentné výskumné praktiky sú fundamentálnym predpokladom pre replikovateľné a dôveryhodné vedecké poznanie. Cieľom príspevku bolo prezentovať predbežné výsledky analýzy prevalence zodpovedných a problematických výskumných praktík v slovenskom akademickom prostredí prostredníctvom náhodného výberu 500 článkov publikovaných v recenzovaných časopisoch s afiliáciou k slovenským inštitúciám v oblasti sociálnych vied. Články boli získané z databáz Scopus, EPCA a CREPČ za vykazovacie obdobie 2013-2022. Výsledky ukazujú, že 51% analyzovaných článkov predstavovali empirické štúdie, 20% malo kvalitatívny dizajn a menej než 1% tvorili systematické prehľady a meta-analýzy. Z empirických štúdií iba 10% obsahovalo zdôvodnenie veľkosti vzorky, 20% neuviedlo údaje o reliabilite a až 90% neobsahovalo opis chýbajúcich údajov. Veľkosť efektu uvádzalo aspoň pre niektoré analýzy 42% štúdií, 50% uvádzalo p-hodnoty iba v kategóriách. Iba 8% štúdií obsahovalo etické vyhlásenie, 82% neuvádzalo žiadne vyhlásenie o konflikte záujmov, 4% sprístupnili dáta, 0,5% poskytlo výskumný kód a žiadna štúdia nebola predregistrovaná. Tieto zistenia poukazujú na výrazný priestor pre zlepšenie transparentnosti a rigoróznosti výskumných praktík v slovenskom akademickom prostredí.

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APVV-22-0458

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Denisa Fedáková

Spoločenskovedný ústav CSPV SAV, v. v. i.

# **Slovak Social Sciences and Open Science: Policymakers' perspective**

The aim of this conference presentation was to provide a partial report on a qualitative examination of the barriers and facilitators of open science practices (OSP), with a focus on Slovak academic institutions. Two online focus groups (N=4; N=6) were conducted to explore policymakers' opinions on practices such as open data and open materials, open code, pre-registration and registered reports, replication, open access and/or preprints, and open peer review. In addition to identifying barriers and facilitators of OSP in research institutions in Slovakia, the relevance of OSP's contribution to society was also recognized. Furthermore, challenges associated with the implementation of OSP were discussed.

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Matúš Adamkovič

Spoločenskovedný ústav CSPV SAV, v. v. i.

# Leveraging Large Language Models for Data Extraction in Meta-research

The manual data extraction in metaresearch is often a tedious, time-consuming, and error-prone process. In this paper, we investigate whether the current generation of Large Language Models (LLMs) can be used to extract accurate information from scientific papers. Across the metaresearch literature, these usually range from extracting verbatim information (e.g., the number of participants in a study, effect sizes, or whether the study is preregistered) to making subjective inferences.

Using a publicly available dataset (Blanchard et al., 2023) containing a wide range of meta-scientific variables from 34 network psychometrics papers, we tested six LLMs (Claude 3.5 Sonnet, Claude 3 Opus, Claude 3 Haiku, GPT 4o, GPT 4o mini, o1-preview). We used the API for extracting the variables from the documents automatically. This automated pipeline allows batch processing of research papers. As such, it represents a more efficient and scalable way to extract metascientific data, compared to using the default chat interface.

Our results point to a high accuracy and high potential of LLMs for metascientific data extraction. The accuracy of the respective models ranged from 76 % to 87 %, and most models were able to convey uncertainty in the more contentious cases.

**Sympóziu:**  
**Ked' sa svet mení: práca s informá-**  
**ciami, rodina a spoločenská soli-**  
**darita počas kríz**

Ústav výskumu sociálnej komunikácie SAV, v. v. i.

# Tvorivé riešenie problémov 21. storočia

Dvadsiate prvé storočie je charakteristické prehlbujúcimi sa komplexnými krízami, ktoré siahajú od klimateckej zmeny až po migračné toky a sociálne napätie. V takýchto situáciách sa ukazuje ako nevyhnutné hľadať nové prístupy, ktoré prekračujú tradičné rámce riešenia problémov. Tvorivé riešenie problémov (creative problem-solving, CPS) predstavuje systematický proces hľadania inovatívnych a efektívnych riešení, ktoré dokážu reagovať na meniace sa podmienky a neistotu. Tento proces zahŕňa generovanie nových nápadov, ich kritické hodnotenie a flexibilné prispôbovanie stratégií. Jedným z kľúčových predpokladov úspešného tvorivého riešenia problémov je metakognícia – vedomé riadenie a monitorovanie vlastného myslenia. Metakognitívne stratégie, ako systematické plánovanie, reflektovanie priebehu riešenia, hodnotenie výsledkov a následná úprava postupov, významne zvyšujú kvalitu a efektivitu tvorivého procesu. Príspevok vychádza z poznatkov z edukačnej psychológie, pričom zdôrazňuje, prečo je dôležité cielene rozvíjať metakognitívne a kreatívne schopnosti u jednotlivcov i skupín. Skúmanie a rozvíjanie tvorivého riešenia problémov je kľúčové nielen v oblasti vzdelávania, ale aj v širšom spoločenskom a profesionálnom kontexte, kde sa neustále objavujú nové a komplexné výzvy.

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Barbara Lášticová, Xenia Daniela Poslon, Ketí Bocaj, Anna Novák Bobulová, Mária Macková, & Anna Kende

Ústav výskumu sociálnej komunikácie SAV, v. v. i.

# Medziskupinová solidarita na Slovensku v čase multikríz: normatívne rámce a selektívna podpora

Príspevok skúma selektívnu povahu medziskupinovej solidarity na Slovensku, pričom analyzuje reakcie na utečencov z Ukrajiny, Rómov a LGBTQ+ ľudí počas viacerých kríz. Na základe analýzy politického diskurzu a laických konštrukcií solidarity argumentujeme, že normatívna klíma formuje vnímanie toho, kto si „zaslúži“ našu podporu. Naše dáta naznačujú, že podpora ľudí z Ukrajiny bola vnímaná ako opodstatnená, avšak bola podmienená zásluhovosťou pomoci. Kým morálna motivácia pomáhať podporuje dlhodobu udržateľnú medziskupinovú solidaritu, politizované motivácie v menšej miere vedú k podmienennej solidarite s ľuďmi z Ukrajiny. Naopak, v prípade solidarity s Rómami a Rómkami naše dáta naznačujú, že hoci otvorený rasizmus je považovaný za normatívne neprijateľný, negatívne postoje voči Rómom pretrvávajú, čo súvisí s ochotou angažovať sa v aktoch medziskupinovej solidarity. To sa prejavilo počas militarizovanej karantény rómskych osád počas pandémie. Podobne, teroristický útok v queer bare Tepláreň v roku 2022 vyvolal krátky nárast súcitu s LGBTQ+ ľuďmi, avšak tolerantné normy komunikované v politickom diskurze neviedli k sociálnej zmene a vylučujúci diskurz sa opäť posilnil. Naše dáta z viacerých projektov teda naznačujú, že v čase kríz je medziskupinová solidarita na Slovensku selektívna a v značnej miere je rámcovaná normami komunikovanými v politickom diskurze.

## Funding:

VEGA 2/0102/22 a APVV 23-0119.



Ústav výskumu sociálnej komunikácie SAV, v. v. i.

## **Rodina v liminálnej fáze: Vyjednávavanie rol v zmiešaných rodinách**

V období druhého demografického prechodu dochádza k výraznej diverzifikácii rodinných foriem, pričom zmiešané rodiny sú jednou z najrýchlejšie rastúcich. Pribúdajúci počet detí tak počas svojho detstva zažíva prítomnosť niekoľkých dospelých v domácnosti. Cieľom nášho výskumu bolo zistiť, ako sa v zmiešaných rodinách vyjednávajú rodinné roly. Kvalitatívny výskum pozostával z individuálnych interview realizovaných na vzorke 15 participantov, z toho 8 dospelých detí, ktoré vyrastali v zmiešaných rodinách a 7 matiek, ktoré vychovávali deti v takýchto rodinách. Dáta boli analyzované metódou reflexívnej tematickej analýzy. Výsledky ukázali, že adaptácia na rodinné roly primárne súvisí s vekom detí v čase vzniku zmiešanej rodiny. Čím sú deti mladšie, tým viac sa roly podobajú na tie, ktoré fungujú v biologických rodinách. V prípade starších detí prebieha formovanie a vyjednávavanie rolí v dynamickej triangulácii vzťahov medzi biologickou matkou, jej partnerom/manželom a jej deťmi. Úloha matky je ústredná, pretože primárne určuje pravidlá týkajúce sa zaangažovania svojho partnera do výchovy dieťaťa a harmonizuje vzťahy. Najviac sa vyjednávava rola matkinho partnera, ktorý sa buď stane plnohodnotným rodičom, pôsobí ako čiastočný mužský vzor, alebo sa nepodieľa na výchove dieťaťa. Deti aktívne participujú na vyjednávavaní rolí a najmä vo vyššom veku čiastočne preberajú zodpovednosť za šťastie svojej matky, čomu prispôbujú svoje konanie.

Ústav výskumu sociálnej komunikácie SAV, v. v. i.

# **Ako sa prepletajú snaha o informovanosť, lingvistické kompetencie a občianska participácia v mediálnych portfóliách mladých dospelých na Slovensku**

V krízových časoch je dôležité mať k dispozícii spoľahlivé informácie o aktuálnom dianí v primeranej miere a kvalite. V súčasnosti sme však svedkami fragmentácie informačného priestoru a obrovské množstvo neustále aktualizovaných – často aj protichodných – správ z rôznych zdrojov komplikuje proces ich spracovania a subjektívneho vyhodnocovania. Pre prípadné občianske konanie ľudí preto môže byť kľúčové, koľko a akých informácií konzumujú, akými kanálmi, od akých „producentov“, či ide o jeden zdroj alebo viaceré relatívne nezávislé a tiež, či si informácie overujú. Veľké kvantitatívne výskumy už dlhšie potvrdzujú, že mladí ľudia výrazne uprednostňujú nové médiá pred tradičnými, pričom ako zdroj dominujú platformy pre sociálne siete ako Instagram a TikTok, ktoré boli pôvodne zamerané na úplne odlišné obsahy. Tento trend potvrdzujú aj dáta z nášho kvalitatívneho výskumu o využívaní nových médií mladými dospelými na Slovensku. Vďaka použitiu kvalitatívnej metodológie poskytuje hlbší vhľad do preferencií a motivácií mladých ľudí pri tvorbe ich individualizovaných mediálnych portfólií, s presahom do (zriedkavej) občianskej participácie.

**Sympóziu:**  
**Budúcnosť práce v dobe umelej**  
**inteligencie/The future of work in**  
**the age of AI**

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Brian Fabo, Ivana Studená

Prognostický ústav CSPV SAV, v. v. i.

# **From Temporary to Transformative: Digital Skill Shifts and the „New Reality” of Work**

This paper argues that the temporary shift towards remote work and increased reliance on digital tools triggered a fundamental change, resulting in a „new reality” rather than a simple return to pre-pandemic skill requirements. By analyzing a large dataset of online job advertisements from a prominent job portal, we identify the specific digital competencies that have become increasingly critical. The research considers the implications of this transformation for education – including lifelong learning - and the ongoing evolution of the modern workforce.

## **Funding:**

This research received funding from the project Vega 2/0090/25

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Lucia Mýtna Kureková, Miroslav Štefánik,  
Ivana Studená

Prognostický ústav CSPV SAV, v. v. i.

# **The role of social dialogue in supporting adult learning participation and skills transition.**

This paper studies the role of social dialogue in improving adult learning (AL) participation in the European Union. The growing literature on AL stresses the importance of supporting adults to enhance their skills and participation in learning. There are strong presumptions about the role of social dialogue and its positive impact on i) the participation of employees in AL and ii) the equity of participation in AL. In our paper, we focus on providing new empirical evidence to discuss the role of social dialogue in supporting workers in AL participation in the time of digital and green skills transition. We undertake a systematic comparative analysis of 30 European countries to explain AL participation in terms of intensity and equity. We conceptualize inequality in AL participation by measuring gaps among different categories of workers and categories of jobs and thus provide a more comprehensive perspective on the existing inequalities, as well as the mediation effect of various social dialogue indicators. We find that, across the European countries, trade unions have supported overall AL participation, but they have not yet improved equity for the groups facing the most significant barriers in accessing AL. From a policy perspective, our paper provides insights regarding how social partners can effectively engage with individuals in facilitating adult learning opportunities for a wider group."

## **Funding:**

This research received financial support from the European Commission within the project Industrial Relations and Social Dialogue to Kick-in Inclusive Adult Learning (I SKILL), grant agreement no. VS/2021/0208 and from the project VEGA no. 2/0090/25.

Prognostický ústav CSPV SAV, v. v. i.

# Robotisation, skills and mental health of workers: evidence from Slovak machinery production

Research shows that digital transformation is associated with higher levels of work-related stress and deterioration of mental health (Abeliansky et al., 2024), poorer job satisfaction (Gorny and Woodard, 2020) due to adverse trends in working time patterns, high-intensity working, and unsocial working hours (Eurofound, 2023). On the one hand, robotisation is anticipated to diminish the physical aspects of work tasks and eliminate routine jobs. In our research, we investigate the changes in job composition within a manufacturing firm resulting from robotisation and identify new adverse effects on workers' mental health. Our empirical study of Slovak manufacturing reveals the link between robotisation and a new form of routine yet physically unrelated stress factors. We find that the intensity required for working with and setting up the robots, along with the high financial risks associated with potential errors, negatively impacts the mental health of medium-skilled workers. Our findings indicate a need to reassess the anticipated industry-level changes in skills and job adaptations resulting from automation.

## Funding:

This research received financial support from the European Commission within the project Industrial Relations and Social Dialogue to Kick-in Inclusive Adult Learning (I SKILL), grant agreement no. VS/2021/0208 and from the project VEGA no. 2/0090/25.

# In-Demand Skills: A Shield Against Automation - Evidence from Online Job Vacancies

This paper investigates the relationship between in-demand skills, wage differentials, and susceptibility to automation using data from Slovakia's largest job board in 2022. It introduces a novel algorithm that classifies skills into fifteen categories based on unstructured text in online job vacancies. The analysis then explores how cognitive, socioemotional, and manual skills relate to wage premia or penalties. The findings reveal that skills such as social interaction, character traits, people and project management, software-specific expertise, technical support, financial skills, and machine learning and artificial intelligence are associated with significant wage premia—most notably for machine learning and AI, suggesting their scarcity and high labor market demand. Conversely, skills like hand-foot-eye coordination, writing, customer service, physical abilities, and general computer skills do not yield wage premia and may even incur penalties. In total, in-demand skills account for 25\% of the variation in offered wages.

To assess how in-demand skills influence occupational susceptibility to automation, a novel measure of exposure to automation technologies—including AI, machine learning, software, and robotics—is developed using patent data and task-level labor descriptions across ISCO-08 occupations. The analysis shows that certain essential skills provide a degree of protection against automation. To supplement this, the demand for skills is analyzed in interaction with social skills to explore potential complementarities between human and machine capabilities. The results indicate that hand-foot-eye coordination, software-specific, financial, and machine learning and AI skills are associated with lower exposure to at least one type of automation technology. However, interaction effects show that when these skills are combined with social abilities, they may be associated with higher automation exposure. This suggests that roles requiring physical, financial, or technical expertise may complement rather than substitute automation technologies when paired with social skills, enhancing overall productivity.

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Finally, the paper examines whether firms with labor demand that is highly exposed to automation exhibit lower conditional skill demand. The results show that the relationship is hump-shaped, with peak demand occurring between the 60th and 80th percentiles of firm-level exposure to all automation technologies. Therefore, negative associations between certain skills and automation exposure may not necessarily reflect a shielding effect. To identify the relationship of in-demand skills on automation exposure, I apply an inverse probability weighting estimator that reweights observations based on treatment probabilities conditional on observed vacancy characteristics, thereby approximating a randomized assignment of demand for skills. The results reveal that manual and abstract skills, such as physical, hand-eye coordination, and software-specific skills, are negatively associated with automation exposure, acting as a shield against automation technologies. In contrast, routine skills, like customer service, cognitive, and finger dexterity skills, are positively linked to occupations which tasks are more susceptible to being automated. Social and character skills, while positively correlated with exposure, play a complementary role and are therefore being associated with occupations more susceptible to automation.

## Funding:

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# Príspevky

Spoločenskovedný ústav CSPV SAV, v. v. i.

# **Characterization of feminicide: a study of investigative procedures in Santa Catarina, Brazil**

Feminicide is the term used in different Latin American countries to refer to the murder of women because they are women. The term emerged in the 1990s in Mexico, leading to legal recognition, with Brazil approving its first law in 2015. The objective of this quantitative study is to characterize the phenomenon in a state of southern Brazil, with data from criminal investigation of female homicide procedures conducted between 2018 and 2020. The analysis used SPSS software and the research was funded by the Brazilian institutions FAPESC and CNPq. With 51% (n=142) of the cases classified as feminicide, most victims were aged between 20 and 29, predominantly white women. Most feminicide cases were motivated by jealousy, infidelity, or break-up, while most common homicides were motivated by reprisals against organized crime. Only 33 feminicide victims and six homicide victims had reported previous violence. No significant information was found on the mental health history and the educational level of the victim and author. This highlights the absence of a system to characterize key aspects of knowledge production on the subject. Psychology needs a critical and contextualized understanding of violence against women, to preventive interventions based on different social markers.

## **Funding:**

Research was founded by the Santa Catarina State Foundation for Research and Innovation Support (FAPESC, Brazil) and the Coordination for the Improvement of Higher Education Personnel (CNPq, Brazil). The author's academic mobility at the Institute of Social Sciences of the Slovak Academy of Sciences, Kosice, Slovakia, is founded National Scholarship Program of the Slovak Republic.

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Patrik Havan, Eva Ballová Mikušková,  
Michal Kohút, Magdalena Adamus

Ústav experimentálnej psychológie CSPV SAV, v. v. i.

# Vyvážené meranie štýlov myslenia: Kontrolovanie bezobsahového súhlasu alebo príbeh jedného dotazníka

V našom výskume sme sa zamerali na adaptáciu a riešenie limitácií dotazníka 4-Component Thinking Styles Questionnaire (4-CTSQ), ktorý meria štyri štýly myslenia: aktívne otvorené myslenie, uzavreté myslenie, preferenciu namáhavého myslenia a preferenciu intuitívneho myslenia. Hlavným cieľom bolo overiť validitu 4-CTSQ v slovenskom prostredí, preskúmať jeho nomologickú sieť, prediktívnu silu a faktorovú validitu. Zároveň sme doplnili reverzne formulované položky a vytvorili alternatívnu, vyváženú verziu dotazníka (4-CTSQ-B). Pôvodný nástroj totiž obsahoval iba jednosmerne formulované položky, čo znemožňovalo kontrolu efektu bezobsahového súhlasu.

Na základe dvoch štúdií ( $N_1 = 1233$ ,  $N_2 = 712$ ) sme potvrdili štvorfaktorovú štruktúru nástroja, a to aj po pridaní reverzných položiek. Zároveň sme preukázali, že rovnako ako pôvodný 4-CTSQ, aj vyvážená verzia 4-CTSQ-B predikuje nepodložené presvedčenia. V novej verzii sme však zaznamenali relatívne vysokú mieru bezobsahového súhlasu, čím sme potvrdili odôvodnenosť jeho kontrolovania. Na záver sme kriticky zhodnotili pretrvávajúce konceptuálne obmedzenia položiek merajúcich aktívne otvorené a uzavreté myslenie (v oboch verziách dotazníka) a navrhli možné riešenia.

Naše výsledky naznačujú, že 4-CTSQ – a ešte výraznejšie jeho vyvážená verzia 4-CTSQ-B – sú vhodnými nástrojmi na meranie štýlov myslenia.

## Funding:

VEGA 2/0053/21; VEGA 2/0035/24

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Branislav Uhrecký, Peter Halama, Lucia  
Záhorcová, Peter Teličák

Ústav experimentálnej psychológie CSPV SAV, v. v. i.

# **Meaning making and continuing bonds in coping with loss: A role of attachment and childhood experiences**

In this presentation, we wish to talk about a VEGA project in preparation. The aim of the project will be to investigate interactions among dimensions of meaning making in grief and continuing bonds with the deceased person in adaptation to loss. Loss of a significant other represents one of the most difficult experiences in human life and grief is subject of great interest in counseling and clinical practice, yet our understanding of them on an empirical level is not as well versed as we would have hoped. Continuing bonds theory suggests that specific ways of mentally representing and remembering the deceased person is related to coping with loss, which is an assumption we aim to put to test. We presume it also interacts closely with the process of meaning making and jointly, they predict difficulties in mourning such as complicated grief or prolonged grief disorder. In a longitudinal qualitative design, we would like to study meaning making and continuing bonds in their depth and time dynamics. Simultaneously, we aim to study these processes via cross-sectional quantitative designs. It is also our intention to study how adverse and positive childhood experiences, and attachment styles predict continuing bonds and meaning making.

Ústav experimentálnej psychológie, CSPV SAV, v. v. i.

# **Predstavenie projektu R2 „Komunikácia v kontexte: neurokognitívne mechanizmy naturalistickej komunikácie u autistických adolescentov“**

V projekte, ktorý nadväzuje na moje predchádzajúce výskumy neurálnych mechanizmov spracovania kontextuálnych informácií v naturalistickej komunikácii dospelých s poruchami autistického spektra (PAS) (napr. Stolk, Bašnáková, Toni, 2022), sa venujem téme pragmatických aspektov komunikácie u autistických adolescentov. Adolescencia je vývinovým obdobím, počas ktorého sa mozog zásadne mení z pohľadu štruktúry aj funkcie, a zároveň sa mení množstvo, zložitosť a subjektívna dôležitosť interakcií s vrstovníkmi (Blakemore, 2012). V projekte skúmam, či a akým spôsobom sa odlišujú sociálne interakcie u neurotypických dospievajúcich a dospievajúcich s autizmom, pre ktorých býva výzvou porozumieť dynamickým a nestálym kontextom každodenných konverzácií. Psychologické a neurovedné skúmanie mechanizmov verbálnej komunikácie ľudí s PAS sa však typicky zameriava skôr na neinteraktívnu produkciu a porozumenie (texty, monológy), pričom práve v interakcii (dialóg) je potrebné vo zvýšenej miere rozumieť kontextuálnym aspektom komunikácie. V sérii interaktívnych experimentálnych hier inšpirovaných experimentálnou semiotikou sa zameriavam na to, ako páry autistických a neurotypických adolescentov vyjednávajú význam v multimodálnych interakciách (Heasman a Gillespie, 2019). V príspevku predstavím teoretické a empirické východiská projektu, ako aj dizajn naturalistických komunikačných hier a možnosti merania interakčnej dynamiky komunikujúcich párov.

## **Funding:**

Štipendium R2 z Plánu obnovy a odolnosti

# **Social Media Influencing Political Attitudes: Trust vs. Trustworthiness.**

This study examines the typology of political trust across European countries using a residual-based measure of trustworthiness. By comparing observed public trust with expectations derived from governance performance indicators, we classify citizens into four distinct categories based on their type of trust judgment: cynical mistrust, skeptical mistrust, skeptical trust, and credulous trust. The analysis utilizes data from Eurobarometer, Eurostat, the Varieties of Democracy project, and the European Centre for Disease Prevention and Control. A multilevel mediation approach is employed to account for both individual- and country-level predictors of political trust. We reveal significant cross-national variations. Countries such as Luxembourg, Finland, and the Netherlands exhibit higher levels of skeptical trust, indicating a rational alignment between public confidence and government performance. In contrast, nations like Romania, Bulgaria, and Croatia are dominated by skeptical mistrust, where distrust prevails over the expectations based on objective governance indicators. The study also highlights the role of social media and the spread of disinformation in shaping trustworthiness. The proliferation of misinformation exacerbates trust polarization, reinforcing both cynical mistrust and credulous trust by amplifying negative narratives or fostering blind loyalty. This dynamic undermines democratic accountability by weakening rational, evidence-based trust judgments. These insights contribute to a better understanding of trust dynamics and their implications for democratic stability across Europe.

## **Funding:**

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Prognostický ústav CSPV SAV, v. v. i.

## K niektorým špecifikám vývoja rodín na Slovensku

Príspevok sa zameriava na charakter a prípadné zmeny v zložení a tvorbe cenзовých domácností na Slovensku medzi sčítaniami 2011 a 2021 v kontexte nastavenia rodinného a reprodukčného správania. Snaží sa pritom poukázať aj na niektoré regionálne diferenciácie a špecifiká. Potvrďuje predovšetkým rastúce zastúpenie domácností jednotlivcov v neprospech úplných rodinných domácností pozostávajúcich z manželského páru. Na druhej strane tiež identifikuje rastúcu početnosť kohabitujúcich párov, ako aj domácností osamelých matiek s deťmi. Získané výsledky tiež potvrdzujú existenciu pomerne významných regionálnych rozdielov vo formovaní jednotlivých typov domácností na Slovensku.

# **From energy supply security to a sustainable society: Transformations of energy security in times of global crises**

This flashtalk presents the transformation of the concept of energy security in times of global crises and the transition to a low-carbon society. The traditional understanding of energy security, which focused on ensuring a continuous energy supply, is expanded in light of various historical and current crises to include new dimensions such as price stability, environmental sustainability and technological innovation. Decarbonization and the transition to renewable energy sources are reshaping the old model of energy security. With it come new challenges, from production variability and technical and regulatory barriers to risks associated with digitalization and cybersecurity. The aim of this flashtalk is to provide a brief interdisciplinary overview of the shift from the traditional model of energy security to a sustainable energy future that considers not only technical and economic aspects but also environmental and societal needs in times of multiple crises.



Spoločenskovedný ústav CSPV SAV, v. v. i.

## Veľký jazykový model Mistral-SK

„Jazykový model Mistral-SK je slovenská adaptácia známeho francúzskeho jazykového modelu Mistral, ktorý patrí medzi výkonné open-source riešenia v oblasti umelej inteligencie. Tento model bol prispôsobený pre slovenský jazyk, čo umožňuje lepšiu prácu so slovenskými textami, vrátane porozumenia, generovania a sumarizácie informácií v slovenčine. Mistral-SK využíva pokročilé techniky strojového učenia, najmä transformátorové architektúry, ktoré sú schopné spracovávať dlhé textové sekvencie s vysokou presnosťou. Vďaka optimalizácii pre slovenčinu dokáže lepšie zachytiť jazykové nuancie, ako sú slovosled, idiomy alebo gramatické štruktúry typické pre slovenský jazyk. V porovnaní s inými modelmi je Mistral-SK špeciálne trénovaný na slovenské datasety, čo zvyšuje jeho efektivitu. Je dostupný ako open-source, čo umožňuje vývojárom ľahšiu integráciu do vlastných projektov. Zároveň je optimalizovaný pre rýchlejšie spracovanie textu s nižšími hardvérovými nárokmi. Mistral-SK predstavuje dôležitý krok v lokalizácii AI technológií a môže byť užitočný nielen pre výskumníkov, ale aj pre firmy hľadajúce pokročilé nástroje na spracovanie prirodzeného jazyka v slovenčine.“



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