

Developing the Polish Community Resilience Scale (PCRS) for Measuring Community Resilience in Cities and Communities

Marcin Marek Rzegocki ⁽¹⁾ - Józef Partyka ⁽²⁾

⁽¹⁾ Cracow University Of Economics, International Management And Logistics, Krakow, Poland - ⁽²⁾ University Of The National Education Commission, Krakow, Institute Of Psychology, Krakow, Poland

Keywords: resilience, local governance, scale validation, strategic management, social capital, Poland,

Abstract Contemporary cities and local communities face unprecedented challenges requiring robust resilience – the capacity of communities to survive hardship and thrive amid climate change, economic shocks, and social disruptions while maintaining their identity. While international measurement tools exist, they predominantly reflect Anglo-Saxon cultural frameworks and fail to capture the specific dynamics of Central and Eastern European cities, shaped by diverse historical legacies, trust patterns, and civic engagement traditions. This research, funded by the Norwegian Financial Mechanism (2023–2024), addresses this gap by developing and validating the Polish Community Resilience Scale (PCRS), a quantitative instrument adapted to capture urban social resilience in the Polish and Central European context. The instrument was developed through interdisciplinary workshops and literature review, resulting in a 54-item questionnaire tested on a nationally representative sample of 440 residents from all 16 Polish regions. Exploratory Factor Analysis (Promax rotation) revealed a three-factor solution explaining 55.2% of variance, with excellent internal consistency (Cronbach's $\alpha = .97$ overall; factors ranging from .88 to .97). Convergent validity with the Conjoint Community Resiliency Assessment Measure (CCRAM) confirmed 86% thematic overlap despite independent development. Three empirically grounded dimensions emerged: Integrated Governance and Crisis Preparedness (e.g., "Local authorities listen to residents' concerns to better prepare for crises"), Local Identity and Civic Belonging (e.g., "I feel rooted in the city/municipality where I live"), and Formal Participatory Engagement (e.g., "I have actively participated in public consultations on local issues"). Findings show higher organizational strength and social involvement in smaller cities compared to metropolitan areas, and stronger civic identity among long-term residents. These patterns reflect Central Europe's diverse historical and cultural legacies while aligning with universal resilience elements. PCRS provides a culturally adapted, psychometrically validated tool to benchmark resilience across diverse urban contexts. It enables planners and policymakers to identify at-risk communities, strengthen social capital, and design interventions that respect local cultural contexts rather than imposing one-size-fits-all solutions.