East/West
Journal of Ukrainian Studies

Perceived Social Cohesion in Ukraine: Diversity and Attitudes

Oleksandra Deineko, Aadne Aasland, Olga Filippova et Olena Muradyan

Citer cet article

Deineko, O., Aasland, A., Filippova, O. & Muradyan, O. (2023). Perceived Social Cohesion in Ukraine: Diversity and Attitudes. *East/West, 10*(2), 7–40. https://doi.org/10.21226/ewjus775

Résumé de l'article

This article demonstrates the ways in which social cohesion as a "sense of togetherness" is progressing within Ukrainian society—a society that is striving to escape the post-Soviet model as it undergoes the processes of state- and nation building and democratic development. This study draws on a national population survey and applies cluster analysis to identify homogeneous groups of the population in terms of their social-cohesion perceptions and behaviours. Six clusters are identified: distrustful, disunited, ambivalent, tolerant, connected, and declarative. The authors establish the composition of each cluster in relation to socio-economic, socio-demographic, ethnocultural, and attitudinal characteristics. Their research questions the relevance of institutional trust as a social-cohesion indicator in the context of the specific conditions of transitional societies. The authors submit that trust in political institutions might strengthen social cohesion at the level of society without necessarily corresponding to individually oriented indicators of social cohesion, such as civic and political participations. This paper sheds light on the weaknesses of the methodological approach advanced by Joseph Chan and colleagues. With the application of cluster analysis in the present study, one finds that the horizontal dimension of social cohesion is particularly well suited for use in cross-cultural studies. By contrast, the vertical dimension emerges as more contextual, requiring greater attention to the specificities of a given political regime. This paper proposes the existence of social-cohesion zigzags displaying an ambivalent state of perceptional schemes where the highest cohesion scores in some indicators are accompanied by the lowest ones in others within the same representative group. This study confirms the complexity and multi-level nature of social cohesion in transitional societies.

Perceived Social Cohesion in Ukraine: Diversity and Attitudes

Oleksandra Deineko
Norwegian Institute for Urban and Regional Research, Oslo Metropolitan University
V. N. Karazin Kharkiv National University

Aadne Aasland
Norwegian Institute for Urban and Regional Research, Oslo Metropolitan University

Olga Filippova
Karelian Institute, University of Eastern Finland
V. N. Karazin Kharkiv National University

Olena Muradyan
V. N. Karazin Kharkiv National University

Abstract: This article demonstrates the ways in which social cohesion as a "sense of togetherness" is progressing within Ukrainian society—a society that is striving to escape the post-Soviet model as it undergoes the processes of state- and nation building and democratic development. This study draws on a national population survey and applies cluster analysis to identify homogeneous groups of the population in terms of their social-cohesion perceptions and behaviours. Six clusters are identified: *distrustful*, *disunited*, *ambivalent*, *tolerant*, *connected*, and *declarative*. The authors establish the composition of each cluster in relation to socio-economic, socio-demographic, ethnocultural, and attitudinal characteristics. Their research questions the relevance of institutional trust as a social-cohesion indicator in the context of the specific conditions of transitional societies. The authors submit that trust in political institutions might strengthen social cohesion at the level of society without necessarily corresponding to individually oriented indicators of social cohesion, such as civic and political participations. This paper sheds light on the weaknesses of the methodological approach advanced by Joseph Chan and colleagues. With the application of cluster analysis in the present study, one finds that the horizontal dimension of social cohesion is particularly well suited for use in cross-cultural studies. By contrast, the vertical dimension emerges as more contextual, requiring greater attention to the specificities of a given political regime. This paper proposes the existence of social-cohesion zigzags displaying an ambivalent state of perceptional schemes where the highest cohesion scores in some indicators are accompanied by

the lowest ones in others within the same representative group. This study confirms the complexity and multi-level nature of social cohesion in transitional societies.

Keywords: social cohesion, Ukraine, cluster analysis, social-cohesion zigzags, social perception.

1. INTRODUCTION

Since the establishment of Ukraine's statehood in 1991, a vital task for the young nation has been to build unity among the population, which is diverse in terms of ethnic identity, language use, geopolitical orientation, and socio-economic features, often intersecting with regional differences (Aasland and Kropp). Attempts to identify foundational aspects of the state that would promote unity among the country's diverse groups have been highly contested. Trust in the authorities is meagre—among the lowest of any European country (Golovakha et al.). However, most Ukrainian citizens have a strong feeling of belonging to their place of residence—from the local community to the Ukrainian state (Aasland et al.).

Social cohesion is a concept often used to describe the "glue" that is necessary for holding a society or community together. Despite the obvious usefulness of the concept, there have been few in-depth studies of social cohesion in Ukrainian society. Paul Dickes and Marie Valentova conducted a comparative study of forty-seven European countries based on theoretically derived indicators of social cohesion from the 2008 European Value Study. In their survey, Ukraine was grouped together with other Eastern European countries, characterized by low formal (behavioural) and substantial (attitudinal/perceived) levels of social cohesion. Mykola Bondarenko and colleagues used comparative data from Ukraine to complement comparative analyses of the European Social Survey of 2012–13. They found that Ukraine generally scored low to very low on selected indicators of social cohesion. Another study, conducted utilizing Ukraine's Social Cohesion and Reconciliation (SCORE) Index, also offers insights into social-cohesion levels in the country, using indicators that enable international comparisons (see "Ukraine"). The focus of the SCORE Index is to identify the drivers of conflict dynamics and peaceful social change. In a qualitative study, Aadne Aasland and colleagues examined social cohesion in the context of decentralization reform and found that the voluntary amalgamation of local communities increased local participation in politics and communal life. This resulted in stronger social cohesion in many of the newly established amalgamated territories. Other studies of social cohesion in Ukraine have centred mostly

on its economic aspects (Polunieiev; Kytsak and Kyryliuk; Hrynenko and Kyryliuk).

Our study has a different objective. Using a representative population survey from 2020, we seek to identify social-cohesion perception clusters in Ukraine—groups with similar scores in a set of social-cohesion indicators derived from the existing literature on social cohesion. What are the common features that define each of these clusters? We identify and name six clusters of this type based on their patterns of perceiving social cohesion. Next, we establish the composition of each of these clusters in terms of their socio-economic, socio-demographic, ethnocultural, and attitudinal characteristics. A complex picture ultimately emerges. We find that perceptions of social cohesion cannot be ranged along a simple continuum from low to high scores. This complexity may well result from the processes of nation building, the fluidity of identities, and the instability of social structures in present-day Ukraine.

2. Social Cohesion: Post-Soviet Traces

The emergence of an independent Ukrainian state—with its institutional changes and reforms, the development of democracy, and the introduction and advancement of individual freedoms and social responsibilities—has contributed to changes in individual behaviours, forms of social cohesion, and perceptions of such cohesion in Ukrainian society. Tony Barnett and Alan Whiteside, using a comparative approach, have shown that social cohesion can arise from either social control or civil society. Control emerges from the implementation of a centralized, homogenizing authority over the citizenry. The political ideology of the Soviet Union had an effect on forms of social cohesion: the division between the public and private spheres was minimized, and individual behaviours of all kinds were closely regulated (Barnett and Whiteside 89). We consider, in a similar vein, the current changes in social cohesion in post-Soviet Ukraine within the context of transition—namely, a transition from social cohesion based on social control to social cohesion stemming from civil society.

There are almost no studies of social cohesion in Soviet-era Ukraine that would enable the examination of the dynamics of social-cohesion development between the Soviet and post-Soviet periods. In some papers, social cohesion occasionally emerges in connection with the nation-building process as a tool to promote national integration and to tie the citizenry together in a national fellowship (Harasymiw). The key issue that arises in this regard is the identity constructed on the grounds of two simultaneous processes—inclusion (generation of the self) and exclusion (distinguishing

of the other). Since the first years of independence, Ukraine has offered its nation builders a huge "variety of ethnic groups, languages, religions, regions, and political histories with which to work" (Harasymiw 206). Paul James points to the codification and maintenance of inclusion and exclusion as the key tasks of state- and nation builders. As summarized by Taras Kuzio, the Ukrainian ruling elites in the newly independent state failed "to reach a consensus as to who the actual 'Other' is" (361). Kuzio's approach deals with a somewhat narrow set of social actors who contribute to the nation-building process (in referring to social cohesion based on social control). This paper attempts to expand the set of nation builders to include those who construct social cohesion as an outcome of civil society. As noted by Andy Green and colleagues, "whole societies, and the individuals within them, are bound together through the action of specific attitudes, behaviours, rules and institutions which rely on consensus rather than pure coercion" (19). It is precisely these aspects of changes in attitudes, behaviours, rules, and institutions that are the focus of our cluster-analysis examination of social-cohesion perceptions.

The processes of state- and nation building experienced by Ukraine in the last three decades have affected social cohesion in various ways. In the political sphere, Ukraine's regional diversity has been instrumentalized and politicized from one electoral campaign to the next, reinforcing ideas that have less to do with regional diversity than with regional differences. Throughout the years, many studies have observed variances in citizens' preferences in presidential and parliamentary elections, geopolitical orientations, identities, and perceptions of the "Ukrainian nation project," illuminating multiple factors that affect these processes (Onuch et al.; Onuch and Hale; Giuliano; Arel). However, the ways in which ordinary citizens perceive social cohesion in a diverse society remain unclear. Many explorations have centred on political attitudes and behaviours in various regions of Ukraine. Although they show the broader picture, they at the same time lack the data to explain commonalities among regions and heterogeneity within local communities. Using a cluster-analysis approach, a closer examination of cohesion can provide valuable insight for considering and supporting democratization and state- and nation building processes as initiatives from below in Ukraine.

3. THEORETICAL FRAMEWORK

Studies of social cohesion often rely on two types of data sources: quantitative sociological population surveys (Chan et al.; Dickes and

Valentova; Delhey et al.; Dragolov et al.) and administrative statistical data (Berger-Schmitt; Noll). One weakness of relying solely on the latter is the inability to catch perceived and subjective perspectives on social cohesion. In this study, we view social cohesion as

> a state of affairs concerning both the vertical and the horizontal interactions among members of society as characterized by a set of attitudes and norms that includes trust, a sense of belonging and the willingness to participate and help, as well as their behavioral manifestations. (Chan et al. 290)

Our empirical operationalization of this model of social cohesion includes two dimensions that identify different types of social bonds: horizontal (relationships among individuals and groups within society) and vertical (relationships between citizens and the state). This empirical model also includes objective components (behavioural manifestations and practices) and subjective components, such as "subjective feelings of trust, a sense of belonging and the willingness to help" (Chan et al. 291). Altogether, there is a set of eight social-cohesion indicators (see table 1).

TABLE 1. | Social-cohesion dimensions and types of indicators as developed by Chan et al.

Horizontal subjective	Vertical subjective	Horizontal objective	Vertical objective
General trust in fellow citizens	Trust in public figures and confidence in political and other major social institutions	Social participation and vibrancy of civil society	Political participation
Willingness to co-operate with and help others	—	Voluntarism and donations	—
Sense of belonging or identity	—	Presence of absence of major inter-group alliances or cleavages	—

With this model we can measure both subjective and objective manifestations of social cohesion. As noted, subjective manifestations identify cohesive attitudes; the objective ones imply appropriate actions (social practices). We ask the following:

(a)   What social groups can be identified based on their perceptions of social cohesion?[1] What are the social portraits of these groups?

(b)   How can cluster-analysis results contribute to theorizing on social cohesion in post-Communist countries?

Taking the approach of Joseph Chan and colleagues in distinguishing between the components and factors of social cohesion, Jan Delhey and colleagues tested a set of possible indicators of universal or particular social-cohesion factors. Analyzing the Bertelsmann Social Cohesion Radar index in thirty-four Western societies and twenty-two Asian ones, they investigated possible correlations between economic, political, and cultural factors and a social-cohesion index. Economic prosperity emerged as a universal social-cohesion pro-factor, whereas other indicators (political freedom, religious mood, and value preferences) worked differently in Western and Asian societies. In this study, we investigate possible correlations between a set of social characteristics and models of social-cohesion perceptions in Ukrainian society to see how various socio-demographic, socio-economic, and socio-political characteristics (age, gender, region, type of settlement, education, occupation, financial status, language preferences, attitudes toward decentralization, views on language reform, identification models, and civil activism) may influence perceptions of social cohesion.

4. DATA AND METHODS

Our data comes from a representative survey of individuals across Ukraine conducted in December 2020 by the Ukrainian opinion-poll agency Operatyvna Sotsiolohiia in Dnipro on behalf of Oslo Metropolitan University

---

[1] Studies of social cohesion often draw on Kenneth Bollen and Rick Hoyle's notion of perceived social cohesion, which refers to a member's perception of their own position within a group. Such an approach does not fit our theoretical framework—we attempt to examine social cohesion using a societal (not group) level. However, the usage of Bollen and Hoyle's framework sheds light on how the approach of Chan and colleagues could be realized through modes of perception. Here, social cohesion is considered to be a phenomenon of social perception, not an objectively existing entity encompassing citizens' perceptions of their positions in society and their attitudes toward its institutions.

(for details, see Baliichuk), within the framework of the ARDU project.[2] The aim was to capture various dimensions of social cohesion at the local level among ordinary Ukrainians to see whether and how identities, perceptions, and behaviours vary within different segments of the population. The ARDU project examined how ethnicity, language, and regional-local identity interacted in the context of political reform in Ukraine and how Ukrainian decentralization, education, and language policies affected social cohesion.

The survey was conducted in the form of telephone interviews with just over 2,100 respondents. The opinion-poll agency generates a fresh database of phone numbers for every new all-Ukrainian survey using a computerized random-number algorithm in which each phone number is a random set of numbers and indices of mobile operators (taking into account the total share of operators that provide mobile services in the Ukrainian market). Mobile-phone coverage in Ukraine is very high, and mobile phones are far more common than land lines. The quality of the method was tested by comparing the results of several opinion-poll agencies prior to elections where the prognoses of election results proved among the most accurate when this method was used. The surveyed population is representative of geographical distribution, type of settlement, gender, and age.

We modified Chan and colleagues' model of measuring social cohesion slightly, in line with the Ukrainian social context. Instead of inquiring about relations between local residents and immigrants, we asked about relations with internally displaced persons (IDPs) from the Donbas and Crimea. The belonging and identity indicator was expanded by a set of questions related to a respondent's sense of ethnic, local, community (*hromada*), regional, national, and European identity, in place of Chan and colleagues' sole focus on the national level. To capture the specifics of Ukrainian transitional society, we adapted to the Ukrainian context a set of questions about trust in public figures and confidence in political and other major social institutions. In this way, we sought to measure degrees of trust in the president, the parliament, the judiciary, local authorities, non-governmental organizations (NGOs), and mass media.

We performed a cluster analysis[3] based on the hierarchic method of comparison widely used in the social sciences (Fonseca). Six clusters (groups of respondents) were identified based on their perceptions of components of

---

[2] ARDU—Accommodation of Regional Diversity in Ukraine (see *Accomodation*).

[3] A description of the cluster analysis is presented in the appendix below ("Appendix: Cluster-Analysis Details").

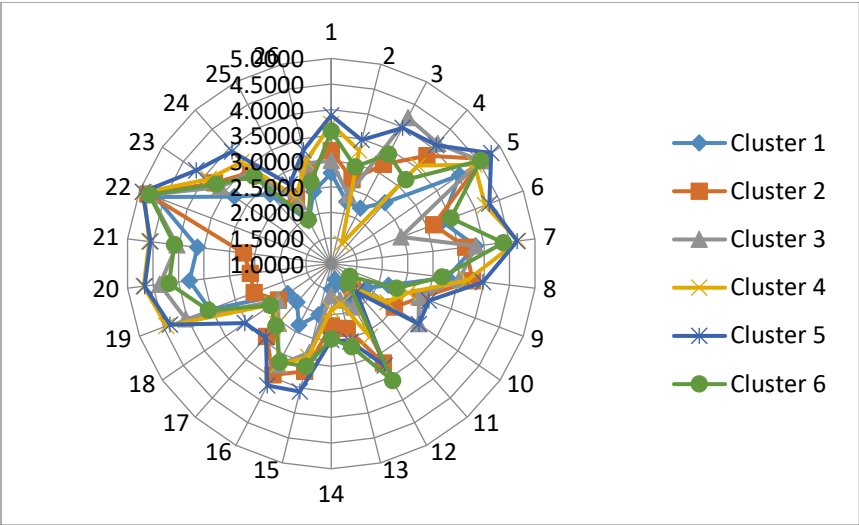social cohesion. A table of cluster centroids was generated and visualized as a radar chart (see figure 1).[4]

FIGURE 1. | Radar chart of cluster-analysis results.

A visualization of canonical discriminant functions (see figure 2)[5] indicates that the greatest distance is found between the centroids of the second, fifth, first, and fourth clusters, while the centroids of the sixth and third clusters are closest to each other. Using this method, we are able to

---

[4] Figure 1 shows a visualization of the cluster centroids that are described in detail in table 3. Numbers 1–26 in figure 1 correspond to the twenty-six variables noted in table 3 (e.g., the question "People in our country are always out to take advantage of you" is coded as number *1*; for each number, cluster centroids are displayed for each of the six clusters).

[5] Figure 2 displays the results of a discriminant analysis that was conducted to validate the cluster analysis by checking the differences of objects between groups (formed clusters) with respect to several variables simultaneously—variables used for clustering. This type of analysis is based on the discriminant-function calculation, which allows for the clearest division between clusters, assessing the "quality" of the clustering. The greatest distance between cluster centroids shows the differences in respondents' characteristics per cluster.

identify more similarities in the characteristics of relevant groups of respondents in connection with the empirical interpretation.
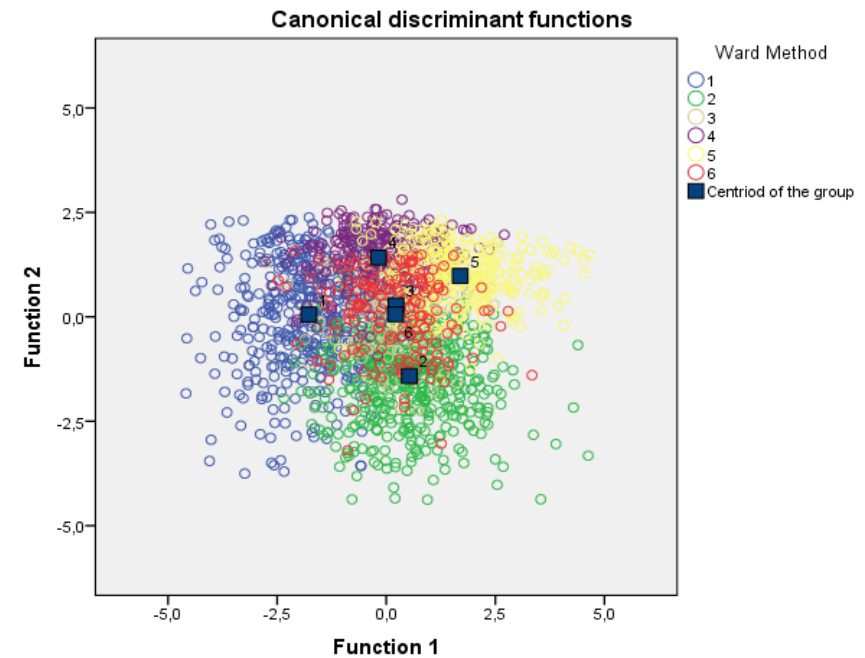
FIGURE 2. | Visualization of canonical discriminant functions.

5. VARIETY OF SOCIAL-COHESION MODELS OF PERCEIVED PERSPECTIVE: CLUSTER INTERPRETATION

Figure 1 and table 3 together enable an analysis of different models of social-cohesion perception by studying cluster characteristics (see "Appendix: Cluster-Analysis Details," below). The range of social-cohesion perception is evident in groupings that we have named *distrustful cluster, disunited cluster, ambivalent cluster, tolerant cluster, connected cluster*, and *declarative cluster*. These classifications are based on how each cluster stands out in relation to the others as shown by scores on various indicators of social cohesion.

5. 1. *DISTRUSTFUL* CLUSTER

This group demonstrates the lowest level of social cohesion in the greatest number of empirical indicators. However, closer analysis reveals that this is caused primarily by the low scores of this cluster in various types of trust. For other indicators of social cohesion, the results are relatively mixed—usually at the lower end of the range. This group shows weak scores on indicators such as

(a)   a willingness to co-operate with and help others—"I am willing to pay more tax if it would improve the social welfare of my *hromada*" (2.21); "It is quite difficult for me to co-operate with people in our *hromada* (city) if they have different political views than I do" (3.31); "It is quite difficult for me to co-operate with people in our *hromada* (city) if they are from ethnic groups other than mine" (3.83);

(b)   a sense of belonging or identity—"I feel proud of being a member of my *hromada*" (4.03);

(c)   voluntarism and donations—"How often do you help other people (apart from your family) with household chores, work, or emotional support?" (3.27); and

(d)   political participation—"How often do you participate in discussions about the problems of your *hromada* (city; e.g., signing petitions, civil actions, public hearings, etc.)?" (1.83).

Although this group demonstrates the lowest levels of institutional and interpersonal trust, it is not the most-conflictual one. This is confirmed by the scores on disunity between different groups in a respondent's *hromada*. For these items, the lowest scores are found among representatives of the second cluster. The first cluster has the lowest score on unity only with regard to the economic aspect of group disunity—between the rich and the poor (2.03). Further correlation analysis has shown that members of this group have the lowest financial status. Owing to their distrust in institutions, and other people in general (but especially the rich), we have chosen to term this cluster *distrustful*.

5. 2. *DISUNITED* CLUSTER

This group exhibits average scores for most indicators, but with high cohesion potential for voluntarism and donations:

(a) "How often do you help other people (apart from your family) with household chores, work, or emotional support?" (3.77); and

(b) "How often do you engage in charity work (providing material/financial assistance to the needy)?" (2.86).

Members of this cluster also score rather highly in institutional trust. In particular, they are likely to trust the mass media, having the second-highest rating for this indicator (2.90). Rather high levels of trust in the media accompanied by a huge media influence on individual patterns of behaviour may partially explain some of the prejudices in communication and co-operation that are demonstrated by this cluster. The media often spreads negative stories—conflicts and incidents, for example, that might also involve representatives of different ethnic groups, IDPs, and so on. This may offer insight as to why some in this cluster indicate difficulties in communicating with members of other ethnic groups (3.63—the lowest rate of cohesion for this indicator among all of the clusters) and have one of the lowest scores for interaction with people holding other political views (3.13). A mirror tendency is also evident in the high scores on indicators relating to declarations of disunity between various groups in the community. This cluster shows the lowest scores of perceived unity between representatives of different ethnicities in the *hromada* (2.60), between people who speak different languages (2.59), and between locals and IDPs (2.71). Perceptions of disunity between the rich and the poor are also noticeable, although with a slightly lower score on disunity than that of the first, *distrustful*, cluster. The high scores in perceived disunity at the *hromada* level go together with an orientation toward disunity at the individual level, as seen in the low degrees of willingness to co-operate with and help others. With scores indicating perceived disunity at both the individual and the collective levels, the designation *disunited* seems appropriate for this cluster.

5. 3. AMBIVALENT CLUSTER

Representatives of this third cluster demonstrate several contradictory positions. On the one hand, they quite often agree with negatively laden statements, such as "People in our country are always out to take advantage of you" and "People in our country are not to be readily trusted" (that is, regarding general trust in fellow citizens), showing one of the lowest levels of cohesion for these indicators of all of the clusters. On the other hand, though, this cluster leads in cohesion levels in the willingness to pay more tax if it would improve the social welfare of their *hromada*. They are also

positively oriented toward devoting part of their leisure time to voluntary work and helping others, indicating considerable willingness to co-operate with and help others. Although convinced that other people tend to use them, representatives of this cluster still want to help others by making efforts to improve their lives. Here, we can note social-cohesion zigzags—an ambivalent state of perceptional schemes where the highest cohesion scores for some indicators are accompanied by the lowest (or among the lowest) for others. But such orientations and perceptions do not always correspond with actions in practice: this group has mid-level scores when it comes to helping other people (apart from family) with household chores, work, or emotional support and when it comes to engaging in charity. They also display the second-highest level of activity in terms of participation in discussions about *hromada* issues.

This group displays another contradictory tendency as well. We note an imbalance between a relatively low level of perceived group conflict—with high scores in perceived unity between representatives of different ethnicities in the *hromada* (4.03), between people who speak different languages (4.36), and between locals and IDPs (4.03)—and a low degree of willingness to co-operate with people who hold different political views (the lowest rate of all of the clusters) or with representatives of other ethnic groups (one of the lowest rates). How might one explain this apparent mismatch? An interpretation of these results can be that the cohesion portrait of this group is ambivalent. But there are also reasons to interpret it as an expression of specific disappointments in politics, as supported by low levels of trust in the president, the parliament, the judicial system, and local authorities. At the same time, such distrust might also trigger participation in discussions about local issues, as we have noted above. Among other things, we observe that perceptional zigzags of cohesion may appear both inside one component or dimension of social cohesion (a general trust in fellow citizens and a willingness to co-operate with and help others are both indicators of subjective components and horizontal dimensions of cohesion) as well as across components and dimensions, as shown, for example, by the contradiction inherent in reporting an absence of major inter-group conflict despite a low level of willingness to co-operate with and help others.

5. 4. *Tolerant* Cluster

Perceptional-cohesion zigzags are also found in the *tolerant* cluster. Unlike with the previous group, representatives of this cluster do not agree that people are always trying to take advantage of others. They also tend to

display trust in other people (high scores for indicators of general trust in fellow citizens). However, members of this cluster also show the lowest level of willingness to pay more tax if it would improve the social welfare of their *hromada* (1.43), and they are not among the most willing to use their leisure time for voluntary work and helping others (a mid-level score—3.54). Their unwillingness to pay more tax can be explained by their low financial resources (we will return to this point when describing the group's social portrait): they likely prioritize their time for income-generating activities instead of for voluntary work.

We cannot find any lack of cohesion in this cluster. Its representatives differ from other clusters in their interpersonal and inter-group tolerances—people do not experience difficulties in co-operation with representatives of various social groups at the local level. Thus, the characterization *tolerant* seems appropriate. This cluster exhibits the highest scores for perceived unity between representatives of different ethnicities in the *hromada* (4.43), between people who speak different languages (4.68), and between locals and IDPs (4.57). They co-operate readily with people in their community (*hromada*), including those with different political views (one of the highest scores of all of the clusters) and representatives of other ethnic groups. Moreover, they demonstrate significantly higher levels of interpersonal—but not institutional—trust. They take second place (after the most-cohesive group—the fifth cluster) in terms of trust in family (4.90), neighbours (3.90), members of their *hromada* (3.64), people who they meet for the first time (2.47), and representatives of other ethnicities (3.05). Their tolerant attitudes are reflected in their high levels of interpersonal trust.

5.5. *CONNECTED* CLUSTER

This cluster scores high or very high on most indicators of social cohesion across the subjective and objective components and the horizontal and vertical dimensions. Representatives of this cluster have the highest scores in general trust in fellow citizens, a sense of belonging, social participation and vibrancy of civil society, and voluntarism and donations, as well as in the absence of major inter-group alliances or cleavages. This group indicates a willingness to pay more tax if it would improve the social welfare of their *hromada*, and they demonstrate a desire to spend part of their leisure time doing voluntary work and helping others. They lead in the relevant practical indicators—the frequency of helping other people with household chores, work, or emotional support and of engaging in charity. Representatives of this cluster show real commitment to voluntarism and donations.

Interestingly, this group does not lead in trusting the president of Ukraine or the parliament, but their trust in other social institutions is the highest of all of the clusters. This may point to a specific interpretation of trust in the political institutions of Ukraine in the context of perceptions of social cohesion: a high rate of institutional trust might attest to political loyalty or to a lack of critical thinking that perhaps blocks civic and political participation at the individual level (thereby reducing the potential of social cohesion). For this cluster, the high level of social cohesion in virtually all of the social-cohesion indicators clearly demonstrates a high degree of integration into the social fabric of the local community. Therefore, we call this group the *connected* cluster*.*

5. 6. *DECLARATIVE* CLUSTER

This cluster exhibits the highest rate of trust in the president of Ukraine (3.57) and the parliament (2.67), with stronger trust in the president than in the local authorities (3.06) or NGOs (3.16). Indeed, they trust the president even more than they trust members of their own *hromada* (3.27). However, they score quite low on interpersonal trust, especially with respect to people who they meet for the first time and representatives of other ethnicities (one of the lowest levels among the clusters). At the same time, when looking at perceptions of disunity between different people in their *hromada*, they report rather low conflict levels.

This cluster is characterized by the lowest level of social- and civil-society participations, reporting little involvement in discussions about the problems of their *hromada* (1.43) and scoring low on the political participation indicator. Moreover, representatives of this group rarely help non-family members with household chores, work, or emotional support (the lowest rate of all of the groups—3.17) and rarely engage in charity (in the form of providing material/financial assistance to the needy). However, they occupy a mid-level position in terms of willingness to pay more tax if it would improve the social welfare of their *hromada* (3.40—third position among the clusters). Their declared willingness to co-operate with and help others is not reflected in actual voluntarism and donation practices. They declare themselves to be cohesive but do not put this into practice. Therefore, we call this the *declarative* cluster.

5. 7 SOCIAL PORTRAITS OF CLUSTER REPRESENTATIVES

We employed chi-square tests to explore whether socio-demographic variables (age, sex, region of residence, type of settlement, education, and occupation), financial status, language preferences, attitudes toward decentralization, language-reform perceptions, identification models, and civic activism had statistically significant effects across the six social-cohesion clusters presented above. This correlation analysis showed no statistical significance between the clusters by region of residence[6] or type of settlement. What, then, are the social portraits of the groups that we have characterized in terms of their patterns of social-cohesion perception?

5. 7. 1. *DISTRUSTFUL* CITIZENS

These respondents are likely to be male (see table 4), with a high concentration of representatives from the oldest age category (*60+ yrs.*—30.1%) and from the middle-aged category *36–40 yrs.* (30.8%). More often than other cluster representatives, they are employed full-time (40.7%); and they have the lowest rate of higher education (27.3%) and the highest rate of uncompleted secondary education (3.7%). This, the poorest social group of all of the clusters, is civically inactive (94.1% of its representatives are not members of NGOs). Together with representatives of the fourth (*tolerant*) cluster, they more often report Russian as their mother tongue (25.5%). They are more likely than any other cluster to agree that the rights of ethnic minorities are not protected in Ukraine (the highest rate of agreement—36.1%). Representatives of this group are more likely disagree with the statement that the Ukrainian language should be the only state language in Ukraine (28.8% fully disagree—the highest rate of all of the clusters). They are more likely to agree that current state policy may provoke the growth of ethnic tensions (50.5% fully agree). They are critical of ongoing decentralization reform, as more often than other clusters, they report that the situation in their community has become worse after decentralization

---

[6] We tested four macro-regions—western, eastern, central, and southern. The composition of these macro-regions is as follows: western macro-region—Volyn, Rivne, Lviv, Ivano-Frankivsk, Ternopil, Zakarpattia, Khmelnytskyi, and Chernivtsi regions; central macro-region—Vinnytsia, Zhytomyr, Sumy, Chernihiv, Poltava, Kirovohrad, Cherkasy, and Kyiv regions and Kyiv city; southern macro-region—Dnipropetrovsk, Zaporizhzhia, Mykolaiv, Kherson, and Odesa regions; and eastern macro-region—Donetsk, Luhansk, and Kharkiv regions.

(26.7%). Furthermore, this group demonstrates the lowest levels of self-identification in all types of identification: European, national, civic, regional, local, and *hromada*.

5. 7. 2. *Disunited* Citizens

Respondents belonging to this group are more likely to be females in the youngest age categories (*18–24 yrs.* and *25–35 yrs.*) who more often than other cluster representatives have only specialized professional secondary education (40.6%). They primarily hold full-time or part-time jobs (38.0% and 12.4%, respectively); but they also have the highest level of unemployment relative to other clusters (18.3%), while their financial status occupies a mid-level position. They display a rather strong identification with various types of identities (national, regional, local, *hromada*, civic, and European), with high rates for all of the identity models (in contrast to the *distrustful* cluster). More often than other clusters, they give the Ukrainian language as their mother tongue (73.7%); they also more often use Ukrainian at work (54.4%). They are "supporters" of decentralization reform,[7] often noting that the situation in their community after decentralization has become better (23.8% partially agree and 16.7% fully agree). These *disunited* citizens express mid-level scores on the questions that the Ukrainian language should be the sole state language in Ukraine and the rights of ethnic minorities are well protected in Ukraine.

5.7.3. *Ambivalent* Citizens

Representatives of this group are likely to be male, with the group's having the highest percentage of individuals aged 51–59 (17.3%) and 60+ (36.2%; and they have the lowest number of youth). It is hard to differentiate their educational status from that of other clusters, except to say that they, together with the representatives of the sixth (*declarative*) cluster, have the greatest share of higher-education status—39.8% for this group. The *ambivalent* group includes many retired people (35.1%) and has the lowest

---

[7] The ARDU project focused on exploring the impact of decentralization reform on social cohesion in Ukraine. In the survey, people were asked to evaluate the influence of decentralization reform on the quality of the activity of local authorities (choosing answers from *Worsened* to *Improved*). More details about this part of the study can be found in Aadne Aasland and Sabine Kropp's work.

share of unemployed people (9.8%). Their financial status is quite high, with 43.3% of cluster representatives (the highest proportion of all of the clusters) declaring that they have enough money to live on. Furthermore, this group shows the highest level of civic activism, as measured by their engagement in NGOs. They are more likely to agree that the rights of ethnic minorities are protected in Ukraine (26.1% fully agree), as well as agreeing wholeheartedly that the Ukrainian language should be the sole state language (66.3%). However, they do not support current state policy on ethnicity issues;[8] almost every second representative of this group agrees that state policy may provoke the growth of ethnic tensions. They are quite optimistic in their evaluation of the results of decentralization reform, being more likely to agree that the situation in their communities has become better after decentralization (16.1%—*Improved*; 26.4%—*Improved somewhat*). They demonstrate some of the highest levels of national, civic, *hromada*, and European identities in relation to other clusters, and they more often report the Ukrainian language as their mother tongue (67.3%).

5. 7. 4. *Tolerant* Citizens

Representatives of this cluster are likely to be female, especially in the *51–59 yrs.* (15.6%) and *60+ yrs.* (35.0%) age brackets, and well educated (32.7% have a higher education, and 6.1%—two or more formal-education qualifications). In contrast to the *ambivalent* cluster, this group is one of the poorest (similarly to the *distrustful* cluster). They do not demonstrate any specific features regarding occupation—most of this group have full-time work (36.0%) or are retired (34.5%). This group shows mid-level rates of national, civic, regional, and *hromada* models of identification, but representatives rarely identify themselves as European (only 20.2% agree fully; 15.2%—partly). More often than members of other clusters, they regard the Russian language as their mother tongue (29.5%—the highest percentage). They are "moderate supporters" of Ukraine's decentralization reform and are more likely to be critical of the current state policy on ethnicity issues. Together with representatives of the *distrustful* cluster, they more often (than other clusters) disagree with the statement that the

---

[8] In the survey, respondents were asked to evaluate their agreement or disagreement with the statement "Current state policy may increase ethnic tensions in Ukraine." Some other questions were related to perceptions of language and educational reforms, but the aforementioned question was proposed without concrete explanation of specific reforms or legislative changes.

Ukrainian language should be the only state language in Ukraine (22.9% fully disagree), and they are more likely to consider the rights of ethnic minorities insufficiently protected in Ukraine.

5. 7. 5. CONNECTED CITIZENS

Representatives of this cluster are likely to be female, with a high proportion of the youngest age group—*18–24 yrs.* (10.0%)—and those 36–40 years of age (31.1%). They are typically well educated, although they are not always the highest among the clusters (36.5% have a higher education and 6.7% have two or more higher-education qualifications). The financial status of this group is the highest among the clusters—they are the wealthiest (have enough money to live well [36.5%] or have a prosperous life [31.4%]). Of all of the groups, this cluster has the highest number of private entrepreneurs (9.1%). *Connected* citizens demonstrate the highest level of identification for all of the identity models studied here—national, regional, civic, local, *hromada*, and European (combining the sums of all of the identity indicators per group under *Yes, absolutely* and *To some extent*). Together with representatives of the second (*disunited*) cluster, they more often report the Ukrainian language as their mother tongue (73.0%), also using Ukrainian more often at work (60.1%). They may be considered enthusiastic supporters of decentralization reform, being more likely to agree that the situation in their community has improved after decentralization (23.4%—*Improved*; 29.0%—*Improved somewhat*). They also tend to support state policy on ethnicity issues, as shown primarily by their disagreement (more than other clusters) that state policy in this area may provoke growing ethnic tensions. In line with representatives of the second (*disunited*), third (*ambivalent*), and sixth (*declarative*) clusters, they tend to favour recognition of the Ukrainian language as the only state language in Ukraine (61.4% fully agree; 10.5% partially agree).

5. 7. 6. DECLARATIVE CITIZENS

Representatives of this cluster are somewhat more likely to be female, with the highest share in the youngest categories—*18–24 yrs.* (14.9%) and *25–35 yrs.* (24.6%). They do not demonstrate any specific occupational patterns as compared with the others, except that their share of students is higher than in any of the other clusters. This group has a significant share of individuals with a higher education (39.0%) and has the highest share of those with

uncompleted higher studies (12.4%). The financial status of this group is in a mid-level position. These *declarative* citizens show high levels of European, national, civic, and regional identities, but they register a somewhat weaker association with the *hromada* and local identities. Whereas 72.6% of individuals in this cluster regard the Ukrainian language as their mother tongue, fewer use it at work (49.1%). This group is civically inactive: 95.5% do not belong to an NGO. They tend to agree that the Ukrainian language should be the only state language in Ukraine (63.6% fully agree), and they are moderate supporters of decentralization reform. Many find it hard to assess the current state policy on ethnicity issues, tending to choose such alternatives as *Partially agree and disagree* (24.3%) in response to the question of whether current state policy might provoke the growth of ethnic tensions.

Table 2 shows identified cluster specifics in terms of level of social cohesion, calculated on the basis of an additive index of all of the cohesion variables.

TABLE 2. | Results of empirical data analysis: clusters, levels of cohesion, and group social portraits

Cluster (by perception of social cohesion)	Level of social cohesion (score)
Distrustful cluster	Low (68.9)
Disunited cluster	Low (79.7)
Ambivalent cluster	Middle (81.3)
Tolerant cluster	Middle (84.5)
Connected cluster	High (95.0)
Declarative cluster	Middle (82.0)

Note: We have calculated the total sum of all of the measured social-cohesion indicators for all of the clusters and identified three levels of cohesion—low, middle, and high.

6. DISCUSSION AND RESULTS

In this study, we have identified six social-cohesion clusters, each of which exhibits considerable variation in terms of perceived levels of social cohesion for different indicators. Thus, we cannot identify "pure models" that would systematically order groups into high, middle, or low levels across all

indicators of social cohesion. All of the empirically generated clusters are characterized by mixed results for different indicators, with inner contradictions and substantial ambivalence. This may confirm the complexity and multi-level nature of social cohesion in post-Soviet societies. At the same time, it may also stimulate further reflection on how to measure social cohesion in post-Communist countries.

In line with this second perspective, we have identified the most-differentiating indicators of Chan and colleagues' social-cohesion model, adapted for current Ukrainian realities. Under these indicators, we observe the most-fundamental differences among assessments in each cluster that might be interpreted as the most-informative and -sustainable markers of social cohesion—a respondent's willingness to pay more taxes (indicator *Willingness to co-operate with and help others*); a respondent's desire to spend part of their leisure time doing voluntary work and helping others (indicator *Willingness to co-operate with and help others*); a respondent's co-operation with people in their *hromada*/town whose political views differ from their own (indicator *Willingness to co-operate with and help others*); and respondents' assessments of disunity between different population groups (all of the survey questions in this regard; indicator *Presence of absence of major inter-group alliances or cleavages*). Common to all of these indicators is an orientation concerning social inclusion. Thus, Jane Jenson's axis of social inclusion and exclusion as a dimension of social cohesion seems central to present-day Ukrainian realities. Furthermore, the horizontal-subjective and horizontal-objective indicators of Chan and colleagues' measurement model are well suited for capturing social cohesion in post-Communist societies.

By contrast, the vertical dimension of Chan and colleagues' model emerges as poorly suited for examining social cohesion in the Ukrainian case. It seems dubious to use "high institutional trust" as an indicator of social cohesion. As noted above, trust in the media may negatively influence tolerance and unity orientations at the local and *hromada* levels, provoking conflicts and interpersonal distrust. A high degree of trust in political institutions and leaders, rather than indicating strong social cohesion, may attest to unfounded civic loyalty, an absence of critical thinking, and a lack of civic and political participations—all of which work against social cohesion.

Thus, our research calls into question the relevance and validity of institutional trust (especially toward media and political institutions) as an indicator of social cohesion in societies in transition. This may also accentuate the lack of civic-loyalty theorization around social cohesion as "an attribute of a group or society, not of individuals" (Dickes et al. 454). Trust in political institutions might strengthen social cohesion at the level of a society in question without necessarily corresponding to individually oriented

indicators of social cohesion, such as civic and political participations. For example, a person may express strong trust in political institutions but simultaneously be a passive citizen.

The same conclusion can be developed regarding the use of political-participation practices as the vertical-objective dimension of social-cohesion measurement. The methodological approach put forward by Chan and colleagues fails to take into consideration the fact that political actors do not always contribute to enhanced social cohesion. To the contrary, the activities of representatives of some political parties (especially radical ones) may provoke a decline in social cohesion at the national level, disrupting trust among various social actors, groups, and communities; deepening social exclusion and inequality; and establishing competitiveness rather than co-operation as a background for interactions. Active political participation at the level of certain political communities may help strengthen social cohesion at the group level while triggering political polarization at the societal level. This is why in the absence of additional qualitative analysis, a quantitatively high degree of political participation in a given society should not automatically be seen as indicative of thriving social cohesion—at least not in the case of young, post-Communist democracies undergoing political reform. Exploring political participation as an indicator of social cohesion requires qualitative methods, not just quantitative ones. All of this demonstrates the importance of strengthening the theoretical horizons of social-cohesion conceptualization, not only in accordance with macro-social indexes (Social Cohesion Radar and the like) and impersonal quantitative data but also within the framework of perceived sociological perspectives that form meanings and senses of social cohesion.

Applying cluster analysis in the study presented here, we found that the horizontal dimension of social cohesion is especially well suited for use in cross-cultural studies. By contrast, the vertical dimension emerged as more contextual, requiring greater attention to the particularities of a given political regime.

The inner contradictions of our specified social-cohesion clusters reveal cleavages between the orientations and practices identified by the social-cohesion assessments in our study. In Ukrainian society, orientations toward social cohesion are often declared but not realized in practice. This trend is, in fact, quite common in studies of social cohesion. On the results of a national survey conducted in Hong Kong, Joseph Chan and Elaine Chan note that "[i]n spite of feeling cohesive, respondents did not act as cohesively" (644). But this should not be interpreted as weak social cohesion. We seek, instead, to emphasize the potential state of social cohesion (level of orientations) that might be activated at the practical (activity) level by certain factors. A

heartening example in this regard can be found in war-torn Ukrainian society, where practices of social cohesion are thriving—voluntarism and donations, helping others, and a powerful civil resistance. This indicates potential and actual states of social cohesion as additional theoretical dimensions.

Our analysis of the empirical data has also revealed the presence of social-cohesion zigzags that display an ambivalent state of perceptional schemes: the highest cohesion scores in certain indicators are accompanied by the lowest (or among the lowest) scores in others. Perceptional zigzags of cohesion may appear within one component or dimension of social cohesion, as well as between components and dimensions—as with the presence of absence of major inter-group alliances or cleavages and the willingness to co-operate with and help others.

A correlation analysis shows a lack of statistical significance between the formed clusters by region and type of settlement. A good social policy should use universal models of constructing social cohesion. Another range of characteristics—age, gender, education, occupation, language preferences, attitudes toward decentralization, language-reform perceptions, identification models, and civil activism—have proven to be statistically significant across all six social-cohesion clusters. Our research has confirmed Delhey and colleagues' conclusion about the positive impact of economic prosperity (in our case—financial status) on the potential for social cohesion.

At the beginning of the 2000s, Bohdan Harasymiw summarized that "youngsters . . . prefer to speak Russian at home" and "are indifferent to the national question" (242). Our study twenty years later has shown the opposite. Young Ukrainians are more likely than the older ones to exhibit greater potential for social cohesion. This may be explained by the dynamic process of youth socialization in present-day independent Ukraine, which is characterized by political, civil, and cultural polyphony; older Ukrainians were socialized under the prevailing conditions of the USSR. We may also highlight various indicators (factors) that generate social cohesion, such as a preference for the Ukrainian language, positive attitudes toward decentralization reform, and a high degree of identification with the national, regional, civic, local, *hromada*, and European identity types. These indicators stand out as the most-common characteristics among groups with the highest levels of social cohesion. Finally, we note that all of the above-mentioned indicators offer a strong support for the force of Ukrainian civil resistance under the pressure of war.

WORKS CITED

Aasland, Aadne, and Sabine Kropp, editors. *The Accommodation of Regional and Ethno-Cultural Diversity in Ukraine*. Palgrave Macmillan, 2021. Federalism and Internal Conflicts, edited by Soeren Keil and Eva Maria Belser.

Aasland, Aadne, et al. "Citizens' Perspectives: Reform and Social Cohesion in Ukraine's Border Regions." Aasland and Kropp, pp. 237–72.

Accommodation of Regional Diversity in Ukraine (ARDU). uni.oslomet.no/ardu/. Accessed 27 Sept. 2023.

Arel, Dominique. "Language, Status, and State Loyalty in Ukraine." *The Battle for Ukrainian: A Comparative Perspective*, special issue of *Harvard Ukrainian Studies* [Cambridge, MA], vol. 35, nos. 1–4, 2017–18, pp. 233–64.

Baliichuk, Vladislav. "The Methodology of the ARDU Survey, Dnipro: Operatyvna Sociologiya (in Russian)." *ODA—Open Digital Archive*, By- og regionforskningsinstituttet (NIBR), OsloMet, Mar. 2020, oda.oslomet.no/oda-xmlui/handle/20.500.12199/6514. Accessed 5 June 2023.

Barnett, Tony, and Alan Whiteside. *AIDS in the Twenty-First Century: Disease and Globalization*. Springer, 2002.

Berger-Schmitt, Regina. "Considering Social Cohesion in Quality of Life Assessments: Concept and Measurement." *Social Indicators Research*, vol. 58, nos. 1–3, June 2002, pp. 403–28. *Springer Nature Link*, https://doi.org/10.1023/A:1015752320935. Accessed 15 Apr. 2025.

Bollen, Kenneth A., and Rick H. Hoyle. "Perceived Cohesion: A Conceptual and Empirical Examination." *Social Forces* [Chapel Hill, NC], edited by Richard L. Simpson, vol. 69, no. 2, Dec. 1990, pp. 479–504. *Oxford Academic*, published 1 Dec. 1990, https://doi.org/10.1093/sf/69.2.479. Accessed 15 Apr. 2025, PDF download.

Bondarenko, Mykola, et al. "Sotsial'na zhurtovanist' v Ukraïni: Dosvid aplikatsiï metodyky Bertelsmann Stiftung do danykh ievropeis'koho sotsial'noho doslidzhennia." *Visnyk Kyïvs'koho Natsional'noho Universitetu imeni Tarasa Shevchenka: Sotsiolohiia*, vol. 8, 2017, pp. 58–65.

Carvalho, Naiara Barbosa, et al. "A Discriminant Function for Validation of the Cluster Analysis and Behavioral Prediction of the Coffee Market." *Food Research International*, Anderson de Souza Sant'Ana, editor-in-chief, vol. 77, pt. 3, Nov. 2015, pp. 400–07. *ScienceDirect*, Elsevier, https://doi.org/10.1016/j.foodres.2015.10.013. Accessed 15 Apr. 2025.

Chan, Joseph, and Elaine Chan. "Charting the State of Social Cohesion in Hong Kong." *The China Quarterly* [London], vol. 187, Sept. 2006, pp. 635–58. *Cambridge University Press*, published 21 Sept. 2006, https://doi.org/10.1017/S0305741006000415. Accessed 15 Apr. 2025, PDF download.

Chan, Joseph, et al. "Reconsidering Social Cohesion: Developing a Definition and Analytical Framework for Empirical Research." *Social Indicators Research*, vol. 75, no. 2, Jan. 2006, pp. 273–302. *Springer Nature Link*, https://doi.org/10.1007/s11205-005-2118-1. Accessed 15 Apr. 2025.

Delhey, Jan, et al. "Social Cohesion and Its Correlates: A Comparison of Western and Asian Societies." *Comparative Sociology*, vol. 17, nos. 3–4, June 2018, pp. 426–55. *Brill*, published online 14 June 2018, https://doi.org/10.1163/15691330-12341468. Accessed 15 Apr. 2025.

Dickes, Paul, and Marie Valentova. "Construction, Validation and Application of the Measurement of Social Cohesion in 47 European Countries and Regions." *Social Indicators Research*, vol. 113, no. 3, 2013, pp. 827–46. *Springer Nature Link*, published 4 July 2012, https://doi.org/10.1007/s11205-012-0116-7. Accessed 15 Apr. 2025.

Dickes, Paul, et al. "Construct Validation and Application of a Common Measure of Social Cohesion in 33 European Countries." *Social Indicators Research*, vol. 98, no. 3, Sept. 2010, pp. 451–73. *Springer Nature Link*, published 5 Dec. 2009, https://doi.org/10.1007/s11205-009-9551-5. Accessed 15 Apr. 2025, PDF download.

Dragolov, Georgi, et al. "Level, Trend, and Profiles of Social Cohesion in Asia." *What Holds Asian Societies Together? Insights from the Social Cohesion Radar*, edited by Bertelsmann Stiftung, Verlag Bertelsmann Stiftung, 2018, pp. 69–96.

El-Hanjouri, Mo'oamin M. R., and Bashar S. Hamad. "Using Cluster Analysis and Discriminant Analysis Methods in Classification with Application on Standard of Living Family in Palestinian Areas." *International Journal of Statistics and Applications*, vol. 5, no. 5, 2015, pp. 213–22. *Scientific and Academic Publishing*, article.sapub.org/10.5923.j.statistics.20150505.05.html. Accessed 15 Apr. 2025, PDF download.

Fonseca, Jaime R. S. "Clustering in the Field of Social Sciences: That Is Your Choice." *International Journal of Social Research Methodology*, vol. 16, no. 5, 2013, pp. 403–28. *Taylor and Francis Online*, Informa UK, published online 13 Sept. 2012, https://doi.org/10.1080/13645579.2012.716973. Accessed 15 Apr. 2015.

Giuliano, Elise. "Who Supported Separatism in Donbas? Ethnicity and Popular Opinion at the Start of the Ukraine Crisis." *Identity Politics in Times of Crisis: Ukraine as a Critical Case*, special issue of *Post-Soviet Affairs*, Olga Onuch et al., guest editors, vol. 34, nos. 2–3, Mar.-May 2018, pp. 158–78. *Taylor and Francis Online*, Informa UK, published online 15 Mar. 2018, https://doi.org/10.1080/1060586X.2018.1447769. Accessed 15 Apr. 2025.

Golovakha, Yevhen, et al. *Ukrainian Society in 1992–2018: Monitoring Social Changes*. Institute of Sociology, National Academy of Sciences of Ukraine, 2019.

Green, Andy, et al. *Regimes of Social Cohesion*. LLAKES Research Paper 1, Centre for Learning and Life Chances in Knowledge Economies and Societies, U College London, 2009. *Digital Education Resource Archive (DERA)*, UCL Institute of Education, dera.ioe.ac.uk/10486/1/Z.-Regimes-of-Social-Cohesion.pdf. Accessed 5 June 2023.

Hair, Joseph F., Jr., et al. *Multivariate Data Analysis*. 6th ed., Pearson Education, 2006.

Harasymiw, Bohdan. *Post-Communist Ukraine*. Canadian Institute of Ukrainian Studies P, 2002.

Hennig, Christian, et al., editors. *Handbook of Cluster Analysis*. CRC Press, 2015.

Hrynenko, Anatolii, and Volodymyr Kyryliuk. "Sotsial'na zhurtovanist' suspil'stva v umovakh demokratiï." *Visnyk Kam"ianets'-Podil's'koho Natsional'noho Universitetu imeni Ivana Ohiienka: Ekonomichni nauky*, vol. 11, 2016, pp. 220–26. *Natsional'na Biblioteka Ukraïny imeni V. I. Vernads'koho*, nbuv.gov.ua/UJRN/vkpnuen_2016_11_31. Accessed 15 Apr. 2025, PDF download.

James, Paul. *Nation Formation: Towards a Theory of Abstract Community*. Sage Publications, 1996. Politics and Culture, edited by Bryan S. Turner.

Jenson, Jane. "Mapping Social Cohesion: The State of Canadian Research." CPRN Study No. F|03, Canadian Policy Research Networks, 1998. *Academia*, www.academia.edu/26949106/Mapping_Social_Cohesion_The_State_of_Canadian_Research. Accessed 5 June 2023.

Karimov, Ravil'. *Osnovy diskriminantnogo analiza: Uchebno-metodicheskoie posobiie*. Saratovskii Gosudarstvennyi Tekhnicheskii U, 2002.

Kuzio, Taras. "Identity and Nation-Building in Ukraine: Defining the 'Other.'" *Ethnicities*, Stephen May and Tariq Modood, editors-in-chief, vol. 1, no. 3, Sept. 2001, pp. 343–65. *Sage Journals*, https://doi.org/10.1177/146879680100100304. Accessed 15 Apr. 2025, PDF download.

Kytsak, Taras, and Volodymyr Kyryliuk, "Sotsial'no-trudovi aspekty sotsial'noï zhurtorvanosti suspil'stva." *Sotsial'no-trudovi vidnosyny: Teoriia ta praktyka* [Kyiv], no. 2 (6), 2013, pp. 171–76. *IRKNEU—Instytutsiinyi repozytarii*, published 10 Oct. 2013, ir.kneu.edu.ua/handle/2010/4922. Accessed 15 Apr. 2025, PDF download.

Noll, Heinz-Herbert. "Towards a European System of Social Indicators: Theoretical Framework and System Architecture." *Social Indicators Research*, vol. 58, nos. 1–3, June 2002, pp. 47–87. *Springer Nature Link*, https://doi.org/10.1023/A:1015775631413. Accessed 15 Apr. 2025.

Onuch, Olga, and Henry E. Hale. "Capturing Ethnicity: The Case of Ukraine." *Identity Politics in Times of Crisis: Ukraine as a Critical Case*, special issue of *Post-Soviet Affairs*, Onuch et al., guest editors, vol. 34, nos. 2–3, Mar.-May 2018, pp. 84–106. *Taylor and Francis Online*, Informa UK, published online 12 Apr. 2018, https://doi.org/10.1080/1060586X.2018.1452247. Accessed 15 Apr. 2025.

Onuch, Olga, et al. "Studying Identity in Ukraine." *Identity Politics in Times of Crisis: Ukraine as a Critical Case*, special issue of *Post-Soviet Affairs*, Onuch et al., guest editors, vol. 34, nos. 2–3, Mar.-May 2018, pp. 79–83. *Taylor and Francis Online*, Informa UK, published online 12 Apr. 2018, https://doi.org/10.1080/1060586X.2018.1451241. Accessed 15 Apr. 2025.

Polunieiev, Iurii. "Sotsial'na zhurtovanist' iak skladova ekonomichnoho proryvu." *Naukovyi visnyk Uzhhorods'koho Universytetu: Seriia: Ekonomika*, vol. 33, no. 1, Mar. 2011, pp. 161–66.

Thanoon, Thanoon Y. "Using Cluster Analysis and Discriminant Analysis Methods in Classification with Application on Factor Scores Results." *Tikrit Journal of Administration and Economics Sciences*, vol. 7, 2011, pp. 1–15. *ResearchGate*, Jan. 2011, www.researchgate.net/publication/311595105_Using_Cluster_Analysis_and_Discriminant_Analysis_Methods_in_Classification_with_Application_on_Factor_Scores_Results. Accessed 15 Apr. 2025.

"Ukraine: Social Cohesion and Reconciliation Index." *SCORE*, Centre for Sustainable Peace and Democratic Development, use.scoreforpeace.org/en/ukraine/2019-Schools-0. Accessed 26 Sept. 2023.

APPENDIX: CLUSTER-ANALYSIS DETAILS

Hierarchic cluster analysis was used in this study, employing Ward's method in combination with the squared Euclidean distance (Hennig et al.). Twenty-eight indicators of social cohesion were applied as clustering variables, primarily measured by Likert-type scales—ordinal five-point scales[9] (for the set of indicators, see table 3), ranging from 1 (*strongly disagree/very rarely/fully distrust*) to 5 (*strongly agree/very often/fully trust*).

After the first clustering, a discriminant analysis was undertaken. This method is often used to validate cluster analysis (Carvalho et al.) by checking the differences of objects between groups (formed clusters) with respect to several variables simultaneously—the variables used for clustering (El-Hanjouri and Hamad). Such analysis is based on the discriminant-function calculation, which makes it possible to conduct the clearest division between clusters, assessing the "quality" of the clustering (Thanoon). The results of the discriminant analysis for two variables—*Membership in NGOs* and *Membership in political parties* (see table 3, numbers 27 and 28)—showed no significant differences[10] between cluster centroids. Thus, these variables were removed from the variable list used for clustering.

A secondary cluster analysis was then conducted based on twenty-six variables of social cohesion. To minimize data loss, a recoding procedure was carried out prior to clustering: the responses "no answer" and "refused to answer" were converted into missing answers, and the responses "I don't know, it's hard to say"—into neutral, or average, answers (the third position on the five-point ordinal scales—*Partially agree and disagree*). This resulted in 1,937 responses out of the 2,103 initial respondents selected as valid for clustering.

Joseph Hair, Jr., et al. recommend using a stopping rule when sizable increases are observed in the agglomeration coefficient (heterogeneous clusters result when there is a large agglomeration coefficient). Analyzing the results shown in the agglomeration table, we found the largest coefficient increase at the sixth stage of the merger, confirming our decision to select six clusters. As a result, 1,937 respondents were divided into six clusters, with cluster 1 comprising 466 cases (22.2%); cluster 2—525 cases (25.4%); cluster 3—196 cases (9.3%); cluster 4—263 cases (12.5%); cluster 5—300 cases (14.3%); and cluster 6—177 cases (8.4%).

---

[9] Save for the questions about participation in the previous local elections (two-point scale—*yes/no*) and membership in NGOs and political parties.

[10] I.e., the absence of a zero significance level for the criteria of equality of group means.

For further clustering, a validation of the discriminant analysis was repeated. Based on the criteria for equality of group means, a zero level of significance was fixed for all cluster variables. This indicates that all of the clustering variables are characterized by significant differences between the cluster centroids. According to the classification results, 71.8% of the initial grouped observations were classified correctly: 327 of 466 respondents were correctly identified in the first cluster (70.2%); 387 of 535, in the second cluster (72.3%); 142 of 196, in the third cluster (72.4%); 201 of 263, in the fourth cluster (76.4%); 216 of 300, in the fifth cluster (72.0%); and 118 of 177, in the sixth cluster (66.7%). Thus, the results of the clustering may be considered satisfactory (Karimov).

TABLE 3. | Table of cluster centroids

No.	Question	Chan et al.'s indicators of social cohesion	First-cluster centroids	Second-cluster centroids	Third-cluster centroids	Fourth-cluster centroids	Fifth-cluster centroids	Sixth-cluster centroids
1.	"People in our country are always out to take advantage of you."	General trust in fellow citizens	2.76	3.20	3.01	3.72	3.89	3.58
2.	"People in our country are not to be readily trusted."	General trust in fellow citizens	2.24	2.68	2.37	3.27	3.48	2.94
3.	"I am willing to pay more tax if it would improve the social welfare of my *hromada*."	Willingness to co-operate with and help others	2.21	3.18	4.21	1.43	3.99	3.40
4.	"I would like to allocate part of my leisure time to do voluntary work and help others."	Willingness to co-operate with and help others	2.58	3.80	4.12	3.54	4.08	3.18
5.	"I feel proud of being a member of my *hromada*."	Sense of belonging or identity	4.03	4.59	4.53	4.39	4.78	4.53

TABLE 3 (*continued*)

No.	Question	Chan et al.'s indicators of social cohesion	First-cluster centroids	Second-cluster centroids	Third-cluster centroids	Fourth-cluster centroids	Fifth-cluster centroids	Sixth-cluster centroids
6.	"It is quite difficult for me to co-operate with people in our *hromada* (city) if they have different political views than I do."	Willingness to co-operate with and help others	3.31	3.13	2.45	4.20	4.29	3.49
7.	"It is quite difficult for me to co-operate with people in our *hromada* (city) if they are from ethnic groups other than mine."	Willingness to co-operate with and help others	3.83	3.63	3.84	4.66	4.65	4.37
8.	"How often do you help other people (apart from your family) with household chores, work, or emotional support?"	Voluntarism and donations	3.27	3.77	3.51	3.67	3.98	3.17
9.	"How often are you engaged in charity work (providing material/ financial assistance to the needy)?"	Voluntarism and donations	2.19	2.86	2.82	2.60	3.03	2.36
10.	"How often do you participate in discussions about the problems of your *hromada* (city; e.g., signing petitions, civil actions, public hearings, etc.)?"	Political participation	1.83	2.48	3.06	2.33	3.07	1.43

TABLE 3 (*continued*)

No.	Question	Chan et al.'s indicators of social cohesion	First-cluster centroids	Second-cluster centroids	Third-cluster centroids	Fourth-cluster centroids	Fifth-cluster centroids	Sixth-cluster centroids
11.	"Did you take part in the last local-council elections?"	Political participation	1.47	1.62	1.69	1.61	1.74	1.49
12.	"To what extent do you trust the president of Ukraine?"	Institutional trust	1.79	3.18	1.95	2.61	3.24	3.57
13.	"To what extent do you trust the parliament (Verhovna Rada)?"	Institutional trust	1.31	2.30	1.72	1.80	2.56	2.67
14.	"To what extent do you trust justice?"	Institutional trust	1.50	2.21	1.61	1.90	2.49	2.46
15.	"To what extent do you trust local authorities?"	Institutional trust	2.02	3.16	2.78	2.87	3.57	3.06
16.	"To what extent do you trust NGOs?"	Institutional trust	2.35	3.45	3.23	3.22	3.68	3.16
17.	"To what extent do you trust the mass media?"	Institutional trust	2.01	2.90	2.55	2.57	2.92	2.62
18.	"There is disunity between the poor and the rich in your *hromada*."	Presence of absence of major inter-group alliances or cleavages	2.03	2.25	2.26	2.40	3.04	2.44
19.	"There is disunity between representa-tives of different nationalities in your *hromada*."	Presence of absence of major inter-group alliances or cleavages	3.53	2.60	4.03	4.43	4.36	3.56
20.	"There is disunity between people who speak different languages in your *hromada*."	Presence of absence of major inter-group alliances or cleavages	3.78	2.59	4.36	4.68	4.66	4.18

TABLE 3 (*continued*)

No.	Question	Chan et al.'s indicators of social cohesion	First-cluster centroids	Second-cluster centroids	Third-cluster centroids	Fourth-cluster centroids	Fifth-cluster centroids	Sixth-cluster centroids
21.	"There is disunity between locals and IDPs in your *hromada*."	Presence of absence of major inter-group alliances or cleavages	3.62	2.71	4.03	4.57	4.55	4.07
22.	"To what extent do you trust your family?"	General trust in fellow citizens (inter-personal trust)	4.66	4.82	4.78	4.90	4.93	4.79
23.	"To what extent do you trust your neighbours?"	General trust in fellow citizens (inter-personal trust)	3.30	3.77	3.62	3.90	4.19	3.72
24.	"To what extent do you trust members of your *hromada*?"	General trust in fellow citizens (inter-personal trust)	2.80	3.37	3.37	3.64	3.92	3.27
25.	"To what extent do you trust people who you meet for the first time?"	General trust in fellow citizens (inter-personal trust)	1.94	2.47	2.36	2.47	2.74	1.96
26.	"To what extent do you trust representa-tives of other nationalities?"	General trust in fellow citizens (inter-personal trust)	2.44	2.89	3.00	3.05	3.27	2.63
27.	Membership in NGOs	Social partici-pation and vibrancy of civil society	—	—	—	—	—	—
28.	Membership in political parties	Social partici-pation and vibrancy of civil society	—	—	—	—	—	—

TABLE 4. | Social portraits of cluster representatives (chi-square test results; significance level .001 and .005; in %)

Category	Distrustful cluster (N = 466)	Disunited cluster (N = 535)	Ambivalent cluster (N = 196)	Tolerant cluster (N = 263)	Connected cluster (N = 300)	Declarative cluster (N = 177)
Gender						
Female	48.5	61.1	48.5	58.2	57.7	54.8
Male	51.5	38.9	51.5	41.8	42.3	45.2
Age						
18–24 yrs.	5.6	9.2	3.6	4.2	10.0	14.9
25–35 yrs.	20.2	23.4	17.9	15.6	16.4	24.6
36–40 yrs.	30.8	31.8	25.0	29.7	31.1	22.9
51–59 yrs.	13.3	13.3	17.3	15.6	14.0	14.9
60+ yrs.	30.1	22.3	36.2	35.0	28.4	22.9
Education						
Unfinished secondary	3.7	2.8	0.0	3.4	1.0	1.7
Finished secondary	15.4	15.8	11.7	11.8	15.1	10.7
Secondary special. professional	39.7	40.6	37.8	38.4	32.1	32.8
Unfinished higher	9.8	8.1	5.6	7.6	8.7	12.4
Higher	27.3	28.4	39.8	32.7	36.5	39.0
Two or more higher degrees	4.1	4.3	5.1	6.1	6.7	3.4
Financial status (opportunities)						
Cannot afford even the most-necessary items	21.9	12.1	11.3	18.0	11.9	9.2
Can afford to buy the most-necessary items	29.6	26.9	19.6	27.8	17.7	24.7
Generally enough, but durable goods are hard to afford	32.2	34.9	43.3	33.7	36.5	39.1
Live in prosperity but find it difficult to afford some expensive items	14.7	24.2	24.2	18.4	31.4	24.7
Can afford everything wanted	1.5	1.9	1.5	2.0	2.4	2.3
Occupation						
Full-time employment	40.7	38.0	35.1	36.0	38.5	34.9
Part-time employment	8.8	12.4	12.4	5.4	7.4	11.6
Private entrepreneur	4.6	5.7	5.7	8.4	9.1	6.4
Unemployed	15.8	18.3	9.8	12.6	12.5	15.1
Studying	0.9	2.7	2.1	3.1	4.4	5.2
Retiree	29.2	23.0	35.1	34.5	28.0	26.7

TABLE 4 (*continued*)

Category	Distrustful cluster (N = 466)	Disunited cluster (N = 535)	Ambivalent cluster (N = 196)	Tolerant cluster (N = 263)	Connected cluster (N = 300)	Declarative cluster (N = 177)
NGO affiliation						
No NGO membership	94.1	90.0	84.1	89.4	86.6	95.5
Formal membership	3.3	4.0	5.6	3.0	7,0	2.3
Active membership	2.6	6.0	10.0	7.6	6.4	2.3
"The rights of national minorities are well protected in Ukraine."						
Disagree totally	36.1	17.8	20.1	19.1	12.3	18.5
Disagree somewhat	15.9	13.6	12.5	19.1	11.6	14.0
Partially agree and disagree	23.6	31.5	21.2	28.1	29.3	29.9
Agree somewhat	10.3	18.8	20.1	13.6	25.0	17.8
Agree totally	14.2	18.4	26.1	20.0	21.7	19.7
"Ukrainian should be the only state language in Ukraine."						
Disagree totally	28.8	13.3	18.4	22.9	15.3	12.1
Disagree somewhat	6.3	7.7	4.7	6.6	4.7	8.7
Partially agree and disagree	7.9	10.9	5.3	10.5	8.1	8.7
Agree somewhat	5.0	7.3	5.3	5.4	10.5	6.9
Agree totally	52.0	60.7	66.3	54.7	61.4	63.6
"Current state policy may increase ethnic tensions in Ukraine."						
Disagree totally	13.8	11.9	10.3	14.2	26.4	18.4
Disagree somewhat	7.1	11.0	8.0	11.5	12.5	13.2
Partially agree and disagree	12.8	17.8	14.9	15.0	17.7	24.3
Agree somewhat	15.8	26.8	21.3	16.4	16.6	23.7
Agree totally	50.5	32.5	45.4	42.9	26.8	20.4
"Influence of decentralization reform on the quality of the activity of local authorities."						
Worsened	26.7	14.0	17.8	18.0	10.3	13.0
Worsened somewhat	8.4	5.8	12.1	7.7	6.7	6.8
No changes	39.0	39.6	27.6	37.8	30.6	39.7
Improved somewhat	17.8	23.8	26.4	20.3	29.0	24.0
Improved	8.1	16.7	16.1	16.2	23.4	16.4
Mother tongue						
Ukrainian	61.7	73.7	67.3	57.9	73.0	72.6
Russian	25.5	15.8	19.4	29.5	19.0	13.7
Surzhyk (Ukr./Russian mixture)	0.9	0.6	1.0	0.8	1.3	0.6
Other	1.9	0.9	1.0	1.1	0.0	1.7
Several (Ukrainian mentioned first)	5.0	4.5	5.1	7.7	3.7	5.1

TABLE 4 (*continued*)

Category	Distrustful cluster (N = 466)	Disunited cluster (N = 535)	Ambivalent cluster (N = 196)	Tolerant cluster (N = 263)	Connected cluster (N = 300)	Declarative cluster (N = 177)
Several (Russian mentioned first)	5.0	4.1	5.6	3.1	3.0	6.3
Several (other mentioned first)	0.0	0.4	0.5	0.0	0.0	0.0
Language generally used at work						
Ukrainian	42.7	54.4	53.4	44.7	60.1	49.1
Russian	35.4	27.6	33.2	38.1	21.2	34.7
Surzhyk	3.7	2.1	1.0	0.8	3.1	2.3
Other	1.1	1.2	3.1	1.2	1.4	1.2
Several (Ukrainian mentioned first)	11.2	10.3	6.7	8.9	7.8	6.9
Several (Russian mentioned first)	5.7	4.1	2.6	6.2	6.1	5.8
Several (other mentioned first)	0.2	0.4	0.0	0.0	0.3	0.0
Self-identification: "Do you identify yourself as European?"						
Absolutely not	54.3	32.3	36.9	46.5	27.0	30.9
Mostly not	17.2	20.8	15.0	18.1	18.9	23.0
To some extent	11.5	22.5	12.3	15.2	25.6	20.6
Yes, absolutely	17.0	24.4	35.8	20.2	28.5	25.5
Self-identification: "Do you have a sense of national identity?"						
Absolutely not	6.9	2.9	2.2	3.2	2.1	1.8
Mostly not	8.5	3.8	3.2	3.6	3.4	4.7
To some extent	18.1	18.7	14.0	16.2	13.4	19.3
Yes, absolutely	66.6	74.6	80.6	77.1	81.0	74.3
Self-identification: "Do you have a sense of civic identity?"						
Absolutely not	6.9	1.3	1.0	2.3	1.7	1.2
Mostly not	5.1	1.9	2.1	3.5	2.3	0.6
To some extent	11.3	10.4	6.3	7.7	6.4	11.6
Yes, absolutely	76.7	86.4	90.6	86.5	89.6	86.7
Self-identification: "Do you have a sense of regional identity?"						
Absolutely not	9.0	2.5	2.2	4.4	3.8	3.5
Mostly not	8.0	6.0	3.8	4.8	1.7	1.8
To some extent	14.3	13.8	14.7	12.4	9.4	18.2
Yes, absolutely	68.7	77.7	79.3	78.5	85.0	76.5
Self-identification: "Do you have a sense of hromada identity?"						
Absolutely not	13.4	6.9	1.4	14.1	2.3	13.8
Mostly not	9.2	7.8	5.6	6.5	2.3	6.9
To some extent	16.9	15.6	9.9	14.1	17.1	22.4
Yes, absolutely	60.6	69.7	83.1	65.2	78.3	56.9

TABLE 4 (*continued*)

Category	Distrustful cluster (N = 466)	Disunited cluster (N = 535)	Ambivalent cluster (N = 196)	Tolerant cluster (N = 263)	Connected cluster (N = 300)	Declarative cluster (N = 177)
Self-identification: "Do you have a sense of local identity?"						
Absolutely not	6.6	1.1	1.0	3.6	0.7	0.6
Mostly not	5.9	2.5	4.2	1.2	1.4	2.9
To some extent	9.5	9.1	9.4	5.6	7.5	14.6
Yes, absolutely	78.0	87.3	85.3	89.6	90.5	81.9