

DEVELOPMENT AND VALIDATION OF THE AZERBAIJANI EMPOWERMENT
SCALE: SUPPORT AND NEW IMPLICATIONS FOR THEORY

By

ALEKSANDR M. CHERYOMUKHIN

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ABSTRACT OF THE DISSERTATION

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By ALEKSANDR CHERYOMUKHIN

Dissertation Director:

N. Andrew Peterson, Ph.D.

The empowerment construct has been central in theories and practice interventions across many health and social science disciplines. However, research and evaluation studies measuring empowerment within international community development initiatives are rare due to a lack of validated measures appropriate for the cultural context. This study represents an initial empirical effort to validate the Azerbaijani Empowerment Scale (AES), an instrument designed to assess intrapersonal component of psychological empowerment among adult community residents in Azerbaijan, a former Soviet country with a secular Muslim culture. The participants ($n = 350$) were recruited in urban and rural communities using a purposeful sampling strategy. The present study examined the underlying factor structure of the AES instrument and its associations with conceptually related variables (i.e., community participation, sense of community, depression, and alienation). Exploratory factor analysis suggested that the AES instrument included three dimensions: leadership competence, policy control, and beliefs in community action.

Partial correlations demonstrated that the AES measure was related with other variables in expected ways. Results of a path analysis indicated that the hypothesized model provided a good fit to the data from the sample of community residents in Azerbaijan. Specifically, both sense of community and community participation had direct, positive effects on all three empowerment subscales. In addition, a direct effect of depression on leadership competence was found, as well as indirect effects on all three dimensions of empowerment through its relationships with sense of community and community participation. Alienation was found to have a direct, negative effect on beliefs in community action, as well as indirect effects on all three subscales of empowerment through its relationship with community participation. Findings supported the reliability and validity of the AES.

This study contributes to empowerment theory by examining its applicability to the community context in Azerbaijan. The AES instrument can be useful to health and social science researchers in the region of the South Caucasus and Central Asia. Practical implications of this study include the recommendation of a new, culturally-appropriate and validated instrument to evaluate empowerment-oriented interventions and guide development of evidence-based policies and practices in Azerbaijan and neighboring countries.

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Chapter 1: Introduction

Statement of the Problem

Empowerment theory, research, and interventions connect individual well-being with the larger social and political environment (Perkins & Zimmerman, 1995; Rappaport, 1984; Zippay, 1995). In the last decades, empowerment has become a principal framework in social sciences and human service practices (Christens, 2012; Everett, Homstead, & Drisko, 2007; Hur, 2006; LeRoy, Benet, Mason, Austin, & Mills, 2004; Perkins & Zimmerman, 1995; Peterson & Zimmerman, 2004; Peterson et al., 2006; Speer & Peterson, 2000). Empowerment was explored in many disciplines including community psychology (Christens, 2012; Kieffer, 1984; Rappaport, 1987; Zimmerman, 1995, 2000), education (Freire, 1973), public health (Fawcett et al., 2010; Herbert, Gagnon, Rennick, & O'Loughlin, 2009), feminist studies (Carr 2003; East 2000), and social work (Cattaneo & Chapman, 2010; Everett et al., 2007; Itzhaky & York, 2002; Solomon, 1976) to name but a few disciplines that have studied the concept.

Support for well-being and empowerment of vulnerable and disadvantaged populations is a primary mission of the social work profession (Hare, 2004; National Association of Social Workers [NASW], 2008). In the United States and internationally, empowerment has been used as a goal and program evaluation criteria in research and interventions seeking to address various social problems, including unhealthy behaviors and social conditions that affect population health, poverty and the lack of engagement in decision-making (Fawcett et al., 2010; Itzhaky & York, 2000; Kroeker, 1995; Markward et al., 2006; Peterson & Reid, 2003; Peterson & Zimmerman, 2004; Turro & Krause, 2009; U.S. Agency for International Development [USAID], 2013; Wang, Chen, & Chen,

2011; Zippay, 1995). Empowerment-oriented interventions are believed to enhance wellness, ameliorate problems, as well as to raise general standards of living (Peterson et al., 2006; Perkins & Zimmerman, 1995; USAID, 2013).

At the policy level, empowerment is viewed as an instrument intended to enhance the degree of control vulnerable individuals and groups exercise over their lives (Prilleltensky, 1994). The importance of empowerment and participation in the decision-making of diverse populations in a society is emphasized in major international documents including the United Nations Declaration on the Rights of Indigenous Peoples (UN, 2007) and the reports of the World Health Organization Commission on Social Determinants of Health (WHO, 2008). Finally, United Nations uses citizen empowerment as an indicator for assessment of sustainable and democratic development in each country (Farmer & Farmer, 2001; United Nations Development Programme [UNDP], 2009).

Despite its importance, this popular construct is often not well defined nor rigorously measured in U.S.-based and international studies (Cattaneo & Chapman, 2010; Kroeker, 1995; Rzayeva & Karsten, 2005). Many scholars have urged researchers to develop instruments measuring empowerment in specific contexts (Christens, Speer, & Peterson, 2011b; Itzhaky & York, 2000; Peterson & Hughey, 2002; Peterson et al., 2006; Perkins & Zimmerman, 1995; Rappaport, 1987; Zimmerman & Zahniser, 1991). Development of valid measures assessing empowerment in non-western cultures would allow researchers to refine theories and improve the understanding of individual and contextual characteristics that may inhibit or promote a sense of empowerment. Practitioners could use valid instruments to evaluate and better tailor empowerment-oriented interventions to the local socio-cultural environments.

No study to date has developed and empirically tested a measure of empowerment applicable in communities in the former Soviet countries of South Caucasus and Central Asia, and specifically in the secular Muslim country of Azerbaijan. However, validated measures of the construct are needed, which can be easily administered to evaluate community interventions in the country. International efforts to support Azerbaijan's democratic development often focus on empowerment and civic participation. For example, since 1992, the USAID has provided over \$300 million for programs developing civil society and improving the quality of life in Azerbaijan, and a large portion of these funds went to programs encouraging participation of local community residents in decision-making (USAID, 2013). Yet, researchers recognized the lack of valid measures that would allow them to empirically evaluate the empowerment outcomes in the local community environment (Rzayeva & Karsten, 2005).

This study is the first step toward developing a valid Azerbaijani instrument assessing empowerment in the context of community development programs. The purpose is to empirically test psychometric properties of the new Azerbaijani Empowerment Scale (AES). Using data collected from a sample of local community residents, this study examines the underlying dimensionality of the AES measure and its associations with theoretically related variables (i.e., community participation, sense of community, depression, and alienation). The study is guided by Zimmerman's (1995, 2000) empowerment framework and it contributes to the literature about applicability of this theory in non-western community contexts. And because of the similarity of cultures in the South Caucasus and Central Asia, current findings can inform future research and interventions in the region, as well as internationally.

Perspectives on Empowerment in Health, Social Science Disciplines, and Social Work

The word "empowerment" originates from the Latin verb that means "to be provided with power", "to be enabled" (Nyatanga & Dann, 2002; Rappaport, 1987). It has been generally defined as a process by which people gain control over their lives and become democratically engaged in the life of their community (Perkins & Zimmerman, 1995; Rappaport, 1987). Various disciplines have focused on different facets of empowerment: from psychological sense of control at the individual level to political empowerment with its emphasis on increased control over the distribution of socio-economic resources (Cattaneo & Chapman, 2010; Schulz, Israel, Zimmerman, & Checkoway, 1995). For example, political scientists examine power distribution and power acquisition by disadvantaged people, and how collective action may result in upgrading their social status (Angelique, Reischl, & Davidson, 2002; Nelson, 2002; Rollero, Tartaglia, Piccoli, & Ceccarini, 2009). In the field of education, development of critical consciousness is expected to help the oppressed people to discover the sociopolitical roots of their powerlessness, and is seen as the key ingredient in becoming empowered and liberated (Freire, 1973). The literature on management tends to view employee empowerment and engagement in team-building activities as conditions of employee well-being as well as successful organizational performance (Blanchard, Carlos, & Randolph, 2001; Terblanche, 2003).

Health-related research has explored the protective role of empowerment for health outcomes and the links between powerlessness, social participation, and indicators of mental and physical well being. Across societies, the most oppressed and powerless

populations are most likely to manifest symptoms of mental distress (Christens, 2012), while an increased control and influence over life events have been linked with improved mental and physical health (Kristenson, Eriksen, Sluiter, Starke, & Ursin, 2004; Schulz et al., 1995). Empowerment is often a component of interventions targeting populations with disabilities and chronic illness (Anderson et al., 2005; Herbert et al., 2009; Segal, Silverman, & Temkin, 1995), and programs such as substance abuse prevention, weight reduction, and smoking cessation (Holden, Messeri, Evans, Crankshaw, & Ben-Davies, 2004b; Peterson & Reid, 2003). International health promotion initiatives emphasize connection between empowerment and health of community residents and encourage researchers and practitioners to concentrate on conditions and processes that help communities become empowered (Fawcett et al., 2010).

Social workers and community psychologists intensively examine individual and contextual characteristics that may empower individuals and communities, and researchers frequently find linkages between empowerment and variables of community participation, sense of community, and well-being (Hur, 2006). The empowerment perspective in social work is grounded in the belief that increasing a sense of control over individual and community events is crucial to improving the quality of life of disadvantaged individuals and groups (Schulz et al., 1995). This perspective was developed as an alternative to the deficiency-oriented theories which attributed problems experienced by individuals to their personal, psychological or behavioral deficits (e.g., theory of learned helplessness; Seligman, 1975). It has been argued that such approaches disregarded the social context of human problems and were inherently unjust and victim-blaming (Fondacaro & Weinberg, 2002; Kroeker, 1995). The authors criticized

deficiency-oriented interventions as unsustainable and aiming to adapt the disadvantaged groups to the status quo.

An empowerment framework encourages researchers and practitioners to focus on strengths and well-being instead of illness and weaknesses (Perkins & Zimmerman, 1995; Peterson & Reid, 2003). Similarly, empowerment research recognizes the systemic influences of contextual characteristics on social problems instead of focusing solely on deficiencies of disadvantaged individuals and groups (Perkins & Zimmerman, 1995; Rappaport, 1987; Zimmerman, 1995). Importantly, empowerment frameworks suggest that individuals can become empowered without professional involvement (Zimmerman, 1990). Social workers and community psychologists are encouraged to design interventions that support multiple manifestations of community participation rather than only through mental health services, schools, or other institutionalized programs (Fondacaro & Weinberg, 2002). Participation in this framework is extended to include all stages of the collective problem solving process – from engagement in problem definition, to strategy implementation, and to evaluation of accomplishments (Fondacaro & Weinberg, 2002; Rappaport, 1987).

To date, no formal theory exists that adequately describes all manifestations of empowerment or explains the mechanisms by which individuals, organizations, and communities become empowered (Peterson & Reid, 2003). It has been argued that, because empowerment is a contextually anchored dynamic phenomenon, a single and all-encompassing definition of the construct may not be appropriate (Rappaport, 1984; Zimmerman, 1995). Various conceptualizations of empowerment are presented in the following section.

Conceptualizations of Empowerment in Social Work and Community Psychology

Some scholars conceptualized empowerment as a process (e.g., Cattaneo & Chapman, 2010; Foster-Fishman, Salem, Chibnall, Legler, & Yapchai, 1998; Gutierrez, 1995; Hur, 2006; Kaminski, Kaufman, Graubarth, & Robins, 2000; Nelson, Lord, & Ochocka, 2001; Speer & Hughey, 1995). Other theorists described empowerment as both a process and an outcome (e.g., East, 2000; Rappaport, 1987; Staples, 1990; Zimmerman, 1995). Empowering processes refer to how people, organizations, and communities become empowered and increase control over their lives, whereas the empowered outcomes are the consequences of those processes (Zimmerman, 1995). Empowering processes include various forms of participation in voluntary associations and community activities, which provide community members with opportunities to critically understand their sociopolitical context, to gain access to resources, and to develop leadership skills and engage in collective action toward a common goal (Holden et al., 2004b; Gutierrez, 1995; Kieffer, 1984; Zimmerman, 1995). Participatory action research (PAR) is another example of the empowering processes, in which community members become engaged in program development and evaluation, as well as in influencing relevant policies (Koggel, 2008; Zimmerman, 1995). Although some process-oriented studies have tried to identify stages through which empowerment might occur (e.g., Kieffer, 1984; Gutierrez, 1994; Gutierrez & Lewis, 1999), Zimmerman (1995) argued that empowerment is a nonlinear process with components influencing each other in dynamic ways.

To date, most studies on empowerment have focused on outcomes (Hur, 2006). "Empowered state" (Menon, 1999) or "empowered outcomes" (Zimmerman, 1995) refer to specific and measurable effects of empowering processes whether occurring naturally

or as a result of professional interventions. As an outcome, empowerment can include multiple components and it can be examined at various levels of analysis (i.e., psychological, organizational, communal). Although many conceptualizations of empowered outcomes were proposed (e.g., Brief & Node, 1990; Christens, 2012; Kruger, 2000; McWhirter, 1991, 1998; Mechanic, 1991; Rappaport 1987, 1995; Rose, 2000; Spreitzer, 1995; Thomas & Velthouse, 1990; Zimmerman, 1995), the majority of these definitions have been criticized as being too narrowly focused on single dimensions of the phenomenon of empowerment and as being limited to specific contexts or populations (Cattaneo & Chapman, 2010). For example, some authors concentrated on cognitive dimensions such as a person's beliefs, values, behaviors (Brief & Node, 1990), intrinsic motivations (Thomas & Velthouse, 1990), self-determination (Fetterman, 1996; Sprague & Hayes, 2000), self-confidence (Larson, Walker, & Pearce, 2005), or competence (Breton, 1994). Other authors viewed empowerment as a combination of multiple components. For example, an empowered person was expected to have increased self-efficacy, self-esteem, autonomy and responsibility (Gibson, 1991; Tengland, 2007), mastery and self-determination (Boehm & Staples, 2004), self-determination, self-sufficiency, and decision-making ability (Becker, Kovach & Gronseth, 2004; Kovach, Becker, & Worley, 2004), self-efficacy, critical consciousness, development and cultivation (Lee, 1994), or meaning, competence, self-determination, and impact (Spreitzer, 1995).

Cattaneo and Chapman (2010) argued that such definitions are problematic because they tend to focus on entirely individual intrapsychic characteristics and do not involve the correspondence with social reality. According to Riger (1993), an individual

may inadequately assess his or her chances to achieve goals, and such efforts may have disempowering and distressing results. Additionally, the focus on individual characteristics was critiqued as insufficient in describing collective empowerment and as promoting conflict-based models which prioritize individual determination over the human need for social connection (Cattaneo & Chapman, 2010; Prilleltensky, 1997; Riger, 1993).

Zimmerman (1995, 2000) proposed a multidimensional model of empowerment which includes psychological, organizational and community levels. Zimmerman's model is widely applied in community psychology and social work (Cattaneo & Chapman, 2010; Hur, 2006; Peterson et al., 2006; Wang et al., 2011). It sets psychological empowerment apart from other similar concepts such as self-efficacy, competence, mastery, self-esteem, locus of control, mental health and power, in several important ways. First, psychological empowerment is not a personality trait but a contextually-oriented conception that recognizes ecological and cultural influences (Zimmerman, 1990, 1995; Speer & Peterson, 2000). Its aim is change in a person's social context rather than only intrapsychic change (Cattaneo & Chapman, 2010; Zimmerman 1995). Second, psychological empowerment is conceptualized as occurring through engagement in participatory behaviors and collective action (Zimmerman, 1995). Also, whereas concepts like mastery and competence describe self-perceptions in response to environmental events, psychological empowerment refers to proactive engagement in one's community.

Cattaneo and Chapman (2010) noted that Zimmerman's model has greater specificity than other models, it allows operationalization of components of

empowerment into measurable variables, and it has inspired a development of measures of empowerment, including the widely used Sociopolitical Control Scale (Peterson et al., 2006; Zimmerman & Zahniser, 1991). For these reasons, the current study validating the AES is guided by the Zimmerman's (1995, 2000) framework of empowerment.

Key Components of Zimmerman's Theoretical Framework of Empowerment

Zimmerman's (1995, 2000) theoretical framework specifies empowered outcomes at individual, organizational, and community levels of analysis. As an outcome at the individual level, psychological empowerment integrates perceptions of personal control, a critical understanding of the sociopolitical environment, and proactive behaviors aimed at social change. Organizational empowerment includes processes and structures that enhance members' skills and provide them with the mutual support necessary to develop a more just organization and to improve organizational effectiveness. At the community level of analysis, empowerment refers to individuals working together in an organized fashion to improve their collective lives and linkages among community organizations and agencies that help improve community quality of life. It is assumed that all levels influence each other and that empowerment can have different intensities that can change over time (Zimmerman, 1990). Because psychological empowerment has been the primary focus of social work research, community based interventions and program evaluations (Christens, 2012; LeRoy et al., 2004; Peterson et al., 2006; Perkins & Zimmerman, 1995; Speer & Peterson, 2000), this study will focus on this dimension of empowerment.

According to Zimmerman's (1995) framework, psychological empowerment (PE) has three interrelated components: intrapersonal, interactional, and behavioral. The intrapersonal component of PE includes the notions of sociopolitical control, self-efficacy and motivation to control. The sociopolitical control refers to how people assess their capabilities to achieve desirable social change goals in specific sociopolitical contexts (Peterson et al., 2006; Zimmerman, 1995; Zimmerman & Zahniser, 1991). The sociopolitical control component has dimensions of self-perceived leadership competence and policy control. Perceived leadership competence reflects the individuals' beliefs about their own leadership capacities, and policy control reflects their beliefs about having control over the policies and decisions in a local community. These self-perceptions of control and competence are critical because they provide the initiative for people to engage in proactive behaviors aimed at social change (Zimmerman, 1990; Zimmerman & Rappaport, 1988). Perceived control contributes to the development of subjective well-being and psychosocial resilience (Grabe, 2012; Seligman, 1990; Zimmerman, 1990) and serves as a buffer against future adversities (Prilleltensky, 1994).

The interactional component reflects critical awareness of the sociopolitical environment and the knowledge of resources and methods to produce social change (Freire, 1973; Kieffer, 1984; Speer, 2000; Zimmerman, 1995). For example, community residents may become aware of the factors that influence solutions to the community problems and resources necessary to achieve a common goal. This aspect of PE also includes familiarity with the norms, values and behavioral options appropriate to achieve desirable goals in specific context (Zimmerman, 1990, 1995). Relevant values may

include cooperative decision making, commitment to collective (versus personal) interests, or mutual assistance.

The behavioral component of PE refers to actions taken to directly influence outcomes in a specific context. Depending on the context, empowering behaviors may range from engaging in mutual help groups or independent living programs, to joining voluntary associations and participating in community activities. The behavioral component of PE may also include behaviors to manage stress or adjust to change (Zimmerman, 1995).

Recently Christens (2012) proposed to expand the Zimmerman's (1995) framework of PE by adding a relational component. According to Christens, the relational component focuses on the collective exercise of transformative power to achieve change in the sociopolitical domain and it provides a conceptual connection between indicators of PE at an individual level with engagement in participatory behaviors and collective action. Several elements of the construct of relational empowerment were described. Collaborative competence refers to an individual's attitudes and perceptions about the efficacy of forming collaborative relationships and engaging in collective action to address a community issue. Indicators of collaborative competence may include individual's perceptions supporting the development of group solidarity and collaborations with others aiming at achieving change. Another element, facilitating the empowerment of others, involves efforts of individuals to identify other people's capacities and support their growth. Additional elements of relational empowerment were described as individuals' actions to bridge social divisions, mobilize networks, and pass on legacy. Empirical testing of this expanded model of PE has

potential to address the notion that the ultimate aim of empowerment is change in a person's social environment (Cattaneo & Chapman, 2010; Zimmerman 1995).

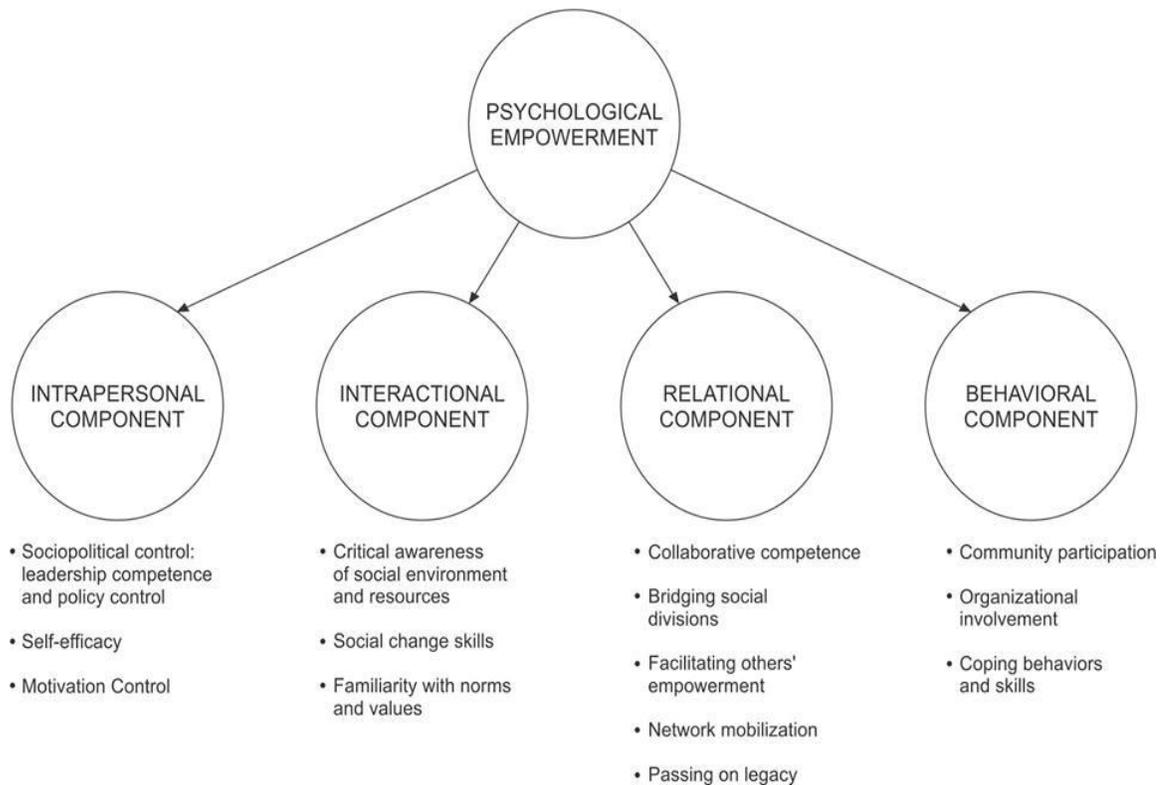


Figure 1: Nomological network of psychological empowerment (adapted from Christens, 2012, and Zimmerman, 1995).

Figure 1 shows the multidimensional model of PE which includes three components originally proposed by Zimmerman (1995) and the additional relational component (Christens, 2012). Merged together, these components represent defining characteristics of an empowered person who believes in his or her capacity to lead others and influence a given sociopolitical environment, understands how that environment

works, engages in collective actions aimed at social change, and collaborates with others to facilitate their empowerment, expand networks, and pass on legacy (Christens, 2012; Zimmerman, 1995). However, the full multi-dimensional model of PE has never been empirically validated. Very few studies have examined the interactional PE (e.g., Speer, 2000; Speer & Peterson, 2000). Holden and colleagues (Holden, Crankshaw, Nimsch, Hinnant, & Hund, 2004a; Holden, Evans, Hinnant, & Messeri, 2005) published a very elaborate study that tested a two-component PE model based on the Zimmerman's (1995, 2000) framework. Holden and colleagues (2005) integrated both intrapersonal and interactional components in their measure of PE, but treated it as a one-dimensional variable, which is inconsistent with the theory. Acknowledging the limitations of their study (e.g., self-selected and highly engaged participants and specific context of the study), the authors observed that that their model may not be applicable under other circumstances.

To date, the majority of North American and international studies in community contexts have focused on the intrapersonal component of PE and used sociopolitical control with two subscales of leadership competence and policy control as its indicator (e.g., Carballo-Diequez et al., 2005; Itzhaky & York, 2000, 2003; Markward et al., 2006; Peterson & Hughey, 2004; Peterson et al., 2006; Peterson, Peterson, Agre, Christens, & Morton, 2011; Zimmerman & Zahniser, 1991). Zimmerman (1995) has argued that measuring sociopolitical control may be the most relevant for assessing PE for a specific population in a specific context because other components, such as the availability of resources and the actual possibility to effect policies, may be more influenced by the

community's or organizational characteristics. Discussion of the assumptions underlying the Zimmerman's framework of PE is presented in the next section.

Assumptions of Zimmerman's Framework

This framework is based on several theoretical and empirically supported assumptions. First, the most frequently explored are associations between PE and variables of community participation, sense of community, and psychological wellbeing. PE is expected to be positively related with community participation and sense of community (Christens, Peterson, & Speer, 2011a; Holden et al., 2004a; Itzhaky & York, 2000; Peterson & Reid, 2003; Peterson, Speer, & McMillan, 2008; Speer, 2000; Speer, Jackson, & Peterson, 2001). And PE is expected to reduce feelings of psychological distress (e.g. alienation and depression; Christens et al., 2011b; Kristenson et al., 2004; Markward et al., 2006; Peterson & Reid, 2003; Zimmerman, 1990, 1995; Zimmerman & Zahniser, 1991). In other words, individuals who feel depressed and alienated from community life and those uninvolved in local community organizations and activities are expected to have lower sense of sociopolitical control.

Second assumption of the Zimmerman's (1995) framework is that PE is considered a dynamic and contextually-embedded construct that varies across contexts, people and over time. Some individuals may be more or less empowered than others, and all individuals are viewed as having the potential to develop a sense of empowerment at one time and disempowerment at another. Individual or group characteristics (e.g., age, gender, socioeconomic status, cultural values) may influence the meaning or manifestation of PE in a particular study. For example, empowerment may manifest

differently for subgroups of men and women (Holden et al., 2004a; Peterson & Hughey, 2004; Peterson, Lowe, Aquilino, Schneider, 2005; Zimmerman, 1995), or for people in different socio-political circumstances (Bespinar, 2010; Markward et al., 2006; Xu, Perkins & Chow, 2010; Wang et al., 2011). Individuals with a longer history of social activism may feel themselves different and may assign empowerment different meanings than individuals with shorter or no previous empowerment-related experiences (Bartunek, Foster-Fishman, & Keys, 1996; Bartunek, Lacey, & Wood, 1992; Itzhaky & York, 2000). Also, different cultural or structural contexts (e.g., organization versus community) may require different skills, knowledge, and actions for their members to become empowered (Bespinar, 2010; Foster-Fishman et al., 1998; Rappaport, 1987; Speer & Hughey, 1995). Thus, we should not, for example, require the persons from different cultural contexts or even all individuals from the same group to demonstrate the same perceptions, skills, or actions for increasing their sense of empowerment. This translates into the most important assumption of the Zimmerman's (1995) framework: The development of a universal and global measure of empowerment is not an appropriate goal because it is theoretically inconsistent with the construct given the specific demands and characteristics of different settings, populations and life situations. To prevent exclusion or misinterpretation of empowerment experiences of various groups, multiple authors have encouraged researchers to adapt the operationalizations and measures of empowerment to the cultural meanings of specific populations and the unique local contexts under study (Cattaneo & Chapman, 2010; Foster-Fishman et al., 1998; Rappaport, 1987; Zimmerman, 1995). Zimmerman (1995) argued that although measuring PE in a specific setting for a particular sample necessarily limits the extent to

which the findings can be generalized, this is an acceptable trade-off for developing adequate and culturally appropriate measures of PE and improving our understanding of what enhances empowerment in specific environments. Overall, more empirical research in new settings is necessary to reveal the contextually- and culturally-specific elements of empowerment and elements that transcend context (Christens, 2012).

Purpose of the Current Study

This study represents an initial effort to develop and empirically test the Azerbaijani Empowerment Scale, an instrument designed to assess intrapersonal component of PE among adult community residents in Azerbaijan, a former Soviet country with a secular Muslim culture. Specifically, this study was designed to test whether the AES instrument would replicate the bi-dimensional structure of the Sociopolitical Control Scale - Revised (Peterson et al., 2006), a widely used measure of the intrapersonal component of PE based on the Zimmerman's (1995, 2000) framework. Second, this study used data from a sample of community residents in Azerbaijan to test whether the newly developed AES instrument related in theoretically expected ways with a set of conceptually related constructs of community participation, sense of community, alienation and depression.

Research questions

1. What is the underlying factor structure of the new measure of intrapersonal PE, the Azerbaijani Empowerment Scale, which is supported by the data from a sample of community residents in Azerbaijan?
2. Are the dimensions of the AES associated with measures of community participation, sense of community, alienation and depression, as expected by empowerment theory?

Specific hypotheses

1. Community participation will be positively associated with intrapersonal PE. Specifically, individuals' higher scores on community participation will be associated with higher scores on the AES measure.
2. Sense of community will be positively associated with intrapersonal PE. Specifically, individuals' higher scores on sense of community will be associated with higher scores on the AES measure.
3. Alienation will be negatively associated with intrapersonal PE. Specifically, individuals' higher scores on alienation will be associated with lower scores on the AES measure.
4. Depression will be negatively associated with intrapersonal PE. Specifically, individuals' higher scores on depression will be associated with lower scores on the AES measure.

Practical Implications for Social Work

Empowerment of vulnerable and disadvantaged populations is a primary mission of the social work profession (Hare, 2004; NASW, 2008). Empowerment is viewed as a protective factor and empowerment-oriented interventions are expected to address social problems of disadvantaged populations (Gutierrez, 1995; Peterson et al., 2006; Solomon, 1976; Zippay, 1995). Psychological empowerment was proposed as a primary orientation and targeted outcome for community development efforts (Christens, 2012). Most of the western social work research and interventions have focused on the sociopolitical control and paths that facilitate individuals' participation in community contexts (Christens et al., 2011b; Gutierrez, 1995; Holden et al., 2004a, 2005; Peterson et al., 2006, 2008). Yet, scientists have questioned whether the term "empowerment" carries the same meaning in different socio-cultural contexts and among different advocates and populations (Cattaneo & Chapman, 2010; Zippay, 1995).

Professional ethics of social work requires that program implementation and practice interventions incorporate cultural considerations of the target populations (NASW, 2008). Studies on empowerment in non-western contexts are often qualitative (e.g., Abdoli, Ashktorab, Ahmadi, Parvizi, & Dunning, 2008; Bospinar, 2010) or use unvalidated instruments (e.g., Markward et al., 2006). Valid measures or numerical data on empowerment in Azerbaijan are lacking, and the associations between various forms of civic participation and empowerment have never been empirically examined in the local communities (Rzayeva & Karsten, 2005). The few Azerbaijani studies on empowerment and community participation have used qualitative interviews and predominately sampled program staff, excluding target populations or members of the

general public (e.g., Najafizadeh, 2003; USAID, 2005). Despite substantial donor investments in empowerment-oriented programs in Azerbaijan (USAID, 2013), it is not known how empowerment is conceptualized by local people or how empowerment-oriented interventions can be quantitatively assessed. Some authors expressed a concern that the lack of conceptual clarity as well as appropriate measures may result in confusion between empowerment and indoctrination when donor agencies and government may use hierarchical and oppressive policies and practices to control local initiatives (Rzayeva & Karsten, 2005).

The current study aims to address this gap by presenting the first effort to develop a theoretically guided and empirically tested Azerbaijani measure of intrapersonal PE. Informed by Zimmerman's (1995) framework of PE as well as the previous studies on assessing intrapersonal component of PE (Peterson et al., 2006), current investigation examined the validity of the AES measure with a sample of community residents in Azerbaijan. By exploring the dimensionality of the AES instrument and its associations with other constructs, this study has tested the applicability of Zimmerman's (1995) framework to the secular Muslim culture in Azerbaijan. The validated AES instrument can contribute to the future social science research and evaluation of empowerment-oriented interventions in the country. Such research can help international donors, the local government, as well as other stakeholders, to develop policies and interventions that are evidence-based and more responsive to the experiences of community residents in Azerbaijan. And because of the similarity of cultures in the region of South Caucasus and Central Asia, the AES instrument can be further tested and potentially applied in neighboring countries.

Chapter 2: Literature Review

Review of the Measures of Psychological Empowerment

There are several reasons why measuring PE is difficult (Zimmerman, 1995): (a) PE manifests itself in different perceptions, skills, and behaviors across people; (b) Different beliefs, competencies, and actions may be required in different settings; and (c) PE may fluctuate over time.

The majority of measurement efforts have focused on developing instruments to assess empowerment at the individual level (Cattaneo & Chapman 2010; Herbert et al., 2009), and the measures tend to be tailored for use in specific populations or contexts, such as work-related empowerment, empowerment of consumers of health-related services, or residents in underprivileged communities. For example, instruments were developed to measure PE of employees at their workplace (Menon, 1999; Spreitzer, 1995), people with specific chronic diseases (Anderson et al. 1995; Bulsara, Styles, Ward, & Bulsara, 2006; Tsay & Hung 2004; Webb, Horne, & Pinching, 2001), patients with mental illness (Hansson & Bjorkman 2005; Rogers, Chamberlin, Ellison, & Crean, 1997; Rogers, Ralph, & Salzer, 2010; Walker, Thorne, Powers, & Gaonkar, 2010), persons with disabilities (Bolton & Brookings, 1998; Brookings & Bolton, 2000), or parents whose children have physical or emotional disorders (Akey, Marquis, & Ross, 2000; Koren, DeChillo, & Friesen, 1992).

Herbert and colleagues (2009) presented a systematic review of health-related individual empowerment scales published in American and international peer reviewed journals between 1988-2007. The authors reported that out of the fifty instruments they identified only one measure that had good evidence of reliability and validity (e.g., the

Parent Empowerment Survey; Trivette, Dunst, Hamby, & LaPointe, 1996), while all the other instruments they reviewed tended to have problematic or no evidence for reliability and validity. Yet, Herbert's (2009) study may be criticized for applying inappropriate criteria for assessing validity and reliability in their review. Herbert considered the scales with both reliability and validity correlation coefficients ≥ 0.8 as having good evidence, the scales with coefficients ≥ 0.7 and < 0.8 as having moderate evidence, and instruments with coefficients < 0.7 or no reported reliability and validity as having limited or no evidence. These criteria contradict recommendations to consider reliability coefficients of 0.7 as acceptable (Nunnally, 1978). Also, expecting very high alpha coefficients may not be a good research practice because scales with coefficients of 0.9 or above may imply item redundancy rather than scale reliability (Boyle, 1991; Streiner, 2003). Despite these limitations, Herbert and colleagues (2009) made an important conclusion that such lack of validity of measures may be partially due to the lack of consensus on the theoretical definition of empowerment construct and its indicators. Other social scientists also acknowledged the lack of conceptual consensus in research on empowerment (Cattaneo & Chapman, 2010), as well as a frequent application of unvalidated measures of PE in American and international health-related studies (Brohan, Elgue, Sartorius, & Thornicroft, 2010).

Most measures of PE in social work and community psychology have centered on measuring the construct in the context of citizen participation in community interventions, organizations, and activities (e.g., Carballo-Diequez et al., 2005; Grabe, 2012; Hamilton & Fauri, 2001; Holden et al., 2004a, 2005; Itzhaky, 2003; Itzhaky & York, 2000, 2003; Markward et al., 2006; Peterson & Reid, 2003; Peterson et al., 2006,

2011a; Smith & Propst, 2001; Speer, 2000; Speer & Peterson, 2000; Speer et al., 2001). The Sociopolitical Control Scale (SPCS; Zimmerman & Zahniser, 1991) and its modifications (e.g., Peterson et al., 2006, 2011a) have been recognized as the most frequently used measures of the intrapersonal component of PE in community psychology and social work (Christens, 2012; Wang et al., 2011). The measure is described in more detail in the following section.

The Sociopolitical Control Scale and Its Modifications

The Sociopolitical Control Scale (Zimmerman & Zahniser, 1991) was designed to measure self-perceptions of an individual's abilities to organize people and influence policy decisions in the context of a local community. The SPCS and its modifications were used in multiple studies in the United States (e.g., Carballo-Diequez et al., 2005; Christens et al., 2011a; Peterson & Hughey, 2004; Peterson & Reid, 2003; Peterson et al., 2006; Smith & Propst, 2001; Speer, 2000; Speer & Peterson; Speer et al., 2001). The measure was also translated and used in international studies in Israel (Itzhaky & York, 2000), Italy (Rollero et al., 2009), and Eastern Europe (Markward et al., 2006).

To develop the 17-item SPCS scale, Zimmerman and Zahniser (1991) drew items from 10 other instruments assessing related constructs such as political efficacy, perceived competence, locus of control, and sense of mastery. The authors tested the SPCS instrument with several samples in the United States, and their factor analyses produced two dimensions, leadership competence and policy control. The two SPCS subscales were also related in expected ways to measures of alienation and community involvement.

Peterson and colleagues (2011) tested a modified measure, the Sociopolitical Control Scale for Youth (SPCS-Y), which was designed to assess intrapersonal PE among high school students. Using data from a sample of urban youth located in the northeastern United States, the authors demonstrated that the bi-dimensional model of the SPCS-Y with subscales of leadership competence and policy control provided good fit to the data. Additional analyses of associations between intrapersonal PE and measures of community and school participation, neighborhood attachment, perceived school importance, and drug use, provided additional empirical evidence of the validity of the SPCS-Y and its underlying bi-dimensional model of intrapersonal PE.

Itzhaky and York (2000) translated the SPCS into Hebrew and replicated the Zimmerman and Zahniser's (1991) bi-dimensional model PE with a sample of community activists in Israel. They demonstrated that sociopolitical control as a measure of PE was positively correlated with measures of participation in community activism, a sense of community and general sense of well-being. In Eastern European study, Markward and colleagues (2006) translated the SPCS scale and surveyed parents of school-age children to assess their PE and explore associations with community participation and depression. Rollero and colleagues (2009) translated the SPCS into Italian language and examined associations between PE, sense of community and political participation in Italy. Their study reported that political activists showed higher scores on sociopolitical control than non activists.

Several authors noted that the original SPCS scale had a limitation with respect to factorial validity, because several negatively worded items failed to load on the expected factor (Peterson et al., 2006; Smith & Propst, 2001; Zimmerman & Zahniser, 1991).

Peterson and colleagues (2006) suggested that these items may have been more relevant to constructs such as depressive realism rather than the intrapersonal component of PE. Peterson and colleagues developed and tested Sociopolitical Control Scale - Revised (SPCS-R) with 17 positively-worded items. Using two samples which included adult community residents in the Midwestern and Northeastern United States, the authors provided empirical evidence supporting an improved content and construct validity of the revised measure. For example, factor analysis confirmed the bi-dimensional structure of the SPCS-R, and further tests demonstrated that the SPCS-R was related in expected ways to measures of community involvement. The instrument included two subscales, leadership competence and policy control, and it was recommended for empirical studies of community involvement and the intrapersonal component of PE.

It is important to note that the evidence of dimensionality of the intrapersonal component of PE is controversial. Zimmerman's theory (1995) as well as several studies hypothesized that sociopolitical control is a two-dimensional construct (Itzhaky & York, 2000; Peterson et al., 2006, 2011a; Smith & Propst, 2001; Zimmerman & Zahniser, 1991). However, Holden and colleagues (Holden et al., 2004a, 2005) used the items from the two subscales of the SPCS (Zimmerman & Zahniser, 1991) to create a unidimensional measure assessing the sociopolitical control among youth participating in tobacco control intervention. This unidimensional model contradicted the Zimmerman's (1995) theoretical framework as well as the empirical studies mentioned above. Holden and colleagues (2005) recognized that the findings supporting their unidimensional model could be attributed to the unique characteristics of the sample in their study which

included only self-selected and highly involved participants. The authors suggested that their model may not apply to the other samples or contexts.

Wang and colleagues (2011) recently validated a Chinese measure of PE, the Chinese Urban Citizens' Psychological Empowerment (CUCPE) scale. In the politically constrained context of China, the authors avoided political connotations and defined the intrapersonal component of PE as a personality-oriented, self-motivated, and proactive control with the aim of community members' citizen participation. Guided by Zimmerman's (1995, 2000) theory, their study applied a translated version of an instrument that originally intended to assess the two intrapersonal dimensions of leadership competence and policy control. Factor analyses of Chinese data, however, produced a 16-item CUCPE scale that measured three dimensions: an inclination to criticize, perceived participatory competence, and proactive control of participatory motivation.

It has been noted that assessment of sociopolitical control should be adapted to setting-specific aspects in a given context, including the specific goals and strategies that are viewed as meaningful and chosen by the target groups (Cattaneo & Chapman, 2010; Zimmerman & Zahniser, 1991). Social scientists have not tested the SPCS-R instrument (Peterson et al., 2006) in community contexts of the South Caucasus and Central Asia. Therefore, new investigations are necessary to examine whether the theoretically hypothesized bi-dimensional model of the intrapersonal PE and its associations with other conceptually relevant constructs can be empirically replicated with diverse samples of community residents in this region. Discussion of theoretically expected associations between intrapersonal PE and other constructs is presented in the next section.

Relationships Between Psychological Empowerment and Conceptually Relevant Variables

Personality traits, contextual characteristics, and engagement in voluntary associations and community activities are hypothesized to be antecedents of PE (Spreitzer, 1995; Zimmerman, 1995). Personality traits, such as self-esteem and locus of control, shape individual's self-perceptions in specific sociopolitical contexts. A sense of critical consciousness is also believed to facilitate PE (Freire, 1973; Gutierrez, 1995; Kieffer, 1984; Zimmerman & Rappaport, 1988). Gutierrez (1995) suggested that individual and group factors such as ethnic consciousness, cognitive styles, and perceptions of other groups can facilitate the understanding of status and power in causing problems and thus can lead to empowerment.

Sense of community and community participation are the most frequent antecedents of PE explored in social work and community psychology (Christens et al., 2011b; Holden et al., 2004a; Peterson & Reid, 2003; Peterson et al., 2008; Peterson, Speer, & Peterson, 2011; Speer, 2000). Community participation provides unique opportunities for individuals to become empowered because community members learn to analyze the roots of a social problem and sufficiently use their resources to collectively solve it (Gutierrez, 1995; Zimmerman & Rappaport, 1988). Sense of community is an indicator of emotional support and shared interests between people in a community and is expected to be positively associated with community participation and a sense of PE (Peterson et al., 2008; Peterson & Reid, 2003).

Demographic characteristics are also hypothesized to predict PE. For example, a study of youth engaged in tobacco prevention intervention have found that younger and

male participants were less likely to report empowerment, while their race/ethnicity was not associated with empowerment (Holden et al., 2004a). Multiple empirical studies have found various demographic characteristics (e.g. age, gender, education and income) to be positively associated with intrapersonal PE (Itzhaky & York, 2000; Peterson & Hughey, 2002, 2004; Peterson et al., 2006). Christens and colleagues (2011b) demonstrated a positive link between the socioeconomic status and intrapersonal PE: Individuals with higher incomes and levels of formal education perceived themselves as having more sociopolitical control. Environmental characteristics are also hypothesized to influence an individual's sense of empowerment. These characteristics may include opportunities for meaningful participation, management practices, or access to information (Cattaneo & Chapman, 2010; Spreitzer, 1995).

The indicators of empowerment may include self-perceptions, attitudes and beliefs (e.g., learning to view oneself as a social change agent), specific knowledge (e.g., awareness of available resources), and skills (e.g., assertiveness and advocacy) that increase well-being of the participating individuals (Holden et al., 2004b; Kieffer, 1984). PE is expected to increase individual effectiveness and innovative behavior (Spreitzer, 1995), concentration, initiative, resiliency (Thomas & Velthouse, 1990), and commitment to remain involved in collective community actions (Holden et al., 2004b; Kieffer, 1984). Empowered individuals are expected to become more resilient in the face of unhealthy practices and behaviors. For example, in the context of smoking prevention programs, the more engaged participants are hypothesized to change their attitudes in terms of their openness to smoking (Holden et al., 2004a). Finally, PE is expected to reduce feelings of psychological distress (Kristenson et al., 2004; Markward et al., 2006; Peterson & Reid,

2003; Zimmerman, 1990, 1995; Zimmerman & Zahniser, 1991). Because associations between the intrapersonal PE and a set of variables such as community participation, sense of community, alienation, and depression, are frequently used to assess the validity of measures of PE, a brief overview of such studies follows.

Psychological empowerment and community participation

Community or grassroots participation has been generally defined as individuals' voluntary engagement in community organizations and activities that affect decision-making and problem-solving (Zimmerman & Rappaport, 1988). Multiple studies explored participation in various types of community organizations and associations addressing specific local needs, including youth sports and recreation groups, community crime and drug prevention coalitions, and self-help groups (Perkins, Hughey, & Speer, 2002). Community participation differs from involvement in formal services (i.e. mental health institutions and schools) or traditional skills training because it is voluntary and community residents themselves choose activities and degrees of involvement (Zimmerman, 1990; Zimmerman & Rappaport, 1988).

One of the most empirically supported predictions of the Zimmerman (1995, 2000) framework is that community participation predicts PE (Christens et al., 2011a). Many theorists and researchers have identified participation in voluntary associations and community activities as an enhancer of PE and mental wellbeing (Gutierrez, 1995; Holden et al., 2004a; Itzhaky & York, 2000; Peterson & Reid, 2003; Peterson et al., 2011b; Speer et al., 2001; Zimmerman, 1990, 1995; Zimmerman & Zahniser, 1991). For example, Zimmerman's study (1990) examined associations between various degrees of

participation and PE. Using data from a sample of undergraduate students ($n = 388$) and a sample of community residents ($n = 205$), Zimmerman found that participation in community organizations had a direct positive effect on PE, and these results were replicated across two samples in the study. In the process of developing the SPCS instrument, Zimmerman and Zahniser (1991) used three samples in the United States which included undergraduate students ($n = 390$), community residents ($n = 205$), and members of church ($n = 143$). Their findings indicated that dimensions of PE were positively associated with measures of community participation.

In a study on validation of the SPCS-R instrument, Peterson and colleagues (2006) used a sample of adult community residents of the Northeastern United States ($n = 750$) and examined associations between PE and participation in community based organizations and community action activities. Partial correlation results indicated that, controlling for demographic characteristics, community participation had significant positive associations with dimensions of intrapersonal PE. In the more recent study (Peterson et al., 2011b), the data from a random sample of urban residents in the Southwestern United States ($n=283$) provided an additional empirical support for the hypothesis that participation predicted the intrapersonal component of PE. Yet, one common limitation of the described investigations was the use of self-report measures and cross-sectional designs which excluded objective indicators of participation and did not allow the researchers to make causal inferences.

Several international studies found similar positive links between community participation and PE. Itzhaky and York (2000) conducted a cross-sectional study in Israel to examine associations between participation and PE and to replicate the original study

by Zimmerman and Zahniser (1991). The Israeli study involved 156 community activists with different degrees of participatory experience. Itzhaky and York (2000) found that PE was associated with the measures of community participation, community belonging and well-being, and that the more experienced activists were more empowered. Another cross sectional study in Israel with a sample of parents of children with disabilities ($n = 93$) found that participation in decision-making was associated with empowerment among the parents (Itzhaky & Schwartz, 2000). Yet, notable limitations of both these Israeli studies were the non-random sampling and inclusion of only participants who were actively involved in various voluntary parents' organizations.

Although most researchers conceptualize that community participation precedes empowerment (Christens et al., 2011a; Itzhaky & York, 2000; Peterson & Reid, 2003; Zimmerman 1990; Zimmerman & Rappaport, 1988), Speer & Hughey (1995) hypothesized that there may be reciprocal relationship between these constructs. Recently Christens and colleagues (2011a) tested reciprocal and unidirectional causal relations between community participation and PE with two waves of survey data from a panel of randomly selected neighborhood residents and organizational members from several regions of the United States ($n = 474$). The findings of the structural equation modeling indicated that community participation influenced future PE, however, reciprocal causality was not found to occur between the variables. The results reinforced conceptualization of empowerment as a social process and outcome of participation rather than a characteristic of individuals or a precursor to action. Yet, the authors acknowledged that unobserved contextual factors might be specific to the cities of the study and not replicable in other contexts.

Community participation was also found to be associated with greater sense of community (Barati, Samah, & Ahmad, 2012; Itzhaky & York, 2000; Peterson & Reid, 2003; Perkins & Long, 2002, Peterson et al., 2008) and mental well-being (Itzhaky & York, 2000; Peterson et al., 2008). Importantly, several social scientists observed that community participation may be empowering only when it is equal, meaningful, voluntary and initiated by community residents themselves, and that empowerment may not be achieved when action and advocacy is done on their behalf by professionals or service providers (Itzhaky & Schwartz, 2000; Perkins et al., 2002; Xu et al., 2010; Zimmerman, 1990). For example, Xu and colleagues (2010) observed that in China and other developing countries, where community residents have very limited opportunities to exercise equity and collective power, participation is a mere component of government-initiated provision of social services. Such top-down experiences of participation do not engage residents in community decision-making processes or local politics and do not empower them. Zimmerman (1990) hypothesized that voluntary participation provides community members with opportunities to learn skills that help them solve problems and exert personal control, and that such outcomes may not be achieved if participation is involuntary or of entirely technical nature (such as addressing envelopes).

Indicators of community participation may vary by context. While membership in community organizations and political activities are frequent indicators of community participation in western countries, Xu and colleagues (2010) argued that in China and other developing countries such opportunities are very limited, and therefore participation is better indicated by informal neighborhood relationships rather than formal

membership, and by individual self-interest oriented behaviors rather than collective common good oriented political actions. The authors contended that beside the desire to engage in collective action, there should be institutional infrastructures for local political involvement, perceived opportunities for collective actions and experiences of collective efficacy in the community, in which contemporary China is deficient.

Overall, positive associations between sociopolitical control and various types of individual's participation in their communities may be determined by the American culture where voluntarism and individual determination are pervasive positive values and behavioral indicators of PE (Rappaport, 1987; Zimmerman & Zahniser, 1991). Some international researchers have argued that empowerment-oriented theories and interventions based on these western values may not be appropriate for populations in other cultures (e.g., Bospinar, 2010; Hirayama & Cetingok, 1988; Schiele, 1996; Yip 2004). Thus, further testing the association between community participation and PE in non-western cultures is necessary.

Psychological empowerment and sense of community

The sense of community refers to the reciprocal relationship between people and community to which they belong. The four dimensions of the sense of community include needs fulfillment, group membership, influence and shared emotional connection (McMillan & Chavis, 1986; Peterson et al., 2008). Several studies in North America empirically tested path models and found that sense of community predicted the intrapersonal PE directly and indirectly through its positive effect on community participation (Peterson & Reid, 2003; Peterson et al., 2011b). Peterson and colleagues

(2008) surveyed a random sample of community residents (n = 293) located in the Midwestern United States. Their findings indicated that sense of community was positively associated with community participation and intrapersonal empowerment, and it was negatively associated with depression. In another study, Peterson and colleagues (2011b) conducted empirical investigation in a substance abuse prevention context with randomly selected urban residents (n=283) involved in an evaluation of a National Institute of Justice community policing initiative in the Southwestern United States. The authors tested a path model that included residents' awareness of problems in their community, perceived police responsiveness to drug crime, variables representing residents' sense of community and citizen participation as predictors of the intrapersonal component of PE. Findings indicated that the path model had a good fit to the data and that sense of community predicted PE through its relationship to perceived police responsiveness to drug crime and citizen participation.

These relationships were challenged by some international studies. For example, Li and colleagues (2007) published a qualitative study examining sense of community and community participation in the form of engagement of Chinese villagers in tourism development programs. The authors described that communities in China are often clan-based and the sense of connectedness to community provides some individuals with exclusive access ("an entry ticket") to the circles of elite families and businesses. Without such connectedness, it is virtually impossible for ordinary villagers to get jobs, join businesses, or equally engage in community initiatives. The authors concluded that stronger community connectedness among some individuals deprived other villagers from participating in the decision-making process about how heritage resources should be

used, and thus it tended to be a barrier for active and equitable participation in a rural community.

In another Chinese study, Xu and colleagues (2010) empirically examined associations between sense of community, neighboring, socioeconomic status, and political participation in the form of voting. Using nationally representative data of urban and rural households from the Chinese General Social Survey ($n = 10,372$), the authors found that higher socio-economic status, sense of community and neighboring behavior predicted political participation. However, the authors commented that knowing and helping one's neighbors in China may be the more representative indicator and stronger facilitator of participation than "the more abstract membership in organizations". The authors argued that, despite of the strong association between sense of community and community participation, the influence of the sense of community should not be overestimated in Chinese and other contexts where meaningful, equal, and effective political participation at the local community level ultimately is constrained and regulated by government. An important limitation of this study was that variables of participation, sense of community, and neighboring each were measured by single items and did not capture the complexity and depth of the constructs they represented. Overall, measures were different from the ones commonly used in the North American studies, so it is questionable to what degree these findings can be compared to those from the U.S. samples.

Psychological empowerment and alienation and depression

Theorists acknowledge connections between empowerment and various manifestations of mental distress (Christens, 2012). Alienation refers to the subjectively experienced distress related to the perceived status differences in a society and it is believed to facilitate various types of deviance (Dean, 1961). Alienated persons tend to view themselves as not belonging to the social environment because of their social status (Dean, Brandes, & Dharwadkar, 1998). The concept of alienation usually includes three major components: powerlessness, normlessness, and social isolation (Dean, 1961). Depression is one of the most common disorders that is associated with declines in quality of life (Beekman, Deeg, & Van Limbeek, 1997). Zimmerman and Rappaport (1988) recommended using depressive symptoms to assess discriminant validity of empowerment instruments. Because subjective sense of psychological wellbeing influences individuals' sense of control over life events and their willingness to be actively engaged in collective actions, researchers of empowerment often use measures of depression and alienation as indicators of psychological wellbeing (Christens et al., 2011b; Grabe, 2012; Kristenson et al., 2004).

Review of the literature suggests that the lack of perceived control is associated with alienation and depression (Christens et al., 2011b; Zimmerman, 1990; Zimmerman & Zahniser, 1991). Using structural equation modeling, Peterson and Reid (2003) tested a path model with a random sample of urban residents ($n = 661$) and found alienation to influence PE directly and indirectly through its relationship to sense of community. Specifically, the more alienated individuals tended to report lower sense of community and lower PE. Similarly, an Eastern European study reported that depression was

associated with a lack of sociopolitical control, and the authors commented that the negative association was understandable given that depression results in withdrawal from activities and a lack of cognitive clarity (Markward et al., 2006).

Cultural Aspects in Studies on Psychological Empowerment

Although theory suggests that empowerment may have different meanings and manifestations in different populations, both studies and interventions in diverse and international contexts have been criticized for operationalizing the construct based on definitions of the researchers, service providers, or development agencies, rather than that of the community participants or service users (Foster-Fishman et al., 1998; Herr, 2008; Strawn, 1994). Such imposed definitions may not be consistent with the expectations and experiences of local community members and may disempower them. For example, Strawn (1994) conducted a qualitative study in California and described how a program that intended to facilitate the empowerment of low-income immigrant women from diverse ethnic backgrounds inadvertently increased their alienation by inadequately defining what empowerment meant to them and which processes would facilitate their empowerment experience. Whereas the program developers designed the intervention based on their own interpretation of empowerment as aimed at fostering individual determination, the participants tended to value cohesiveness and group interests as more appropriate goals. Another qualitative study (Kroeker, 1995) examined an agricultural cooperative in a poor community in Nicaragua and described how community participation had mixed results because it undermined the value and respect participants had in society. Because the participants did not want to verbally confront others or to be

singled out, they either avoided expressing opinions in community meetings, or multiple individuals spoke at once to hide individual contributions within the noise. Such participatory style was misinterpreted by the local and outside service providers who perceived the participants as "lacking culture" or "lacking conscience". Similarly, Yip (2004) criticized western conceptualizations of empowerment and argued that Asian cultures are collectivistic, and that Chinese people tend to view pursuing individual interests and entering direct confrontation with others as inappropriate.

Some researchers (e.g., Speer, 2000) have recognized that western studies often used rather individualistic indicators of participation and sense of empowerment such as writing petitions or voting. Several international studies (e.g., Hirayama & Cetingok, 1988; Yip 2004) have questioned the appropriateness of such indicators in nonwestern societies. Xu and colleagues (2010) have argued that manifestations of participation in China are reflected in helping one's neighbors and reciprocal relationships in a community, while formal membership in organizations and political activism is too individualistic in local socio-cultural context. In a qualitative study of poor Chilean settlement, Turro and Krause (2009) found that although community participation was connected to empowerment, it was motivated by the individuals' desire to help others, fulfill mutual responsibilities, and other aims favoring well-being of their social group, rather than by their personal gains.

Lindstrom (2005) published an empirical study which investigated ethnic differences in terms of social participation in southern Sweden. The cross-sectional data from the public health survey included responses from 5600 randomly selected local residents born in Scandinavia as well as immigrants from other Western countries, former

Yugoslavia, Poland, Arabic speaking countries and other developing countries. The study has found that participants born in Arabic speaking countries and other developing countries (Iran, Turkey, Vietnam, Chile and sub-Saharan Africa) participated to a significantly lower extent in a variety of civic and social activities when compared to the reference population born in Sweden. Indicators of the community participation included union meetings, meetings of other organizations and big gatherings of relatives, as well as cultural activities (theatre, cinema, and arts exhibitions), sports events, night club entertainment, and private parties. This pattern was particularly strong for women born in Arab countries. Lindstrom suggested that these differences could not be explained by socioeconomic variables (e.g., education, economic stress or possibly unemployment) or the ethnic consciousness. The author concluded that the cultural differences and differences in the process of acculturation (partly dependent on the length of time spent in Swedish society) may explain the differences in social participation between the ethnic groups in the study.

Several recent studies on empowerment in countries culturally and geographically close to Azerbaijan have also pointed at cultural differences influencing how people become empowered and how empowerment may be experienced. A qualitative study of Iranian patients with diabetes has found that the study participants regarded themselves as being empowered by their faith even as they were facing difficult illness (Abdoli et al., 2008). Interestingly, while western authors (i.e., Rakel & Weiss, 2007) demonstrated that fear of long-term dependency on others has led to disempowerment in patients with chronic illness, Abdoli and colleagues (2008) highlighted that in Iranian context the fear of diabetes and its consequences was a strong facilitator of gaining a greater sense of

control. Participants in Iranian study reported that their expectations and fears of dependency on other people motivated the patients to take better care of their health. Their empowerment process was also influenced by such culturally-specific aspects as religious beliefs and viewing doctor as holy man, diabetes as God's will, and caring for the body as important task because it was God's gift.

A recent qualitative study in Turkey has questioned the applicability of the hypothesis that collective participation facilitates empowerment of individuals. Bospinar (2010) has argued that the western "over-romanticized" goal of empowering individuals to engage in collective action may have problematic consequences for women in Turkey. The author contended that in the constrained political and socio-economic context, Turkish women act privately and use individual strategies of achieving personal benefits without challenging the patriarchal system dominant in family and community. Bospinar argued that tools for individual empowerment may not be the same as tools for collective empowerment of women as a social class, and in some contexts people may choose to pursue one over the other. This echoes Riger's (1993) criticism that empowerment-guided interventions may generate tensions that can erode a collective sense of community, and that empowerment frameworks should consider communal values to be as important as a need for individual autonomy and control.

Markward and colleagues (2006) conducted an empirical study in an Eastern European community context and used Zimmerman's (1995) theory and the SPCS scale (Zimmerman & Zahniser, 1991) to assess intrapersonal PE. Markward (2006) reported that the participants in a suburban community (n = 172) scored higher on leadership competence than on policy control. Importantly, the findings indicated that voting in the

last presidential election and degree of depression represented two variables that were negatively associated with the sense of leadership competence among the study participants. The authors described that citizens' voices were not democratically reflected in the results of corrupt elections held prior to the study. This might explain why the majority of the study's participants agreed that "a good many local elections are not important enough to bother with". Markward concluded that participation may have a disempowering effect on individuals in post-Socialist societies where citizens become disillusioned about their chances to use democratic means to influence decision-making.

In another study that explored empowerment in politically constrained context of China, Wang and colleagues (2011) avoided political connotations of the construct and defined intrapersonal PE as a personality-oriented, self-motivated, and proactive control with the aim of community members' citizen participation. Guided by Zimmerman's framework (1995, 2000), Wang and colleagues generated Chinese items intended to assess intrapersonal PE. Factor analyses of Chinese data produced a 16-item instrument, the Chinese Urban Citizens' Psychological Empowerment (CUCPE) scale, which measured three dimensions: an inclination to criticize, perceived participatory competence, and proactive control of participatory motivation. Such findings remind researchers that indicators and dimensions of empowerment may vary in different socio-cultural contexts, and that it is crucial to examine PE in relation to the experiences, roles and activities that are perceived as culturally meaningful and available by the local community members (Cattaneo & Chapman, 2010; Rappaport, 1987).

Despite making valuable contributions to the research on PE, many international studies have multiple limitations that need to be acknowledged. Many authors tended to

use convenience samples and solely qualitative data (e.g., Abdoli et al., 2008; Bospinar, 2010; Kroeker, 1995; Turro & Krause, 2009; Yip, 2004). The Eastern European study (Markward et al., 2006) was quantitative, but it used a convenience sample and unvalidated version of the SPCS measure (Zimmerman & Zahniser, 1991) which was merely translated into the local language. The current study presented here is aimed to address some of these limitations by validating the AES scale and empirically testing its underlying dimensionality and its associations to a set of theoretically related constructs with a sample of Azerbaijani community residents. To increase comparability of the findings, efforts were made to include measures that were similar to the ones used in the previous empirical studies on validation of empowerment instruments in North American community contexts.

Chapter 3: Methodology

Overview

The study is cross-sectional, non-experimental, and it involves collection of primary data using self-administered paper surveys. The research process comprised three major stages: generation and pretesting of a pool of items in Azerbaijani language, collecting data from the sample of community residents in Azerbaijan, and statistical examination of psychometric properties of the new AES instrument. The purposeful sampling strategy was used to recruit study participants who were community residents in Azerbaijan. The data collection began after receiving an approval from the Institutional Review Board (IRB) at Rutgers University as well as from organizations in Azerbaijan that assisted the researcher in conducting this study. This chapter describes the strategy used to recruit a sample and collect data for this study, the measures for the constructs of interest, and the analytic strategies used to examine the study hypotheses.

For scale development, methodologists recommend a ratio of 5 to 10 subjects per item for samples of up to 300 subjects, whereas for a sample of 300 or larger this ratio may be relaxed (DeVellis, 2003, p. 37). According to Costello and Osborne (2005), in the majority (63%) of the studies in social sciences over the previous two years, the subject to item ratios were 10 to 1 or less, and the largest portion of articles (26%) had a ratio of higher than 2 to 1 but lower or equal to 5 to 1. Overall, a number of methodologists have recommended 300 cases as sufficient sample size for most scale development studies (DeVellis, 2003; Worthington & Whittaker, 2006).

Purposeful sampling tends to be the most common approach in scale development studies, particularly when members of populations of interest are difficult to identify or

from whom it is particularly difficult to solicit participation (Worthington & Whittaker, 2006). Review of the previous studies on PE in international contexts suggests that researchers have often used non-random samples and included only members engaged in community based organizations and initiatives (e.g., Holden et al., 2005; Itzhaky & Schwartz, 2000; Itzhaky & York, 2000; Markward et al., 2006). As has been noted by Gorsuch (1997), the sample is sufficient if it includes people similar to those with whom the measure will be used, and if those who would score high and those who would score low on the variables of interest are represented in the sample.

Based on these recommendations, the feasibility concerns, as well as the length of the final Azerbaijani questionnaire which included 32 empowerment items, the researcher aimed to survey approximately 320 or more respondents. In the absence of a centralized directory of community residents or listings of locations in Azerbaijan where community mobilizing programs have or have not been implemented, random sampling procedures could not be applied. Therefore the purposeful sampling strategy was chosen to recruit participants for this study. To ensure protection of the survey participants as well as to maximize the response rate, the procedures were tailored to the local context and conducted in consultation with local experts and the leaders of the nonprofit organizations implementing community mobilizing projects in the country. The data were collected during the winter months in 2011-2012.

Setting for Research: The Azerbaijani Community Context

Azerbaijan is a former Soviet Republic with a secular Muslim culture. The population of the country is 9.4 million people and its official language is Azerbaijani

(The State Statistical Committee of the Republic of Azerbaijan, 2013). Azerbaijan is an important U.S. ally due to its abundant oil and gas resources, strategic geopolitical location and cultural ties with Turkey, Iran and Russia. As the most western-oriented Turkic country of the former Soviet region, Azerbaijan has often served as a model for development in five neighboring countries of Central Asia (Freizer, 2003).

The United States has an abiding interest in helping this predominantly Muslim nation to strengthen secular democracy and to achieve long-term stability. Since 1992, USAID has provided over \$300 million for programs promoting human and political rights, citizen empowerment, and improving the quality of life of Azerbaijan's people (USAID, 2013). A substantial portion of these funds support various community development initiatives that encourage participation in decision-making and are expected to empower community members and help them become more self-reliant in solving local problems.

Community mobilizing efforts, particularly in under-developed areas, encourage community participation through involvement in formally registered local non-governmental organizations (LNGOs) or informal community based organizations and associations (CBOs) in which residents assume responsibilities for problem-solving and addressing instrumental community needs. Although the number of community-driven initiatives has been growing, they tend to remain active at relatively local levels (USAID, 2005). The USAID study acknowledged multiple structural, political, and financial constraints to active participation in the CBOs and LNGOs in the country, including complex policies about registration and operation, corruption, tax disadvantages, and restrictions related to conducting activities. A heavy dependency on the international and

governmental funding is another impediment in that many local efforts are not sustainable and end when the financial support stops (Rzayeva & Karsten, 2005). Finally, the community members' mindset of dependence and their lack of confidence in the capacity of the nonprofit sector to improve their lives also tend to discourage many from participation (USAID, 2005). These contextual, social and psychological limitations make empowerment-oriented interventions in Azerbaijani communities even more crucial. Very few studies that examined empowering effects of participation on community members in the country emphasized the importance of creating new experiences of successful and self-reliant problem solving for the local community residents. One qualitative examination of three voluntary organizations for women (Najafizadeh, 2003) argued that participation provides members with opportunities to influence solutions to problems at the local level and gain more control over their wellbeing. A qualitative assessment published by USAID (2005) illuminated that, from participants' perspectives, focusing on small and easily achievable projects provides community residents with experiences of success and "psychological boost". Because valid Azerbaijani measures of empowerment were lacking, it was impossible to quantitatively examine the associations between various forms of community participation and empowerment in the local communities (Rzayeva & Karsten, 2005). Theoretically sound and empirically supported instruments are necessary to examine how various contextual and psychological factors influence participation and empowerment in Azerbaijani communities. The first effort to fill this gap is presented below.

Scale Translation and Content Validation Procedures

The guidelines of the International Test Commission for adapting instruments (ITC, 2010) suggest that the adaptation of existing instruments to new cultures should take full account of linguistic and cultural differences among the populations for whom adapted versions of the instrument are intended. The ITC also suggests that non-equivalent questions between versions intended for different populations may enhance content validity of the measure for new population. To address these issues, this study used procedures suggested for scale validation and international adaptation (e.g., ITC, 2010; Rubio, Berg-Weger, Tebb, Lee, & Rauch, 2003; Wombacher, Tagg, Burgi, & MacBryde, 2010). The multi-step item generation involved collaboration with a translator in Azerbaijan, a panel of Azerbaijani content experts with expertise in social science research and in administration of community mobilization programs, lay members of the target population, and a panel of researchers in the U.S. First, the original 17 items of the SPCS-R scale (Peterson et al., 2006) were translated into Azerbaijani language by an experienced translator who had degree in psychology and deeply understood culture and socio-political context. The central task in translating the survey items was to create culturally appropriate Azerbaijani "equivalents" of the original English items. As pointed out by Harkness (2003), meanings are context-bound, and therefore instead of mere translation, the aim was to make the items meaningful in the context of community life in Azerbaijan. The translator was provided with information about the constructs, their definitions and subscales.

The scale validation process began with assessing the face and content validity of the Azerbaijani empowerment items. Rubio and colleagues (2003) recommended using

two panels of content experts and lay experts which should include three to ten members each. In this study, seven Azerbaijani researchers and professionals with degrees in psychology and social sciences and with expertise in empowerment-oriented and community-mobilizing interventions were invited to serve as content experts. Some of these experts were also bilingual and had a chance to compare the English items with the translated Azerbaijani versions. Initially, four of these content experts were asked to review the translated items in terms of how representative they were of the content domains of constructs, the clarity and cultural appropriateness of item wording, and the overall comprehensiveness of the entire measure. The experts were encouraged to make suggestions about how the measure could be improved by deleting or modifying bad items or proposing additional items illuminating some relevant content that might have been omitted. Their comments were returned within a week and reviewed by the researcher and translator. Because the sample of experts was small, the analysis focused on whether a given item was found problematic and was suggested to be modified or removed by any of the reviewers. After the initial review, the pool of Azerbaijani empowerment items included 40 items. Then the researcher and three additional content experts reviewed these items in a joint meeting. They improved wording of some items and reached consensus to delete 8 items because they were repetitive or not relevant in the local context.

Efforts were made to tailor the items to the experiences of community residents. For example, there are several Azerbaijani words that can be translated as "community" but that have different meanings. The word "İjma" means an organized community with a council or some other governing and decision-making body of representatives who are

usually informally elected by community residents. Although most communities have some sort of leadership, such an organized form of community governance exists only in locations where specific type of community-mobilizing interventions were implemented and where the residents were trained to use such terminology and to participate in specific collective problem-solving procedures. According to the Azerbaijani experts, the concept of “Ijma” would not be familiar to all residents in communities where special interventions or training programs did not take place. More commonly, community is understood as a unity of people co-habiting in the same neighborhood, district, or village, and who are perceived as sharing similar concerns, experiences and resources. Therefore, as suggested by both panels of content experts, the instructions to the questionnaire explained that "community" referred to the experiences in the locale where the respondents lived such as their neighborhood, district, or village.

All experts suggested removing words "politics" or "government" or other similar terms with direct political connotations from the questionnaire. For example, the original item "A person like me can really understand what's going on with government and politics" was modified into the Azerbaijani item "I believe that I have pretty good understanding of what is happening in my community and what problems need to be addressed first". Another original item "I enjoy political participation because I want to have as much say in running government as possible" was replaced with an Azerbaijani item "I enjoy taking part in discussions and searching the solutions to the problems in my community". For similar reasons, the following items about electoral participation were removed: "It makes a difference who I vote for because whoever gets elected will represent my interests" and "A good many local elections are important to vote in".

Because some community residents might not want to be actively involved in problem-solving efforts, the experts suggested adding five negatively-worded items, such as "I feel relieved when others assume leadership in solving problems".

Importantly, the experts believed that some additional items were needed to represent culturally relevant experiences. Specifically, community residents tend to engage in problem-solving efforts when they want to help their peers and when they believe that community activism (versus individual efforts in private domain) are likely to succeed. Therefore several additional items were designed to capture these attitudes (e.g., "I frequently take an active part in solving other people's problems" and "I believe that people can change the rules and norms that create problems in our community").

After these revisions, the instrument was pretested with a small sample of five lay community residents. They examined whether the items and survey instructions read naturally, were clear and easy to understand, represented the experiences of the target population, and whether the respondents were able to complete such survey on their own. Based on their feedback, few wording simplifications were made. Next, the items were back-translated into English and reviewed by the researchers in the U.S. who were members of the dissertation committee. Their review made sure that the modified Azerbaijani items represented the intended meanings. The final questionnaire included 32 items intended to examine dimensions of intrapersonal component of PE in the context of Azerbaijani communities. These items were used to collect data and explore psychometric properties of the new AES measure. All other instruments utilized in this study were translated without adding new items; however, their face and content validity were similarly reviewed by content experts.

Sampling and Data Collection Procedures

Initially, ten major local and international nonprofits implementing community mobilization projects in Azerbaijan were asked to help the researcher locate communities and recruit participants for the study. Four of those organizations had active projects in both rural and urban regions at the time of the study, were capable of providing access to communities in a feasible manner, and expressed commitment to help the researcher collect data. The data collection took place during winter months and coincided with the coldest weather in the last decades. Due to frequent snowstorms many roads were blocked for extended periods of time. The nonprofits that committed to support this research project were able to continue to access and work in communities during those months. These organizations were among the most experienced local nonprofits implementing community mobilizing projects for more than 5 years and working in a variety of geographic areas. Particularly, these organizations worked in Baku – the country’s capital, two rural regions in the Midwest and one rural region in the Southwest. The location of the communities and the access to the study participants were determined and facilitated by these nonprofit organizations.

Leaders of the nonprofit organizations were supplied with letters describing the purpose of this survey. They were asked to inform residents in communities about the survey and invite them to participate. To ensure diversity of the sample, the program leaders were asked to include communities with various lengths of experience in mobilizing initiatives and to invite residents with different degrees of community involvement (including people who rarely attended community meetings or were not members in community based organizations). Examples of community based

organizations included parents' associations, neighborhood committees, issue-specific groups, and others.

The data were collected in group meetings in which 10-50 people participated. In some cases local residents gathered to discuss local issues and at the end of the meeting they filled out the survey. In some communities, the residents came specifically to meet with researcher and fill out the survey. Such rather informal procedures were suggested by local experts and program leaders in Azerbaijan to avoid suspicions of the local authorities and to make participation in the survey more inclusive. The less involved residents were also invited to come to meetings just to fill out the survey. No monetary incentives were offered to these organizations or the study participants. The data were collected until the desirable number of surveys was completed. The researcher traveled to these communities to oversee the survey administration. In some cases when the researcher was unable to personally attend the community meeting due to financial and logistical constraints, a program coordinator or representative from a nonprofit organization was instructed about the data collection procedures to ensure similarity of these procedures in each community. The surveys were printed in Azerbaijani language. A letter of informed consent was attached to the questionnaire. Participants were informed that their participation was voluntary and their responses were anonymous. No identifying information (e. g., name or contact information) was included in the questionnaire. The survey took between 30-45 minutes to complete. A total of 350 surveys were collected. To prevent the loss of the collected data, the responses were entered in Excel file as soon as it was possible. The paper documents were stored in the researcher's home in a safe cabinet.

Measures

Choice of the variables and instruments was guided by theory and previous similar studies that validated the measures of PE in North American community contexts. For each measure used in the present study, the mean score of items comprising the corresponding scale was calculated. Scores from subscales representing the intrapersonal component of PE served as the criterion variables. Scores from measures of community participation, sense of community, depression, and alienation, served as predictors. The survey also asked about the respondents' demographic characteristics including age, gender, ethnicity, education, employment status, household income, and membership in community based organizations.

Community participation. The measure of community participation included eight items assessing civic involvement and participatory behaviors in community-action activities over a three-month period. Speer and Peterson (2000) found support for the validity of the community participation scale: The scale's items represented one underlying construct and related as expected with membership in community organizations and sense of community. A succession of studies have used modifications of this measure in various community contexts (e.g., Hughey, Peterson, Lowe, & Oprescu, 2008; Peterson et al., 2006, 2008; Peterson & Reid, 2003; Speer et al., 2001). The items asked about involvement in community activities such as: "Wrote a request or letter of complaint to influence solution of a social problem" and "Attended a meeting or a gathering about problems in our community". Respondents answered on a 4-point scale reflecting how often they participated in each activity over the last three months. Responses ranged from 1 = "Not at all" to 4 = "5 or more times". A higher score on this

variable indicated higher participation in community activities. In the current study, Cronbach's alpha for the measure of community participation (mean=1.77; SD=.66) was .85.

Sense of community. The variable of sense of community was assessed by the translated version of the Brief Sense of Community Scale (BSCS) – an 8-item self-report measure assessing four subscales: needs fulfillment, group membership, influence, and emotional connectedness. The BSCS was originally validated with a sample of adults in the Midwestern United States, and the measure was found to be correlated with community participation, PE, mental health, and depression (Peterson et al., 2008). Translated versions of the BSCS were validated in Germany (Wombacher et al., 2010) and Iran (Barati et al., 2012). The Azerbaijani instrument in this study included items such as: "I feel like I am a part of this community" and "I feel that I have an impact on what is happening in my community". A 5-point Likert response options ranged from 1 = "Strongly disagree" to 5 = "Strongly agree". A higher score on this variable indicated a stronger sense of community. Cronbach's alpha for the measure of sense of community (mean=3.56; SD=.77) was .78.

Alienation. A translated 8-item version of Dean's (1961) alienation scale was previously used to assess the validity of the original SPCS scale in the Zimmerman and Zahniser (1991) studies, as well as in the more recent studies on empowerment and sense of community (e.g., Christens et al., 2011b; Hughey et al., 2008). The scale included such items as: "Most people rarely feel themselves lonely" and "Sometimes it seems to me that other people use me". The items were assessed on a 5-point Likert-type scale ranging from 1 = "Strongly disagree" to 5 = "Strongly agree". In this study, Cronbach's alpha for

the measure of alienation (mean=2.93; SD=.52) was .60, which was considered acceptable reliability for a scale in early stage of empirical development (Nunnally, 1967).

Depression. An abbreviated version of the Center for Epidemiologic Studies Depression Scale (CES-D; Radloff, 1977) was used in this study. A short 8-item version (Krause, 1986, 1997) of the CES-D assessed cognitive and somatic manifestations of depression. This version of the CES-D has been demonstrated to be reliable and valid with adult populations (Krause, 1995, 1997), and it was previously used in studies on empowerment and sense of community (e.g., Peterson et al., 2008). Items examined how frequently during the previous week the respondents experienced such depressive symptoms as depressed mood and sleep disturbances. The scale included items such as: "I had bad appetite, I did not have interest in food" and "I could not get rid of sadness, even with the help of relatives and friends". The items were scored on a 4-point Likert-type scale ranging from 1 = "Rarely or none of the time" to 4 = "Most or all of the time (5-7 days)". Cronbach's alpha for the measure of depression (mean=1.91; SD=.65) was .84.

Socioeconomic status (SES). This variable served as a covariate in tests of partial correlations and structural equation modeling. Similarly to some previous studies (e.g., Christens et al., 2011b), SES was calculated by combining a measure of household income and level of educational attainment into a single score. Income was measured by asking participants to indicate their approximate monthly household income on a 5-point scale, with values ranging from 1 = "less than 250 manat per month" (or \$318) to 5 = "more than 1,000 manat per month" (or \$1,275). Education was measured by asking

participants to report their highest attained education on a 5-point scale, with values ranging from 1 = "Middle school, 9 years" to 5 = "Master's degree or higher".

Intrapersonal PE. As previously described, the Sociopolitical Control Scale Revised (Peterson et al., 2006) was translated and used to generate culturally appropriate Azerbaijani items assessing intrapersonal component of PE. After procedures of content validation, the initial pool of items for the AES included 32 items that were intended to measure community residents' self-reported leadership competence (e.g., "I am often leader in groups") and policy control (e.g., "The majority of public officials listen to my opinion"). The items were scored on a five-point Likert scale with response options ranging from 1 = "strongly disagree" to 5 = "strongly agree". Descriptive statistics and psychometric properties of the AES measure are presented in the next chapter.

Human Subject Research Review

An initial request for exemption from full Institutional Review Board (IRB) review was submitted to the Rutgers University IRB in the spring of 2011. The Rutgers Office of Research and Sponsored Programs approved the exemption from full IRB review (as of May 18, 2011, P.I. Name: Aleksandr Cheryomukhin, category 2). After the instruments were translated into Azerbaijani language and pilot tested, the amendments were again submitted and approved by the Rutgers Office of Research and Sponsored Programs (as of January 18, 2012).

Chapter 3: Results

Descriptive Statistics

Data analysis began with calculation of descriptive statistics (means, standard deviations or frequency distributions) on demographic characteristics of the sample.

Demographics for the sample are shown in Table 1.

The study participants' age ranged from 18 to 71 years ($M = 29.53$, $SD = 10.85$), 94% were ethnic Azerbaijanis, and 52% were females. In terms of occupation, 35% reported having a full-time job, 7% were employed part-time, 21% were unemployed or homemakers, 1% were retired, and 29% were students. In terms of education, the majority (39%) indicated finishing Bachelor's degree. In response to a question about their monthly household income, the majority (42%) indicated 250 manat (\$318) or less, another 31% of respondents indicated 251-500 manat (\$319-637) per month, almost 14% indicated 501-750 manat (\$638-956), another 7% indicated 751-1000 manat (\$957-1,274), and the remaining 7% indicated monthly household income of 1000 manat (\$1,275) or more. In terms of membership in community based organizations, almost two thirds (64%) were non-members, additional 25% indicated membership in one community based organization, and the remaining 10% of participants indicated membership in 2 or more community based organizations.

Table 1: Demographic Profile of Survey Participants (n=350)

Variable	N (%)
Age	
Range in years (Mean, SD)	18-71 (M=29.53, SD=10.85)
Gender	
Male	159 (47.7%)
Female	174 (52.3%)
Ethnicity	
Azerbaijani	304 (94.4%)
Occupation	
Full time employed	115 (35.2%)
Part time employed	24 (7.3%)
Unemployed or homemaker	70 (21.4%)
Retired	3 (.9%)
Student	95 (29.1%)
Other	20 (6.1%)
Membership in Community Based Organizations	
Non-member	225 (64.3%)
Member in 1 organization	89 (25.4%)
Member in 2 or more organizations	36 (10.3%)
Highest Educational Attainment	
Middle school (9 years)	61 (18.7%)

High school (11 years)	55 (16.8%)
Professional lyceum or college	55 (16.8%)
Bachelor's degree	128 (39.1%)
Master's degree or higher	28 (8.6%)
<hr/>	
Monthly Household Income	
≤ 250 manat (\$318)	132 (41.6%)
251-500 manat (\$319-637)	98 (30.9%)
501-750 manat (\$638-956)	43 (13.6%)
751-1000 manat (\$957-1,274)	22 (6.9%)
≥ 1000 manat (\$1,275)	22 (6.9%)
<hr/>	

Exploratory Factor Analysis

Multiple methodologists recommended that the construct validation of new instruments should begin with exploration of the underlying factor structure using exploratory factor analysis (EFA; Fabrigar, Wegener, MacCallum, & Strahan, 1999; Worthington & Whittaker, 2006). EFA is a data-driven approach that is used to examine whether the new instrument measures the intended construct and to explore the underlying dimensionality of an item set. After face and content validity of a pool of generated items have been examined, EFA allows the researcher to identify the items that do not measure an intended factor or that simultaneously measure multiple factors and diminish psychometric properties of the instrument.

Several conditions for adequate application of EFA were followed in this study. Principal axis factoring and oblique rotation (i.e., promax rotation) was selected as a factor extraction and rotation method for new scales and scales where factors are hypothesized to be correlated (Fabrigar et al., 1999; Kahn, 2006; Worthington & Whittaker, 2006). Decision about the appropriate number of factors to retain was based on a combination of tests including the Kaiser criterion, scree test, parallel analysis, and conceptual interpretability (Fabrigar et al., 1999; O'Connor, 2000; Worthington & Whittaker, 2006). The Kaiser criterion (Kaiser, 1958) refers to retaining the factors whose eigenvalues are 1.0 or higher. Scree test (Cattell, 1966) allows the researcher to plot the computed eigenvalues of the correlation matrix in descending order and to identify the last substantial drop in the magnitude of the eigenvalues. In parallel analysis (Horn, 1965), researchers order extracting eigenvalues from random data sets that parallel the actual data set with regard to the number of cases and variables, and then compare the eigenvalues derived from the actual data with the eigenvalues derived from the random data. Factors are retained if their original eigenvalue from the actual data is larger than the eigenvalue from the random data (O'Connor, 2000; Worthington & Whittaker, 2006). Previous simulation research has indicated that PA can be considered the best empirical method for determining the number of factors in factor analysis (Dinno, 2009) and it has been recommended by many authors (O'Connor, 2000; Schmitt, 2011).

The following conditions for retaining items were used in the current study. At least three items were expected to represent each extracted factor, the minimum values for factor loadings were set at .40. The resulting models were examined in terms of their

theoretical meaningfulness and interpretability, which was suggested as the definitive factor-retention criterion (Fabrigar et al., 1999; Worthington & Whittaker, 2006).

When EFA was performed with the Azerbaijani dataset, the Kaiser-Meyer-Olkin measure of sampling adequacy was .92, and Bartlett's test of sphericity was 4455.39 ($p < .001$), which provided evidence that the correlation matrix was appropriate for the factor analysis (Dziuban & Shirkey, 1974). Out of the pool of 32 empowerment items, initially six factors with eigenvalues higher than 1 were extracted. However, multiple authors pointed that the eigenvalues-greater-than-one rule should not be the only criteria for decisions about factorability because the number of extracted components often tends to be overestimated (Fabrigar et al., 1999; O'Connor, 2000). Examination of the scree plot suggested that the data might have a three-factor underlying structure. The parallel analysis was also performed using the guidelines developed by O'Connor (2000). The eigenvalues derived from the Azerbaijani dataset were compared with the eigenvalues derived from the random data with the same number of cases and items. Because only the first three eigenvalues from the Azerbaijani data were larger than the corresponding first three 95th percentile random data eigenvalues, the parallel analysis indicated support for the three-factor solution.

When examining the originally extracted six dimensions in terms of item-loadings and meaningfulness, further evidence of factor over-extraction was discovered.

Specifically, one factor contained only negatively-worded items, such as: "I feel relieved when others assume leadership in solving problems" and "Meetings with public officials have no benefits, because I believe that ultimately my voice can not influence anything". This factor was not conceptually interpretable and therefore it was deleted. Two

additional factors had only two items each. One of these factors contained the following items: "I frequently give advice to other people about how they can resolve problems" and "I frequently take an active part in solving other people's problems". This factor could be interpreted as motivation to help other people. One more factor contained the following two items: "Others often follow my advices" and "I frequently notice that others listen to my ideas". This factor could be interpreted as influence on other people. However, when factors with only two items are extracted in the initial stages of instrument development, it is recommended to delete such factors, generate additional items representing the same content domain, and to collect new data which should be re-examined using EFA procedures (Worthington & Whittaker, 2006). Based on these recommendations, as well as the results of the parallel analysis, it was decided to delete both factors with only two items. However, in the future it will be useful to generate additional items targeting similar content and to empirically test these additional dimensions of motivation to help others and influence on others.

After several iterations, eleven items with loadings lower than .40 were deleted, for example: "I think I find different and more effective solutions to the problems in our community". The final three-factor solution with twelve items is presented in the Table 2.

Table 2: Azerbaijani Empowerment Scale, Factor Loading (12 Items)

Items	Factors		
	1	2	3
I suppose that people are capable of achieving changes that will lead to improvements in our community.	.86		
I believe that people can change the rules and norms that create problems in our community.	.83		
If people persist and continue to fight for their goals, they can overcome difficulties and refusals and achieve successful results.	.70		
It is important that people actively participate in solving social problems in a community where they live.	.62		
The majority of public officials listen to my opinion.		.85	
People who can influence solutions to problems in our community usually listen to my opinion.		.79	
I believe that my voice can influence resolutions of social problems in my community.		.62	
People like me have multiple ways in which they can influence how problems get solved.		.57	
People with life experience similar to mine fit very well to serve in committees and meetings aimed at resolving problems in our community.		.51	
I prefer to be a leader and to lead other people rather than to follow others.			.83
I am often leader in groups.			.77
When I act in a team, I like it better when I am in a leadership role.			.69
Cronbach's alpha	.83	.82	.81
Eigenvalue	5.20	1.66	1.11
% of variance	43.35	13.82	9.21
Cumulative % of variance explained			66.38

This three-factor solution was simple and interpretable. All items had loadings of above .40 and loaded on only one factor. The inter-factor correlations were moderate, ranging from .48 to .61. The total variance accounted for by the three factors was 66.38%. Cronbach's alpha for the overall 12-item AES instrument (mean=3.64; SD=.77) was .88. The factor 2 explained 13.82% of total variance and it was interpreted as representing policy control dimension. This policy control subscale (mean=3.37, SD=.94, Cronbach's alpha=.82) contained five items, such as "The majority of public officials listen to my opinion". The factor 3 explained 9.21% of total variance and it was interpreted as representing leadership competence dimension. This factor contained three items (mean=3.80, SD=.96, Cronbach's alpha=.81), for example: "I am often leader in groups". More importantly, factor 1 explained 43.35% of total variance. This factor (mean=3.86, SD=1.00, Cronbach's alpha=.83) included 4 items such as: "If people persist and continue to fight for their goals, they can overcome difficulties and refusals and achieve successful results" and "I believe that people can change the rules and norms that create problems in our community". Because the content of the items referred to perceptions about importance of community activism and chances of community residents efforts to successfully resolve problems and achieve improvements in their community, this factor was labeled as "beliefs in community action".

In summary, the originally extracted six-factor solution appeared to be overfactored because it contained dimensions that had only two items or were not interpretable. In contrast, the combination of the scree plot, parallel analysis, as well as the interpretability of the extracted factors suggested that the three-factor solution with 12 items could be considered best representing the underlying structure of the Azerbaijani

measure of intrapersonal empowerment. Next, partial correlations were performed to test associations between the overall AES, its subscales, and the set of conceptually related constructs.

Bivariate Analyses

Convergent and discriminant validity of the three-factor solution produced by exploratory factor analysis was assessed by examining associations between the overall 12-item AES scale, its three dimensions, and a set of conceptually relevant variables. Based on previous research (e.g., Hughey et al., 2008; Itzhaky & York, 2000; Parker et al., 2001; Peterson & Reid, 2003; Peterson et al., 2008; Speer & Peterson, 2000), it was expected that the AES measure would be positively associated with the measures of sense of community and community participation, and at the same time, the AES measure and its subscales were expected to be negatively associated with the measures of depression and alienation. Socioeconomic status, comprised of education and household income, served as a covariate. Controlling for socioeconomic status, partial Pearson's correlation coefficients were calculated between the scores on the AES, its three subscales and other variables. Partial Pearson's correlation coefficients are presented in Table 3.

Table 3: Partial Correlations Between Azerbaijani Empowerment Scale, Its Dimensions and Conceptually Relevant Variables

Variable	1	2	3	4	5	6	7	8
1. Overall AES	--	.75**	.83**	.76**	.54**	.46**	-.14*	-.11*
2. Leadership Competence		--	.48**	.42**	.41**	.31**	-.19**	-.03
3. Policy Control			--	.39**	.49**	.36**	-.15**	.02
4. Beliefs in Community Action				--	.36**	.41**	-.02	-.21**
5. Sense of Community					--	.27**	-.27**	-.00
6. Community Participation						--	.08	-.17**
7. Depression							--	-.10
8. Alienation								--

Note. Covariate in the partial correlation analysis: socioeconomic status

** $p < .01$. * $p < .05$

As hypothesized, controlling for socioeconomic status, the overall AES measure was positively associated with the measures of sense of community ($r = .54$, $p < .01$) and community participation ($r = .46$, $p < .01$), and it negatively correlated the measures of depression ($r = -.14$, $p < .05$) and alienation ($r = -.11$, $p < .05$). Each factor of the AES had strong positive relation with the total scale and the correlation coefficients ranged from .75 to .83. Subscales assessing leadership competence, policy control, and beliefs in community action, were related with each other. However, association between policy control and beliefs in community action was somewhat weaker ($r = .39$, $p < .01$) than

between policy control and leadership competence ($r=.48, p<.01$) or leadership competence and beliefs in community action ($r=.42, p<.01$). All these three factors were positively associated with the measures of sense of community and community participation. As expected, depression was negatively related to subscales of leadership competence ($r=-.19, p<.01$) and policy control ($r=-.15, p<.01$). However, the associations between alienation and these two subscales were not significant. To the contrary, the factor labeled as beliefs in community action was significantly negatively associated with alienation ($r=-.21, p<.01$) and it was not associated with the measure of depression. Notably, the association between beliefs in community action subscale and community participation was stronger ($r=.41, p<.01$) than between this subscale and sense of community ($r=.36, p<.01$). Overall, the AES instrument and its subscales related with other variables in expected ways. An exception involved the relationship between sense of community and policy control. This correlation ($r=.49, p<.01$) was stronger than the correlations among AES subscales. Next, a path analysis was used to test the construct validity of the AES measure.

Testing a Path Model

To further examine the construct validity of the three-factor model of the AES measure, a path model predicting the three empowerment subscales was tested (see Figure 2). Structural equation modeling was performed using Amos 20 (Arbuckle, 2011). The subscales assessing dimensions of leadership competence, policy control, and beliefs in community action, served as the outcomes. The model included alienation, depression, community participation and sense of community as predictors. Socioeconomic status

served as a covariate. The relationships tested in this study were similar to the models that were examined in previous empirical research (e.g., Peterson & Reid, 2003; Peterson et al., 2011b). Specifically, the path analysis tested whether, controlling for socioeconomic status, alienation would predict the three dimensions of the AES directly as well as indirectly through its relationships with community participation and sense of community. Similarly, the model tested whether, controlling for socioeconomic status, depression would predict the three dimensions of the AES directly as well as indirectly through its relationships with community participation and sense of community. In addition, the path analysis tested whether sense of community affected the subscales of leadership competence, policy control, and beliefs in community action, directly as well as indirectly through its relationship with community participation.

Maximum likelihood estimation was used to analyze the variance–covariance matrix. The model was assessed using several widely accepted and robust measures of fit. These included the discrepancy Chi-square (χ^2), the discrepancy-to-df ratio, the Comparative Fit Index (CFI), the Tucker-Lewis Index (TLI), the Incremental Fit Index (IFI), and the Root Mean Square of Error Approximation (RMSEA). Several guidelines for the model interpretation (Schreiber, Nora, Stage, Barlow, & King, 2006; Worthington & Whittaker, 2006) were followed. According to those guidelines, non-significant χ^2 values and discrepancy-to-df ratios less than 2.0 indicate acceptable fit. The values greater than .90 on the CFI, TLI, and IFI are desirable, while the values of .95 or higher indicate good fit. For the RMSEA, the values lower than .06 indicate good fit of the model to the data from the sample of participants.

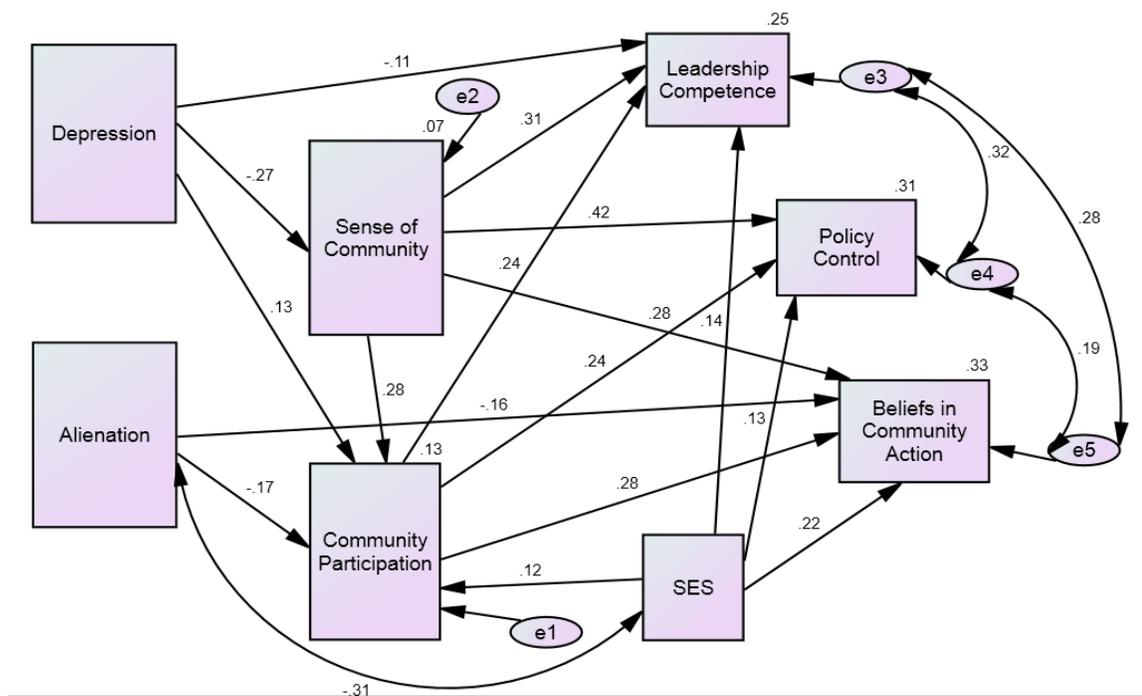


Figure 2: Path model testing associations between the three subscales of the AES and a set of conceptually related constructs.

The over-identified path model, which is presented in Figure 2, shows only statistically significant paths and the error variance of each endogenous variable. The path coefficients in Figure 2 represent statistically significant ($p < .05$) standardized beta weights. The fit indices are presented in the Table 4. The Chi-square was not significant ($\chi^2(8) = 7.97, p = .44$), and discrepancy-to-df ratio, 1.00, indicated good model-to-data fit. The fit indices (CFI = 1.00, TLI = 1.00, IFI = 1.00, RMSEA = .00) indicated good fit of the model to the data.

Table 4: Overall Fit Statistics for the Path Model Estimating Associations Between Dimensions of Azerbaijani Empowerment Scale and Theoretically Related Constructs

<i>Measures of fit</i>	<i>3-factor AES (n=350)</i>
χ^2	7.97
<i>Df</i>	8
<i>p-value</i>	.44
<i>Discrepancy/df</i>	1.00
<i>TLI</i>	1.00
<i>CFI</i>	1.00
<i>IFI</i>	1.00
<i>RMSEA</i>	.00
<i>(90% CI)</i>	(.00, .06)

Note. Predictors: alienation, depression, sense of community, community participation.

Covariate: socioeconomic status.

The model accounted for 25% of the variance in leadership competence, 31% of the variance in policy control, and 33% of the variance in beliefs in community action subscale of the AES instrument. As can be seen in Figure 2, depression was found to have a direct negative effect on leadership competence ($B = -.11$), as well as indirect effects on all three subscales of empowerment through relationships with sense of community and community participation. Unexpectedly, depression had a direct positive effect on community participation ($B = .13$). These results suggest that individuals with lower depressive symptoms tended to have higher self-perceived leadership competence

and higher sense of community, which was related positively with the three subscales of empowerment. On the other hand, individuals with higher depressive symptoms tended to be more involved in participatory behaviors in their communities, and the more involved community residents tended to feel more empowered.

In addition, results of the path analysis indicated that alienation had a direct negative effect on beliefs in community action ($B = -.16$), as well as an indirect effect on all three subscales of empowerment through its relationship with community participation ($B = -.17$). This finding suggests that the more alienated community residents were less likely to believe in community activism, and they tended to report lower community participation which was positively related with all three subscales of intrapersonal empowerment.

The path model indicated that sense of community had positively affected all three dimensions of the AES directly and indirectly, through its positive relationship with community participation variable ($B = .28$). Individuals with higher scores on sense of community tended to be more involved in participatory behaviors in their communities, and respondents who participated to greater extent in their communities were more likely to perceive themselves as more capable of being leaders, influencing policy decisions, and more likely to believe in the importance and effectiveness of community activism.

Figure 2 shows that socioeconomic status was negatively associated with alienation ($B = -.31$) and it had positive effect on community participation ($B = .12$) and the three subscales of empowerment. These results indicated that community residents with higher socioeconomic status reported lower symptoms of alienation and at the same time they tended to be more involved in community activities and feel more empowered.

Significant, although modest, inter-correlations between the empowerment subscales (e.g. leadership competence, policy control, and beliefs in community action) were detected. As shown in Figure 2, the strongest relationship was between the dimensions of leadership competence and policy control ($B = .32$), while the relationship between beliefs in community action and leadership competence ($B = .28$), as well as the relationship between beliefs in community action and policy control ($B = .19$), were weaker. Overall, these results, taken together with the findings from factor analyses and bivariate correlations, supported the interpretation of the AES as a scale with three constituent subscales.

Chapter 4: Discussion

Summary of Findings

The purpose of this study was to develop and test psychometric properties of the AES, a measure of the intrapersonal component of PE tailored to the Azerbaijani community context. Procedures of multi-step cross-cultural test adaptation and validation (DeVellis, 2003; ITC, 2010; Rubio et al., 2003; Worthington & Whittaker, 2006) were utilized to maintain conceptual similarity between the English and Azerbaijani versions of the items, while also ensuring that the new AES scale was culturally meaningful and contextually adequate. Face and content validity of the Azerbaijani measure were reviewed by a panel of lay community residents, as well as Azerbaijani and U.S. experts, resulting in items that were culturally and linguistically appropriate for the target population of community members in Azerbaijan.

Tests of factorial validity provided empirical support for the multidimensional model of the AES measure. At the same time, the findings from the Azerbaijani data differed from previous empirical reports. Specifically, statistical analyses of the data from the Azerbaijani sample did not support the originally hypothesized two-factor model of intrapersonal empowerment containing dimensions of leadership competence and policy control, as we expected based on the theory of PE (Zimmerman, 1995) and the previous scale validation studies (e.g., Peterson et al., 2006; Zimmerman & Zahniser, 1991). Procedures of exploratory factor analysis suggested that the AES instrument contained 12 items that loaded on three factors. The first two factors of the Azerbaijani measure resembled dimensions of the original SPCS-R scale and were labeled as leadership competence and policy control. The third factor, however, contained items that referred

to perceptions about the importance of community members' engagement in problem-solving efforts and the potential of community activism to bring about desirable improvements in community members' lives. This factor contained four items and it was labeled as beliefs in community action.

The 3-factor AES measure was reliable and generally related in expected ways with other variables in this study. Specifically, bivariate correlations indicated that the overall AES measure positively correlated with measures of community participation and sense of community, and it was negatively associated with depression and alienation. As hypothesized, all three subscales of the AES assessing leadership competence, policy control, and beliefs in community action, were positively associated with the measures of sense of community and community participation. Path analysis provided additional evidence for construct validity of the AES instrument and supported the hypotheses that sense of community and community participation would be positively related with dimensions of the intrapersonal PE. Specifically, sense of community was positively linked with the three empowerment subscales directly and indirectly, through its positive effect on community participation, which replicated findings from previous empirical reports (e.g., Peterson & Reid, 2003; Peterson et al., 2011b). These findings indicated that community residents with greater sense of community tended to feel more empowered and be more engaged in community activities, and respondents who indicated greater involvement in community action were more likely to perceive themselves as capable to be leaders and to influence decision-making, and they were more likely to believe that community activism is important and can lead to improvements in their communities.

The hypotheses about negative links between the symptoms of psychological distress (i.e., depression and alienation) and the AES measure (Peterson & Reid, 2003; Zimmerman, 1990, 1995; Zimmerman & Zahniser, 1991) were partially confirmed by Azerbaijani data. Bivariate correlations indicated that the overall AES measure was negatively associated with measures of depression and alienation. However, depression and alienation were differentially related with the three empowerment subscales. Specifically, the path model indicated that depression was directly negatively linked only with the leadership competence subscale of intrapersonal PE. This study found that the more depressed respondents tended to be less confident about their capacity to be leaders in their community. Results of the current study did not find the direct links between depression and dimensions of policy control and beliefs in community action. However, depression was linked indirectly with all three empowerment subscales through respondents' sense of community and community participation. Unexpectedly, path analysis revealed positive association between depression and community participation. These results indicated that Azerbaijani respondents with higher depressive symptoms tended to indicate lower sense of community, and residents with lower sense of community tended to perceive themselves as less capable of being leaders and influencing policy decisions, and they were less likely to believe in success of community activism. At the same time, the findings suggested that community residents who were more depressed tended to also be more engaged in participatory activities in their communities, and these more engaged participants tended to perceive themselves as more capable to be leaders and to influence decision-making, and they were more likely to believe in importance of community activism. The unexpected positive link between the

variables of depression and community participation may be due to several possible considerations. First, it is important to acknowledge that even though the abbreviated CES-D instrument (Krause, 1986, 1997) is often used to assess depressive symptoms, the instrument is not intended to provide a clinical diagnosis of depression. Second, while the researcher made efforts to include residents with varying degrees of participation in their communities in the study sample, it is possible that the highly emotionally disturbed and the least engaged community residents failed to be included in this study. Also, it is possible that residents who are more emotionally disturbed by problems in their community may become more motivated to engage in efforts to resolve those problems. Or, perhaps those with high depressive scores are less likely to hold jobs and have more time for community participation. Without additional data it is not possible to figure this out with the evidence at hand. Previous empirical study by Itzhaky and York (2000) similarly found that the less involved community members scored higher on the mental wellbeing measure than the more involved members. The authors suggested that the more experienced participants may become less optimistic and more discouraged as they face more obstacles in the course of their activism. In an Eastern European study, Markward and colleagues (2006) observed that engagement in community problem-solving activities does not always lead to successful outcomes, and community residents may become more disillusioned and discouraged when their efforts fail to bring about the desirable changes. Both those studies used correlations and did not examine the direction of relationship between depression, community participation and empowerment. The associations found in these studies and our sample regarding variables of depression, alienation, and community participation raise intriguing and important questions for

future research. Relationships between these variables in Azerbaijani community contexts need to be further tested with new samples.

Although partial correlations suggested that alienation was negatively associated with the overall AES measure, path model specified that alienation had direct negative link with only one subscale of the AES (e.g., beliefs in community action) as well as with the community participation variable. The Azerbaijani data suggested that the more alienated individuals tended to participate less in community activities and they believed to lesser extent that community activism may bring about positive changes. The negative association between alienation and the subscale assessing beliefs in community action, as well as the content of the subscale's items with focus on individuals' attitudes toward the proactive exercise of power in a sociopolitical domain (e.g., "I believe that people can change the rules and norms that create problems in our community" and "I suppose that people are capable of achieving changes that will lead to improvements in our community") suggested the importance of perceptions about community activism for assessing intrapersonal PE in the Azerbaijani context. Such dimension was missing in the original SPCS-R instrument and may be the most important finding of the current study.

Contrary to some previous empirical reports (e.g., Peterson & Reid, 2003), the current study did not find the direct links between alienation and sense of community, as well as between alienation and two dimensions of intrapersonal empowerment (e.g., leadership competence and policy control). It is important to note that previously published path models (e.g., Peterson & Reid, 2003; Peterson et al., 2011b) used the total scores on intrapersonal PE and did not examine how predictor variables (e.g., alienation, sense of community, or community participation) related with subscales of PE. Overall,

these variables may operate differently in different cultural contexts. More qualitative studies can explore aspects of empowerment specific to Azerbaijani culture, while additional empirical studies in Azerbaijan and neighboring cultures are needed to test how components of intrapersonal PE relate to other constructs in the local community contexts.

Additionally, this study replicated previous findings (e.g., Christens et al., 2011) about the positive role of the socioeconomic status: community residents with higher SES tended to feel less alienated, were more engaged in community activities, and they scored higher on all three subscales of the Azerbaijani empowerment measure (e.g., leadership competence, policy control, and beliefs in community action).

The current findings provide support for the reliability and validity of the AES measure. Most importantly, it is the first attempt to develop an instrument assessing intrapersonal empowerment in Azerbaijani language that has been guided by theory and tested empirically. More studies are needed to examine how dimensions of the AES measure are related with other constructs in Azerbaijani community context. Further empirical testing of the AES instrument in Azerbaijan and in the neighboring countries in the South Caucasus and Central Asia will help improve psychometric properties of the measure and contribute to social science research on empowerment as well as evaluation of empowerment-oriented policies and practices.

Implications for Theory and Future Research

These findings have vital implications for the theory of the PE construct, its measurement, and the evaluation of empowerment-based interventions. Previously,

multiple studies in the United States as well as in other countries utilized a bi-dimensional model of sociopolitical control with subscales of leadership competence and policy control to assess the intrapersonal component of PE in community contexts (e.g., Itzhaky & York, 2000; Markward et al., 2006; Peterson et al., 2006; Zimmerman & Zahniser, 1991). Zimmerman's (1995, 2000) framework views PE as a contextually-embedded construct which may include a different set of beliefs and competences in different settings. Therefore it has been recognized that dimensionality and content of instruments assessing PE may vary to capture the specific characteristics of different settings, populations and life situations (Cattaneo & Chapman, 2010; Zimmerman & Zahniser, 1991). There are examples when studies guided by Zimmerman's (1995) theory and conducted in new socio-cultural contexts reported additional dimensions of intrapersonal empowerment. For example, Wang and colleagues (2011) recently validated the Chinese Urban Citizens' Psychological Empowerment (CUCPE) scale, which assessed three dimensions of intrapersonal empowerment more relevant in the local context: an inclination to criticize, perceived participatory competence, and proactive control of participatory motivation.

The data from Azerbaijani sample in the current study provided an initial support for the three-dimensional factor structure of the AES instrument which included 12 items assessing community residents' self-perceived leadership competence, policy control, and their beliefs in community action. This latter dimension focuses on individuals' attitudes toward the exercise of power in community context and the chances of community activism to achieve improvements in the sociopolitical domain. This dimension may provide a bridge between the individuals' self-perceptions and their motivation to engage

in the processes of collective action. Theorists of empowerment emphasized the importance of commitment to collective (versus personal) interests, desire to exert control in the public arena, and motivation to participate in collective efforts which are required to achieve change in social systems (Cattaneo & Chapman, 2010; Christens, 2012; Zimmerman, 1990, 1995). However, Xu and colleagues (2010) argued that in the Chinese community context, where opportunities to exercise collective power are limited, community members tend to engage in informal reciprocal relationships and individual problem-solving behaviors rather than collective common good oriented actions. Similarly, Bospinar (2010) observed that engagement in public and collective action are culturally inappropriate and may have problematic consequences for women in Turkey, and therefore women tend to use individual strategies to address social constraints and achieve benefits for themselves privately without challenging the system of rules and norms in community and society. Adding a dimension that explores perceptions of community residents in a particular culture about community action and the exercise of power in a public domain represents a critical step toward addressing criticism that most western theories of empowerment may be inadequate in socio-cultural contexts where public and collective activism may be culturally inappropriate or politically constrained. Also, this dimension may address an important notion that indicators of empowerment should reflect the experiences and activities that are perceived as culturally meaningful and available by the local community members (Cattaneo & Chapman, 2010).

It is important to mention that the initial exploratory factor analysis of the Azerbaijani data has extracted two more factors that contained items assessing motivation to help other people (e.g., "I frequently take an active part in solving other people's

problems") and influence on other people (e.g., "Others often follow my advices"). These factors were not retained because they contained only two items each. Future studies on PE in community contexts in the South Caucasus and Central Asia may benefit from adding more items about motivation to help other people and other behaviors aimed at improving other people's lives. Researchers can use theory of PE (Zimmerman, 1995, 2000), its more recent iterations (e.g., Christens, 2012), as well as the findings of the current study to plan new empirical studies. Further refinement of the AES instrument and examination of associations between dimensions of PE and other conceptually relevant constructs is the most important direction for future research in the South Caucasus and Central Asia.

Another direction for future research has to do with other levels of analysis of the empowerment construct. Zimmerman's (1995, 2000) framework assumes that empowerment operates at psychological, organizational, and community levels. The current study focused on developing an instrument assessing empowerment at the psychological level. Empirical examination of other levels of empowerment have never been conducted in the regions of South Caucasus and Central Asia and would be a valuable contribution to the efforts to validate Zimmerman's empowerment framework in new cultural contexts.

Implications for Practice

This study represents a crucial, initial step toward development of valid and culturally appropriate measures of empowerment that are tailored to the context of former Soviet countries in the regions of South Caucasus and Central Asia. Empowerment of

vulnerable populations is a primary mission of the social work profession (NASW, 2008), and growing emphasis on measurable outputs and outcomes of empowerment-oriented community development programs makes the use of valid assessment tools a key element for successful practice as well as for rigorous empirical research (Craig, 2002). It has been recognized that despite substantial donor investments in empowerment-oriented programs in Azerbaijan (USAID, 2013), it was difficult for researchers to quantitatively evaluate and convert these experiences into evidence-based recommendations for policy and practice (Rzayeva & Karsten, 2005). The few Azerbaijani studies on empowerment and community participation tended to use qualitative methods and predominately sampled program staff while excluding community residents who were the primary target for empowering interventions (e.g., Najafizadeh, 2003; USAID, 2005). Moreover, some authors expressed a concern that the lack of appropriate measures as well as conceptual clarity may result in confusion between empowerment and indoctrination, when donor agencies and government may utilize hierarchical and oppressive policies and practices to control local initiatives (Rzayeva & Karsten, 2005). The AES instrument can help address these concerns. Researchers and practitioners can start using this instrument to evaluate empowerment-oriented interventions, accumulate quantitative data, and design policies and interventions that are evidence-based, culturally adequate and responsive to the experiences of local populations.

Previous qualitative evaluations of community mobilizing interventions in Azerbaijan (e.g., USAID, 2005) reported low community participation and described community members as being passive and dependent. Practitioners may need to recognize the important role that individuals' beliefs about community action, as well as

their self perceptions in terms of capacities to be leaders and influence policy decisions, play in formation of individuals' sense of PE. Azerbaijani data in the current study suggests that community residents who are more actively engaged in problem-solving activities in their communities are also more likely to believe in the importance of community activism as well as in their own capacities to be leaders and to influence community decisions. Therefore community mobilizing interventions may benefit from strategies that allow local residents to accumulate successful experiences of engaging in culturally appropriate community activism and improving problematic norms, rules, and practices of their concern. Such successful experiences may be expected to help community members become more empowered and motivated to remain actively involved in community issues. Overall, the data from Azerbaijani sample illuminated that community mobilizing interventions that foster residents' sense of community and encourage their participation in community activities may improve individuals' sense of mental wellbeing and contribute to their sense of empowerment.

From a practical standpoint, the AES instrument is short and easy to use. If translated and proved valid in the neighboring countries, the AES measure could be potentially utilized in the broader region of South Caucasus and Central Asia. Using similar assessment tools in empirical research and program evaluation across several countries and contexts would make findings from different samples more easily comparable.

Limitations

Several limitations of the study should be recognized. First, because there are no baseline measurements in this study, it is not known how the study participants would have scored on the variables of our interest before their communities were entered by organizations implementing community mobilizing interventions. A second limitation is that the cross-sectional non-experimental design does not allow making causal inferences. Alternative models describing relationships between the constructs in this study are possible. Future research should utilize designs that would allow researchers to compare rival models and reveal causal relationships between the variables studied.

A third limitation is that there were no previously validated Azerbaijani instruments measuring empowerment or any other constructs included in this study. Therefore, all instruments were translated in Azerbaijani versions of the measures that were previously utilized in similar studies on PE in the United States and other countries (e.g., Itzhaky & York, 2000; Markward et al., 2006; Peterson et al., 2006, 2008; Peterson & Reid, 2003; Zimmerman & Zahniser, 1991). Their face validity, however, was reviewed by two panels of the U.S. and Azerbaijani experts, and reliability of each scale was examined by calculating Cronbach's alphas. Consequent statistical analyses allowed the researcher to consider that the measures generally related with each other in conceptually meaningful ways, hence their validity was considered acceptable for this pilot study. Other validation procedures were not performed because validation of the instruments other than the AES measure was beyond the scope of the current study and it should be conducted separately. Results of such subsequent studies will help to re-assess the findings presented in this paper. At the same time, the findings from the current study

lay the groundwork for developing and validating Azerbaijani measures of variables such as community participation, sense of community, depression and alienation. The study's measures were also limited in that they represented self-reports of individual perceptions concerning person or environment-related factors. For example, self-reports on community participation may not accurately reflect the actual levels of engagement in participatory behaviors. Finally, although the abbreviated version of the CES-D measure has been widely used to assess depressive symptoms, the instrument is not intended to provide a clinical diagnosis of depression. Future studies would benefit from inclusion of additional measures of the similar constructs.

The items in the third subscale of the AES instrument (i.e, beliefs in community action) have a referent that does not involve one's self-perceptions of competence and control. The referent for these items is "people" in general rather than oneself "I" or "My"-focused items. Future research should examine the influence of different referents on participants' responses.

The relatively small sample size in this study was due to the security and feasibility concerns, as well as due to the capacity to recruit participants by the organizations that agreed to help the researcher. Although the sample size of 350 participants was considered adequate (DeVellis, 2003; Worthington & Whittaker, 2006), it did not allow us to perform both exploratory and confirmatory factor analyses as recommended by scale development experts (Worthington & Whittaker, 2006). Collection of additional data in Azerbaijani community contexts will provide an opportunity to perform confirmatory factor analysis and other procedures to replicate the three-factor structure of the AES measure.

Finally, while the non-random sampling limits generalizability of the findings, purposeful sampling strategies have been widely used in the scale development research (Worthington & Whittaker, 2006). This approach was recommended by Azerbaijani experts and it was the only way for the researcher to ensure protection of study participants and increase their willingness to participate. Some social scientists previously pointed out that it is difficult to employ random sampling and an experimental design in studies in the contexts of community development interventions because that would require researchers to have a separate control group where variables were held constant, which in most cases is neither possible nor ethically desirable (Craig, 2002).

Despite these limitations, multiple strengths need to be acknowledged. This study represents a crucial, initial step toward development of valid and culturally appropriate measures of empowerment that are tailored to the context of former Soviet countries in the regions of South Caucasus and Central Asia. Many previous studies on PE in international contexts tended to use solely qualitative data (e.g., Abdoli et al., 2008; Bespinar, 2010; Najafizadeh, 2003; Turro & Krause, 2009; USAID, 2005) or unvalidated instruments (e.g., Markward et al., 2006). The current study for the first time empirically tested an aspect of Zimmerman's (1995, 2000) theoretical framework with a sample of community residents from secular Muslim culture of Azerbaijan. The study did benefit from the inclusion of individuals from both urban and rural communities located in different geographic regions of the country. Examination of the content, factorial and construct validity of the AES measure were presented. This investigation statistically explored underlying dimensions of the AES and examined the relationships between the empowerment subscales and several theoretically related variables. Findings provided

evidence for reliability and validity of the AES. This study demonstrated that an expanded model of PE with three dimensions (i.e., leadership competence, policy control, and beliefs in community action) was found to be applicable to the sample of community residents in Azerbaijan. If these findings will be replicated with data collected from other samples in Azerbaijan, it will strengthen the validity of the AES instrument.

Given the growing need for tailoring interventions to specific populations and contexts, development of assessment tools validated by local people is very important (Craig, 2002). Recognizing that further research is necessary to improve the AES measure of intrapersonal component of PE, we hope that this study can stimulate future research and interventions in Azerbaijan as well as in the neighboring countries in the South Caucasus and Central Asia.

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