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SUMMARY OF DOCTORAL THESIS
EFFECTIVENESS EVALUATION OF THE COGNITIVE
BEHAVIORAL THERAPY IN RESTRUCTURING SOCIAL
AXIOMS

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Burnout in a social context

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INTRODUCTION

Burnout is a topic of interest for organizational psychology research due to its high prevalence, personal costs—medical conditions, and diminished quality of life—and economic costs of approximately \$550 billion annually in the U.S. economy alone (Poll, 2013).

Interventions to reduce burnout so far have been directed both at employees, through strategies to increase personal resources, and at employers, by optimizing requests and professional resources, but the results are contradictory (Awa *et al.*, 2010). Maricuțoiu's (2016) meta-analysis showed modest effects in reducing burnout and suggests intervention strategies that address depersonalization and lack of professional achievement, not just emotional exhaustion. The labor market is undergoing changes due to the process of globalization and migration, with almost 70% of the approximately 23.5 million emigrants in the last 9 years in Europe employed (OECD, 2022).

In this context, the research aimed to investigate the existence of a connection between social axioms (social beliefs) and individual attributes, such as personal autonomy, and whether these attributes can constitute effective resources of protection against burnout syndrome. It will also be verified whether individual attributes and axioms can undergo changes with the help of a group cognitive-behavioral intervention and whether the effects will also be found at the level of depersonalization and lack of professional achievements.

This thesis has two parts, each with two chapters. In the first chapter, the framework was briefly described, starting from the phenomenon of globalization and

migration and how they influence social axioms. The effects of these phenomena on the level of burnout and personal autonomy were presented, but also social axioms as a way of highlighting both cultural differences and similarities. The chapter was ended with the conclusions and rationale of this work. In the second chapter were exposed, in a broader manner, the concepts introduced in the previous chapter, as well as the research carried out in relation to the concepts presented.

This research underpinned the design and methodology associated with each of the three studies presented in the next chapter. Each study was presented separately in chapter three, along with future research limitations and directions. In the fourth chapter were summarized the most important conclusions of the presented studies, the contribution to the field of studies and future research directions.

The main contributions made by this paper are:

1. Theoretical: a model of structural equations has been proposed that links social axioms with personal autonomy and burnout, this being, as far as we know, the first operationalization of such a model. The contribution of this study was to confirm the relatively stable character of social axioms and to enrich the data collected with the questionnaire of social axioms in Romania.
2. Practical: proposing a training model, a first attempt to modify social axioms through an original model of cognitive behavioral interventions.

CHAPTER 1. GLOBALISATION AND MIGRATION

Globalisation is a complex process that refers to the ever closer interconnectedness of economies, cultures and societies around the world. In recent decades, globalisation has had a significant impact on migration, by increasing the movement of people and goods between countries. This process has led to an increase in the number of emigrants and a diversification of the reasons why people emigrate (Castles & Miller, 2009). Thus, migration has become one of the most important topics debated in the context of globalization.

In general, migration can be defined as the movement of people from one place to another, in search of new opportunities, to avoid conflicts or to improve their lives (Massey *et al.*, 1998). Globalisation has facilitated this process by opening up new markets, increasing economic competitiveness and developing infrastructure. Thus, migration can be considered a direct consequence of globalisation and the changes associated with it.

According to reports by the Organisation for Economic Co-operation and Development, the total number of emigrants arriving in Europe between 2011 and 2020 was around 23.5 million, and the conflict in Ukraine has resettled around 5 million inhabitants. On average in 2021, nearly 70% of emigrants were employed (OECD, 2022).

Migration has a significant impact on the economies of the countries involved. In general, emigrants are seen as an important resource for host economies because they bring with them a new workforce and different skills (Waldinger *et al.*, 2019) and this improves productivity and competitiveness of the

economy. In addition, migrants often occupy less-paid or less-valued jobs that are not attractive to the local population. Therefore, emigrants can be considered a solution to companies' recruitment problems.

However, there are also negative effects of migration on host economies. Emigrants can compete with domestic workers for jobs, which can lead to lower wages and an increase in unemployment. Emigrants may also be exposed to forms of exploitation, such as undeclared work or insecure and unpaid working conditions (Castles & Miller, 2009).

Migration can have a significant impact on host societies. For example, migration can lead to increased cultural diversity, which can be beneficial for society at large. In addition, immigrants can bring with them new knowledge and experiences, which can enrich the community in which they settle (Massey *et al.*, 1998).

Migration can lead to social tensions and conflicts, discrimination and segregation, and migrants can be marginalised and impoverished. Migration can also have a negative impact on education and health, with migrants being exposed to forms of violence or extreme poverty (Castles & Miller, 2009).

Migration and globalization have brought significant changes in the way individuals perceive and relate to the world around them. In terms of self-esteem, these phenomena can have both positive and negative effects. Interactions with people from different backgrounds can increase self-confidence and openness to new perspectives, while the feeling of insecurity in front of new conditions, discrimination or difficulties in

integration can negatively affect self-esteem, generating feelings of alienation or inferiority.

As for the locus of control, migration and globalisation can have varied influences. On the one hand, the processes of adapting and learning new norms and systems can contribute to developing a sense of control over one's own destiny, by acquiring navigation skills in a complex environment. On the other hand, uncertainties about work, frequent changes and the accelerated pace of modern life can create a feeling of loss of control. Socio-economic pressures and global competition can induce stress and anxiety related to the ability to cope with challenges.

Adapting to new conditions and requirements can involve a considerable effort for migrants to maintain their work-life balance. Work-related overload or pressures to succeed in a competitive environment can lead to physical and mental exhaustion. At the same time, the feeling of distancing from the traditional social network, in the context of migration, can accentuate isolation and emotional stress.

1.1.Conclusions and rationale of this work

In Western societies, burnout is a status symbol (Brown, 2010). It produces losses that are difficult to quantify on a personal level, but at the societal level, losses of about \$ 550 billion are estimated in the US economy alone (Poll, 2013).

Interventions to reduce burnout were originally meant to help a person cope with workplace stressors (Kahill, 1988) and, second, to change the organizational environment (Awa *et al.*, 2010).

Burnout in a social context

Interventions at individual level are based on two premises:

- 1) burnout is the result of poor individual adaptation to work;
- 2) it is difficult (if not impossible) to change jobs (Maslach *et al.*, 2001).

According to the JD-R (Job Demands – Resources) model, burnout is viewed as an imbalance between job demands on the one hand and job resources, personal resources, and rest and recreation opportunities on the other (Xanthopoulou, *et al.*, 2007).

Interventions at the organizational level aim to reduce the impact of organizational stressors through organizational change – optimizing job demands and resources – and are less common than interventions at individual level (Awa *et al.*, 2010; Kahill, 1988; Maslach *et al.*, 2001). Individual interventions are focused on increasing personal resources and improving participants' rest and recreation habits.

Personal resources consist of personality traits such as neuroticism, agreeableness, openness to novelty, with a relatively stable character and therefore difficult to modify and character traits such as optimism, motivation, locus of control, self-esteem, with a more variable character and therefore easier to modify through interventions.

Further research found little results for both approaches (Awa *et al.*, 2010; Marine *et al.*, 2006; Maslach *et al.*, 2001), and the meta-analysis of Maricuțoiu *et al.*, (2016) showed modest effects in reducing burnout and suggests tailored intervention strategies that also

address depersonalization and lack of professional achievement.

The concepts circumscribed to personal autonomy – self-esteem and the locus of control – are factors that determine work involvement (Xanthopoulou *et al.*, 2009), constituting personal resources that can be engaged in overcoming challenges related to the professional role.

With 70% of an increasing number of emigrants being inserted into the labour market (OECD, 2022), there is little research proving the role of cultural context in the development of personal autonomy and how this relationship influences burnout.

This paper aims to evaluate social axioms as an influencing factor in the relationship between personal autonomy – as a source of protection against burnout – and burnout. At the same time, the present research aims to test the possibility of restructuring social axioms, starting from the premise that cognitive behavioral therapy has techniques for restructuring maladaptive personal beliefs (Holdevici, 2009).

Interventions in the organizational framework are designed to take into account the specifics of organizational needs, but also the dynamics of the working group. Therefore, it is possible that these social axioms – especially social cynicism and social complexity – influence how company employees collaborate. Social cynicism, as defined by Bond and Leung (2004), is a negative conception of human nature manifested as distrust of people and institutions, and social complexity refers to the belief that there are no fixed rules of behavior in society and something can be achieved in several ways. A high degree of social

cynicism can create a climate of negativity and disinterest, in which people avoid offering their support or contributing positively to team efforts. This can lead to poor communication, reluctance to share important information, and lack of involvement in collective projects. A low level of social complexity in a workgroup translates into the existence of rigid norms of conduct. This behavioral rigidity and lack of tolerance can create anxiety for group members and, over time, emotional exhaustion.

The expected results of the intervention will support the assertion that one can intervene on the social axioms that define behavior also by restructuring/resignifying these beliefs acquired in life experience. The confirmation of the proposed hypotheses is a fundament for developing programs to improve the work climate, reduce burnout syndrome and increase employee well-being, as well as company results by increasing personal autonomy and changing social axioms. This approach will allow the design of culturally adapted interventions and will provide a more accessible entry point because participants tend to mobilize less resistance than when maladaptive personal beliefs, deeply emotionally charged, are at issue.

The concepts used in the present research and the main theories and studies supporting this approach will be further defined.

CHAPTER 2. CONCEPTS AND THEORIES

2.1. Burnout

The concept of burnout was first identified and brought to the attention of researchers in the 1970s by the

psychiatrist Freudenberg (1974) and Maslach (1976), a social psychologist who studied emotions at work, and has since been recognized as a great potential risk factor to the physical and mental health of employees, the effectiveness of their work with a negative impact on the overall performance of the organization. Burnout is defined as "a psychological syndrome that occurs in response to chronic stressors in the workplace" (Maslach, *et al.*, 2001, p. 399).

The three dimensions of response are: overwhelming exhaustion, feelings of cynicism and detachment from work, and inefficiency and lack of results (Maslach, *et al.*, 2001).

The link between job requirements and workplace resources, burnout, and engagement has been researched under the Job Demand-Resource (JD-R) model (Demerouti, *et al.*, 2001), a model that postulates that job requirements (e.g. physical demands, time pressure, shift work) are associated with burnout, while lack of resources (e.g. participation in decisions, performance evaluation, social support) are associated with lack of commitment.

Burnout is therefore a disruptive emotional experience with a strong impact on personal, interpersonal and organizational outcomes, resulting in an increase in absenteeism, resignations or career changes, serious health damage, an increased likelihood of dysfunctional relationships with clients, colleagues or family of those affected (Tyrrell, 2010). The consequences are both at the personal level – as of 2019, burnout is included in the list of occupational diseases proposed by the World Health Organization – and at the organizational level – costs between \$ 450 and 550 billion

per year are estimated at the level of the US economy alone (Poll, 2013).

The impact of this syndrome has led to a lot of research focusing on identifying predictors of burnout, in an attempt to prevent this phenomenon. Among the factors studied are: the number of hours worked (Park & Lake, 2005 apud Tyrell 2010), work environment, employee characteristics, job characteristics, level of experience, socio-demographic factors such as gender or marital status of the employee (Yildirim, 2008, apud Tyrell 2010) and degree of burden (Shirom *et al.*, 2008, apud Tyrell 2010).

Research that has identified and studied these factors has produced conflicting results, unable to make a clear connection between these characteristics, objective, assessment, and burnout syndrome. Starting from the theory of cognitive-behavioral psychology, the research focused on studying the relationship between **the subjective perception** by the employee of the workload and burnout (versus the actual number of **hours worked or the actual volume of tasks**) (Shirom *et al.*, 2008, Panagopoulou *et al.*, 2006, apud Tyrell 2010). The conclusions of these studies were that the workload perceived by the employee is better associated with the burnout phenomenon than the actual number of hours worked or the actual volume of tasks to be performed, thus highlighting the need to approach burnout not only in terms of objective factors but also subjective parameters, perceived at the individual level by employees.

Research results attest to a low efficiency of cognitive behavioral therapy in reducing burnout

syndrome (Maricuțoiu *et al.*, 2016; Maguire, 2017) or therapies that combined, in addition to cognitive behavioral therapy, elements of vocational counseling and entrepreneurial training (Gorter, 2001) or elements of transactional analysis (Johnson *et al.*, 2018). However, the best results were found in interventions based on cognitive behavioral therapy and those based on relaxation techniques, in reducing emotional exhaustion. Depersonalization and lack of personal achievement are not influenced by the interventions that were the subject of the meta-analysis and the authors recommended adapting interventions to reduce these two components of burnout (Maricuțoiu *et al.*, 2016).

2.2. Personal autonomy

When discussing personal autonomy, we consider, first, a behavioral activation component (Bandura, 2000), and second, the ability to make decisions and exercise control over important areas of personal life (Ryan & Deci, 2001). This concept has been defined differently with the development of cross-cultural psychology, noting that in Western societies, characterized by individualism, the self is developed separately from the social order, with greater openness to individual rights, freedom of choice, and equality. Collectivist societies foster the development of an interdependent self, defined by roles in the family and society (Helwig, 2006).

Within this research, the concept of personal autonomy was defined and measured as being made up of three main components: self-determination, self-esteem, and the locus of control. This approach is based on how

the concept was previously defined and measured in Gavreliuc's works (Gavreliuc, 2012).

2.2.1. Self-esteem in the organization

Self-esteem has been defined as representing the affective and evaluative component of the self, mobilizing both a set of affective experiences about oneself and a set of self-referential cognitions (Gailliot & Baumeister, 2007). The research used the tool developed by Pierce, Gardner, Cummings, and Dunham in 1989 to capture the extent to which a person believes they are capable, important, and valuable as a member of an organization. This scale assesses the self-perceived value of the person in the context of the organization in which they work and also shows that people with high self-esteem meet their needs in their professional roles.

2.2.2. Self-determination

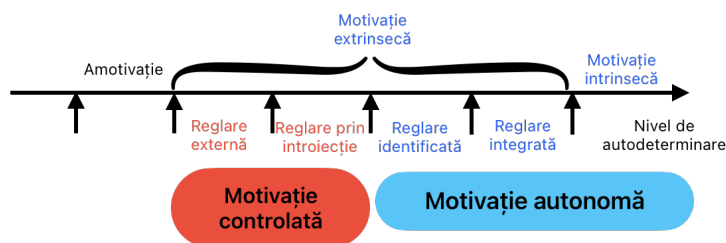
Self-determination theory, proposed by Ryan and Deci, provides a framework for how personality, motivational processes, and self-regulation of behavior evolve throughout human development. It was developed based on observations and experiments related to the influence of socially stimulating behaviors (reward, praise) on intrinsic motivation (Deci & Ryan, 2000) and distinguishes three major stages of development. The theory describes what happens at each stage, in terms of motivation, perception of the place of causality, and the relevant regulatory processes that constitute the regulating style. If in the first stage of development, the

perception of causality is impersonal, motivation unstructured and regulatory style disorganized, in the last stage of development authors describe an intrinsic motivation and regulating style, along with an internalized place of causality.

The authors of SDT state that individual motivational processes have behind them the need to satisfy three universal needs, which are: 1. autonomy, 2. **competence** and 3. **connection**.

Figure 1 schematically shows the process of internalizing motivational processes.

Figure 1. Motivation according to self-determination theory



2.2.3. Locus of control in the organisation

The development of personal autonomy implies, in addition to internalizing the volitional process, also internalizing the locus of control (Deci & Ryan, 1995). The most influential theory of attributional patterns was developed by Julian Rotter, under the name of locus of control theory (Rotter, 1966, 1993). Using this theory, the

author has built a tool that highlights how a person determines the causes of events (internally or externally determined). People with an external locus of control tend to be extrinsically motivated, believe they have little control over context and therefore little responsibility. These people tend to be easily influenced by others, have a lower level of schooling and attribute failure to external causes (unfair destiny, bad luck) and do not change their expectations after a failure. Internalists, on the other hand, tend to be more intrinsically motivated, control context, show responsibility and resist external pressures, using their discernment to decide when to conform.

For this research project, the scale of locus of control in organizations developed by Spector, in 1988, was selected because it was considered that the research would be conducted in an organizational context and the scale developed by Rotter has more modest correlations with variables related to the organizational framework (Spector, 1988).

2.3. Social axioms

Social axioms are defined as general, context-independent beliefs acquired from socialization experience (Bond, 1988). These general beliefs concern people, social groups, social institutions, the environment, the spiritual world, as well as associated phenomena and are stored as assertions related to the relationship between two entities or concepts.

These axioms have, along with attitudes, a central role in cognitive processes and, according to the functionalist perspective (Kruglanski, 1980), serve four main functions: 1. Knowledge – helps people understand

the world, 2. Instrumental – facilitates the achievement of important goals, 3. Protection – helps protect self-esteem, 4. Expressive – allows the manifestation of personal values of the individual.

These functions performed by social axioms give them a pan-cultural character because they concern how people solve their problem of survival (Schwartz, 1992). The five facets of social axioms have been described as follows:

1. Social cynicism - refers to the negative view of human nature because of slight corruptibility in the Figure of power, a discriminatory view in relation to certain social groups, a distrust of social institutions and carelessness in choosing ethical means to achieve goals. An example axiom for this dimension is: Generally, kind-hearted people suffer losses.
2. Social complexity - aimed at understanding that there are no fixed rules and one thing can be achieved in several ways, hence the apparent inconsistency in human behavior. An example axiom for this dimension is: People can have opposite behaviors in different situations.
3. Reward for application - represents the general belief that effort, knowledge, and planning will lead to positive results and help avoid negative ones. An example axiom is: Working people will achieve more, eventually.
4. Religiosity - refers to beliefs in supernatural forces and the benefits offered by a belief system. An example axiom is: There is a higher being controlling the universe.

5. Destiny control - refers to beliefs that events in one's life are predetermined and there are ways to influence these outcomes. These beliefs accept logical contradiction between predetermination and the possibility of changing outcomes, and this has given rise to practices for avoiding bad luck in many cultures. An example axiom is: Fate determines a person's success in life (Bond & Leung, 2004).

Social axioms appear correlated with burnout syndrome in a 2016 study of 342 Malaysians. Based on the stress model described by Lazarus, burnout is presented as an imbalance between demands and available resources. Research has highlighted the moderating role of social cynicism on the relationship between demands and burnout and reward for application on the relationship between resources and work involvement (Valencia et al., 2016).

These results support the approach of the proposed research. It should be noted that the investigation of the influence of social axioms on the development of personal resources specific to personal autonomy was not for the purpose of Valencia's research, which is an objective of the present research.

CHAPTER 3. ORIGINAL STUDIES

3.1. General objectives

This paper aims to:

1. Assess the extent to which personal autonomy – composed of self-esteem evaluated in the organization, locus of control evaluated in the organization, and self-determination – is a protective factor against burnout.

2. Evaluate social axioms as an influencing factor on personal autonomy and in the relationship between personal autonomy and burnout.
3. Test the possibility of modifying social beliefs, starting from the premise that cognitive behavioral therapy has techniques for modifying maladaptive personal beliefs (Holdevici, 2009).
4. Test the possibility of modifying personal resources that constitute personal autonomy – self-esteem, internalizing locus of control, and motivation in order to improve the protection factor against burnout.

To achieve these goals, this paper was structured into three distinct studies, each with its own objectives, derived from the general ones.

3.2. Study 1 – Investigating the relationship between personal autonomy and burnout

3.2.1. Objectives and assumptions

Burnout has been researched and correlated with various aspects related to the organizational context, such as: satisfaction in relationships with co-workers, promotion opportunities, supervision, autonomy and perceived control (Barad, 1979 and McDermott 1984 apud Kahill, 1988). Demerouti proposes, in 2001, with the job demands-resources (JD-R) model, a relationship between job demands and resources and postulates that job demands are rather responsible for the emotional exhaustion component of burnout, while lack of resources is responsible for the occurrence of depersonalization (Demerouti, *et al.*, 2001). Starting from the JD-R model, Xanthopoulou's longitudinal study highlights a link between self-esteem in the organization, along with self-

efficacy and optimism, as personal resources at time T1 and work involvement at time T2 (2 years apart), the correlation coefficient being $r=0.34$ and $p < 0.01$ (Xanthopoulou *et al.*, 2009). Since work involvement is an opposite concept to burnout (Schaufeli, 2008), it is investigated, within this study, the extent to which personal autonomy – composed of self-esteem in the organization, the locus of control in the organization and self-determination – is a protective factor against burnout. Therefore, the following hypothesis are proposed:

H1: People with low self-esteem to have high burnout scores in the organization

People generally need to control their environment, or at least believe they do, in order to have reduced levels of anxiety (Miller, 1980). This is supported by Wang's meta-analysis of locus of control and work, which highlights correlations of $r=-0.38$ with burnout and $r=0.16$ with work performance and $r=-0.20$ with intention to leave work and $r=-0.17$ with absenteeism (Wang *et al.*, 2010). Therefore, another hypothesis is that:

H2: People with an external locus of control tend to have higher levels of emotional exhaustion and low self-esteem in the organization

But the locus of control also influences interpersonal relationships at work, and it is expected that people with an internal locus of control in the organization will have higher social skills (the possibility of establishing good working relationships) and therefore a lower degree of depersonalization (Wang *et al.*, 2010). That is why the hypothesis is proposed:

H3: People with an external locus of control will have an increased level of cynicism

Self-determination theory, proposed by Deci and Ryan, holds that the extent to which our needs for autonomy, competence, and connection are met generates psychological well-being (Deci & Ryan, 2000). As well-being excludes the simultaneous existence of burnout syndrome, it is proposed that:

H4: People with high levels of self-awareness and perception of choice will have low levels of burnout.

3.2.2. Methodology, tools, procedure

This study has a descriptive, cross-sectional design, the data was collected using a Google form whose address was communicated to all employees of the company between September and December 2019. Participation in the study was voluntary and was not rewarded in any way. The collected data was analyzed using JASP 0.16.4. In order to verify the proposed hypotheses, starting from the theories associated with the researched concepts, the following tools were selected:

1. Social axioms were evaluated with the Social Axioms Survey (SAS-II; Guan *et al.*, 2010).
2. The locus of control at work was measured using the short version of Spector's Work Locus of Control Scale (WLCS, Spector, 1998).
3. Self-esteem was measured with the Organizational Based Self Esteem Scale (OBSE, Pierce *et al.*, 1989).
4. Self-development was assessed using the Self Development Scale (SDS, Deci & Ryan, 1985) with two facets: (1) self-awareness (AS) and (2) choice perception (PC).

5. Burnout was measured using the Maslach Burnout Inventory (MBI-HSS, Maslach *et al.*, 1986) on the three facets of emotional exhaustion (EE), depersonalization (DE), and lack of professional achievement (LRP).

3.2.3. Participants

This study had nonprobabilistic sampling, participation was open to all employees and was voluntary. 222 participants provided complete information, 193 females and 29 males aged between 21 and 70, all employees of a private health clinic working in Romania.

3.2.4. Results

Hypothesis 1, according to which people with low self-esteem in the organization will have increased burnout scores has been validated.

The collected data highlight a statistically significant negative correlation between self-esteem in the organization and the three components of burnout: $r=-0.476$ and $p< ,001$ with Emotional Exhaustion, $r=-0.363$ and $p< ,001$ with Depersonalization, $r=-0,619$ and $p< ,001$ with Lack of professional achievements but also $r=-0.563$ and $p< ,001$ with Burnout evaluated globally.

Hypothesis 2, which holds that people with an external locus of control in the organization have higher levels of emotional exhaustion and low self-esteem in the organization, has been partially verified.

Self-esteem in the organization does not significantly correlate with locus of control in the

organization, but the locus of control in the organization significantly correlates with emotional exhaustion, the correlation coefficient being $r = 0.190$ and $p = 0.004$.

The data collected in this study validate hypothesis 3, according to which people with an external locus of control will have an increased level of depersonalization, the correlation coefficient between the locus of control in the organization and depersonalization being $r = 0.175$ and $p = 0.009$.

And hypothesis 4, which states that people with a high level of self-awareness and perception of choice will have a low level of burnout, is verified, the correlation coefficient is $r = -0.513$ and $p < 0.001$ for self-awareness and $r = -0.602$ and $p < 0.001$, $N = 222$ for choice perception.

To check the overall influence of personal autonomy on burnout, a multiple regression was performed, which revealed that 50% of the variation in total burnout can be predicted by three of the four components of personal autonomy: $F(4,217) = 55,709$ $p < 0,001$. The component check shows that self-esteem in the organization ($= -0.358$, $t = -6.631$, $p < 0.001$), self-awareness ($= -0.130$, $t = -\beta 2.128$, $p = 0.034$), and choice perception ($= -\beta 0.366$, $t = -6.025$, $p < 0.001$) negatively predict burnout. This indicates that people with higher self-esteem, aware of themselves and their choices, will have lower burnout levels.

3.2.5. Discussion

This study assessed to what extent personal autonomy can be an additional resource of protection against burnout. Our hypothesis, which states that greater personal autonomy is associated with a reduced level of burnout, has been confirmed. The results obtained highlight r-indices of Pearson correlation of -0.563 between burnout and self-esteem in the organization for $p < 0.001$, which confirms the results of Xanthopoulou's study highlighting a correlation of $r = 0.34$ and $p < 0.01$ between self-esteem in the organization and work engagement, a concept opposed to burnout (Xanthopoulou *et al.*, 2009).

This implies that people with high levels of self-esteem in the organization, people who know their own value and the importance of their professional role, will have a low level of burnout. The results suggest that people less aware of their professional value put more effort at work in a desire to validate their own worth and thus are more likely to develop burnout.

Equally, people with a high level of self-awareness and perception of choice, people who are in touch with their own needs and emotions and take them into account when they make their decisions and satisfy their needs for autonomy, competence and connection, have a low level of burnout. The correlation coefficient r Pearson, calculated based on data collected in the current study, is -0.513 for self-awareness, -0.602 for choice perception and $p < 0.001$, respectively.

People with an external locus of control in the organization have a higher level of emotional exhaustion

and low self-esteem in the organization are partially verified, the Pearson correlation coefficient being $r = 0.190$ and $p = 0.004$ with emotional exhaustion. This result confirms the results obtained by Wang's meta-analysis, which finds correlations of $r=0.39$ between work control site and burnout (Wang *et al.*, 2010). This means that the feeling of not controlling events in our organizational life is associated with emotional exhaustion and this can be produced by the anxiety resulted from feelings of lack of control. On the other hand, the data collected in this study suggest that self-esteem assessed in the organization does not seem to be associated with the locus of control. This can be explained by the field of activity of the organization (medical), where self-esteem can be to a greater extent fueled by the professional role (doctor vs. nurse) than by the feeling that employees have control over the professional environment in which they operate.

The data also support that people with an external locus of control in the organization have an increased level of depersonalization, the Pearson correlation coefficient is $r=0.175$ and $p=0.009$. This result supports our hypothesis and is consistent with previous research (Miller, 1980) showing that people with an internal locus of control benefit from a high level of confidence in their ability to interact socially and this causes them to have a reduced degree of cynicism specific to the depersonalization stage of burnout.

To verify the overall influence of personal autonomy on burnout, a multiple regression was performed, which revealed that 50% of the variation in total burnout can be explained by three of the four

components of personal autonomy: $F(4,217)=55,709$ $p<0,001$. These three components are: self-esteem in the organization ($\beta=-0.358$, $t=-6.631$, $p<0.001$), self-awareness ($\beta=-0.130$, $t=-\beta 2.128$, $p=0.034$) and choice perception ($\beta=-0.366$, $t=-6.025$, $p<0.001$) and they negatively predict burnout. This means that the greatest weight in the variation of the burnout level is represented by the variation in the perception of choice and self-esteem in the organization. In other words, the extent to which a person is aware of herself and her value in the organization, of the fact that it can choose and thus satisfy its needs for competence, autonomy and connection are overwhelming factors in varying the level of burnout. Therefore, an intervention aimed at reducing burnout levels could address this link.

3.2.6. Limits and future directions

In this study, a cross sectional design was used and this prevents highlighting some causal inferences, and the small group, although sufficient for the purpose of this study, does not allow to generalize the conclusions to a wider population. A resumption of the study in a larger population and in another field would provide further confirmation of the conclusions of this study. Moreover, a possible intervention aimed at reducing burnout levels could include in its objectives increasing self-esteem, internalizing the locus of control and awareness of freedom of choice in the occupational sphere.

3.3. Study 2 - The mediating role of personal autonomy in the relationship between social axioms and burnout

3.3.1. Objectives and assumptions

Starting from Wei's study, which finds correlations between social cynicism and burnout (Wei, *et al.*, 2015), the existence of this link in the Romanian cultural space was investigated. The proposed hypothesis is that:

H1: A high level of social cynicism is associated with a high level of burnout.

Studies in cross-cultural psychology highlight that a high degree of social complexity creates a multitude of behavioral niches (Smaldino et al., 2019) and the use of different standards at different stages of social evaluation can produce different emotions in the process of self-evaluation (Higgins et al., 1986) and reduce the sense of personal achievement. The proposed hypothesis was that:

H2: Increased values of social complexity are associated with reduced values for lack of professional achievement.

The extent to which there is a link between social axioms and personal autonomy has been tested based on Hui and Bond's study highlighting the role of social axioms in guiding self-regulating behavior (Hui & Bond, 2010). These results, together with the results of the previous study highlighting the protective role of personal autonomy in the occurrence of burnout syndromes, support the approach of the present research by highlighting the mediating role of personal autonomy. However, the influences of social axioms on the development of personal resources specific to personal

autonomy have not been investigated, which is an objective of the present research. A model of structural equations was also tested, in which personal autonomy mediates the relationship between social axioms and burnout. The proposed hypothesis was that:

H3: Personal autonomy mediates the relationship between social axioms and burnout

Because research on social axioms in Romania is reduced and the results invite further research, an objective of this study was to bring additional information in this field, also centralizing the results obtained from previous research.

3.3.2. Methodology, procedural tools

This study has a descriptive, cross-sectional design, the data was collected using a Google form whose address was communicated to all employees of the company between October and November 2021. Participation in the study was voluntary and was not rewarded in any way. The collected data was analyzed using JASP 0.17.1.

In order to verify the proposed hypotheses, starting from the theories associated with the researched concepts, we selected the following tools:

1. Social axioms were evaluated with the Social Axioms Survey (SAS-II; Guan *et al.*, 2010).
2. The workplace control site was measured using the short version of the Work Locus of Control Scale (WLCS, Spector, 1998).
3. Self-esteem was measured with the Organizational Self Esteem Scale (OBSE, Pierce *et al.*, 1989).

4. Self-development was assessed using the Self Development Scale (SDS, Deci & Ryan, 1985) with two facets: (1) self-awareness (AS) and (2) choice perception (PC).

5. Burnout was measured using Maslach Burnout Inventory (MBI-HSS, Maslach *et al.*, 1986) on the three facets of emotional exhaustion (EE), depersonalization (DE), and lack of professional achievement (LRP).

3.3.3. Participants

In this study participated 528 employees of a retail company in Romania operating 7 cities, 336 female and 187 male and five people who did not declare their gender, aged between 22 and 62 years ($M = 39.70$, $SD = 8.33$). Sampling was nonrandom, any employee was free to participate in the study, and participation was voluntary.

3.3.4. Results

The descriptive statistics of the data collected in this study indicate an asymmetric distribution, which is why we will use tests for nonparametrically distributed data.

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Tabel 3 . Statistică descriptivă

	Minim	Maxim	Medie	Abatere std.	Oblicitate	Boltire
Stima de sine	2,200	5,000	4,354	0,568	-0,898	0,545
Locul controlului	8,000	44,000	20,650	6,118	0,120	0,006
Conștiința de sine	1,000	5,000	43,530	0,712	-1,120	2,231
Percepția alegerii	1,000	5,000	23,900	0,900	0,274	-0,515
Cinism social	1,000	5,000	2,684	0,856	0,037	-0,353
Răsplată pentru efort	1,500	5,000	4,294	0,543	-1,037	1,803
Complexitate socială	1,875	5,000	4,089	0,541	-0,573	0,525
Controlul destinului	1,000	5,000	2,649	0,772	0,093	-0,465
Religiozitate	1,000	4,875	2,992	0,818	-0,336	-0,061
Epuizare emoțională	9,000	48,000	19,415	7,520	1,066	1,302
Depersonalizare	5,000	26,000	8,877	3,619	1,493	2,777
Lipsa realizărilor profesionale	8,000	48,000	18,133	6,068	0,667	0,954

N=528

3.3.4.1. Centralisation of previous studies

Referring to previous studies conducted on the Romanian population, a centralization of the scores obtained using social axioms was performed. See Table 4.
- Scores for studies based on social axioms in Romania.

Tabel 4 . Scoruri axiome sociale, studii realizate pe populație românească

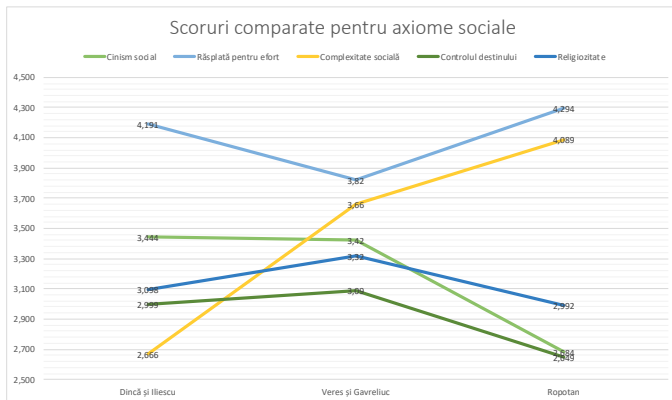
Studiu	Dincă și Iliescu	Gavreliuc	Veress și Gavreliuc	Mosoia și Dincă	Mosoia	Ropotan	Ropotan
An	2009	2012	2019	2020	2022	2022	2022*
Participanți	796	522	676	190	51	141	528
Bărbați	393		306	126	22	35	187
Femei	403		370	64	29	106	336
Vârstă medie	38,31			40,25	51,35		39,7
Abatere standard	5,58			11,16	14,055		8,33
Cinism social	3,444	3,297	3,42	2,814	2,839	2,519	2,684
Abatere standard	0,448	0,434	0,82	0,668	0,608	0,669	0,856
Răsplată pentru efort	4,191	3,806	3,82	4,105	4,176	4,182	4,294
Abatere standard	0,5	0,444	0,76	0,535	0,435	0,486	0,543
Complexitate socială	2,666	3,435	3,66	4,233	4,169	3,823	4,089
Abatere standard	0,403	0,297	0,75	0,415	0,344	0,406	0,541
Controlul destinului	2,999	2,690	3,09	2,748	2,796	2,649	2,649
Abatere standard	0,558	0,578	0,9	0,688	0,733	0,739	0,772
Religiozitate	3,098	3,275	3,32	3,238	3,589	3,077	2,992
Abatere standard	0,816	0,641	0,88	0,916	0,938	0,824	0,818

* - studiul curent

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The scores recorded in this study seem to have the lowest values for social cynicism, if we check similar groups 3,444 in Dincă and Iliescu (2009), 3.42 in Veress and Gavreliuc (2019) and 2,684 in the current study. The same three studies show higher values for reward for application from 4.19 in Dincă and Iliescu (2009) to 4,294, with even lower values in 2019, in Veress and Gavreliuc's study. Social cynicism, religiosity, and destiny control score lowest in the current study. Because the studies use different samples and none of them are representative, we cannot compare the results. See figure 3.

Figure2. Average social axiom scores for three studies in Romania



However, a Kruskal-Wallis test performed between scores obtained by this previous research does not indicate statistically significant differences on the social axiom scale ($H = 6$, $p = 0.4232$, $df = 6$), the p-value being above the significance threshold (McKight *et al.*, 2010).

These results do not indicate statistically significant differences on the social axiom scale, with the p-value above materiality (McKight et al., 2010).

3.3.4.2. Validation of objectives and assumptions

The first hypothesis, which proposes that a high level of social cynicism is associated with a high level of burnout, is supported by the collected data, social cynicism having statistically significant Spearman correlation indices with all three components of burnout. The highest correlation index is with emotional exhaustion, $\rho = 0.341$ and $p < 0.001$. This result confirms the results of previous studies showing correlation indices of social cynicism of $r = 0.35$ with emotional exhaustion, $r = 0.34$ with depersonalization, and $r = 0.4$ with reduced personal achievement ($p < 0.01$) (Wei et al., 2015). Table

Variabilă	1	2	3	4	5	6	7	8	9	10	11	12
1. Stima de sine în organizație	—											
2. Locul Controlului în organizație	-0.280 ***	—										
3. Conștiința de sine	0.293 ***	-0.320 ***	—									
4. Percepția alegerii	0.277 ***	-0.341 ***	0.408 ***	—								
5. Cinism Social	-0.159 ***	0.378 ***	-0.247 ***	-0.220 ***	—							
6. Răsplată pentru Efort	0.372 ***	-0.477 ***	0.312 ***	0.324 ***	-0.139 **	—						
7. Complexitate socială	0.225 ***	-0.146 ***	0.196 ***	0.126 **	0.084	0.426 ***	—					
8. Controlul Destinului	-0.018	0.405 ***	-0.242 ***	-0.157 ***	0.512 ***	-0.044	0.086 *	—				
9. Religiozitate	0.063	0.064	-0.030	-0.009	0.178 ***	0.155 ***	0.106 *	0.394 ***	—			
10. Epuizare	-0.364 ***	0.390 ***	-0.349 ***	-0.416 ***	0.341 ***	-0.412 ***	-0.045	0.179 ***	-0.003	—		
11. Depersonalizare	-0.300 ***	0.307 ***	-0.307 ***	-0.334 ***	0.306 ***	-0.342 ***	-0.090 *	0.145 ***	-0.034	0.663 ***	—	
12. Lipsa realizărilor profesionale	-0.499 ***	0.436 ***	-0.353 ***	-0.385 ***	0.218 ***	-0.540 ***	-0.280 ***	0.107 *	-0.041	0.454 ***	0.407 ***	—

* $p < .05$, ** $p < .01$, *** $p < .001$

5 shows all Spearman correlations between social cynicism and the three components of the burnout scale.

The second hypothesis, according to which increased values of the social complexity scale are associated with reduced values of the scale of lack of professional achievement, is also confirmed by the Spearman correlation index of -0.28 and $p < 0.001$.

To investigate the influence of social axioms on components of the burnout scale, it was observed, with the help of linear regressions, that social axioms explain:

a. 27% of variation in emotional exhaustion, $r^2=0.270$, $F(3.527)=64.474$ ($p<0.001$). The most influential axioms are reward for application

with a standardized coefficient $\beta = -0.429$ ($p < 0.001$) and social cynicism with a standardized coefficient $\beta = 0.291$ ($p < 0.001$).

b. 21% of the variation in depersonalization is explained by social axioms, $r^2 = 0.212$, $F(2.527) = 70.639$ ($p < 0.001$). The axioms with the greatest influences are reward for application with a standardized coefficient $\beta = -0.327$ ($p < 0.001$) and social cynicism with a standardized coefficient $\beta = 0.291$ ($p < 0.001$).

c. 32% of the variation in lack of professional achievement is explained by social axioms, $r^2 = 0.318$, $F(3.527) = 81.435$ ($p < 0.001$). The most influential axioms are reward for application with a standardized coefficient $\beta = -0.456$ ($p < 0.001$) and social cynicism with a standardized coefficient $\beta = 0.196$ ($p < 0.001$).

Personal autonomy as a mediator of the relationship between social axioms and burnout was partially supported by the collected data, self-esteem in the organization and perception of choice being the most frequent mediators. The strongest mediations of personal autonomy occur on the relationship between reward for application and all three components of burnout, where the total indirect effect is about 50% of the total effect value, and on the relationship between social cynicism and burnout, where the total indirect effect is about 30% of the total effect value.

As statistically significant mediation models we have noted:

1. Reward for application \Rightarrow Self-esteem \Rightarrow Emotional exhaustion (total effect $B = -5.729$, $z = -10.021$, $p < 0.001$; indirect effect $B = -1.121$, $z = -4.723$, $p < 0.001$)

2. Social Cynicism \Rightarrow Perception of choice \Rightarrow Emotional Exhaustion (total effect $B=2,469$, $z=7,645$, $p<0,001$; indirect effect $B=0.374$, $z=3,699$, $p<0,001$)
3. Social cynicism \Rightarrow Perception of choice \Rightarrow Depersonalization (total effect $B=1.207$, $z=7.217$, $p<0.001$; indirect effect $B=0.126$, $z=2.881$, $p=0.004$)
4. Reward for application \Rightarrow Perception of choice \Rightarrow Depersonalization (total effect $B=-2.286$, $z=-7.719$, $p<0.001$; indirect effect $B=-0.286$, $z=-3.110$, $p=0.002$)
5. Reward for application \Rightarrow Self-esteem \Rightarrow Depersonalization (total effect $B=-2.286$, $z=-7.719$, $p<0.001$; indirect effect $B=-0.354$, $z=-3.089$, $p=0.002$)
6. Social cynicism \Rightarrow Locus of control \Rightarrow Lack of professional achievement (total effect $B=1.392$, $z=5.33$, $p<0.001$; indirect effect $B=0.272$, $z=2.811$, $p=0.005$)
7. Social cynicism \Rightarrow Self-esteem \Rightarrow Lack of professional achievements (total effect $B=1.392$, $z=5.33$, $p<0.001$; indirect effect $B=0.24$, $z=2.857$, $p=0.004$)
8. Reward for application \Rightarrow Self-esteem \Rightarrow Lack of professional achievements (total effect $B=-5,098$, $z=-11,029$, $p<0,001$; indirect effect $B=-1,151$, $z=-5,537$, $p<0,001$)
9. Reward for application \Rightarrow Locus of control \Rightarrow Lack of professional achievements (total effect $B=-5.098$, $z=-11.029$, $p<0.001$; indirect effect $B=-0.701$, $z=-2.89$, $p=0.004$)

In this study, a first model was built starting from the investigated mediation relationships in which only social cynicism, reward for application and social complexity were included in the social axioms because religiosity and destiny control were not significant indicators in the mediation relationships presented above.

Within personal autonomy, all four subscales were included: perception of choice and self-awareness, along with self-esteem and locus of control. Burnout was also represented by all three components assessed: emotional exhaustion, depersonalization, and lack of professional achievement. The obtained model, however, does not show an acceptable level of fit with the collected data ($\chi^2 = 401,453$, $df = 33$, $p < 0,001$). The χ^2/df value is 12.165, CFI is 0.776, TLI is 0.694, SRMR is 0.089, and RMSEA is 0.145.

In the following model, only two social axioms were preserved, social cynicism and reward for application because social complexity is not a significant predictor variable in mediation relationships previously investigated in this study.

For personal autonomy, only three subscales were preserved: perception of choice and self-awareness, along with self-esteem. The locus of control was removed because, in the previous study, it was found that it does not influence the level of burnout, 50% of the variation in total burnout can be predicted by three of the four components of personal autonomy $F(4,217)=55,709$ $p < 0.001$. The component check showed that self-esteem in the organization ($\beta = -0.358$, $t = -6.631$, $p < 0.001$), self-awareness ($\beta = -0.130$, $t = -2.128$, $p = 0.034$), and choice perception ($\beta = -0.366$, $t = -6.025$, $p < 0.001$) negatively predict burnout.

Burnout was represented in this second model by two of the three components evaluated: emotional exhaustion and depersonalization because the data collected did not support the inclusion of the third component. This conceptualization is also used in other

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studies that report a gap between the first two components of burnout and lack of personal achievement (Friedman, 1993).

This second measurement model shows an acceptable level of match with the data, even if the chi square test is significant ($\chi^2 = 35.305$, $df = 12$, $p < 0.001$). The χ^2/df value is 2.79, CFI is 0.975, TLI is 0.956, SRMR is 0.035, and RMSEA is 0.061. Details of the loads of each factor can be found in Table 7.

Tabel 7. Încărcări factoriale ale modelului de ecuații structurale

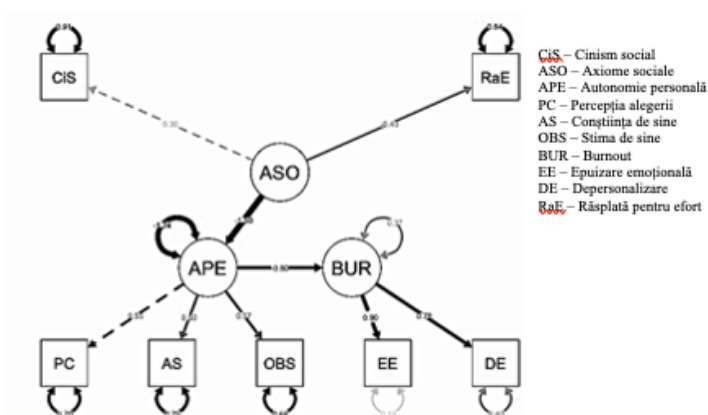
Variabilă Latentă	Variabilă Observată	Estimat	Eroare Standard	z	p	Standardizat	
						Total	LV
Autonomie Personală	Percepția alegerii	1,000	0,000			0,547	0,492
	Conștiința de sine	0,723	0,085	8,478	< ,000	0,500	0,355
	Stima de sine în organizație	0,654	0,071	9,214	< ,000	0,567	0,321
Axiome Sociale	Cinism Social	1,000	0,000			0,299	0,238
	Răspłata pentru Efort	-0,918	0,124	-7,387	< ,000	-0,402	-0,218
Burnout	Epuizare	1,000	0,000			0,902	6,534
	Depersonalizare	0,429	0,027	16,115	< ,000	2,804	0,776

Prezentăm în tabelul 8. coeficienții de regresie ai modelului obținut iar reprezentarea grafică a modelului se regăsește în figura 4.

Tabel 8 . Coeficienți de regresie ale modelului de ecuații structurale

Predictor	Prezis	Estimat	Eroare Std.	z	p	Standardizat	
						Total	LV
Axiome Sociale	Autonomie Personală	-3,094	1,071	-2,889	0,004	-1,498	-1,498
Autonomie Personală	Burnout	-10,577	1,023	-10,343	0,000	-0,796	-0,796

Figură 4. Modelul structural susținut de datele colectate



3.3.5. Discussion

The first objective of this study was to confirm, in a Romanian population, the results of Wei's (2015) study, which finds correlations between social cynicism and burnout, in a group of 276 Chinese students. Although the lots differed in demography and size, correlations were confirmed with roughly equal values of coefficients. This means that people with high levels of social cynicism – people who think "the world is a bad place" and don't trust their peers and institutions – go the extra mile to protect themselves. These efforts lead, over time, to emotional exhaustion and depersonalization, social withdrawal from a "world that is dangerous." These results are also supported by Tartakovsky, who highlights high scores of emotional exhaustion in employees with high levels of social cynicism (Tartakovsky *et al.*, 2012). Cynicism is, in this case, an ineffective strategy for adapting to a world perceived as unfair and disappointing (Anderson, 1996).

Self-esteem and perception of choice amplify the effect of the positive relationship between social cynicism and emotional exhaustion, but also between social cynicism and depersonalization. Lack of professional achievement is positively correlated with social cynicism, and all four components of personal autonomy – self-esteem, locus of control, perception of choice, and self-awareness increase the effect of this relationship. Self-esteem makes people with an increased level of social cynicism make even more effort, perhaps to differentiate themselves from this world perceived as unfair and unfriendly, and thus increase their chances of suffering from emotional exhaustion. This emotionally exhausting effect of people with high levels of social cynicism is amplified by their perception of choice, as they may feel additional responsibility in decision-making. This responsibility likely makes them go the extra mile, and this process increases the chances of chronic fatigue, then emotional exhaustion, and then depersonalization—confirming beliefs that they live in an unfair and disappointing world, and withdrawing from interactions.

The same people with high self-esteem, although they believe that their own effort will benefit them, choose with discernment the efforts they are involved in (as evidenced by the high scores on the scale of perception of choice) and in this way do not end up developing a chronic level of burnout. People who believe that personal effort will bring success have a reduced tendency to withdraw socially.

The most important mediators in this relationship are self-esteem and perception of choice. This means that people with high self-esteem who are aware of their

options and responsibility for their personal choices will choose not to withdraw socially, believing that their effort will ultimately lead to success.

The most important mediation comes in the relationship between social axioms and lack of professional achievements, where all components of personal autonomy significantly mediate the relationship between social cynicism, on the one hand, and reward for application and lack of professional achievements, on the other. This means that personal autonomy seems to function as an additional resource that fuels behaviors specific to personal beliefs: people who consider the world an unfair and dangerous place are more likely to develop burnout, while people convinced that their success depends on personal effort benefit from the resources of personal autonomy. They carefully choose the efforts they are involved in and have reduced chances of burnout.

The structural model supported by the collected data indicates that people with a high level of reward for application and a low level of social cynicism will develop a higher level of personal autonomy. People who believe that personal effort will benefit them feel that their work will be valued and have a sense of control over their professional destiny, which increases their sense of personal autonomy. Conversely, people with a high level of social cynicism will build precarious social relationships that they will not trust, due to skepticism and negative attitudes about peers and institutions. Lack of social support will negatively affect their sense of personal autonomy.

Personal autonomy has an important protective effect on burnout syndrome, especially burnout and depersonalization. This structural model is consistent with the main theories and conceptual frameworks of burnout syndrome, such as the Demands-Resources Model (Bakker & Demerouti, 2007) and the Job-Demands Resources Model (Bakker & Demerouti, 2014). These theories argue that both stress factors (burnout, depersonalization) and resource factors (autonomy, social support) play a crucial role in developing and preventing burnout.

Finally, an objective of this study was to centralize the results obtained in previous research conducted in Romania. Even if variations in scores are observed at different points in time, on numerically different samples in terms of gender and age, these differences are not statistically significant. This indicates a certain conceptual stability of social axioms and confirms the results of previous research (Bond *et al.*, 2004).

3.3.6. Limits and future directions

Although the conclusions of this study confirm the hypotheses associated with the research objective, the use of a transversal design does not allow the generation of causal inferences nor does it observe the mechanisms by which the variation of social axioms explains the variation of personal autonomy and further burnout. Moreover, the group of participants is unrepresentative, therefore conclusions cannot be generalized at population level.

To address the limitations generated by cross-sectional design, study 3, a study with repeated measurements, was developed.

3.4. Study 3 - Effectiveness of a cognitive behavioral intervention on social axioms and personal autonomy

3.4.1. Objectives and assumptions

Starting from the mediation model verified in the previous study, a group model of cognitive-behavioral intervention conducted online was tested in this study. The purpose of the intervention was to reduce the level of burnout by modifying social axioms and components of personal autonomy, personal autonomy that is a protection factor against burnout. The hypotheses of this study were:

H1: The experimental group will experience a greater reduction in burnout than that of the control group.

Increasing personal autonomy in cognitive-behavioral group interventions reduces participants' anxiety and depression (Ryan & Deci, 2018). Because burnout syndrome is associated with anxiety and depression (Koutsimani & Georganta, 2019), this study aimed to improve personal autonomy.

H2: The personal autonomy of the experimental group will have a greater increase than the control group: self-esteem, locus of control, self-awareness and perception of choice will have greater positive variation in the experimental group compared to the control group.

Social axioms are beliefs of a general nature, whereas personal beliefs generally concern narrow issues concerning oneself, society, and the physical and spiritual world (Rozycka-Tran et al., 2015). These beliefs support the achievement of personal goals, and the expression of one's own values, defend personal identity, and provide

an understanding of the surrounding world (Leung & Bond, 2004).

Since the cognitive behavioral paradigm is based on analyzing and identifying thought patterns, a particular concern has been allocated to identifying automatic thoughts and the maladaptive personal beliefs on which they are based. These beliefs concern both oneself ("I'm no good") and the world around me ("People are unfriendly"). Cognitive behavioral therapy has techniques for identifying, testing, and restructuring these maladaptive beliefs (Holdevici, 2009). Therefore, the study aimed to modify beliefs related to social cynicism and reward for application, which were the most important predictors of burnout identified in the previous study, using techniques from cognitive behavioral therapy.

H3: Social cynicism will have a negative variation, and the reward for application will be positive in the experimental group. These variations will be greater in the experimental group compared to the control group.

3.4.2. Methodology, tools, procedure

This study has a longitudinal design, the data was collected using a Google form whose address was communicated to all employees of the company between October and November 2021 and August 2022. Participation in the study was voluntary and was not rewarded in any way. The collected data was analyzed using JASP 0.17.2 and R Studio 2023.06.0.

Starting from the theories associated with the researched concepts, we selected the following tools to verify the proposed hypotheses:

1. Social axioms were evaluated with the Social Axioms Survey (SAS-II; Guan *et al.*, 2010). The
2. The locus of control at work was measured using the short version of the Work Locus of Control Scale developed by Spector (WLCS, Spector, 1998).
3. Self-esteem was measured with the Organizational Self Esteem Scale (OBSE, Pierce *et al.*, 1989).
4. Self-development was assessed using the Self Development Scale (SDS, Deci & Ryan, 1985) with two facets: (1) self-awareness (AS) and (2) choice perception (PC).
5. Burnout was measured using the Maslach Burnout Inventory (MBI-HSS, Maslach *et al.*, 1986) on the three facets of emotional exhaustion (EE), depersonalization (DE), and lack of professional achievement (LRP).

3.4.2.1. Intervention planning

The intervention was directed at employees because these interventions have faster effects than those directed at companies (Awa *et al.*, 2010).

Starting from previous studies' recommendations, which used cognitive behavioral therapy (Johnson *et al.*, 2018) and from the group cognitive behavioral intervention model described by Free (2007), a model of cognitive behavioral intervention was built in which the following aspects were considered:

1) Program duration: **10 weeks**, one group session per week lasting one hour and a half. At the suggestion of the human resources department, the allocated time interval was 13-14:30 on Mondays, Tuesdays or Wednesdays, the proposed interval being located in the lunch breaks vicinity.

2) Cognitive restructuring techniques were used for participants to cope with negative emotions, as well as developing effective rest habits and seeking social support (Heiden et al., 2007). The techniques used were those recommended by Free (2007), namely:

a) Self-monitoring: The client is encouraged to monitor their thoughts, emotions and behaviors in a journal or through a regular recording. It helps develop more conscious observation and identify negative or dysfunctional patterns.

b) Identification of cognitive distortions: The therapist helps the client identify and understand cognitive distortions, such as catastrophic thinking, excessive generalization, or mental filtering. By becoming aware of these distortions, the client can begin to challenge them and replace them with more balanced and realistic thoughts.

c) Exploring values and goals: The therapist works with the client to identify personal values and goals. It involves reflecting on what is important to the client and the direction they want to take in life. By creating a clearer awareness of their values and goals, the client can make decisions and act in accordance with their own values.

d) Self-acceptance and self-compassion: The therapist encourages the development of self-acceptance and self-compassion. It involves teaching the client to

accept and understand their imperfections and to treat their own being with kindness and understanding. The therapist may use techniques such as guided discussion and reflection, writing exercises, or mindfulness practices to support the development of self-acceptance and self-compassion.

e) Body relaxation and awareness techniques: the therapist introduced techniques for relaxation and body awareness, such as: deep breathing, meditation or yoga. These techniques help reduce stress, increase presence in the present moment, and create a deeper connection with your own inner experience.

f) Exercises of taking responsibility and action: the therapist encourages the client to take responsibility for their own life and take concrete actions in the desired direction. By taking responsibility and acting consciously, the client can develop a stronger and more proactive self-awareness.

As topics of discussion for each component on which we intend to intervene, the following topics of self-reflection were proposed:

1. Self-awareness: Who am I, what passions do I have, or did I have when I was younger? What personal values guide my life? What am I not good at? Do I want to change anything in this regard? Where do I get validation from outside my organization?
2. Perception of choice: Who usually chooses for me? Why do we prefer not to choose? Costs/benefits when we don't choose. Can we learn from choices with poor outcomes if we didn't choose?
3. Locus of control: What should be different in my life to feel better? Are these expectations realistic? Who

should make these changes? How can they be implemented?

4. Reward for application: Can we achieve results effortlessly? When does this happen? How do we feel then? What effect does the result have on our self-esteem?

5. Social cynicism: What does it mean to trust someone? How do we choose trusted people? Does context influence trusting behavior? What expectations do we have when we give our trust? Are these expectations realistic?

The intervention was communicated to the experimental group in the form of an imaginary excursion with the theme "In search of well-being and balance" to avoid any association with burnout and reduce the chances of participation in the program.

In conclusion, self-monitoring has been used to increase self-awareness, identifying and restructuring cognitive distortions to reduce social cynicism, exploration of personal values to increase perception of choice, and empowerment to increase reward for application.

3.4.3. Participants

Using the recommendations for interpreting the results of the burnout scale (Maslach et al., 1996), 105 employees of a Romanian retail company, based in Bucharest, were invited to participate in the experimental group. The selection criterion was the total score obtained on the MBI burnout scale in the previous study, and participants with scores above 56 were selected, which was the beginning of the average burnout level (Ramirez et al., 1996). For the establishment of the control group,

another 100 employees were invited to participate, randomly selected from the list of participants in the previous study in order to have a balanced groups.

The experimental group was offered 10 weekly meetings. These meetings were held online because participants were distributed in all work points of the company and invitations to participate were sent personally, by email. In the email for the experimental group, information was provided about the schedule and duration of the meetings, and participants were invited to choose the day they prefer to participate from three options offered: Monday, Tuesday or Wednesday, between 13-14:30, at the suggestion of the human resources department, the proposed interval being located in the vicinity of lunch breaks. Out of the 105 invited employees, 50, 35 female and 15 male participants aged between 22 and 53 years registered, the average age being 36.85 years ($SD = 8,559$). These participants were evenly distributed over the three proposed days as follows: 17 in the group on Monday, 16 on Tuesday and 17 on Wednesday. As a total distribution, 28 participants were from Bucharest, and the rest from the 5 regional stores.

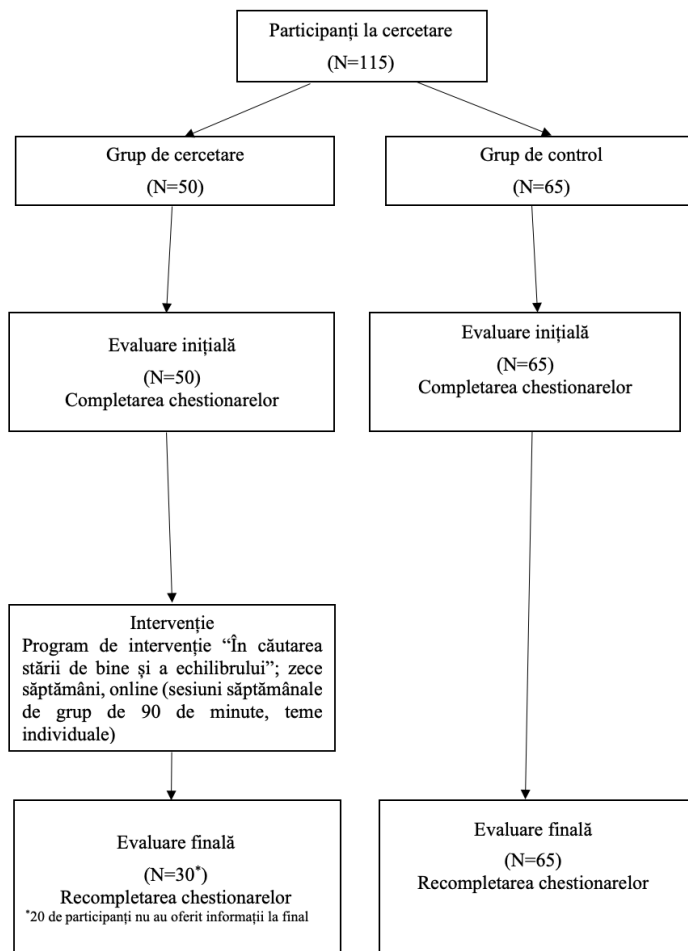
From the point of view of the highest level of education completed at the time of participation, one participant had a gymnasium, 21 participants had completed high school, 24 had an university, and 9 had post-graduate studies.

Seniority in the company was collected as a range, 4% of participants were less than one year old, 5% of participants were between 1 and 2 years old, 20% were between 2 and 5 years old, while 45% of them were between 5 and 10 years old and over 10 years old in the

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company had 25% of participants. The stages of the study and the number of participants at each stage can be found in Figure 5.

Figură 5. Fluxul de participanți la studiul 3



3.4.4. Results

The descriptive statistics of the data collected in this study indicate an asymmetric distribution, which is why we will use tests for nonparametrically distributed data.

The hypotheses of this study were tested using a Wilcoxon statistical test on paired samples that compared average ranks for both the control and experimental groups.

Hypothesis 1 – according to which the experimental group will experience a greater reduction in burnout levels than that of the control group, is not fully supported by the collected data.

Initial emotional exhaustion differed statistically significantly between the two groups, with an average value almost doubling – 15.11 for the control group and 28.23 for the experimental group – but this difference became statistically insignificant at the end. It is worth noting, however, an 84% increase in emotional exhaustion for the control group, with a degree of significance $p < 0.001$, while the experimental group registers a not statistically significant increase of only 1%. Depersonalization increases by 96% for the $p < 0.001$ control group and only 9% for the experimental group, but the difference is not statistically significant.

Only the lack of professional achievements shows statistically significant differences between the control group and the experimental group in both initial and final measurements. The lack of professional achievements shows an increase of 131% for the control group and only 31% for the experimental group, both with a degree of significance $p < 0.001$.

Therefore, we cannot claim that the intervention managed to reduce the burnout level of the experimental group, a group selected with an above-average burnout level, but it contributed to slowing the growth rate of symptoms by 83% for emotional exhaustion, by 88% for depersonalization and by 101% for lack of personal achievements.

Hypothesis 2 postulate that the personal autonomy of the experimental group will have a greater increase than that of the control group: self-esteem, locus of control, self-awareness and perception of choice will have greater positive variation in the experimental group compared to the control group, is partially supported by the collected data.

The most obvious increase, of 39%, is recorded by the perception of choice in the experimental group, compared to only 3% in the control group, highlighting statistically significant differences for the experimental group.

The locus of control has mean values showing statistically significant initial differences between the two groups, with the control group having a more internalized locus of control than the experimental group. In the end, both groups tended to externalize their locus of control, but the control group recorded a variation of 57% while the experimental group only 17%.

In terms of self-esteem and self-awareness, the lots do not show significant variations in average values.

Hypothesis 3, which proposed that social cynicism will have a negative variation and the reward for

application a positive one in the experimental group, is not supported by the collected data. The mean baseline value of social cynicism for the experimental group was 26% higher than that of the control group, and the difference is statistically significant $p < 0.001$. We note that the average value of social cynicism increases for the control group by 61%, and for the experimental group by only 25%, and the difference is statistically significant, $p < 0.001$.

The reward for application presents an inverse dynamic. Although the mean baseline values were 11% higher for the control group and the differences were statistically significant, the final mean values show differences of only 1%, although both groups show a significant decrease of 15% for the control group and 14% for the experimental group, and not increasing as proposed by this study. See Table 11.

Tabel 11. Variații ale mediilor și semnificația statistică a testului t

		Măsurători inițiale					Măsurători finale					Wilcoxon pt eșantioane pereche
	Grup	N	Minim	Maxim	Media	Deviație std.	Minim	Maxim	Media	Deviație std.		
Stimă de sine	C	65	3,40	5,00	4,58	0,435	2,40	5,00	4,59	0,544	510,50	
	E	30	3,00	4,90	4,03	0,453	3,20	5,00	4,07	0,518	191,50	
Locul controlului	C	65	8,00	31,00	18,25	5,340	22,00	34,00	28,63	2,012	2,50***	
	E	30	15,00	37,00	24,70	5,154	22,00	34,00	28,80	2,592	66,00***	
Conștiința de sine	C	65	2,20	5,00	4,57	0,66	2,60	5,00	4,59	0,525	539,00	
	E	30	2,80	5,00	4,01	0,672	3,20	5,00	4,10	0,532	171,00	
Percepția alegerii	C	65	2,00	5,00	4,01	0,824	2,60	5,00	4,13	0,373	905,00	
	E	30	1,40	4,60	2,83	0,827	3,40	4,60	3,93	0,381	3,00***	
Cinism social	C	65	1,00	4,50	2,42	0,805	2,63	4,88	3,89	0,502	22,00***	
	E	30	1,00	4,25	3,05	0,759	2,00	5,00	3,81	0,577	50,00***	
Răsplată pentru efort	C	65	3,63	5,00	4,55	0,389	2,63	4,88	3,89	0,502	1988,50***	
	E	30	3,00	4,88	4,04	0,432	2,25	4,25	3,50	0,453	401,00***	
Complexitate socială	C	65	2,75	5,00	4,16	0,509	1,50	4,50	2,71	0,734	2132,50***	
	E	30	3,00	4,75	4,08	0,382	1,75	4,38	3,10	0,623	426,00***	
Controlul destinului	C	65	1,00	4,88	2,51	0,867	2,63	4,50	3,47	0,541	50,00***	
	E	30	1,00	4,38	2,83	0,757	2,25	4,50	3,48	0,518	46,50***	
Religiozitate	C	65	1,00	4,50	3,08	1,006	2,50	4,88	3,71	0,554	218,00***	
	E	30	1,00	4,38	2,96	0,693	2,75	4,75	3,79	0,466	20,50***	
Epuizare emoțională	C	65	9,00	41,00	15,11	5,074	22,00	35,00	27,75	2,845	40,50***	
	E	30	16,00	45,00	28,23	7,668	17,00	41,00	28,50	5,488	181,00	
Depersonalizare	C	65	5,00	18,00	6,89	2,108	5,00	21,00	13,54	3,177	4,50***	
	E	30	7,00	26,00	13,97	5,196	4,00	23,00	15,20	4,664	116,00	
Lipsa realizărilor profesionale	C	65	8,00	28,00	14,17	4,300	24,00	44,00	32,79	2,982	0,00***	
	E	30	15,00	32,00	23,27	4,631	20,00	49,00	30,40	6,495	39,50***	

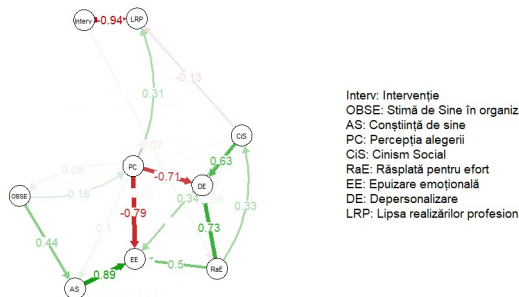
p<0,01 ; * p<0,001

Even if the sample of the experimental group does not have a size that provides a high degree of confidence for this type of analysis, it was verified, with the help of a network analysis with longitudinal data, how the cognitive behavioral group intervention influenced the variables of the model of structural equations validated in the previous study.

Our results show that the variable "Intervention" has a very high coefficient of influence (0.89), which means that it greatly influences the other variables. In contrast, the variable "Self-esteem in the organization" has a much lower influence coefficient (0.21), which means that it influences less the other variables.

Error! Reference source not found. highlights the influence of intervention in reducing the feeling of lack of professional achievements, while the perception of choice is responsible for reducing emotional exhaustion and depersonalization.

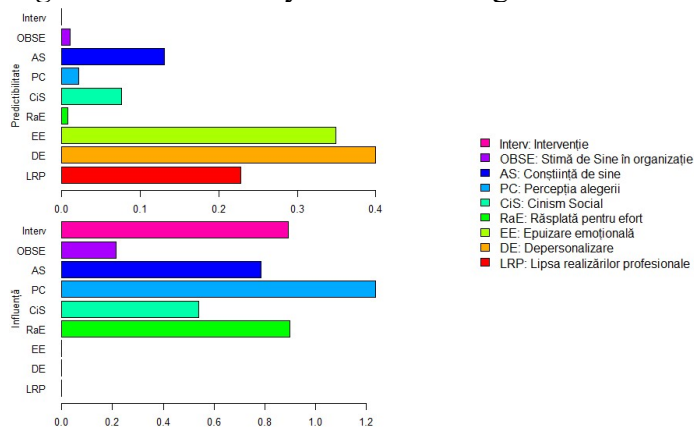
The variables with the highest predictability of change in the period between the two measurements were: depersonalization, emotional exhaustion, and lack of professional achievement.



The variables with the highest predictability of change in the period between the two measurements were: depersonalization, emotional exhaustion and lack of professional achievement.

Among social axioms, only social complexity and religiosity seem to have predictable variation. The influencing factors for these changes are: perception of choice, social complexity, reward for application, and group cognitive behavioral intervention. (see Figure3)

Figure3. Predictability and influencing factors



3.4.5. Discussion

This study aimed to test a group cognitive behavioral intervention applied to an experimental group, selected on the criterion of an above-average burnout score, in order to reduce the burnout value felt by participants. Reducing burnout levels has been proposed by increasing personal autonomy and modifying social cynicism and reward for application (the latter two, components of social axioms).

The personal autonomy of the experimental group increased the most in the area of choice perception (+28% compared to the control group). In the area of self-esteem and self-awareness, the changes were not statistically significant. Network analysis with longitudinal data, although performed on a batch insufficient to have an acceptable degree of confidence in this type of analysis, suggests an influence of intervention on lack of professional achievement.

In other words, participants in the experimental group learned to reevaluate their own professional achievements, which led to increased self-esteem and perception of choice. But network analysis also highlights that the perception of choice is the central element of influence on burnout. This is because people who are aware of the choices they make in their professional lives have a sense of control that is negatively correlated with emotional exhaustion and depersonalization (Karasek, 1992, apud Lambie, 2006).

From the point of view of social axioms undergoing the restructuring process, both social cynicism and reward for application suffer statistically significant variations because of group cognitive behavioral intervention. These variations are rather marginal in the case of reward for application and more important in the case of cynicism, but even so, the evolution has been increasing. Thus, the personal autonomy of the experimental group increased the most in the area of perception of choice, and within social axioms, cynicism suffered a 36% lower increase than that of the control group.

This means that discussions about personal values, the personal values test, and planning actions that give participants a sense of control over their life choices had an effect. Equally, discussions designed to capture dysfunctional thinking patterns and modify beliefs in social cynicism worked.

What happened at the level of burnout, the focus variable of our intervention? Even though the average baseline burnout values were almost double for the experimental group compared to the control group and the difference was statistically significant, at the end of the program, only the variation in lack of personal achievement between the two groups was statistically significant. Although the variation was positive, the experimental group had 83% less variation for emotional exhaustion, 88% less for depersonalization and 101% less for lack of personal achievement.

The partial validation of the hypotheses of this study additionally confirmed the hypotheses of the previous study regarding the link between social axioms and organizational behavior, but not the fact that social axioms can be partially subjected to the process of cognitive restructuring, at least not in the time and manner proposed by this study.

3.4.6. Limits and future directions

The first limit of this study was the size of the experimental group and the impossibility to randomly divide the participants selected according to the selection criterion burnout score above average into two equal groups, one for immediate intervention and one for delayed intervention. In this way, two sets of participants

with approximately equal initial scores could be compared and the effects of the intervention could be different.

Another limit is low participation in sessions of the experimental group. Of the 50 participants, 32 attended half of the meetings and only 30 provided post-intervention information. Also, a face-to-face intervention could generate other results in terms of participation and effects achieved.

The initial data was collected at the end of 2021 and an attempt was made to plan and carry out the intervention in early 2022. The additional workload generated by retail operators' promotions during the spring period, on the one hand, and the conflict in Ukraine, on the other, has hindered us. Thus, the intervention was carried out in June, July and August 2022 and the second set of data was collected in August 2022. This relatively large distance between measurements is another limitation of this study. The additional workload and conflict in Romania's vicinity may be factors that contributed to a 83% increase in emotional exhaustion, 88% in depersonalization and a 101% increase in professional achievement for the control group, but it cannot be excluded the existence of hidden variables that could not be controlled and that nevertheless affected the results of this study.

CHAPTER 4. CONCLUSIONS AND CONCLUDING DISCUSSIONS

The objectives of this work were to:

1. Assess the extent to which personal autonomy – composed of self-esteem in the organization, locus of control in the organization, and self-determination – is a protective factor against burnout. The first study evaluated to what extent personal autonomy can be a protective resource against burnout, starting from the JD-R job demands-resources model (Demerouti, *et al.*, 2001) and from the premise that burnout is the result of poor individual adaptation to work (Maslach *et al.*, 2001). *The hypothesis that greater personal autonomy is associated with a reduced level of burnout has been confirmed.*

The study indicated that people with high self-esteem, who know their own worth and the importance of their professional role, tend to experience low levels of burnout. On the other hand, the results suggested that people less aware of their professional value make greater efforts at work to validate their worth, which predisposes them to developing burnout.

Also, individuals with increased self-awareness and who perceive that they have control over their choices, making decisions that meet their needs for autonomy, competence and connection, show a reduced level of burnout.

People with an external locus of control were prone to higher levels of emotional exhaustion and reduced self-esteem in the organization. These people feel that they cannot control events in their professional environment, and this anxiety correlates with emotional exhaustion and depersonalization. This supports the study hypothesis and previous research (Miller, 1980), which shows that people with an internal locus of control have greater confidence in their social interaction skills, which

helps them avoid a high level of cynicism specific to the stage of depersonalization in burnout.

The first study also found that half of the variation in burnout level is explained by variations in self-esteem, self-awareness and perception of choice, which means that the level of self-awareness and self-worth in the organization, as well as the ability to make choices that meet the needs of competence, autonomy and connection, are key factors in determining the level of burnout.

2. Evaluate social axioms as an influencing factor on personal autonomy and in the relationship between personal autonomy and burnout.

The second study aimed to confirm, on a Romanian population, the results of Wei's study (2015) which found correlations between social cynicism and burnout, and the *correlations were confirmed* with approximately equal values of the coefficients, despite the difference between the groups. This result indicates that people with high levels of social cynicism invest extra effort that can lead to emotional exhaustion and long-term depersonalization, causing them to socially withdraw from a "world considered dangerous." This is consistent with Tartakovsky's research, which revealed high scores of emotional exhaustion in employees with high levels of social cynicism (Tartakovsky *et al.*, 2012). Thus, social cynicism turns out to be an ineffective coping strategy to a world perceived as unfair and disappointing (Anderson, 1996).

Self-esteem and perception of choice have an amplifying effect on the positive relationship between social cynicism and emotional exhaustion, as well as between social cynicism and depersonalization. People

with high levels of social cynicism, who have higher self-esteem, seem to go the extra mile, perhaps in a desire to differentiate themselves from a world they perceive as unfair and unfriendly, thus increasing the likelihood of developing emotional exhaustion.

Also, the perception of choice amplifies the effect of emotional exhaustion in people with a high level of social cynicism because these people feel an additional responsibility in the decision-making process. This responsibility leads them to go the extra mile, increasing the likelihood of developing chronic fatigue, which subsequently leads to emotional exhaustion and then depersonalization – that is, confirming the belief that they live in an unfair and disappointing world, which can lead to withdrawal from interactions.

The second study also aimed to centralize the results obtained in previous research conducted in Romania. Although variations were observed in scores at different points in time and in samples with different gender and age compositions, these differences did not reach a statistically significant level. This indicates a certain conceptual stability of social axioms and confirms the results of previous research (Bond *et al.*, 2004).

The structural model supported by the collected data aligns with the main theories and conceptual frameworks of burnout syndrome, such as the Job-Demands Resources Model (Bakker and Demerouti, 2014). These theories argue that both stressors (such as burnout and depersonalization) and resource factors (such as autonomy and social support) play a crucial role in developing and preventing burnout.

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Based on the results of study 2, it was concluded that personal autonomy is an important protective factor against burnout syndrome, especially in terms of emotional exhaustion and depersonalization. *This result constitutes the achievement of the second objective of the research.*

Figure4. Theoretical model proposed for study

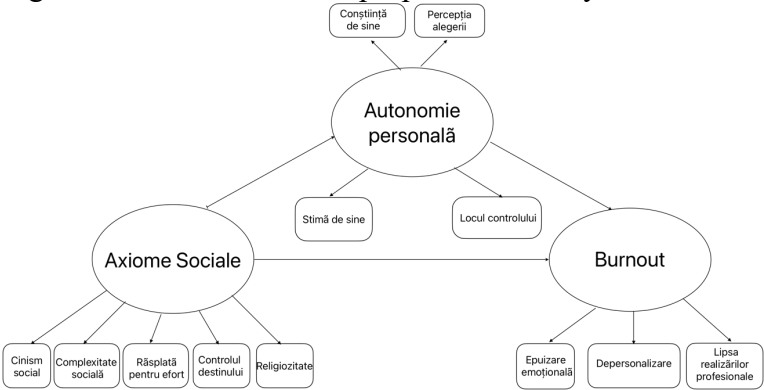
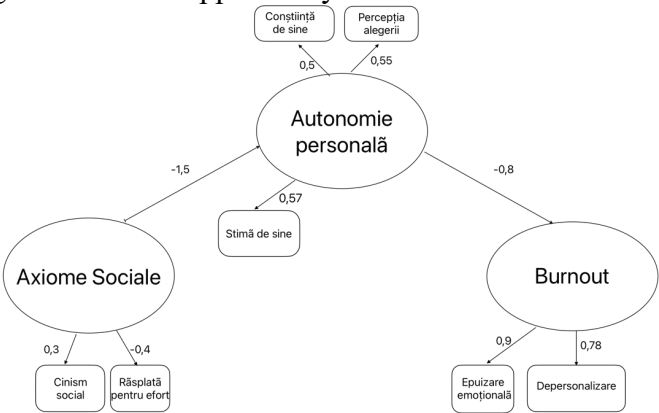


Figure5. Model supported by collected data



3) Test the possibility of modifying social beliefs, starting from the premise that cognitive behavioral therapy has techniques for modifying maladaptive personal beliefs (Holdevici, 2009)

4) Test the possibility of modifying personal resources that constitute personal autonomy – self-esteem, internalizing the locus of control and motivation in order to improve the burnout protection factor

In the third study, a cognitive-behavioral intervention was tested on an experimental group in order to reduce the level of burnout felt by participants. To achieve this, the aim was to increase personal autonomy and change attitudes of social cynicism and reward for application.

The results showed that personal autonomy increased the most in terms of choice perception in the experimental group (+28% vs. the control group). However, network analysis with longitudinal data indicated that these results cannot be attributed solely to the intervention. In fact, the influence of the intervention proved to be significant in reducing the lack of personal achievements, which was an objective of this work starting from the meta-analysis of Maricuțoiu *et al.*, (2016). The data suggest that participants in the experimental group learned to reevaluate their own professional achievements as a result of increased perception of choice.

Network analysis has also revealed that perception of choice is central to burnout. This is explained by the fact that people aware of the choices they make in their professional life feel that they have control over it, which has a negative correlation with emotional exhaustion and depersonalization (Karasek, 1992, apud Lambie, 2006).

Regarding the social axioms undergoing the restructuring process, both social cynicism and reward for application have registered statistically significant variations because of group cognitive-behavioral intervention. These variations only reduced the tendency to increase, not modified the axioms in the anticipated manner.

Despite the fact that the average baseline burnout values were almost twice as high in the experimental group compared to the control group, and the difference was statistically significant, at the end of the program the difference between the two groups became significant only for lack of professional achievement. There was a positive variation in burnout, but the experimental group saw 83% less variation for emotional exhaustion, 88% lower for depersonalization, and 101% less for lack of personal achievement.

Testing the possibility of modifying social beliefs was an objective achieved in study 3, the results show statistically significant changes in them but the trend was positive, while the objective of modifying personal resources that constitute personal autonomy in order to improve the burnout protection factor was partially achieved.

4.1. Contribution to the field of study

The first study assessed the relationship between personal autonomy and burnout and found that individuals with high self-esteem and a sense of control over their choices had lower levels of burnout.

On the other hand, individuals with low self-esteem and an external locus of control were more likely to experience burnout.

The study also found that self-awareness and the ability to make choices that meet the needs for autonomy, competence, and connection were key factors in determining burnout levels.

This study contributed to confirming, on a Romanian population, the results of Xanthopoulou's longitudinal study, which highlighted a link between self-esteem in the organization, along with self-efficacy and optimism as personal resources at time T1 and work involvement at time T2 (2 years apart), the correlation coefficient being 0.34 and $p < .01$, (Xanthopoulou et al., 2009).

The second study aimed to centralize previous research on burnout in Romania and found that there were no significant differences between outcomes. The study also confirmed previous research, which showed a correlation between social cynicism and burnout.

The study concluded that personal autonomy is an important protective factor against burnout, especially in terms of emotional exhaustion and depersonalization.

The contribution of this study was to confirm the relatively stable character of social axioms and to enrich the data collected with the questionnaire on social axioms in Romania. Moreover, a model of structural equations has been proposed that links social axioms with personal autonomy and burnout, this being, as far as we know, the first operationalization of such a model.

The third study tested a cognitive-behavioral intervention to reduce burnout in a group of participants. The intervention focused on increasing personal

autonomy and changing attitudes towards social cynicism and reward for application.

The study found that the intervention had a significant effect on reducing feelings of lack of personal achievement, which was a goal of this work. Although the experimental group was small, network analysis showed that perception of choice was central to the influence on burnout.

The study also found that social cynicism and reward for application changed significantly because of the intervention, but the trend was positive.

A contribution of this study is the proposal of a training model, a first attempt to modify social axioms through an original model of cognitive behavioral interventions.

4.2. Future research directions

A future approach would be to conduct studies on a larger scale, with more participants, and across multiple industries. This would help identify specific factors contributing to burnout in each industry and develop tailored interventions for each area.

Instead of using a cross-sectional research approach, researchers could use a longitudinal design, allowing burnout levels to evolve over time. This would help identify factors that can lead to the development of burnout and develop prevention strategies.

In addition, researchers could check structural patterns and interventions in other cultures. This would help assess the generalization of the findings of this study and identify specific cultural factors that may influence the development of burnout.

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