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# The self-concept of Ukrainian doctoral students: Means-ends decoupling at the state level

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#### Abstract

Employing the Twenty Statements Test and a framework of self-motives (self-esteem, self-efficacy, authenticity), this paper examines the self-concept of Ukrainian doctoral students while means-ends decoupling takes place at the state level. The latter implies that the practices of state policies are disconnected from the state's core goal of creating public welfare. Data are taken from a survey of 125 doctoral students at one Ukrainian university and supplemented with 30 personal interviews within the sample of respondents. The findings reveal that in the Ukrainian case, means-ends decoupling at the state level causes institutional complexity, which results in means-ends decoupling at the organisational level, which in turn leads to cultural complexity. Institutional and cultural complexities experienced by doctoral students trigger them to sustain meansends decoupling at the individual level. The main decoupling for most Ukrainian PhD students is that doctoral education. neither increases their employability nor contributes to the development of science, economy or society. Means-ends decoupling at all levels results not only in a severe diversion of financial and human capital but also has a negative impact on individuals' well-being, hindering their personal and professional development and evoking a sense of meaninglessness, alienation and cognitive dissonance.

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## 1 | INTRODUCTION

Internationally, there are many expectations about doctoral education. For instance, it is supposed to enhance the well-being of individuals as well as contribute to the development of the economy and society (Baschung, 2013; Kitagawa, 2014). Furthermore, doctoral students are expected to bridge national and international scientific dimensions (Kottmann, 2011). However, quality doctoral education requires recruitment of qualified candidates, effective supervision, sufficient financial support (Acker & Haque, 2015; Calma, 2011; Humphrey & Marshall, 2012) and a curriculum which corresponds to career aspirations. Doctoral education is viewed as the third cycle of the Bologna process, while doctoral students are considered as early career researchers (EUA, 2007). Whatever the aims and means, doctoral education involves the development of the self-concept of doctoral students, guided by such motives as self-esteem, self-efficacy and authenticity (Gecas, 1991). The self-concept of individuals reflects the content and organisation of society (Gecas, 1982, 1986). However, society may suffer from means-ends decoupling at the state level, which implies that the policies and practices of the state are disconnected from its core goal of creating public welfare (Hladchenko & Pinheiro, 2018; Hladchenko, Westerheijden, & de Boer, 2018). Such means-ends decoupling occurs, for instance, in oligarchic economies, in which the state is captured by exploitative, rent-seeking oligarchies in business and politics (Guriev & Sonin, 2009). This bleak picture describes numerous post-communist countries (Hellman, 1998), one of which is Ukraine (Åslund, 2000; Yurchenko, 2018).

Thus, this study aims to explore the self-concept of Ukrainian doctoral students while means-ends decoupling takes place at the state level. Data are taken from a survey amongst 125 doctoral students at one Ukrainian university and supplemented with 30 personal interviews from amongst those responding to the survey.

# 2 | THEORETICAL FRAMEWORK

Sociological institutionalism is one of the approaches of new institutionalism, grounded in a cultural perspective (Hall & Taylor, 1996). The sociological institutionalists define culture as institutions—'symbol systems, cognitive scripts, and moral templates that provide the "frames of meaning" guiding human action' (Hall & Taylor, 1996, p. 947). Decoupling is one of the basic concepts of sociological institutionalism (Meyer, 2010). Bromley and Powell (2012) distinguished between policy–practice decoupling and means—ends decoupling. The former refers to a gap between policy and practice, the classical object of implementation studies. The latter refers to a gap between practices and outcomes (Bromley & Powell, 2012; see also Grodal & O'Mahony, 2015), that is, policies may be executed according to plan, but nevertheless intended outcomes are not achieved. It occurs amongst other causes because the implemented practices are compartmentalised from the core goal of the actor, for instance, state, organisation or individual (Bromley & Powell, 2012). Consequently, means—ends decoupling generates an 'efficiency gap' (Dick, 2015, p. 900) and the diversion of critical resources (Bromley & Powell, 2012). Means—ends decoupling is difficult to sustain unless the (individual) actors maintain confidence in the policy or practice (Bromley & Powell, 2012; Dick, 2015). If actors gain awareness of the incompatibility between their practices and outcomes, they experience cognitive dissonance (Dick, 2015) which refers to an individual holding simultaneously two psychologically inconsistent cognitions (Aronson, 1969).

Means-ends decoupling at the state level implies that the policies and practices of the state do not contribute to its core goal of creating public welfare. Moreover, means-ends decoupling at the state level results in institutional complexity (Hladchenko, Westerheijden, et al., 2018) whenever individuals and organisations confront incompatible prescriptions either from one or multiple institutional logics (Greenwood, Raynard, Micelotta, & Lounsbury, 2011; Meyer & Höllerer, 2016). Institutional logics are 'a set of material practices, assumptions, values, beliefs, and rules by which individuals ... provide meaning to their socially constructed reality' (Thornton & Ocasio, 1999, p. 804). As the means and ends of organisational and individual actors are embedded within prevailing institutional logics (Thornton & Ocasio, 2008), institutional complexity constraining actors' means and ends triggers

means-ends decoupling at the organisational and individual levels (Bromley & Powell, 2012; see also Hladchenko & Westerheijden, 2018). Meanwhile, means-ends decoupling at the organisational level leads to cultural complexity—pluralistic and contradictory cultures within the organisation (Browaeys & Baets, 2003).

'The content and organisation of society' determine the content and organisation (structure) of the self-concept of an individual (Gecas, 1982, p. 10). The self-concept is 'the concept the individual has of himself as a physical, social, and spiritual or moral being' (Gecas, 1982, p. 3; see also Rosenberg, 1979). The Twenty Statements Test (Kuhn & McPartland, 1954) in which the individual is asked 20 times 'Who am I?' is an instrument to measure the self-concept. According to Campbell, Assanand, and Paula (2003), the content of the self-concept comprises both one's self-beliefs and self-evaluations through individuals' responses to the questions 'Who am I?' and 'How do I feel about myself?' In turn, Kuhn and McPartland (1954) distinguished between consensual and subconsensual references, while Gecas (1973) defined them as categorical/substantive and evaluative/attributive dimensions of self-concept. The categorical dimension links an individual to social structures through the roles and memberships which a society provides to an individual. Each role can be categorised as an identity or role-identity. Thus, the self-concept can be considered as a hierarchy of identities (Gecas, 1973). Meanwhile, Lok (2010) pointed out that each individual identity implies identity work, as individuals mediate meanings provided by the social environment and their own notions of who they are (self-identity) derived from their practices. Thus, the identity of an individual can be viewed as a constant dialogue process with significant others (Taylor, 1991) and as a search for answers to questions such as 'Who am I?' and 'Where do I belong?' (Välimaa, 1998). In the case of academia, next to the Higher Education institution, resources for identities reside in the individual, disciplinary, professional and national cultural dimensions (Välimaa, 1998). They are cultural entities to which academics belong and with which they interact. Hence, these cultural dimensions provide roles which academics perform. The professional cultural dimension is mainly influenced by the global disciplinary communities and by the national cultural dimension. The latter can be considered as the institutional logics of the main societal institutions, for example, state, market and profession.

Gecas (1982, 1991) defined three self-motives for an individual to maintain and enhance a particular self-concept: self-esteem, self-efficacy and authenticity. These self-motives refer to driving, evaluative and emotional dimensions of an individual's self-concept. Gecas (1991) explained the motivational effect of self-esteem, self-efficacy and authenticity through positive and negative states associated with each motive. Individuals strive to enhance positive states while avoiding negative ones.

Self-esteem refers to the motivation of individuals to evaluate themselves positively and to maintain this positive evaluation. To measure an individual's overall self-esteem, Rosenberg (1965) developed a unidimensional scale. However, self-esteem can distort perceptions and self-concepts as individuals are biased towards favourable assessments (Gecas, 1982). Both extremely negative and extremely positive self-esteem may be harmful to individuals (Gecas, 1991). Furthermore, self-esteem forms the basis of cognitive dissonance theory (Aronson, 1969).

Self-efficacy reflects the motivation of individuals to view themselves 'as a causal agent in the environment ... to experience oneself in agentic terms' (Gecas, 1991, p. 175). A lack of self-efficacy causes individuals to experience alienation due to 'a disjuncture between action and self' (Gecas, 1991, p. 176; see also Seeman, 1959). To experience themselves as efficacious, individuals should have control over their labour and life circumstances. Self-efficacy is akin to the notion of mastery (Pearlin, Nguyen, Schieman, & Milkie, 2007) and varies with the situation to which it is applied, hence it is not a fixed personality trait. Pearlin et al. (2007) asserted that successful experiences inspire the enhancement of the sense of control over life circumstances, thus the enhancement of self-efficacy.

Authenticity refers to 'the individual's striving for meaning, coherence, and understanding' (Gecas, 1991, p. 177). It operates within the realm of beliefs, meanings and understandings of an individual about self. Authenticity can be viewed as 'an assessment and significance of what one is and does' (Gecas, 1986, p. 141).

By virtue of having an identity to which individuals are committed, they are motivated to view it positively (self-esteem), to increase their competence in this identity (self-efficacy) and to experience it as meaningful and important (authenticity). Moreover, individuals tend to merge with those roles in which their investment has been the greatest (Turner, 1978). If doctoral students feel good about the identities of a PhD student and a researcher,

that is, if they have a high self-esteem, a high self-efficacy and a high authenticity, they will work hard to succeed. Otherwise, they will either fail or change their goals.

As means—ends decoupling at the state level entails a severe diversion of intellectual capital and has negative effects on the individuals' well-being (Hladchenko & Westerheijden, 2018), thus on their self-concept, we surmise that respondents neither view their identities of a PhD student and a researcher as meaningful, nor that the PhD process leads to personal growth towards such identities, and on that basis propose two hypotheses:

H1: The claimed identities of a PhD student and a researcher correlate neither with self-esteem nor self-efficacy under conditions of means—ends decoupling at the state level.

*H2*: The self-esteem and self-efficacy do not increase with the number of years in doctoral study under conditions of means–ends decoupling at the state level.

Thus, employing sociological institutionalism and three self-motives developed by Gecas (1982, 1991), we aim to explore the self-concept of doctoral students in a Ukrainian university while means-ends decoupling takes place at the state level and test our hypotheses.

## 3 | DOCTORAL EDUCATION IN UKRAINE: NATIONAL DIMENSION

In 1991, the fall of the Soviet Union allowed Ukraine to be established as an independent state. However, as Ukraine for more than 70 years was part of the Soviet Union, which could well be interpreted as colonial dependency on the Kremlin (Oleksiyenko, 2016), after such a history, the civil society was underdeveloped. Moreover, neither lustration, decommunisation nor de-Sovietisation took place after 1991. Under such conditions, the dominance of old Soviet elites in governmental institutions and the concentration of resources within the state, set the stage for extraordinary rent-seeking (Åslund, 2000). In 1993-1994 the actors from the Soviet shadow economy joined the government to maximise their income. The rent-seeking of the ruling elite resulted in the inconsistent implementation of privatisation and in the emergence of a post-Soviet oligarchy consisting of the old Soviet political elite and actors from the Soviet shadow economy (Åslund, 2000, 2001; Yurchenko, 2018). As oligarchs dominated both the economy and politics, the state agencies were converted from their intended outcomes—the representation of public interests—to other ends, in particular to exploitation by business and political oligarchies, for example, protection of monopolies and economic subsidies (Åslund, 2000, 2001). Conditions beneficial to rent-seeking behaviour were maintained through partial reforms and the blocking of radical reforms by business and political elites (Hellman, 1998). These processes led to the emergence of a regime characterised as a 'neoliberal kleptocracy', which implies that 'typical neoliberal features are exacerbated by omnipresent corruption and institutionalised state asset embezzlement' (Yurchenko, 2018, p. 4). Drawing on our theoretical framework, in Ukraine, means-ends decoupling was sustained at the state level. It resulted in inconsistencies within the institutional logic of the state and consequently in a high degree of institutional complexity experienced by all organisations and individuals who did not belong to the privileged rent receivers. The public disappointment with the exploitation of governmental institutions by the personal interests of powerful oligarchies was a main factor behind the Revolution of Dignity in 2014. However, even after the revolution, the state remains a source of financial gains for powerful actors (Härtel & Umland, 2016).

As regards the Higher Education system in Ukraine, it underwent marketisation and massification after 1991. Meanwhile, a significant part of the Soviet model of Higher Education was preserved. In particular, the division between primarily teaching-oriented Higher Education institutions and research institutes of the academy of sciences remained (Hladchenko, Dobbins, & Jungblut, 2018).

Though Ukraine joined the Bologna process in 2005 (Gomilko, Svyrydenko, & Terepyshchyi, 2016), which mentions only the PhD as the third-cycle degree, the two-level system of scientific degrees (candidate of science<sup>1</sup> and doctor of sciences) as well as the bureaucratic process of the defence of doctoral theses in permanent scientific boards were inherited unchanged from the Soviet model. The same refers to the requirements for candidate of science, for instance, PhD students to pass exams in a foreign language, philosophy and their specialism before they are allowed to defend their theses. Meanwhile, as there is no contract research, doctoral research is driven by the curiosity of the researchers, rather than by the needs of the economy or society (Hladchenko & Pinheiro, 2018). Such a situation would be fine if doctoral research took place at the forefront of international research, but we shall see from the interview findings (below) that PhD students do not see their work like that. Regarding the requirements for the defence of doctoral theses, until 2012, next to the thesis, doctoral students were obliged to present the results of their research in articles only in Ukrainian professional journals. In 2012, the education ministry added requirements of international publication activity. Presently, one article in an international journal and four articles in Ukrainian professional journals are obligatory for a PhD degree, and four international articles and 16 articles in Ukrainian professional journals for the doctor of sciences degree (Ministry of Higher Education & Science, Youth & Sport, 2012). In 2017, the total number of Ukrainian professional journals was around 1,100. However, as a rule, they do not conduct peer review and charge a fee for publication. The average length of articles is 2,500 words, which falls far short of the length that is necessary for an article with solid theory and empirical data.

From 1990 to 2010, the total number of PhD students in Ukrainian Higher Education institutions increased 2.5 times from 13,374 to 34,653 and then followed a decrease to 25,963 in 2016 (State Statistic Service of Ukraine, 2018). Meanwhile, in 2014 the efficiency of the PhD programmes at Higher Education institutions and the research institutes of the academies of sciences was 27 and 12 per cent, respectively (Wynnyckyj, 2016).

According to Ukrainian legislation, doctoral students do not receive a salary but a scholarship. If in 2016 the scholarship of a PhD student was 58 euros per month, in 2017 it was increased to 121 euros per month. However, none of these amounts is enough to cover even the basic needs. Moreover, Ukrainian universities significantly lack research facilities.

Thus, in the Ukrainian case, means-ends decoupling at the state level, which implies contradictions within the institutional logic of the state, results in institutional complexity for Ukrainian doctoral students. They are expected to do research while neither state nor industry is interested in the results of their research. Further, the state also does not provide the necessary conditions for doctoral students, that is, funding for sufficient scholar-ships and research infrastructure.

## 4 | RESEARCH DESIGN

The study adopts a single-case approach (Eisenhardt, 1989) to explore the self-concept of Ukrainian doctoral students. The case involves a large Ukrainian university established in the interbellum and currently, it is amongst the top 10 Ukrainian universities. According to the university statistics, firstly, around 30 per cent of PhD students defend their theses in time, while the total percentage of defended theses is around 60 per cent. Secondly, approximately 30 per cent of PhD students continue their career as academics at this university. Most doctoral students study for free, though there are self-paid doctoral students in economics and law.

The data for this study were collected between March 2016 and February 2017 through a paper questionnaire spread amongst PhD students. An online form was also developed but only four respondents filled it out. The effort needed to reach respondents illustrates that the culture of empirical social research is rather underdeveloped in the Ukrainian university community. To measure self-esteem, we applied the unidimensional scale of Rosenberg (1965). For measuring self-efficacy, we used Pearlin's master scale (Pearlin et al., 2007). To explore the content of the self-concept of Ukrainian doctoral students, we used the Twenty Statements Test. Moreover, respondents

were asked to assess their satisfaction of being a PhD student and their satisfaction with efficacy as a PhD student on a 1–4 Likert scale.

Next to closed questions, the questionnaire also contained an open-ended question: 'What meaning does doctoral education provide for you?' In addition to the survey, 30 semi-structured interviews that lasted from 30 to 90 minutes were conducted with doctoral students who filled out the questionnaire.

#### 5 | FINDINGS: SELF-CONCEPT OF UKRAINIAN DOCTORAL STUDENTS

There are 125 respondents of the survey; the gender balance (49 males, 76 females) is roughly representative of 444 doctoral students affiliated with this university. Also regarding age (96 below 30), the sample is fairly representative and all areas of knowledge are well represented (Table 1).

Concerning the results of the Twenty Statements Test (TST), amongst 125 respondents only 43 define themselves as doctoral students. The identity of a researcher is claimed by 33 respondents (two of them claim to be a young researcher and two a future researcher); amongst them, seven are employed as junior researchers or lecturers. Of these respondents, 21 claim identities both of a researcher and a PhD student. Meanwhile, none of the respondents claims in the TST an affiliation with the university, that is, they view university membership neither positively nor as meaningful.

As regards other identities claimed by the doctoral students (Table 2), nationality is a rather rarely claimed identity amongst the respondents (N = 13). Only one respondent claims to love the Ukrainian language (mechanics, third year), while another one defines himself as a kozak (economics, first year)—a historical term used to

**TABLE 1** Key characteristics of doctoral students (N = 125)

Variable	Percentage
Gender	
Male	49
Female	76
Age	
Under 30	96
30-39 years	22
40-45 years	5
Years of PhD enrolment	
1st year	45
2nd year	37
3rd year	36
4th year and more	7
Discipline	
Engineering sciences (mechanics, biotechnology, manufacturing, IT)	27
Veterinary medicine	24
Economics	22
Agriculture	16
Natural sciences (ecology, chemistry, biology, geography)	15
Pedagogics and philosophy	11
Law	11

**TABLE 2** Categorical and attributive dimensions of the self-concept of Ukrainian doctoral students<sup>a</sup>

Categorical dimension of self-concept           Ascribed characteristics           Gender         46           Name         2           Nationality         13           Patriot         5           Roles and memberships	Identity	Number of respondents
Gender         46           Name         2           Nationality         13           Patriot         5           Roles and memberships         8           Parent         22           Spouse         22           Offspring         44           Sibling         25           Grandson/granddaughter         9           Daughter-in-law         4           Uncle/aunt         3           Member of the family         4           Peers (friend)         36           Intellectual concerns         9           Altruism         5           Sign of zodiac         1           Occupation and work         45           Physical self/body image positive         6           Likes roles         21           Sportsman         6           Abstract identification         63           Religious (Christian)         2           Attributive dimensions of self-concept         7           Intellectual concern         74           Physical self/body image (positive)         48           Physical self/body image (negative)         5           Sense of moral worth (negative)         7 <td>Categorical dimension of self-concept</td> <td></td>	Categorical dimension of self-concept	
Name         2           Nationality         13           Patriot         5           Roles and memberships         Parent           Parent         22           Spouse         22           Offspring         44           Sibling         25           Grandson/granddaughter         9           Daughter-in-law         4           Godfather/mother         4           Uncle/aunt         3           Member of the family         4           Peers (friend)         36           Intellectual concerns         9           Altruism         5           Sign of zodiac         1           Occupation and work         45           Physical self/body image positive         6           Likes roles         21           Sportsman         6           Abstract identification         63           Religious (Christian)         2           Ittributive dimensions of self-concept         7           Intellectual concern         74           Physical self/body image (positive)         48           Physical self/body image (positive)         7           Sense of moral worth (negative)	Ascribed characteristics	
Nationality         13           Patriot         5           Roles and memberships         22           Spouse         22           Offspring         44           Sibling         25           Grandson/granddaughter         9           Daughter-in-law         4           Godfather/mother         4           Uncle/aunt         3           Member of the family         4           Peers (friend)         36           Intellectual concerns         9           Altruism         5           Sign of zodiac         1           Occupation and work         45           Physical self/body image positive         6           Likes roles         21           Sportsman         6           Abstract identification         63           Religious (Christian)         2           Attributive dimensions of self-concept         1           Intellectual concern         74           Physical self/body image (positive)         48           Physical self/body image (nositive)         5           Sense of moral worth (positive)         7           Sense of self-determination (positive)         70 <t< td=""><td>Gender</td><td>46</td></t<>	Gender	46
Patriot         5           Roles and memberships           Parent         22           Spouse         22           Offspring         44           Sibling         25           Grandson/granddaughter         9           Daughter-in-law         4           Godfather/mother         4           Uncle/aunt         3           Member of the family         4           Peers (friend)         36           Intellectual concerns         9           Altruism         5           Sign of zodiac         1           Occupation and work         45           Physical self/body image positive         6           Likes roles         21           Sportsman         6           Abstract identification         63           Religious (Christian)         2           Altributive dimensions of self-concept           Intellectual concern         74           Physical self/body image (positive)         48           Physical self/body image (negative)         5           Sense of moral worth (positive)         103           Sense of self-determination (positive)         70           Sense of self-determination	Name	2
Roles and memberships           Parent         22           Spouse         22           Offspring         44           Sibling         25           Grandson/granddaughter         9           Daughter-in-law         4           Godfather/mother         4           Uncle/aunt         3           Member of the family         4           Peers (friend)         36           Intellectual concerns         9           Altruism         5           Sign of zodiac         1           Occupation and work         45           Physical self/body image positive         6           Likes roles         21           Sportsman         6           Abstract identification         63           Religious (Christian)         2           Attributive dimensions of self-concept           Intellectual concern         74           Physical self/body image (positive)         48           Physical self/body image (negative)         5           Sense of moral worth (positive)         103           Sense of self-determination (positive)         7           Sense of self-determination (negative)         7           <	Nationality	13
Parent         22           Spouse         22           Offspring         44           Sibling         25           Grandson/granddaughter         9           Daughter-in-law         4           Godfather/mother         4           Uncle/aunt         3           Member of the family         4           Peers (friend)         36           Intellectual concerns         9           Altruism         5           Sign of zodiac         1           Occupation and work         45           Physical self/body image positive         6           Likes roles         21           Sportsman         6           Abstract identification         63           Religious (Christian)         2           Attributive dimensions of self-concept         7           Intellectual concern         74           Physical self/body image (positive)         48           Physical self/body image (negative)         5           Sense of moral worth (negative)         7           Sense of moral worth (negative)         7           Sense of self-determination (positive)         70           Sense of self-determination (negative)	Patriot	5
Spouse         22           Offspring         44           Sibling         25           Grandson/granddaughter         9           Daughter-in-law         4           Godfather/mother         4           Uncle/aunt         3           Member of the family         4           Peers (friend)         36           Intellectual concerns         9           Altruism         5           Sign of zodiac         1           Occupation and work         45           Physical self/body image positive         6           Likes roles         21           Sportsman         6           Abstract identification         63           Religious (Christian)         2           Attributive dimensions of self-concept         1           Intellectual concern         74           Physical self/body image (positive)         48           Physical self/body image (negative)         5           Sense of moral worth (positive)         7           Sense of moral worth (positive)         7           Sense of moral worth (negative)         7           Sense of self-determination (positive)         7           Sense of self-determi	Roles and memberships	
Offspring         44           Sibling         25           Grandson/granddaughter         9           Daughter-in-law         4           Godfather/mother         4           Uncle/aunt         3           Member of the family         4           Peers (friend)         36           Intellectual concerns         9           Altruism         5           Sign of zodiac         1           Occupation and work         45           Physical self/body image positive         6           Likes roles         21           Sportsman         6           Abstract identification         63           Religious (Christian)         2           Attributive dimensions of self-concept         1           Intellectual concern         74           Physical self/body image (positive)         48           Physical self/body image (negative)         5           Sense of moral worth (positive)         103           Sense of self-determination (negative)         7           Sense of self-determination (negative)         7           Interpersonal style (positive)         103           Interpersonal style (negative)         7	Parent	22
Sibling         25           Grandson/granddaughter         9           Daughter-in-law         4           Godfather/mother         4           Uncle/aunt         3           Member of the family         4           Peers (friend)         36           Intellectual concerns         9           Altruism         5           Sign of zodiac         1           Occupation and work         45           Physical self/body image positive         6           Likes roles         21           Sportsman         6           Abstract identification         63           Religious (Christian)         2           Attributive dimensions of self-concept         1           Intellectual concern         74           Physical self/body image (positive)         48           Physical self/body image (negative)         5           Sense of moral worth (positive)         103           Sense of moral worth (negative)         7           Sense of self-determination (negative)         7           Sense of self-determination (negative)         7           Interpersonal style (positive)         103           Interpersonal style (negative)         7 <td>Spouse</td> <td>22</td>	Spouse	22
Grandson/granddaughter         9           Daughter-in-law         4           Godfather/mother         4           Uncle/aunt         3           Member of the family         4           Peers (friend)         36           Intellectual concerns         9           Altruism         5           Sign of zodiac         1           Occupation and work         45           Physical self/body image positive         6           Likes roles         21           Sportsman         6           Abstract identification         63           Religious (Christian)         2           Attributive dimensions of self-concept           Intellectual concern         74           Physical self/body image (positive)         48           Physical self/body image (negative)         5           Sense of moral worth (positive)         103           Sense of moral worth (negative)         7           Sense of self-determination (negative)         7           Interpersonal style (positive)         103           Interpersonal style (negative)         7	Offspring	44
Daughter-in-law         4           Godfather/mother         4           Uncle/aunt         3           Member of the family         4           Peers (friend)         36           Intellectual concerns         9           Altruism         5           Sign of zodiac         1           Occupation and work         45           Physical self/body image positive         6           Likes roles         21           Sportsman         6           Abstract identification         63           Religious (Christian)         2           Attributive dimensions of self-concept           Intellectual concern         74           Physical self/body image (positive)         48           Physical self/body image (negative)         5           Sense of moral worth (positive)         103           Sense of moral worth (negative)         7           Sense of self-determination (positive)         70           Sense of self-determination (negative)         7           Interpersonal style (positive)         103           Interpersonal style (positive)         7	Sibling	25
Golfather/mother         4           Uncle/aunt         3           Member of the family         4           Peers (friend)         36           Intellectual concerns         9           Altruism         5           Sign of zodiac         1           Occupation and work         45           Physical self/body image positive         6           Likes roles         21           Sportsman         6           Abstract identification         63           Religious (Christian)         2           Attributive dimensions of self-concept         1           Intellectual concern         74           Physical self/body image (positive)         48           Physical self/body image (negative)         5           Sense of moral worth (positive)         103           Sense of self-determination (positive)         70           Sense of self-determination (negative)         7           Interpersonal style (positive)         103           Interpersonal style (positive)         103	Grandson/granddaughter	9
Uncle/aunt         3           Member of the family         4           Peers (friend)         36           Intellectual concerns         9           Altruism         5           Sign of zodiac         1           Occupation and work         45           Physical self/body image positive         6           Likes roles         21           Sportsman         6           Abstract identification         63           Religious (Christian)         2           Attributive dimensions of self-concept           Intellectual concern         74           Physical self/body image (positive)         48           Physical self/body image (negative)         5           Sense of moral worth (positive)         103           Sense of self-determination (positive)         7           Sense of self-determination (negative)         7           Interpersonal style (positive)         103           Interpersonal style (positive)         103	Daughter-in-law	4
Member of the family         4           Peers (friend)         36           Intellectual concerns         9           Altruism         5           Sign of zodiac         1           Occupation and work         45           Physical self/body image positive         6           Likes roles         21           Sportsman         6           Abstract identification         63           Religious (Christian)         2           Attributive dimensions of self-concept           Intellectual concern         74           Physical self/body image (positive)         48           Physical self/body image (negative)         5           Sense of moral worth (positive)         103           Sense of moral worth (negative)         7           Sense of self-determination (positive)         7           Sense of self-determination (negative)         7           Interpersonal style (positive)         103           Interpersonal style (positive)         103           Interpersonal style (negative)         7	Godfather/mother	4
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Intellectual concerns         9           Altruism         5           Sign of zodiac         1           Occupation and work         45           Physical self/body image positive         6           Likes roles         21           Sportsman         6           Abstract identification         63           Religious (Christian)         2           Attributive dimensions of self-concept         74           Intellectual concern         74           Physical self/body image (positive)         48           Physical self/body image (negative)         5           Sense of moral worth (positive)         103           Sense of self-determination (positive)         7           Sense of self-determination (negative)         7           Interpersonal style (positive)         103           Interpersonal style (negative)         7	Member of the family	4
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Interpersonal style (negative) 7	Sense of self-determination (negative)	7
	Interpersonal style (positive)	103
Psychic style (positive) 99	Interpersonal style (negative)	7
	Psychic style (positive)	99
Psychic style (negative) 12	Psychic style (negative)	12
Work concerns 40	Work concerns	40
Social status (negative) 1	Social status (negative)	1

Identity	Number of respondents
Altruism	36
Age	5
Patriotic	1
Religious	3

<sup>a</sup>We applied the classification developed by Gecas (1973). In particular, moral worth—good, honest; self-determination—ambitious, confident; altruism—helpful; interpersonal style—friendly, shy, aggressive; psychic style—happy, moody, proud, depressed.

denote Ukrainian warriors. The categorical identities related to sport and religion are also rather rare, N = 6 and 2, respectively.

In relation to the attributive dimension of self-concept, 27 individuals (21.6%) describe themselves using attributes with a negative meaning. Moreover, 15 of them use more than one negative attribute. However, several respondents characterise themselves using attributes with opposite meanings, for instance, 'friendly-aggressive' (economics, first year, A03), 'tired-strong by spirit' (economics, first year, A04), 'boring-interesting' (economics, first year, A05), 'good and kind-egoist, grudge-bearing' (economics, first year, A06) and 'lazy-hardworking' (agriculture, first year). Thus, they experience cognitive dissonance holding psychologically inconsistent cognitions. These findings resonate with one case of an absolute inconsistency between low self-esteem equal to 27 and the respondent claiming herself as 'self-realised, satisfied, successful, confident' (economics, second year).

With N = 125, a test  $p < .05^2$  is considered for two-tailed probabilities. On the relations between the dependent and independent variables, our findings reveal a correlation between increased age and satisfaction of being a PhD student (0.255) (Table 3). Also, there are negative correlations between marital status and both self-esteem (-0.200) and self-efficacy (-0.245). These correlations may be due to a higher level of financial needs of married doctoral students and their larger dissatisfaction with the remuneration that they receive at the university. Concerning the hypotheses, we found no correlations between the claimed identity of a PhD student and either self-esteem (-0.051) or self-efficacy (0.007). The same refers to the claimed identity of a researcher and self-esteem (0.08) and self-efficacy (0.007), both of which support H1. The year of study correlates neither with self-esteem (0.002) nor self-efficacy (0.004), which supports H2. Moreover, there are no correlations between the claimed identities of a PhD student (0.048) and a researcher (0.029) and the increase in the number of years of study.

Regarding distinctions amongst the disciplines (Table 4), the PhD students in economics have the lowest median of self-esteem, which is probably due to a significant gap between the size of scholarship which doctoral students receive at the university and the salaries they could earn in the private sector. As respondents' self-efficacy

**TABLE 3** Correlations with dependent variables (p < .05 for two-tailed probabilities)

	Age	Gender	Year of study	Marital status
Self-esteem	0.117	0.066	-0.002	-0.200
Self-efficacy	0.060	-0.121	-0.004	-0.245
Satisfaction of being a PhD student	.255	-0.068	-0.041	0.030
Satisfaction with efficiency as a PhD student	0.138	0.171	0.023	-0.016
Identity of a PhD student	-0.180	0.029	0.048	-0.030
Identity of a researcher	-0.067	0.076	0.029	0.066

Agriculture

Natural sciences

Pedagogics and

philosophy

Law

	Median, self-esteem (max. 40)	Median, self-ef- ficacy (max. 28)	Median, satisfaction of being a PhD student (max. 4)	Median, satisfac- tion with efficacy as a PhD student (max. 4)	Satisfaction of being a PhD student/ self-esteem	Satisfaction of being a PhD student/ self-efficacy
Engineering sciences	31	20	3	3	0.250	0.250
Veterinary medicine	30	19	3	3	0.021	0.123
Economics	29	20	3	2	0.302	0.532

3

3

3

4

3

3

3

-0.079

0.685

0.212

-0.377

-0.070

0.586

0.128

0.163

**TABLE 4** Correlations depending on the discipline

30

33

32

32

19

19

18

21

is not high (Table 4), they do not see themselves as causal agents. We can trace rather a high median of self-esteem, self-efficacy and satisfaction of being a PhD student in law. However, it is not due to the identity of a PhD student, as the satisfaction of being a PhD student correlates neither with self-esteem (-0.377) nor self-efficacy (0.163).

On the relations between the categorical dimension of self-concept and independent (age and gender) and dependent variables (self-esteem and self-efficacy), female gender correlates positively with both a categorical statement (0.252) and an abstract identification (0.180). In the case of attributive dimension, self-esteem correlates only with a positive characteristic about the physical self (0.248). We also focused attention on the attribute strong. However, we did not find any significant correlations with self-esteem (0.084), self-efficacy (0.116), age (-0.068) or female gender (-0.072).

After the quantitative analysis, we turn to the qualitative analysis. This gives additional insight into the research question of the self-concept of Ukrainian PhD students while means-ends decoupling takes place at the state level. As regards our question 'What meaning does doctoral education provide for you?', in one case we found a discrepancy between the questionnaire answer and the one given in the interview. In particular, the written answer of this respondent is 'I want to make a contribution to Ukrainian science' but in a personal interview he voiced another point of view:

I graduated in winter and during half a year I did not manage to find a job. I was desperate and enrolled for the PhD programme as the study is for free. To tell the truth, I do not understand very well what a PhD programme is about. (economics, first year)

The written answer probably was what the respondent thought to be socially desirable, while in personal conversation the interviewee gave the true motivation for doing PhD research.

This respondent's interview answer is not exceptional: not having found a job after graduation, former students go into doctoral programmes, with a view to employment as university lecturers. However, they keep hoping for something better: 'I know a guy who dropped out of the doctoral programme because he was lucky enough to find a job with a high salary' (mechanics, first year). Moreover, due to the Russian intervention in the eastern part of Ukraine, young men prefer doctoral study to being drafted and sent to war:

I entered the doctoral programme, firstly, because of the war, as doctoral students are not called to the army. Secondly, I like working with the youths. But to be a lecturer at the university it is necessary to have a PhD degree. In my case, research comes in the last place. However, I prefer doing PhD research than working in a veterinary clinic. To tell the truth, I do not like to be a vet. [...] Actually, I do not see any meaning in my research. (veterinary medicine, first year, AO1)

Two respondents with a very low self-esteem wrote that they are doing doctoral research because their parents insisted: 'I started a doctoral programme only because of the initiative of my parents but I have no expectations' (economics, second year).

Many respondents express disappointment and desperation about their future, arguing that doctoral education does not ensure employment:

Sometimes, I think that I could have had already a well-paid job and a family and that the doctoral study postpones it. Moreover, sometimes I do not understand what can be the 'benefits' of the scientific degree. Who and for what will need my degree if the number of students decreases every year? Consequently, it is difficult to find a position of a lecturer at the university. In addition, in industry researchers are not viewed as highly competitive. (economics, third year)

I'm sure that I could accomplish more in other area. My expectations have not been fulfilled. There is a gap between the idea about doctoral training before admission and during the study. (economics, fourth year)

I continue doing my doctoral research only because I regret the time that I have already spent on it. (mechanics, second year)

I lack motivation for doing my research, as there are no chances to find a job after completion of the doctoral degree and because of a low academic salary in Ukraine. (economics, third year)

Several respondents express disappointment with the social context: 'Ukrainian science has been decaying' (veterinary medicine, first year); 'I have no motivation to do research because I do not see the prospects for the development of agriculture in Ukraine' (agriculture, first year).

The answers of two doctoral students who claim a high level of English show a different perspective:

I want to get a doctoral degree for free and then emigrate if the situation in the country does not change for the better. Nowadays researchers are not appreciated in Ukraine. (veterinary medicine, first year)

The meaning of the doctoral education lies in the development of personality and in opportunities that I will have after the defence of the PhD thesis, with my good knowledge of English. I anticipate a job abroad and collaboration with international partners. (economics, second year)

As doctoral theses, as a rule, are disconnected from the needs of the economy and society, the findings of the research are not disseminated amongst the economy and society, which causes the PhD students not to view their research as meaningful:

My research would have meaning for me if somebody invested into it and was interested in its results. I know that the results of my research will not change anything and they will not be

disseminated. The supervisor says that my research can make a breakthrough in science but I do not believe it. If it could really make a breakthrough it would be conducted somewhere abroad. (veterinary medicine, first year, A01)

I would prefer to do research that is commissioned by industry and business as it happens in developed countries. (agriculture, second year)

I want my research to be important for others not just as a formality to get a scientific degree. (economics, first year)

A similar but even worse situation is with a doctoral student who views his discipline as absolutely useless and unpromising, yet he aims to lecture students in this discipline:

I do not see any meaning in my discipline, but I want to have a PhD to lecture. I like lecturing because it involves communication with youths. However, if I was younger I would choose another discipline [the doctoral student is only 24 years old]. (agriculture, first year)

A better situation prevails amongst doctoral students in law, which is amongst the most prestigious disciplines in Ukraine and in which are enrolled youngsters from high-income families. As one interviewee clarifies: 'Master in law and doctoral degree in law, I know how to commercialise them. The PhD degree will look well on my business card' (law, first year).

Regarding self-efficacy, the biggest hurdles are experienced by doctoral students in disciplines that require research infrastructure, for example, agriculture, veterinary medicine and mechanics. As they clarify:

Lack of research facilities as you are obliged to find all of them by yourself destroys the willingness to devote yourself to science. (agriculture, second year)

For the research I need twenty rabbits, I need to feed them for several years, I need chemicals and all these things I must buy with my own money. My parents help me with funding. Every month I spend on my experiments on rabbits four times more than my scholarship. (veterinary medicine, second year, AO2)

As we do not have equipment for conducting research, the theses explore theoretical issues, for example, mathematical models. (mechanics, first year)

Lack of research infrastructure, lack of reagents, lack of contacts with researchers who are ready to experiment and try something new. (natural sciences, third year)

Interviewees also claim that the scholarship is so miserable that it is not enough for a living:

The PhD student scholarship is not enough even for the basic needs. (economics, second year)

The scholarship is not enough for a living, taking into account that I must spend my own money on buying materials for research. [But] If I start working next to attending classes and lecturing without payment, I will absolutely have no time for research. (veterinary medicine, second year, AO2)

The latter interviewee mentions having to take classes. Other interviewees too complain that they have to take courses unrelated to their PhD, as it takes much time and distracts them from their doctoral research:

As for efficiency, I think a lot depends on me, but during the first year of the postgraduate programme, we have a lot of useless courses. A doctoral student should devote time and effort to research, instead of studying the same courses which were in master's programme. Because of the classes, I do not have time for doing my experiment. In addition, we should report twice a year about our progress at the attestation. Such a bureaucratic procedure wastes a significant amount of time. (veterinary medicine, first year, AO1)

The attestation which is mentioned by the interviewee is conducted in the 'best Soviet traditions'. As a rule, doctoral students are required to stand in front of the members of a committee. This makes doctoral students feel subordinate to the committee. The interviewee's statement implies the widely held doubt about the efficiency of such a formal procedure before academics who are not involved in research and do not know the details of their research.

Moreover, doctoral students state that they have to teach without payment. Although they do not have a significant teaching workload, preparation and classes divert a lot of time and effort that could be spent on research: 'Doctoral students are perceived by the university as free of charge employees' (mechanics, third year). Further, the interviewees point out that their subordinate status in the relationship with the supervisor hinders their efficiency. This objection is also related to the practice of permanent scientific boards; the priority for choosing a supervisor is his/her membership of the board and it is preferable for the doctoral student that supervisor be a member of the board. However, this practice does not contribute to the quality of research and supervision:

My supervisor ... has a 'name' in Ukrainian science and he is the head of the scientific board, which makes the defence easier for me. While choosing the supervisor it is necessary to choose a powerful and influential academic. (veterinary medicine, first year, A01)

I must do everything by myself, there is nobody to give advice on how to conduct an experiment in a better way. If you do your experiment wrongly, you waste a lot of time and resources. The supervisor, who is almost 80, views all the information which I gain from foreign journals rather negatively. He does not pick up anything new and does not allow me to bring any novelty into research. It also concerns articles as he does not allow me to express my views. (veterinary medicine, second year, A02)

I do everything by myself because the supervisor reads neither my articles nor the thesis, and it's a major problem. (economics, third year)

The latter PhD student continues: 'Moreover, I do not think that the thesis topic is appropriate.' This points to two more problems. First, there is a strict division in specialisms and the specialism of the doctoral research must coincide with the specialism of the supervisor. Often, after the study is done and shortly before the defence, the doctoral student must significantly revise the thesis to make it correspond to the supervisor's specialism, thus further reducing the sense of self-efficacy. Second, but not directly related to our topic, multidisciplinary research is ruled out.

Regarding publications, some respondents consider that publishing in Ukrainian journals is required to help 'to develop science' in Ukraine (agriculture, third year). One respondent, who claims that he paid for publishing in an international journal, has a negative attitude towards such a practice and considers it 'a waste of money and time', while he views publications in Ukrainian journals as 'approbation in the research community of Ukraine that understands the particularities of research done in Ukraine' (mechanics, second year). Meanwhile, the majority of doctoral students, especially in veterinary medicine and agriculture, assert that they conduct an experiment,

which can be presented only in one solid article. However, as we mentioned above, at least five publications are necessary for the defence of a thesis. To fulfil this requirement, they and many other doctoral students are obliged to publish so-called general overviews of theory—not easy to get published internationally, especially in applied studies where it is hard to make an original contribution to the state of knowledge. Moreover, some PhD students argue that they have little faith in the quality of Ukrainian journals, as they clarify:

If you are a single author of the article, the [Ukrainian] journal requires you have either a reference from the doctor of sciences which proves the quality of the article or the article to be written in co-authorship with an academic who has a doctoral degree, as a rule, it's a supervisor. (veterinary medicine, first year)

Publishing under the label 'it's a must because otherwise, you will not pass the next attestation' does not make sense. People ought to publish only really important things. Moreover, it is absurd that Ukrainian journals charge a fee. I regret not so much about money as about wasted time which I spent on articles that were written under the label 'must'. (economics, first year)

Very often doctoral students erroneously think that if their research is focused on Ukraine it is not interesting for the international research community:

I do not read articles in international journals because of my low level of English. Moreover, I do not need to, as my thesis does not require a detailed exploration in my area abroad. My thesis concerns only Ukraine. And I do not think that the results of my research can be interesting abroad. (economics, third year)

As the university publishes so-called 'collections of articles', it is primarily a responsibility of PhD students to submit articles to them and in such a way to ensure the existence of these journals.

However, for those who have good knowledge of English, publishing in Ukrainian journals loses its meaning: 'If you publish in English the world can read you' (veterinary medicine, third year). Another one states: 'I publish in Ukrainian journals only because publications in them are necessary for the defence of PhD thesis. However, Ukrainian journals do not correspond to the level of respected international ones' (agriculture, third year). Another PhD student points out that she is oriented on publications in international journals as they can result in 'a research grant and proposals for collaboration' (natural sciences, third year). Publishing in international journals requires the support from PhD supervisors, but as the latter, as a rule, do not have publications in these journals they cannot advise the doctoral students. Moreover, there is a widespread rumour, also amongst doctoral students, that all foreign journals indexed in international databases charge a fee for publication.

To summarise, depending on the individual dimension, there are polar opposite views amongst Ukrainian PhD students on Ukrainian and international journals. Moreover, a low level of English, lack of information about international journals, supervisors lacking experience in publishing internationally and requirements to the thesis defence that are not focused on publications in international peer-reviewed journals create barriers to the Ukrainian PhD students publishing internationally.

#### 6 | CONCLUSIONS

The aim of our research was to explore the self-concept of Ukrainian PhD students while means-ends decoupling takes place at the state level. Our findings reveal that institutional complexity, caused by means-ends

decoupling at the state level, results in means-ends decoupling at the organisational level of the university which leads to cultural complexity, for instance, on the one hand, the doctoral students are expected to do their research while on the other hand, the university is not able to provide them with favourable conditions. Cultural complexity occurs also, because the attitudes and patterns of behaviour to the doctoral students institutionalised in the university contradict the European ones including the Bologna process, that is, the subordinate status of doctoral students in the university and them being treated as a free of charge workforce but not as early career researchers. To summarise, institutional and cultural complexities experienced by PhD students result in means-ends decoupling at the individual level. It occurs because institutional and cultural complexities constrain individuals' means and ends and create barriers to them behaving as causal agents. The main decoupling for most PhD students is that doctoral education neither increases their employability nor contributes to the development of science, economy or society in Ukraine as their research is disconnected from the needs of international science as much as from the needs of the economy and business. Consequently, what in principal-agent theory is called adverse selection becomes conspicuous: not always the best graduates continue their education in the doctoral programmes. For them, doctoral education becomes attractive only when they do not succeed in finding a job. Or their doctoral research is externally motivated by the necessity to acquire a scientific degree to get a position in the university. Moreover, under conditions of means-ends decoupling at the state and organisational levels, the most difficult situation to fulfil their talent occurs for those rare doctoral students who have intrinsic motivation for PhD research. Meanwhile, the majority of doctoral students become demotivated due to the bureaucratic rules for the thesis defence, the low amount of scholarship, the necessity to attend classes that are not relevant to their research and the lack of career prospects. In addition, doctoral students fulfilling the requirements for the publications to the thesis defence that neither take into account the particularities of the research and discipline nor contribute to the integration of the doctoral students into the international research community also reflects means-ends decoupling at the individual level. It results in significant diversion of time and effort for the PhD students. As most doctoral students are conscious about means-ends decoupling which they sustain, and as they do not view the identities of a researcher and a PhD student as meaningful, they experience cognitive dissonance, which has a negative impact on their psychological well-being. Despite the respondents evaluating their satisfaction of being a PhD rather positively (Table 4), which can be viewed as a distortive effect of self-esteem, the claimed identities of a PhD student and a researcher are correlated neither with self-esteem nor self-efficacy. Moreover, self-esteem and self-efficacy do not increase with the number of years of doctoral study. Both non-correlations support our hypotheses. As regards distinctions between disciplines, the doctoral students in law differ from all others as they are enrolled from high-income families. They have rather a high self-esteem and self-efficacy which, however, do not relate to the role of a doctoral student.

Regarding the TST, as we see, female respondents are more prone to describe themselves using a categorical dimension (0.252) and claiming an abstract identification (0.180). Concerning the attributive dimension, self-esteem correlates only with a positive characteristic about the physical self (0.248).

The limitation of our research is that we interviewed PhD students affiliated only with one Ukrainian university. Meanwhile, our results emphasise that Ukraine urgently needs the elimination of means-ends decoupling at both the state level and organisational level of universities in order for the society and economy to be able to develop. Means-ends decoupling at all above-mentioned levels results not only in significant diversion of financial and human capital but also has a negative impact on the well-being of individuals, hindering their personal and professional development and evoking a sense of meaninglessness, alienation and cognitive dissonance.

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#### **ENDNOTES**

- <sup>1</sup> In 2014, the title candidate of sciences was changed to doctor of philosophy, that is, PhD.
- <sup>2</sup> Low *p* values should be used to minimise the danger of accepting an interesting hypothesis. Here the hypothesis is a null hypothesis and we should increase the possibility for alternative explanations, thus choose a higher *p* value.

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