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**THE MAIN DETERMINANTS OF DEVELOPMENT
–PLS PATH ANALYSIS APPLIED TO THE FACTORS OF ENDOGENOUS
DEVELOPMENT**

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Abstract. Many empirical analyses have been based on the theory of endogenous development, referring to the utilisation of given resources and providing the framework of quantitative analysis. The concept can be especially important in the case of less favoured and/or rural areas. However, the empirical analyses of this widely used theory often neglect the countryside or lay minimal focus on them. The research project presented here investigates the key factors of endogenous development and their presence in the rural districts of Hungary. The main aim of the paper is the examination and explanation of the effects of each capital on development. The study provides a review of the academic literature of development theories, as well as the understanding and development of the concept over the last few decades. The paper briefly addresses the delimitation of the Hungarian countryside, and it also proposes a regression model for the explanation of development, including latent variables symbolising the forms of capital. The model is examined by applying partial least squares (PLS) path analysis, which shows the connections between each form of capital through a dynamic approach. The analysis conducted for the years of 2009, 2013 and 2017 indicates that the relationship between the capitals is defined by temporal differences. Similar interactions can be seen between the capitals in 2009 and 2013, but 2017 shows a completely different system of relations. Hence, the findings show that, in a rural context, the relations between the forms of capital vary considerably over time.

Keywords: rural districts of Hungary, endogenous development, PLS Path Analysis

JEL classification: C31, O18, R11

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1. Introduction - The “evolution” of development theories

Current research findings clearly show that the economic development of Eastern and Central European regions has recently shifted from the dominance of exogenous elements in an endogenous direction, i.e., an increasing number of local factors (“soft endogenous factors”, such as human capital and informal knowledge) define the competitive advantages of regions (Capello & Perucca 2013; Smętkowski 2018). Economic development also includes the role of regional institutions as a significant element, the quality of which evidently contributes to the advancement or decline of a region (EC 2017). Following a short review of development theories, the elements of endogenous regional development are examined, presenting some special approaches of endogenous development.

“The concept of development, in the most general terms, refers to the process which leads to a lower level of quality to the higher level of quality” (Szentes 2011, 13). In this context, Szentes (2011) describes that the concept of development has been interpreted in various ways over the past centuries, especially recently, depending on the discipline of social science. The issue of different interpretations is also mentioned by Todaro and Smith (2009), adding that without a certain degree of general agreement, it is not possible to take measurements and to basically define which country is developing and which one is not. The Authors (2009) also claim that in strictly economic terms, the concept traditionally referred to achieving a long-term increase in income per capita which enables an increase in national output at a faster rate compared to the growth of population. Development was in fact defined in the same way much earlier by Lord Robbins (1968), which is in line with this narrower economic approach.

At the same time, Sen (1988) “goes even further”, integrating humanum into his approach, based on which he establishes that the improvement of living conditions should clearly be one of the most important, if not *the* most important, tasks of economics and this, earlier mentioned “improvement” process is an evident part of the concept of development (Sen 1988). Development thus needs to be understood as, for instance, a multi-faceted process involving the significant changes of social structures and national institutions, which includes the stimulation of economic growth, reduction of inequalities and putting an end to poverty (Todaro and Smith, 2009)¹.

Regarding the interpretation of the theory of development, Lewis (1988) uses the term ‘growth’, still, his view includes the qualitative character of change. More specifically, the Author (1988) interprets development theory as *‘...those parts of economics that play crucial roles when one tries to analyze the growth of the economy as a whole’* (Lewis 1988, p. 36).

Or, as Chant and McIlvaine (2009) describe, development theory is concerned with change much more than it is expected in conventional social sciences. Development theory has always had a close link with the development strategies which intended to put theory into practice. The emergence of the theory was linked to the world after 1945, with its changing financial possibilities in the relationship between the developed and the developing world.

¹ As it is also emphasised by Lengyel (2012a), Amartya Sen’s ideas are apparent in the authors’ approach.

Distinguishing the major trends of the recent decades, the following categorisation is possible (Chant and McIlvaine 2009; Lengyel 2012a):

- modernisation theories, mostly prominent in the 1940s and 1950s but remaining relevant until the 1960s;
- dependency theories, significant in the 1960s and 1970s;
- neoliberal and structural change theories, emerging in the 1980s and continuing in the 1990s and 2000s;
- post-development theories, during the 1990s and 2000s.

Hoff and Stiglitz (2001) also indicate the middle of the 20th century as a point of time since when marked changes have taken place in terms of understanding *development*. As the Authors (2001) put it, we know that development is possible but not inevitable and there is no recipe for success.

Related to this review, Szentes (2011) points out that economics has been concerned with the question of *development* since the establishment of modern social-economic systems. The Author (2011) adds that the theoretical historical² review of economics can reveal several theoretical, economic, and political questions which, as described above, are also featured in development economics emerging independently after the Second World War.

In agreement with this approach of the discipline, and, at the same time, referring back to the different approaches of development theory, Sen's (1988, p. 23) opinion can be called apt and practical, concluding that "...*work on development economics need not await a complete 'solution' of the concept of development*".

When investigating territorial aspects of development of any kind, the aim must be the creation or emergence of a successful region. Regarding the concept of success and a successful region, György Enyedi's (1998, 409–411.) idea of success is indicative; besides formulating the criteria of competitiveness, it pays attention to environmental sustainability and the aspects of social justice: "...*in a successful region, produced income increases. A significant part of this income is used locally for investments, entrepreneurial and personal income, as well as settlement management and development in the form of taxes. Broad sections of the population have a share in the income growth, economic growth does not harm either the natural environment or the built and cultural values of the region. Finally, the growth affects all settlement groups of the region and it does not increase the territorial inequalities within the region*".

Among the spatiality-related trends of development, whether it is location theory or regional growth and development theory, in general two important tendencies have gained ground in the past ten-twenty years (Capello 2012, p. 315):

- *'a tendency to achieve more realism in sometimes abstract conceptual approaches;*
- *a tendency to develop a dynamic perspective'.*

The concept of development can be interpreted in its narrower economic context. As regards the latter, Capello and Nijkamp (2011) includes societal

² Lewis (1988) offers an excellent historical review, examining the theory of development from the dawn of economics.

opportunities, healthy environment, and high-standard education as examples. However, as Stimson et al., (2011) refer to regional and economic development in relation to development, they distinguish attributes measurable by quantitative and qualitative tools. Even though the levels of wealth and income or job creation are essential, creative capital, the low level of social and economic differences or sustainable development are of the same importance.

2. Theoretical Background - A modern interpretation of endogenous development

The endogenous variety of development can be regarded as its revaluated theory. If we examine the term itself, „...*endogenous in economics refers to factors which are not hereditary (“are not from God”) but are created consciously through economic activities. In regional studies, we consider community developments and actions which are consciously created, based on unique local factors, bottom-up and actively involving the local society within a region to have an endogenous character”* (Lengyel 2012b, 145).

The emergence of endogenous development itself is traced back to the end of the 1980s by Benko (1997), although he referred to industrial and city regions, while Vázquez-Barquero and Rodríguez-Cohard (2016) date its gaining significance at the early 80s.

Similarly, Amin (1999), in his article from two decades ago, establishes that the European regional policy was defined by the Keynesian heritage in the case of developed countries from the 60s to the then recent past. This approach relied on the redistribution of income and the demand stimulating effects of welfare policies in the case of less developed regions. In their case, the Keynesian regional policy undoubtedly increased employment and incomes, but these territorial units could not maintain the achieved results permanently and could not manage to realise “self-sustaining” growth based on their own resources. Thus, according to the Author (1999), after the failures of the Keynesian and the pro-market, neoliberal policies, the focus on the theory of endogenous development can be interpreted as a sort of third-track approach. In line with this, Tödtling (2009) considers the theory of endogenous regional development as a kind of “counter-theory”, which responds to the former development concepts that emphasised the importance of external factors in the case of less developed regions, such as interregional trade or the mobility of capital, work, and technology.

Consequently, in the past few decades there has been a shift in the emphasis and focus of regional development theory from exogenous factors to endogenous elements (Stimson et al. 2011), the prevalence of which is also described by Lengyel (2012a).

It can be established that the whole theory relies on the assumption that the basic preconditions of development, sense of initiative and enterprises, are available or present in a latent way in most regions (Tödtling 2009). Similarly, according to Capello’s (2007, 2011) views, endogenous development basically depends on the concentrated arrangement of a region, it is an integral part of a social-economic and cultural system, whose components determine the success of local economy: entrepreneurship, factors of local production (work and capital), and the relationship management skills of local actors, which increasingly contribute to the increase of knowledge creation.

According to Capello's (2007) approach, the main reason of regional differences is the uneven distribution of innovative activities. It can be observed that while today work and capital move very easily, the least mobile factors are precisely those immaterial factors which are, among others, related to innovative capacity.

When Stimson et al. (2011) refer to regional and economic development in the context of development, they distinguish attributes measurable with quantitative and qualitative tools. In another work, Stimson et al. (2009) make regional economic development subject to the strength or weakness of the quality of the (local) management, the efficiency of institutions and the level of the significance of enterprises. These dynamic relationships shape the characteristics of development and the performance of a region. It can be observed that institutions, entrepreneurship, and the quality of (local) management are the three most crucial factors, not only in terms of shaping the performance of the region but they can also substantially improve a region's capacity and conditions (Stimson et al. 2009).

Although the present paper primarily focuses on the endogenous variety of development, certain exogenous elements cannot be ignored even under the current circumstances. Stimson et al. (2009) suggest the internationalisation of financial processes and the movement of labour between regions are typical examples. Related to their above-described new framework, the Authors (2009) claim that it is crucial for a region that the institution system and the (local) management are able to and manage to acquire exogenous factors which are necessary to provide the incomplete endogenous conditions and generate new competences and conditions. Tödtling (2009) also suggests that regional development is always the collective result of endogenous and exogenous factors, thus there are several paths of development, and there is no ideal solution.

As Lengyel (2012a) establishes, today endogenous trends have gained focus in the field of regional growth and broadly defined development. It is linked to the fact that the various trends include ones which base the system of endogenous elements on the concept of capital (Lengyel 2012a). Thus, besides economic capital, several new forms of capital have gained focus.

Following a similar logic, as a part of the recent evolution of economic thinking, Stimson et al., (2011) write that in the past two decades, a further move has been made in terms of integrating the directives of sustainable development in the area of regional development and planning.

Table 1 Appearance of each form of capitals in various endogenous development models

	Fixed Capital / Asset	Human Capital	Social Capital	Natural Capital	Cultural Capital	Relational Capital	Infrastructural Capital	Institutional Capital	Physical Capital	Creative Capital	Symbolical Capital	Structural Capital	Cognitive Capital	Settlement Capital	Entrepreneurial Capital	Built Capital	Political Capital	Activities and Business Firms Markets/External Relations	Image/Perception
AEIDL (1999)	x	x	x		x				x	x								x	x
Kitson et al., (2004)	x	x	x		x		x	x		x									
Capello (2007)	x	x				x		x		x					x				
ETC (2007)	x	x	x	x	x				x										
Vermeire et al. (2008)	x	x	x	x					x										

	Fixed Capital Asset	Human Capital	Social Capital	Natural Capital	Cultural Capital	Relational Capital	Infrastructural Capital	Institutional Capital	Physical Capital	Creative Capital	Symbolical Capital	Structural Capital	Cognitive Capital	Settlement Capital	Entrepreneurial Capital	Built Capital	Political Capital	Activities and Business Firms Markets/External Relations	Image/Perception
Camagni (2008)	x	x	x	x	x	x	x	x											
Braithwaite (2009)	x	x	x	x	x											x	x		
Affuso and Camagni (2010)			x		x	x							x						
Milone et al. (2010)	x	x	x	x	x			x			x								
Stimson et al. (2011)	x	x	x	x						x									
Brasili et al. (2012)	x	x	x	x		x	x						x	x					
Lengyel and Szakáné Kanó (2012)	x	x	x			x	x	x	x										
Atkinson (2013)	x	x	x	x	x		x	x								x			
Dinya (2013)	x	x	x	x	x	x	x	x	x										
Tóth (2013)	x		x	x	x	x					x	x							
Rechnitzer (2016)	x	x	x		x	x		x		x			x						

Source: own construction based on Tóth (2013, 44.)

For developing the indicator system used in the empirical analysis, it is summarised which (capital) factors are mentioned primarily in the academic literature of the topic (Table 1).

Based on their frequency in Table 1, seven forms of capital have been included in the model: *private fixed capital, human capital, social capital, cultural capital, relational capital, infrastructural capital, and natural capital.*

At the same time, some statistical and methodological challenges arose during the analysis:

- Private fixed capital, which refers to the development of economy and can be approached from several sides (e.g. Brasili et al. 2012; Camagni, et al. 2011), has been divided into two parts: private fixed capital, representing the target variable of the model, signifies individual wealth, while entrepreneurial milieu involves the indicators to express prosperous business environment.
- It must be noted that due to its relevancy, natural capital was intended to be included in the analysis. However, as it could not be described quantitatively, this form of capital had to be excluded.

Ultimately, the following capitals (latent variables) form the model: the target variable is called private fixed capital, and the independent (latent) variables are cultural capital, entrepreneurial milieu, human capital, infrastructural capital, relational capital, and social capital.

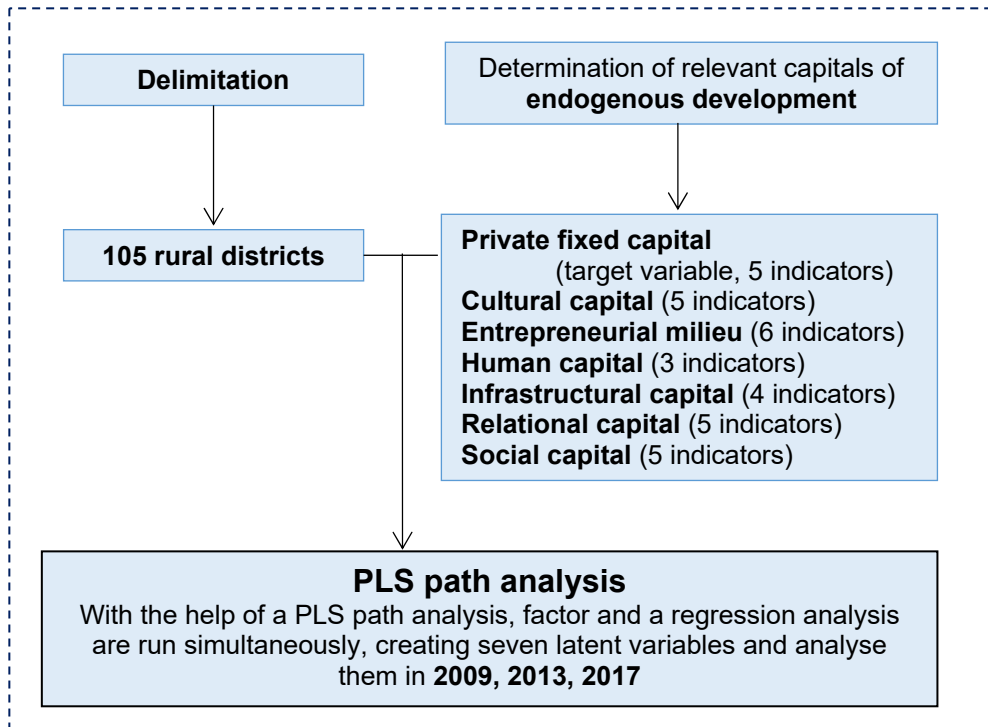
To quantify the selected capitals, the Hungarian database TeIR³ was used and, finally, 33 pieces of indicator were involved in the analysis. (15 of them describe

³ "The National Regional Development and Spatial Planning Information System (in Hungarian: TeIR) makes statistical data of different data owners available in one system, supporting planning and evaluation activities from the national to the local level." - <http://uj.lechnerkozpont.hu/en/oldal/teir>

the material capitals and 18 embody the immaterial ones.) The indicators of each capital can be seen in Annex I.

Furthermore, it was attempted to represent not only the relations between the latent variables, but also the dynamics of connections. Hence, the same model was built for 2009, 2013 and 2017. The time difference makes it possible to analyze the change of relationships as well (Figure 1).

Figure 1 Framework of the analysis



3. Delimitation

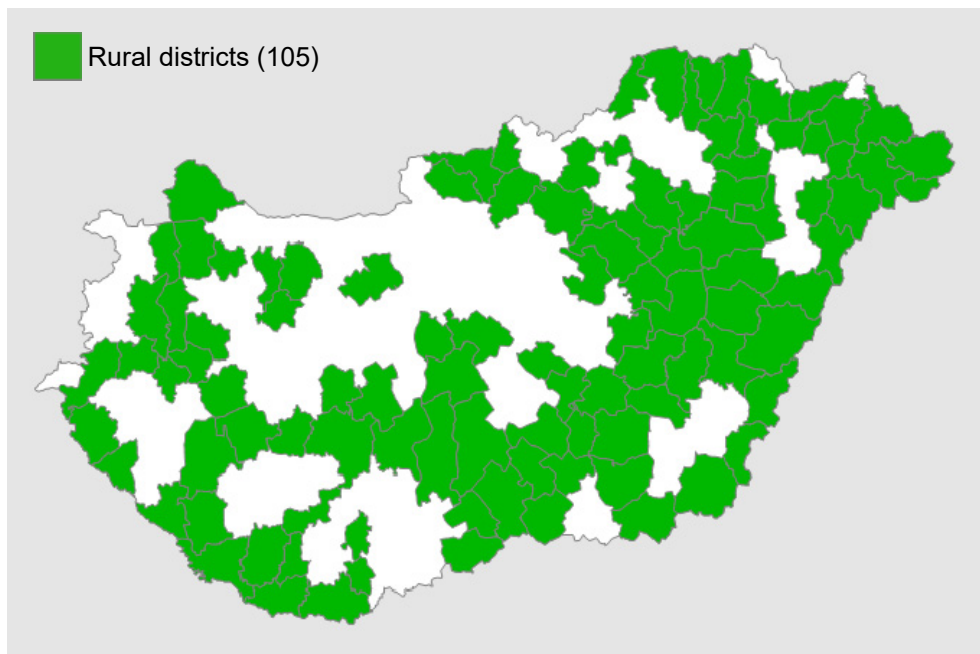
There are several approaches for the territorial interpretation of the Hungarian countryside⁴. This paper does not aim to provide a detailed review of the topic. Furthermore, due to the complexity of the issue, there is probably no single best solution which could be applicable at all territorial levels, thus it is not intended to address this issue. In this part of the paper, it was sought to choose the most suitable territorial level from the aspect of quantifying the development of the Hungarian countryside.

Realising and knowing the limitations of the system, the nomenclature of districts was still selected as a basis for the research, considering its advantages related to data analysis.

⁴ See Bodnár (2011)

Based on this, a threshold of 120 persons/km² was applied as the framework of the analysis, as suggested by Csatóri (2001), among others. Adjusting to the Hungarian system of settlements, in total 105 districts were delimited as a rural territorial unit.

Figure 2 Rural districts of Hungary



Although the degree of the “rural character” of each district is different, the data on the delimited Hungarian rural regions regarding 2018 are the following:

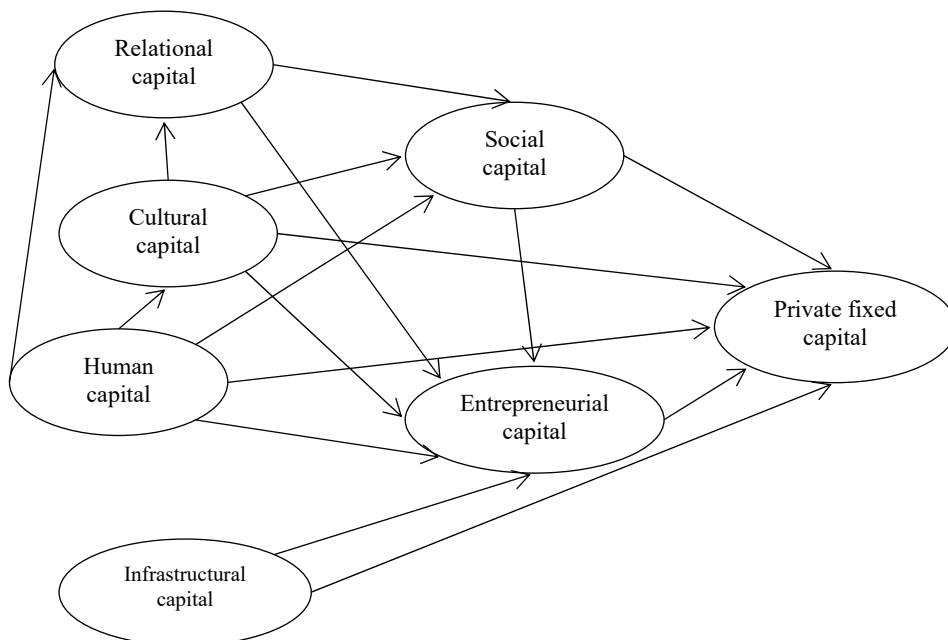
- their area is 57,175 km² in total, which is 61% of the area of the country;
- their population is 3,015,799 people, which is 31% of the population of Hungary.

Besides the above-described attributes, the districts presented in Figure 2 are also characterised by a decreasing and ageing population, to a varying extent. Agriculture is still a relatively dominant sector. In addition, the level of unemployment can be considered high in all age groups, although its rate can be different, moreover, the average level of educational attainment is low. At the same time, it is also to be noted that these phenomena are not exclusively associated with Hungarian processes, of course. Pociūtė-Sereikienė et al. (2014) also wrote about the intensification of polarisation among the post-socialist countries of the European Union, particularly between large cities and economic hinterlands. Also, Egri and Tánczos (2015) write about a very similar spatial structure regarding Central and Eastern Europe in their work.

4. PLS path analysis – original model

PLS path analysis was applied to examine the relationships between the latent factors, which were conducted with SmartPLS 3 software. With the method of PLS path analysis and using the developed latent variables, it was aimed to apply a regression model that is able to explain which factors affect the existing welfare⁵ among the Hungarian rural districts and to what extent, which is interpreted as the synonym of private fixed capital in a simplified way. The advantages of the methodology are also addressed by Tubadji and Nijkamp (2015), as well as Kovács and Bodnár (2017).

Figure 3 Relationship of factors explaining private fixed capital – original model



It is important to note that the model is intended to be applied with a confirmative purpose. As Münnich and Hidegkuti (2012) stated regarding the potential uses, it is verified how much the data confirm the currently hypothetical connections of the capital factors.

The PLS path model presented in this part has an outer and an inner model. The inner model refers to the developed latent factors and their relationships, while the outer model consists of the elements (indicators) forming each factor. The “top left” part of the inner model (Figure 3) includes the immaterial factors, while the material factors are found at the bottom.

⁵ The concept of welfare is interpreted as the synonym of private fixed capital, which is, by definition, an over-simplification, but it may help the interpretation of the objective to be appropriately captured.

In all three examined years, it was based on the relations featured in Figure 3, aiming to construct them. It can be assumed that Cultural, Human, and Relational capital directly shape social capital, and social capital exerts a direct effect on private fixed capital and entrepreneurial milieu. In addition, cultural capital affects relational capital. While in the case of the material capital factors, Infrastructural capital presumably has a significant direct relationship with both entrepreneurial milieu and private fixed capital.

As it is described by Kovács and Bodnár (2017), the reliability of latent variables is often examined using the measure of Cronbach's α , relying on the correlations between the manifest (directly observable) variables corresponding to the latent variables. The measure is required to be minimum 0.6. On the other hand, over the course of the PLS algorithm, the degree of internal consistency is underestimated by Cronbach's alpha, assuming that each variable has identical loading. The measure of composite reliability is used to overcome this problem, which takes account of the different loading values attached to the variables. The measure is required to be over 0.7. The requirements regarding both measures are fulfilled in the analysis (Table 2).

Table 2 Attributes of forms of capital

latent variable year	Cronbach alpha			Composite Reliability			Average Variance Extracted (AVE)		
	2009	2013	2017	2009	2013	2017	2009	2013	2017
Human capital	0.781	0.750	0.722	0.780	0.795	0.750	0.553	0.571	0.514
Infrastructural capital	0.773	0.730	0.847	0.854	0.832	0.898	0.601	0.556	0.688
Relational capital	0.775	0.800	0.797	0.849	0.861	0.851	0.535	0.555	0.545
Cultural capital	0.855	0.801	0.829	0.899	0.862	0.879	0.646	0.565	0.604
Private fixed capital	0.853	0.873	0.806	0.892	0.907	0.863	0.627	0.664	0.563
Social capital	0.877	0.854	0.831	0.910	0.897	0.881	0.670	0.639	0.598
Entrepreneurial milieu	0.705	0.760	0.820	0.807	0.850	0.884	0.521	0.561	0.608

The analysis of the validity of the latent construction refers to the verification of convergent and discriminant validity. In this case, convergent validity examines whether a set of variables is representative of the same artificial variable. It is indicated by the value of average variance extracted (AVE), which shows for each latent variable the average percentage of retaining the variance of its manifest variables. The requirement towards the AVE value is minimum 0.5 (Henseler et al. 2009).

As established by Kovács and Bodnár (2017), the verification of discriminant validity is examining whether the latent variables discriminate to a sufficient extent. The verification is most commonly conducted based on Fornell–Larcker criterion and cross-loading values. Over the course of analysing the criterion, it is verified whether the AVE value of the latent variables is higher than the square of their correlation by pair with the other latent variables. In the examination of cross-loading values, it is verified if the correlation by pair of each manifest variable with its own latent variable is actually higher than with the other ones.

Kovács and Bodnár (2017) also note that using Monte-Carlo simulation. Henseler et al. (2015) mention two validity verification procedures and do not show the non-compliance of discriminant validity. In their work, they suggested an alternative procedure, the assessment of the so-called HTMT (heterotrait-monotrait) correlation ratio for each latent variable pair. The numerator of the ratio is the average of the correlation coefficients by pair between the manifest variables related to two different latent variables, while its denominator includes the average of the correlation coefficients by pair between the manifest variables related to the same latent variable. According to the Authors (2017), it is sufficient for the values of HTMT indexes to be under 0.9 to assume discriminant validity (See Annex II).

Overall, it can be concluded that the test results of the seven capital factors in the examined three years are obtained in the case of average extracted variance, composite reliability, and Cronbach's α measure as well. Regarding the HTMT index, one value is insufficient in three cases, respectively. They slightly diverge from the required values, thus, based on investigational decision, the analysis was assessed to be completable.

5. PLS path analysis – developed model

After testing the latent variables, the question arises whether the direct relationships found in the model are significant. As the significance of the path coefficients can be directly examined while running PLS, the procedure was run by bootstrapping of 5000 subsamples (Table 3).

With regard to social capital, it must be noted that due to the specificity of the indicators involved to measure the factor, a higher value is associated with a higher level of underdevelopment.

Table 3 P values of the original model, 2009

Path	Path coefficients	T value	P value
Human capital -> Relational capital	0.709	17.226	0.000
Human capital -> Cultural capital	0.192	2.385	0.017
Human capital -> Private fixed capital	-0.015	0.147	0.883
Human capital -> Social capital	-0.375	3.601	0.000
Human capital -> Entrepreneurial milieu	0.251	2.087	0.037
Infrastructural capital -> Private fixed capital	0.514	6.998	0.000
Infrastructural capital -> Entrepreneurial milieu	-0.067	0.883	0.377
Relational capital -> Social capital	-0.225	2.047	0.041
Relational capital -> Entrepreneurial milieu	0.609	5.912	0.000
Cultural capital -> Relational capital	0.193	3.485	0.000
Cultural capital -> Private fixed capital	0.036	0.718	0.473
Cultural capital -> Social capital	-0.196	2.748	0.006
Cultural capital -> Entrepreneurial milieu	0.047	0.641	0.522
Social capital -> Private fixed capital	-0.398	5.821	0.000
Social capital -> Entrepreneurial milieu	-0.076	1.278	0.201
Entrepreneurial milieu -> Private fixed capital	0.111	1.258	0.209

Note: Significant correlation, with $p < 0.05$

It is to be noted that the development of the model required several runs, as despite the fact that a path is not significant in a given relationship, it still can be

significant if other paths change. Its reverse may also be true. In Table 4, the path between infrastructural capital and private fixed capital is significant, but it eventually was not included in the 2009 model (Table 4.). The p values of the direct relationships of the years 2013 and 2017 are featured in the Annex.

Omitting the non-significant direct paths, in the final model (regarding all three years), six capitals explain the factor of private fixed capital indirectly or directly. These six capital factors include two material capitals (*entrepreneurial milieu and infrastructural capital*) and four immaterial capital factors (*cultural capital, human capital, social capital, and relational capital*).

Table 4 P values of the final model, 2009

Path	Path coefficients	T value	P value
Human capital -> Relational capital	0.715	16.458	<0.001
Human capital -> Cultural capital	0.199	2.264	0.024
Human capital -> Social capital	-0.543	10.782	<0.001
Infrastructural capital -> Entrepreneurial milieu	0.363	4.358	<0.001
Cultural capital -> Relational capital	0.195	3.235	0.001
Cultural capital -> Social capital	-0.233	3.316	0.001
Social capital -> Private fixed capital	-0.570	7.938	<0.001
Social capital -> Entrepreneurial milieu	-0.353	4.712	<0.001
Entrepreneurial milieu -> Private fixed capital	0.308	3.827	<0.001

Note: Significant correlation, with $p < 0.05$

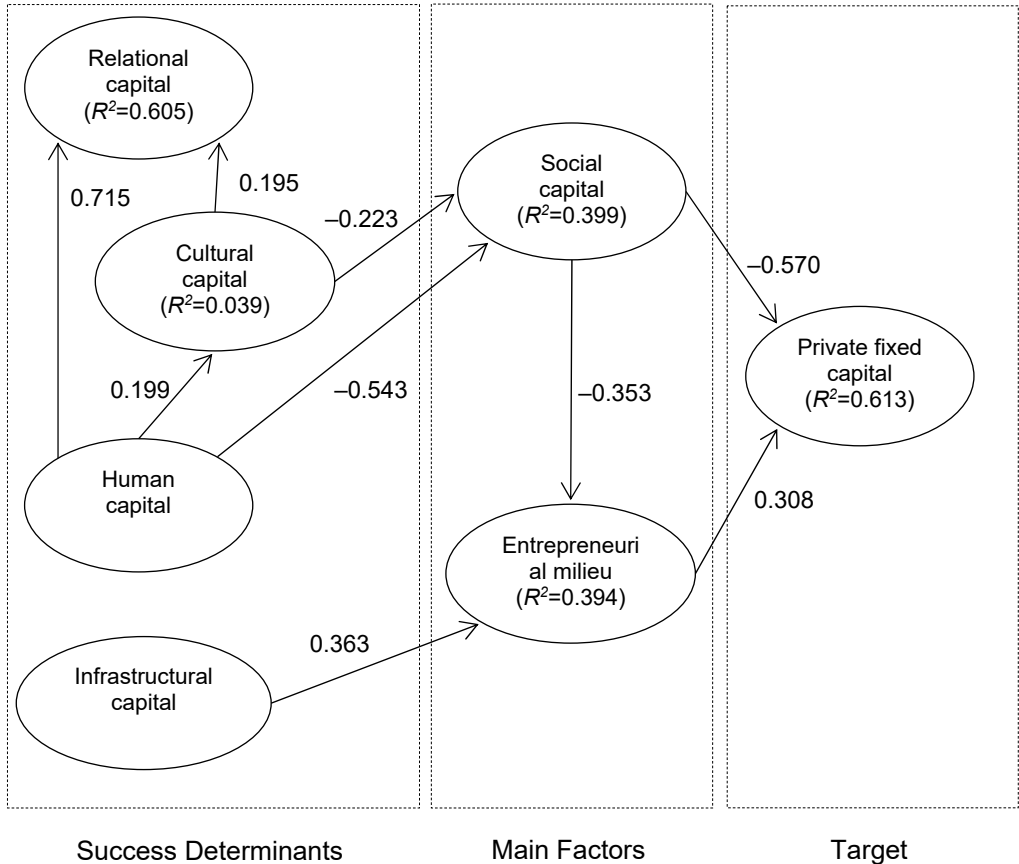
Source: own creation

Similarly to the logic of the endogenous renewed pyramid model (Lengyel 2017; Lengyel–Szakálné Kanó 2012), each capital was categorised as long-run sources, drivers, or targets (Figure 4–5–6). Long-run sources include cultural, relational and human capital as immaterial elements, as well as infrastructural capital as a material factor. The factors of social capital and entrepreneurial milieu were involved, which was interpreted as a kind of business-entrepreneurial milieu, as drivers in the model. The target is represented by the above-mentioned private fixed capital.

Regarding the year 2009, it can be found (Figure 4) that cultural capital and human capital affect social capital, the former having a weak, while the latter having a medium effect. Social capital directly shapes both entrepreneurial milieu and private fixed capital. Thus, although human capital does not have a direct effect on the target variable, it shapes it through four paths indirectly. It first exerts its effect through social capital, secondly through the relationship of cultural and social capital, thirdly through social capital and entrepreneurial milieu, and finally through the path of cultural capital, social capital, and entrepreneurial milieu. By these indirect paths, human capital shapes private fixed capital with medium strength $((-0.543) * (-0.570) + 0.199 * (-0.223) * (-0.570) + (-0.543) * (-0.353) * 0.308 + 0.199 * * (-0.223) * (-0.353) * 0.308 \sim 0.400)$.

As for infrastructural capital, it is shown that it has a direct effect on entrepreneurial milieu, thus it shapes private fixed capital indirectly. A slightly weaker than medium relationship (0.363) is found with the factor representing the performance of enterprises, while its indirect effect on private fixed capital $(0.363 * 0.308 = 0.112)$ is rather weak.

Figure 4 Interactions of forms of capital explaining private fixed capital, 2009



The role of relational capital in the model is interesting as it does not influence any of the capital factors it would be assumed to do so. However, it is shaped by human capital strongly (0.715), while marginally by cultural capital (0.195).

Social capital (-0.570) has the strongest direct effect on private fixed capital, the impact of entrepreneurial milieu (0.308) is much weaker. The variance of the capital representing the target can be explained in over 61 per cent based on the model, i.e., it is influenced in almost 39 per cent by other factors not included in the model.

It was considered to be worth presenting the values of the correlations between each capital factor. Their examination suggests that there is a medium-strong relationship between the capital factors. The exceptions are the relations between cultural and infrastructural capital, and cultural and human capital, in which cases it is more about the lack of relationship. On the other hand, there is a strong correlation between relational capital and entrepreneurial milieu (0.795), and there is also a strong relationship between relational and human capital (0.754).

The special character of the datasets forming social capital has already been mentioned; thus, it is clearly shown that there is a positive correlation between each capital (Table 5).

Table 5 Correlations between the forms of capital, 2009

	Human capital	Infrastructural capital	Relational capital	Cultural capital	Private fixed	Social capital	Entrepreneurial milieu
Human capital	1.000						
Infrastructural	0.675	1.000					
Relational capital	0.754	0.658	1.000				
Cultural capital	0.199	0.147	0.337	1.000			
Private fixed capital	0.647	0.736	0.669	0.292	1.000		
Social capital	-0.589	-0.538	-0.560	-0.340	-0.739	1.000	
Entrepreneurial	0.719	0.553	0.795	0.307	0.621	-0.548	1.000

The size of the direct and indirect effect of each latent variable on private fixed capital was explored. The direct effects correspond with the path coefficients (shown in Figure 4), while all direct and indirect effects are provided by the values of the total effects table (Table 6).

Besides the direct effects of the already mentioned social capital (-0.570) and entrepreneurial milieu (0.308) on private fixed capital, a weak indirect effect is exerted by cultural (0.158) and infrastructural capital (0.112). The indirect effect of human capital (0.400), as previously discussed, is stronger than the previously mentioned ones.

Considering the year of 2013⁶, it can be established that the relationships do not show a substantial change. The most important difference compared to the earlier state is that at this time, Infrastructural capital affects private fixed capital directly as well, although this effect is weak (0.283). Therefore, besides the emergence of the above-mentioned path, the same paths are significant as in 2009. Regarding the strength of relationships, only a few significant changes can be found. The direct effect of entrepreneurial milieu on the target variable decreased (2009: 0.308; 2013: 0.173), and social capital has a less determinative influence on entrepreneurial milieu (2009: -0.353; 2013: -0.212). It is also worth mentioning in the case of social capital that its effect on private fixed capital is lower compared to the previous studied period.

Table 6 Values of total effect, 2009

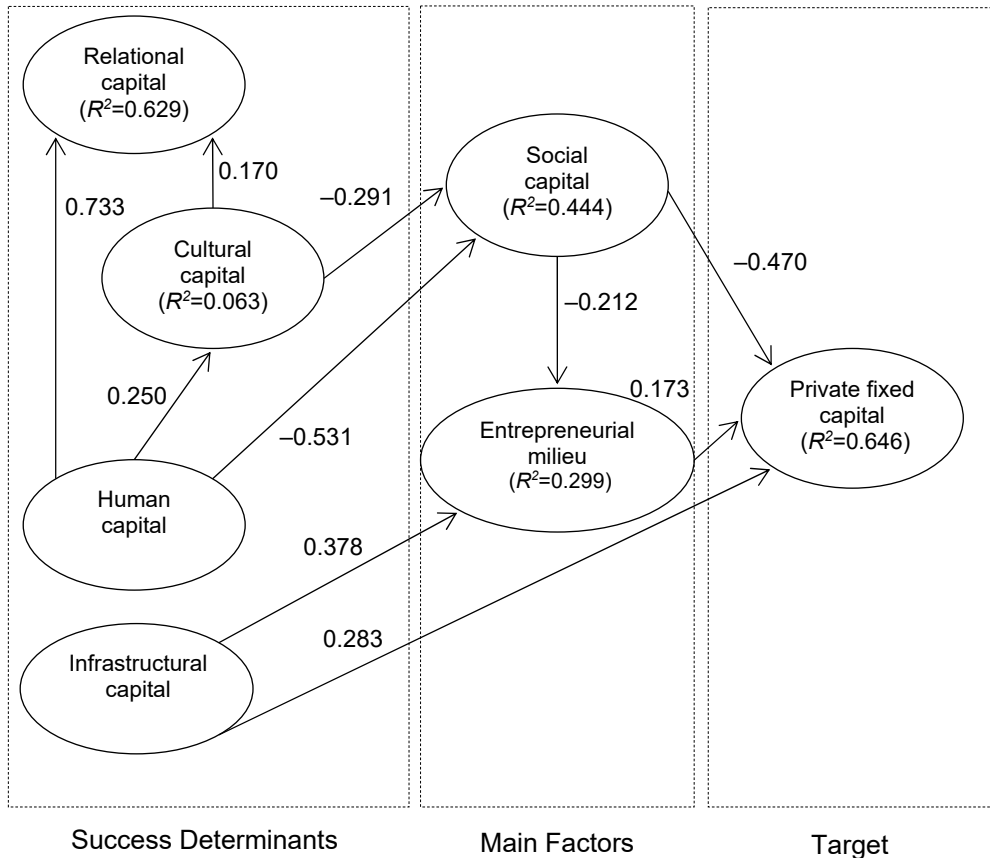
	Relational capital	Cultural capital	Private fixed capital	Social capital	Entrepreneurial milieu
Human capital	0.754	0.199	0.400	-0.589	0.208
Infrastructural capital			0.112		0.363
Cultural capital	0.195		0.158	-0.233	0.082
Social capital			-0.679		-0.353
Entrepreneurial milieu			0.308		

⁶ Annex 7 features the values related to 2013 and 2017 of the test results of PLS path analysis earlier presented in relation to 2009.

It is also found that the strength of the already existing relationships increased in four cases, but to a modest, one could say marginal extent in all four cases. The effect of cultural capital on social capital changed minimally, and the same can be said about the effect of human capital on cultural and relational capital, as well as about the relationship of infrastructural capital and entrepreneurial milieu.

As for the entire model, it can be highlighted that the variance of private fixed capital can be explained with the model in over 64 per cent, thus, this value shows some increase (Figure 5).

Figure 5 Interactions of forms of capital explaining private fixed capital, 2013



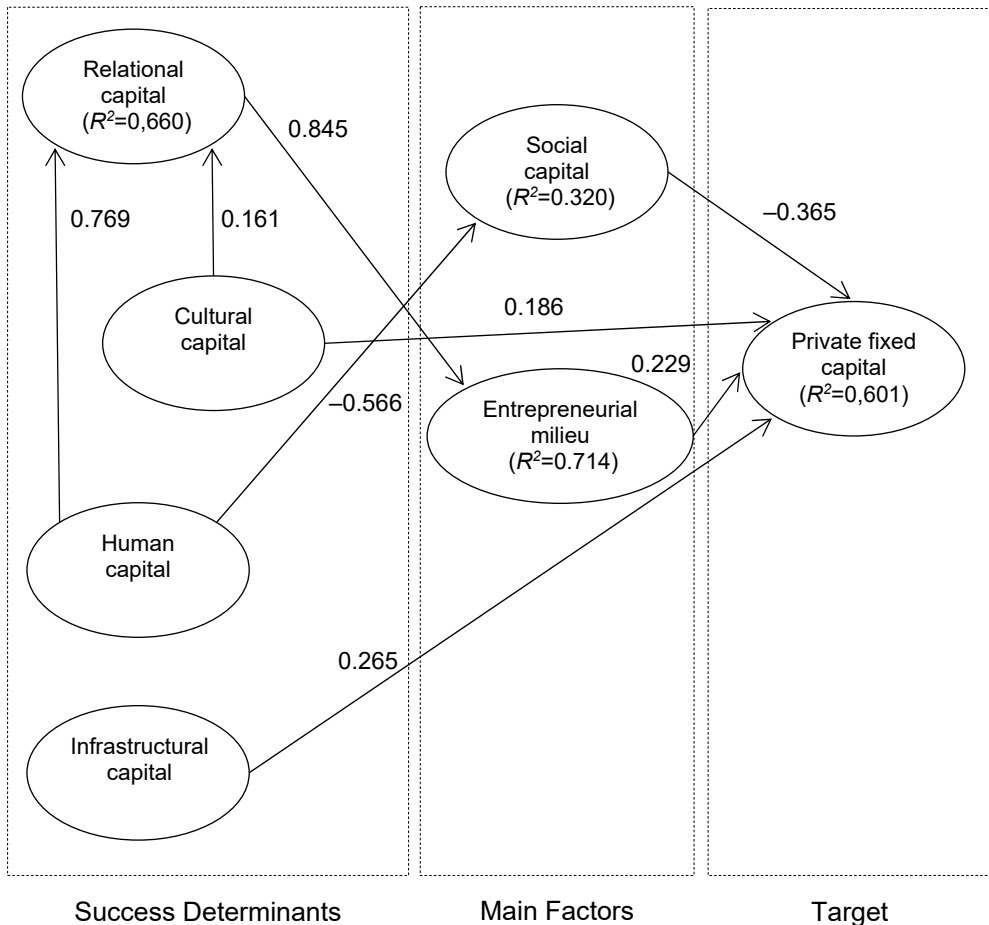
A different picture emerges in 2017 (Figure 6). The third examined situation indicates that four previous paths are discontinued, while three new ones appear. More specifically, in 2017, the relationship between infrastructural capital and entrepreneurial milieu cannot be considered significant, social capital no longer shapes entrepreneurial milieu, human capital does not affect cultural capital, and the effect of cultural capital on social capital also stops.

On the other hand, at this time, cultural capital directly modifies private fixed capital, although the effect is marginal (0.186). Furthermore, a new path emerges in the case of relational capital, strongly affecting entrepreneurial milieu (0.845).

Here again, there are marginal modifications among the previously and currently existing significant paths regarding the strength of effects. It can also be established that the variance of private fixed capital decreased, it can be explained in 60 per cent with the help of the model.

It can be concluded that in 2017, first time in the examined time frames, all capital factors influence private fixed capital. The strongest direct effect on the capital defined as the target is exerted by social capital (-0.365), while the strongest indirect effect is exerted by human capital (0.355).

Figure 6 Interactions of forms of capital explaining private fixed capital, 2017



Jóna (2013) and Tóth (2014) investigated the concept of territorial capital, which can be described as a narrower segment of endogenous development. Jóna (2013) analyzes all the Hungarian subregions with the help of a multidimensional

regression analysis. In the study, territorial capital is the dependent variable which is formed by seven forms of capital. The author states that infrastructural and social capital barely had an effect on territorial capital between 2004 and 2010. During this period, relational and cultural capitals had the most remarkable impact on territorial capital. These factors are followed by private fixed capital, institutional capital, and human capital. It is a notable remark, especially considering the comparison with the present paper.

The analysis indicates that social capital has a significant impact on the dependent variable in each year. Nevertheless, it is a fact that the effect of this latent variable becomes weaker over time. In 2009, the total effect (-0.679) can be regarded strong, but in 2017, it is only moderate (-0.365) (See Annex III).

Tóth (2014) studies the appearance of territorial capital in Hungary as well. In his analysis, he excludes Budapest and focuses on the territorial attractiveness regarding domestic immigration between 2006 and 2011. He suggests that the chance of higher living standards has a quite strong link to immaterial assets (cultural and human capital).

The strength of human capital in the model has been mentioned earlier and a similar conclusion has been revealed. Nonetheless, in the model, cultural capital does not play a significant role. It has a weak effect (around 0.2) on private fixed capital in each year. According to Jóna's (2013), Tóth's (2014) and this analysis, it can be established that analyses with a similar logic but in various territorial frameworks may lead to quite different results.

6. Conclusions and future research possibilities

In the study, the role of endogenous forms of capital was measured in a rural context. The PLS path analysis approach is a novel tool within territorial research, especially if the focus is on rural differences. With the help of the method, the interactions between the various forms of capital were shown, as well as their changes over time. In line with the aim of the analysis, it is believed it may be able to contribute to the academic literature and widen the empirical analysis accomplished with the abovementioned statistical method.

It can be concluded that the role of the capital factors featured in the model is "evident". Regarding the effects of human capital, the negative sign is due to the specificity of the indicators forming it. Thus, all capital factors have a positive effect on private fixed capital.

In the paper, the relationships were studied between capitals through a dynamic approach. The analysis conducted in 2009, 2013 and 2017 indicates that the relationship between the capitals shows temporal differences.

In 2009 and 2013, with one exception, the same paths are significant between the capitals, their strength shows marginal modifications. Both years imply that cultural, human, and infrastructural capitals, considered as long-run factors, shape private fixed capital in an indirect way. These leverage effects emerge through the drivers, i.e., a social capital and entrepreneurial milieu.

Compared to the above-mentioned years, 2017 shows a completely different system of relations. At this time, four paths are discontinued, but three other ones emerge instead. Thus, for instance, the path between infrastructural capital and entrepreneurial milieu is not significant. On the other hand, the infrastructural factor directly shapes private fixed capital. Human capital has a direct effect on social and

relational capitals, but not on cultural capital. In addition, another new path is formed between relational capital and entrepreneurial milieu, the former factor having a strong effect (0.845) on the latter. Consequently, over this year, all capital factors influence private fixed capital.

It is interesting, but definitely not positive, that human capital does not affect private fixed capital directly in any of the years. Although the finding may require further research, it implies that the rural presence of human capital is rather marginal.

As a limitation, the territorial framework of the analysis must be emphasised. The countryside is a unique territory differing from urban settlements, the special characteristics of which are determined by the settlements, economy, and society surrounding it. This environment provides a special context to the analysis; thus, the findings of the paper are only valid within these given conditions.

In the future, it may be worth expanding the time interval of investigation. A longer process could reveal deeper connections, which could help understand the existing interrelations better or make it easier to predict future development paths. Moreover, it must be mentioned once again that natural capital could not be quantified. It is obvious that this form of capital belongs to the countryside, and this failure may also lead to new research directions in the future.

References

- AEIDL [European Association for Information on Local Development] (1999) *Territorial competitiveness. Creating a territorial development strategy in light of the LEADER experience. Part 1*. LEADER European Observatory AEIDL, Bruxelles, http://www.esponontheroad.eu/dane/web_espon_library_files/698/zi_competitivity.pdf Downloaded: 12 June 2019
- Affuso, A., Camagni, R. (2010) *Territorial Capital and Province Performance in the Latin Arch: An Econometric Approach*. Politecnico di Milano. <http://www.grupposervizioambiente.it/aisre/pendrive2010/pendrive/Paper/affuso1.pdf> Downloaded: 12 November 2014
- Amin, A. (1999) An Institutional Perspective on Regional Economic Development. *International Journal of Urban and Regional Research*, 23 (2), 365–378.
- Atkinson, R. (2013) Territorial Capital, Attractiveness and the Place-based Approach: the Potential Implications for Territorial Development. In Pálné Kovács, I., Scott, J., Gál, Z. (Eds.), *Territorial Cohesion in Europe. For the 70th Anniversary of the Transdanubian Research Institute*. IRS CERS HAS, Pécs, 297–308.
- Benko, G. (1997) A regionális fejlődés útjai: globálistól a lokálisig. *Tér és Társadalom*, 11 (2), 1–16.
- Bodnár G. (2011) *What is rural?: Some Possible Methods to Define Rural Areas*. In: Ferencz, Á. (Ed.), *Erdei Ferenc VI. Tudományos Konferencia, Kecskeméti Főiskola Kertészeti Főiskolai Kar, Kecskemét, Vol. 1*, 235-239.
- Braithwaite, K. (2009) *Building on What You Have Got - A Guide to Optimising Assets*. Carnegie UK Trust, Dunfermline, UK.
- Brasili, C., Saguatti, A., Benni, F., Marchese, A., Gandolfo, D. (2012) *The Impact of the Economic Crisis on the Territorial Capital of Italian Regions*. 52nd European Regional Science Congress. 21–25 August. Bratislava. <http://www-sre.wu.ac.at/ersa/ersaconfs/ersa12/e120821aFinal00646.pdf>

- Camagni, R. (2008) Regional competitiveness: towards a concept of territorial capital. In Capello, R., Camagni, R., Chizzolini, B., Fratesi, U. (Eds.), *Modelling regional scenarios for the enlarged Europe*. Springer-Verlag, Berlin, 33–47.
- Camagni, R., Caragliu, A., Perucca, G. (2011) *Territorial Capital. Relational and Human Capital*. Draft version. Politecnico di Milano. Milano. http://www.gruposervizioambiente.it/aisre_sito/doc/papers/Camagni_Caragliu_Perucca.pdf Downloaded: 2 July 2015
- Capello, R. (2007) *Regional Economics*. Routledge, Oxon.
- Capello, R. (2011) Location, Regional Growth and Local Development Theories. *Aestimum*, 58 (1), 1–25.
- Capello, R. (2012) Regional Economics: Theoretical Achievements and Challenges. *Timisoara Journal of Economics*, 18 (5), 313–335.
- Capello, R., Nijkamp, P. (2011) Regional growth and development theories revisited. In Stimson, R., Stough, R. R., Nijkamp, P. (Eds.), *Endogenous Regional Development. Perspectives, Measurement and Empirical Investigation*. Edward Elgar, Cheltenham, UK - Northampton, MA, USA, 301–324.
- Capello R., Perucca G. (2013) *Do Eastern European Regions Move Towards an Endogenous Growth Pattern? A Diachronic Perspective of Regional Success Factors*. GRINCOH Working Paper Series, Paper No. 1.15
- Chant, S., McIlvaine, C. (2009) *Geographies of Development in the 21st Century. An Introduction to the Global South*. Edward Elgar, Cheltenham, UK - Northampton, MA, USA.
- Csatári B. (2001) A vidék földrajzi kérdései. In Dormány G., Kovács F., Péti M., Rakonczai J. (Eds.), *A földrajz eredményei az új évezred küszöbén*. SZTE TTK Természeti Földrajzi és Geoinformatikai Tanszék, Szeged, 1–9. <http://geography.hu/mfk2001/cikkek/Csatari.pdf> Downloaded: 8 October 2010
- Dinya L. (2013) „Zöld” prioritások érvényesítése a megyei szintű területfejlesztési stratégiákban. *Journal of Central European Green Innovation*, 1 (1), 21–33.
- EC [European Commission] (2017) *Competitiveness in low-income and low-growth regions. The lagging regions report*. Commission Staff Working Document. Brussels.
- Egri, Z., Tóth Z. (2015) Spatial Layers and Spatial Structure in Central and Eastern Europe. *Regional Statistics*, 5 (2), 34–61.
- Enyedi Gy. (1998) Sikeres régiók, In *Tények könyve: régiók*. Greger-Delacroix, 409–411.
- ETC [ETC Foundation – Compas] (2007) *Learning Endogenous Development - Building on Bio-cultural Diversity*. ETC Foundation – Compas, Bourton on Dunsmore, Rugby, Warwickshire, UK.
- Henseler J., Ringle C. M., Sarstedt M. (2015) A New Criterion for Assessing Discriminant Validity in Variance-based Structural Equation Modeling. *Journal of the Academy of Marketing Science*, 43 (1), 115–135.
- Henseler J., Ringle C. M., Sinkovics R. R. (2009) The use of partial least squares path modeling in international marketing. *New Challenges to International Marketing (Advances in International Marketing, Vol. 20)*, 277–319.
- Hoff, K., Stiglitz, J. E. (2001) Modern Economic Theory and Development. In Meier, G. M., Stiglitz, J. E. (Eds.), *Frontiers of Development Economics. The Future in Perspective*. World Bank - Oxford University Press, Oxford-Washington, 389–459.

- Jóna Gy. (2013) A területi tőke kistérségi jellegzetességei. *Doctoral Dissertation*. Szent István Egyetem Enyedi György Regionális Tudományok Doktori Iskola, Gödöllő.
- Kitson, M., Martin, R., Tyler, P. (2004) Regional Competitiveness: An Elusive yet Key Concept? *Regional Studies*, 38 (9), 991–999.
- Kovács P. – Bodnár G. (2017) Examining the Factors of Endogenous Development in Hungarian Rural Areas by Means of PLS Path Analysis. *Regional Statistics*, 7 (1), 90–114.
- Lengyel I. (2012a) Regionális növekedés, fejlődés, területi tőke és versenyképesség. In Bajmócy Z., Lengyel I., Málóvics Gy. (Eds.), *Regionális innovációs képesség, versenyképesség és fenntarthatóság*. JATEPress, Szeged, 151–174.
- Lengyel I. (2012b) A hazai területfejlesztés zsákutcái: a triális Magyarország. In Rechnitzer J., Rácz Sz. (Eds.), *Dialógus a regionális tudományról*. Széchenyi István Egyetem Regionális- és Gazdaságtudományi Doktori Iskola, Magyar Regionális Tudományi Társaság, Győr, 140–150.
- Lengyel I. (2017) Competitive and uncompetitive regions in transition economies: the case of the Visegrad post-socialist countries. In Huggins, R., Thompson, P. (Eds.), *Handbook of Regions and Competitiveness. Contemporary Theories and Perspectives on Economic Development*. Edward Elgar, Cheltenham, UK – Northampton, MA, USA, 398-415.
- Lengyel I., Szakálné Kanó I. (2012) Competitiveness of Hungarian Urban Micro-regions: Localization Agglomeration Economies and Regional Competitiveness Function. *Regional Statistics*, 2 (2), 27–44.
- Lewis, W. A. (1988) The Roots of Development Theory. In Chenery H., Srinivasan, T. N. (Eds.), *Handbook of Development Economics*. (Vol. I.) Elsevier, Amsterdam, 27–37.
- Milone, P., Ventura, F., Berti, G. & Brunori, G. (2010) Some Notes on the Identification of Rural Webs. In Milone, P., Ventura, F. (Eds.), *Networking the Rural*. Royal Van Gorcum, Assen, The Netherlands, 30–48.
- Münnich Á., Hidegkuti I. (2012) Strukturális egyenletek modelljei: oksági viszonyok és komplex elméletek vizsgálata pszichológiai kutatásokban. *Alkalmazott Pszichológia*, 15 (1), 77–102.
- Pociūtė-Sereikienė, G., Kriauciūnas, E., Ubarevičienė, R. (2014) Peripheralisation trends in rural territories: the case of Lithuania. *Studies in Agricultural Economics*, 116 (3), 122-130.
- Rechnitzer J. (2016) *A területi tőke a városfejlődésben. A Győr-kód*. Dialóg Campus Kiadó, Budapest-Pécs.
- Robbins, L. (1968) *The Theory of Economic Development in the History of Economic Thought*. London-Basingstoke, Macmillan.
- Sen, A. (1988) The Concept of Development. In Chenery H., Srinivasan, T. N. (Eds.), *Handbook of Development Economics*. (Vol. I.) Elsevier, Amsterdam, 9–26.
- Smętkowski M. (2018) The role of exogenous and endogenous factors in the growth of regions in Central and Eastern Europe: the metropolitan/non-metropolitan divide in the pre- and post-crisis era. *European Planning Studies*, 26 (2), 256-278.
- Stimson, R., Stough, R. R., Nijkamp, P. (2011) Endogenous Regional Development. In Stimson, R., Stough, R. R., Nijkamp, P. (Eds.), *Endogenous Regional Development. Perspectives, Measurement and Empirical Investigation*. Edward Elgar, Cheltenham, UK - Northampton, MA, USA, 1–19.

- Stimson, R., Stough, R. R. & Salazar, M. (2009) *Leadership and Institutions in Regional Endogenous Development*. Edward Elgar, Cheltenham, UK – Northampton, MA, USA.
- Szentes T. (2011) *Fejlesztés-gazdaságtan*. Akadémiai Kiadó, Budapest.
- TelR (2021): TelR database, www.teir.hu and <http://uj.lechnerkozpont.hu/en/oldal/teir>
- Todaro, M. P., Smith, S. C. (2009): *Economic Development*. (11th ed) Addison-Wesley, Boston.
- Tödtling, F. (2009) Endogenous Regional Development. In Kitchin, R., Thrift, N. (Eds.), *International Encyclopedia of Human Geography*, Elsevier, Oxford, 208–213.
- Tóth B. I. (2013) A területi tőke szerepe a regionális- és városfejlesztésben – Esettanulmány a magyar középvárosok példáján. *Doktori értekezés*. Nyugat-magyarországi Egyetem Széchenyi István Gazdálkodás- és Szervezéstudományok Doktori Iskola, Sopron.
- Tóth. B. I. (2014) A hazai kistérségek vonzerejének és területi tőkájének néhány összefüggése. *Területi Statisztika*. 54 (1), 3–18.
- Tubadji, A., Nijkamp. P. (2015) Cultural impact on regional development: application of a PLS-PM model to Greece. *The Annals of Regional Science*, 54 (3), 680–720.
- Vázquez-Barquero, A., Rodríguez-Cohard, J. C. (2016) Endogenous Development and Institutions: Challenges for Local Development Initiatives. *Environment and Planning C: Government and Policy*, 34 (6), 1135–1153.
- Vermeire, B., Gellynck, X., De Steur, H., Viaene, J. (2008) *The role of social capital assets in reconciling endogenous and exogenous drivers of rural renewal*. 8th European IFSA Symposium, 6 - 10 July 2008, Clermont-Ferrand, France, http://ifsa.boku.ac.at/cms/fileadmin/Proceeding2008/2008_WS6_06_Vermeire.pdf Downloaded: 21 July 2014

Annex

Annex I Indicators of each capital, 2009

<i>Forms of capital</i>	<i>Indicators</i>
	<i>Material capital</i>
Private fixed capital	Total domestic income (Ft) per capita
	Total income of full-time jobs (Ft) per capita
	Number of built properties per 1000 inhabitants
	Total floor area (m ²) of built properties in the same year per 1000 inhabitants
Entrepreneurial milieu	Number of passenger cars by residence of operator per 1000 inhabitants
	Balance sheet total (total assets) (1000 Ft) per registered entrepreneurship
	Number of registered limited partnerships per 1000 inhabitants
	Number of registered limited companies per 1000 inhabitants
	Number of registered agricultural cooperatives per 1000 inhabitants
Infrastructural capital	Number of registered limited liability companies per 1000 inhabitants
	Number of registered joint venture per 1000 inhabitants - GFO'11
	Amount of sewage disposal in public collecting system per 1000 inhabitants (1000 m ³)
	Amount of sewage disposal in public collecting system from households per 1000 inhabitants (1000 m ³)
	Internet subscriptions per 1000 inhabitants
	Number of telephone lines (including ISDN lines) per 1000 inhabitants

<i>Immaterial capital</i>	
Social capital	Total number of registered long-term (180 days) job-seekers per 1000 inhabitants
	Number of constant replacement migration per 1000 inhabitants
	Number of full-time pedagogues in primary education per 1000 inhabitants (including specific education)
	Number of juvenile offenders (year 14-17) within registered offenders per 1000 inhabitants
	Number of registered offenders (by location) per 1000 inhabitants
Human capital	Number of full-time students in tertiary education per 1000 inhabitants (by location)
	Number of lecturers in tertiary education per 1000 inhabitants (by location)
	Number of registered companies per 100000 inhabitants in the section of professional, scientific and technical activities
Cultural capital	Number of creative cultural collectivities per 1000 inhabitants
	Number of members of creative cultural collectivities per 1000 inhabitants
	Number of cultural events per 1000 inhabitants
	Number of participants of regular forms of culture per 1000 inhabitants
Relational capital	Number of registered partnerships per 1000 inhabitants in the section of accommodation and food service activities
	Number of registered companies per 1000 inhabitants in the section of accommodation and food service activities
	Number of registered partnerships per 1000 inhabitants in the section of information and communication
	Number of registered companies per 1000 inhabitants in the section of information and communication
	Number of registered non-profit organisations per 1000 inhabitants

Note: Some indicators have different names in 2013 and in 2017. These negligible differences have no influence on the dynamic analysis.

Annex II Values of the HTMT correlation ratio

Pairs of latent variables	HTMT values		
	2009	2013	2017
Infrastructural capital – Human capital	0.677	0.696	0.653
Relational capital – Human capital	0.608	0.657	0.616
Relational capital – Infrastructural capital	0.806	0.950*	0.777
Cultural capital – Human capital	0.243	0.230	0.360
Cultural capital – Infrastructural capital	0.233	0.367	0.204
Cultural capital – Relational capital	0.435	0.449	0.403
Private fixed capital – Human capital	0.521	0.620	0.613
Private fixed capital – Infrastructural capital	0.913*	0.875	0.766
Private fixed capital – Relational capital	0.708	0.759	0.728
Private fixed capital – Cultural capital	0.321	0.337	0.331
Social capital – Human capital	0.489	0.564	0.509
Social capital – Infrastructural capital	0.629	0.834	0.823
Social capital – Relational capital	0.596	0.639	0.488
Social capital – Cultural capital	0.383	0.499	0.283
Social capital – Private fixed capital	0.802	0.835	0.786
Entrepreneurial milieu – Human capital	0.613	0.599	0.597
Entrepreneurial milieu – Infrastructural capital	0.653	0.619	0.556
Entrepreneurial milieu – Relational capital	0.862	0.893	0.905*
Entrepreneurial milieu – Cultural capital	0.388	0.368	0.213
Entrepreneurial milieu – Private fixed capital	0.670	0.606	0.612
Entrepreneurial milieu – Social capital	0.609	0.528	0.470

*Note: *: Over the required results*

Annex III: Test values of PLS Path Analysis

Values of the year 2013

P values of the final model, 2013

Path	Path coefficients	T value	P value
Human capital -> Relational capital	0.733	16.487	0.000
Human capital -> Cultural capital	0.250	3.168	0.002
Human capital -> Social capital	-0.531	10.502	0.000
Infrastructural capital -> Private fixed capital	0.283	2.857	0.004
Infrastructural capital -> Entrepreneurial milieu	0.378	3.943	0.000
Cultural capital -> Relational capital	0.170	2.770	0.006
Cultural capital -> Social capital	-0.291	4.118	0.000
Social capital -> Private fixed capital	-0.470	5.779	0.000
Social capital -> Entrepreneurial milieu	-0.212	2.619	0.009
Entrepreneurial milieu -> Private fixed capital	0.173	2.945	0.003

Note: Significant correlation, with $p < 0.05$

Correlations between the forms of capital, 2013

	Human capital	Infrastructural capital	Relational capital	Cultural capital	Private fixed capital	Social capital	Entrepreneurial milieu
Human capital	1.000						
Infrastructural capital	0.730	1.000					
Relational capital	0.776	0.685	1.000				
Cultural capital	0.250	0.215	0.354	1.000			
Private fixed capital	0.670	0.702	0.667	0.288	1.000		
Social capital	-0.604	-0.698	-0.572	-0.424	-0.750	1.000	
Entrepreneurial milieu	0.698	0.526	0.821	0.273	0.546	-0.475	1.000

Values of total effect, 2013

	Relational capital	Cultural capital	Private fixed capital	Social capital	Entrepreneurial milieu
Human capital	0.776	0.250	0.306	-0.604	0.128
Infrastructural capital			0.348		0.378
Cultural capital	0.170		0.148	-0.291	0.062
Social capital			-0.507		-0.212
Entrepreneurial milieu			0.173		

Values of the year 2017

P values of the final model, 2017

Path	Path coefficients	T value	P value
Human capital -> Relational capital	0.769	17.864	0.000
Human capital -> Social capital	-0.566	13.130	0.000
Infrastructural capital -> Private fixed capital	0.265	2.530	0.011
Relational capital -> Entrepreneurial milieu	0.845	23.094	0.000
Cultural capital -> Relational capital	0.161	2.258	0.024
Cultural capital -> Private fixed capital	0.186	2.434	0.015
Social capital -> Private fixed capital	-0.365	4.289	0.000
Entrepreneurial milieu -> Private fixed capital	0.229	3.769	0.000

Note: Significant correlation, with $p < 0.05$

Correlations between the forms of capital, 2017

	Human capital	Infrastructural capital	Relational capital	Cultural capital	Private fixed capital	Social capital	Entrepreneurial milieu
Human capital	1.000						
Infrastructural capital	0.718	1.000					
Relational capital	0.797	0.648	1.000				
Cultural capital	0.170	0.080	0.291	1.000			
Private fixed capital	0.648	0.644	0.617	0.314	1.000		
Social capital	-0.566	-0.692	-0.441	-0.189	-0.679	1.000	
Entrepreneurial milieu	0.746	0.486	0.845	0.164	0.540	-0.416	1.000

Values of total effect, 2017

	Relational capital	Private fixed capital	Social capital	Entrepreneurial milieu
Human capital	0.769	0.355	-0.566	0.650
Infrastructural capital		0.265		
Relational capital		0.193		0.845
Cultural capital		0.217		0.136
Social capital	0.161	-0.365		
Entrepreneurial milieu		0.229		

FEMALE STEREOTYPES IN ROMANIAN ADVERTISING: AN INTERPRETATIVE CONTENT ANALYSIS

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Abstract. Advertising, by its accessibility, is incredibly powerful in spreading stereotypical representations. The way women are portrayed in advertising in different countries and cultures has been a subject of research for more decades. The paper aims to examine the way women are portrayed in advertising campaigns in Romania. The study focuses on finding the stereotypes used and their characteristics by qualitatively analyzing ads from brands' YouTube channels. We identified seven stereotypes and the analysis shows that women portrayals are idealized in Romanian advertising. Although there are some modern approaches to the representations, ads do not reflect contemporary female roles. The most frequent stereotype is the Next-Door Woman, a stereotype that emphasis on the cuteness of the woman, not on her intelligence. Romanian brands' advertising lacks campaigns promoting women empowerment.

Keywords: female stereotypes, women portrayal, advertising, Romania

JEL classification: M31, M37

1. Introduction

Advertising, a multifaceted phenomenon, is a significant part of everyday life. Beyond the communication and information function, it also has a social role. Advertising messages indirectly communicate information on generally accepted rules, attitudes, and social roles to consumers. Thus, advertising enhances the social integration of individuals, facilitates universal knowledge of values and provides patterns of social behavior (Arens, 2013). The relationship between advertising and society is widely discussed. On the one hand, advertising is considered

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a “mirror” of society reflecting dominant values that already exist. (Holbrook, 1987). On the other hand, advertising has the power to induce and shape values for consumers so it becomes a “mold” of the society (Pollay, 1987).

Advertising messages reflect and build the cultural values of the dominant groups, reflecting and capitalizing on stereotypes, in general, and gender, in particular. As a social media agent with high power among consumers, there are concerns about the distorted way in which the social and professional image and roles of women and men are presented. Women and men are often portrayed in advertising in the form of gender stereotypes that create in the viewer's mind conventional models of the interaction between genders and their roles (Goffman, 1979; Schroeder & Zwick, 2004). Stereotypes offer a simplified version of the world that can limit the possibilities of self-realization, especially for those who belong to stereotypical groups (Knoll et al., 2011).

Advertising makes an unequivocal contribution to gender inequality by promoting sexism (Kilbourne, 1999). This ongoing trend that places women in lower positions is used in advertising to describe traditional clichés by which women have a predominantly decorative role in society, although they manifest their potential and abilities (Plakoyiannaki & Zotos, 2009). Advertising messages feature women with perfect body shapes, creating almost impossible ideals (Cortese, 1999).

According to a SheKnows poll, 91% of respondents believe the way women are portrayed in advertising has a direct impact on girls' self-esteem. Moreover, 94% of respondents believe portraying women as sex symbols in ads is harmful (Stampler, 2014).

Changing the structure of roles in the family and the workforce has led to significant changes in female and male roles. There is an important research area that explores the degree and the way advertising reflects accurately the contemporary roles of women and men (Plakoyiannaki & Zotos, 2009). For a long period of time, women and men were depicted in advertising in traditional roles, but recent data indicate a shift towards more positive role portrayals (Grau & Zotos 2016).

Over the past 60 years, gender stereotypes have been a subject of research around the world. Most of the studies concentrated on the women and men portrayals in print and television. Some studies also did comparative analyses in different cultural contexts (Tschla, 2020). Even though consumers are spending more and more time online and on social media, little research has examined gender portrayals in online platforms (Grau & Zotos, 2016). The current study aims to provide recent evidence on female role portrayals in video ads available on the brands' YouTube channels drawing insights from the Romanian market. A former communist country, Romania offers an interesting context for studying female stereotypes because the society has relatively clear rules about how a person should behave according to his/her gender. Stereotypes are present in human interactions, but they are also widespread in the media and advertising (Grunberg, 2005). Romania ranks in 2020 in the 26th place in the EU in terms of the Gender Equality Index, with lower scores than the EU average in all areas (EIGE, 2020). These show us that gender disparities are affecting the social and professional status of women in Romania. Romanian reality is countered by the EU's efforts to an egalitarian society (European Parliament, 2021) and by a series of advertising campaigns of multinational brands (e.g., Dove, Pantene, Always, Nike) promoting female empowerment and personal freedom (Grau & Zotos, 2016).

2. Literature Review

Stereotypes are defined as exaggerated beliefs associated with a social category (Allport, 1954). A stereotype is a preconceived opinion, a cliché largely independent of individual reactions produced by an unscientific generalization (Chelcea, 2016). According to Eisend (2009), stereotypes can lead to simplified conceptions, expectations and judgments that can restrict the opportunities of subjects from a social category that has already been stereotyped. Depending on the content, stereotypes can be positive or negative. Positive stereotypes refer to those favorable subjective beliefs about members of a particular social group, a membership that gives them advantages, appreciation or even superiority (Czopp et al., 2015). Negative stereotypes refer to those negative traits and characteristics that are attributed to a social group and, by implication, to its members (Voices, 2014). Stereotypes can also be classified according to social category: gender, sex, ethnicity, age, sexual orientation, religion, occupation (Moraru, 2009).

Gender stereotypes are beliefs that are universally recognized as valid about roles, psychological characteristics and behaviors closely related to the person's gender (Browne, 1998).

Deaux & Lewis (1984) argue that gender stereotypes have four different and independent components: character descriptors (affirmation of one's individuality, care for others), physical characteristics (hair length, height), roles (leader, childcare) and occupational status (housewife, driver). Each of these components is associated with a version, either feminine or masculine. Female stereotypes have been used in advertising, both in campaigns for women and men, since the second half of the 18th century. They are used in advertising under the argument that potential buyers can identify themselves in these portrayals leading to increased effectiveness of the ad and therefore to increased sales (Zhou & Chen, 1997).

The way women are portrayed in advertising became a topic of debate in the early 1960s at the same time as the feminist movement. Studies carried out at the time revealed significant differences between the image of the woman in advertising and her real role in society. According to Courtney & Lockeretz (1971), the woman appears in advertising, predominantly, in inferior situations: as a housewife, depending on a man, as a sexual object or deprived of decision-making capacity.

Erving Goffman's study in the late 1970s highlights a culturally infantilized woman and ritually subordinate to the man. Based on a coding system that became a benchmark, Goffman (1979) identified several trends in American magazine advertisements: women's height exceeded by men's; women's hand-touching are delicate, cosseted and never determined and capable of manipulating objects; women receive instructions to use products from men and girls from boys; the gaze and face of women are directed towards the man; the woman often lies on a bed or floor; the look of women is lost and dreamy; women are presented in a mental state of confusion or overwhelmed by the social situation.

Over time, the portrayal of women in advertising has evolved more slowly than the pace at which women have transformed from a housewife to a professional whose voice has gained authority in both the family and society (Gilly et al., 1998). Even today seems that advertising not only does not reflect contemporary roles, but it emphasizes roles that no longer exist in today's society (Zotos & Tschla, 2014). Recent studies show that gender stereotypes are still present in advertising

in many countries (Eisend, 2009, Grau & Zotos, 2016). The most common female stereotypes are occupational ones (Eisend, 2009), women being portrayed as young ladies, using household products, staying at home, and having dependent roles (Knoll et al., 2011).

Literature that examines female portrayal in advertising (Lysonski, 1985; Mitchell & Taylor, 1990; Plakoyiannaki et al., 2008; Plakoyiannaki & Zotos, 2009) shows four stereotype categories: women in traditional roles (dependent and housewives), women in decorative roles (concerned with physical attractiveness and sex objects), women in non-traditional roles (non-traditional activities, career-oriented women, and voices of authority) and women in neutral roles (portrayed as equal to men).

Studies made in Romania about gender stereotypes suggest the existence of a conservative pattern of gender. There are stereotypical approaches to what women do, who they are, and what women want that still prevail. Thus, the leading roles that advertising highlights are: the woman – housewife, the woman – sexual object, the woman – difficult to please, the woman subjected to imposed beauty patterns or the successful diva, and the mother-woman (Grunberg, 2005). According to a more recent study done by Stoica, Miller, & Ardelea (2011), women are portrayed in a mix of traditional and modern roles. Yet more traditional stereotypes – women concerned for physical appearance and housekeeping – are still in the majority. Women are promoting domestic products, especially personal, beauty and care products and household cleaning products. They also appear in home settings and inactive roles.

3. Methodology

The study aims to identify the female stereotypes in Romanian advertising broadcast on TV channels and social media (YouTube). Also, we want to analyze the roles, activities, language, and context in which women are presented.

To address the objective of the research, we used a qualitative approach, an interpretative content analysis. We choose this method because it allows capturing meaning by disaggregating the text into its constituents' parts and subsequently describing the contents of each component to increase understanding of what is communicated and how (Collis & Hussey, 2014). The text can be found in books, newspapers, magazines, scientific articles, speeches, official documents, videos, movies, images (Agabrian, 2006).

The selection of the advertisements was based upon three primary criteria. First, we selected brands whose advertising campaigns will be analyzed. The selection of brands was based on the top "100 strongest Romanian brands", made in 2018 by Unlock Market Research. This is a ranking of the brands that Romanian consumers consider the strongest according to the following criteria: the importance of the brand, the degree of use, and its awareness. This classification of Romanian brands is based on the investment of trust and affectivity given to them by consumers without considering commercial or financial indices. These brands belong to the following product categories: bottled water, durable goods, hygiene and care products, alcoholic beverages, dairy products, sweets, and retailers. Second, we selected advertising campaigns that were broadcast between 2017 and 2021, available on the brand's official YouTube channel. Third, advertisements had to contain a female character with a significant role. For each advertising campaign,

we selected only one ad because the stereotype portrayed is the same. A total of 60 advertising campaign that met these criteria was used in the study (Table 1).

Table 1: Advertising campaigns

Product Category	Brand	Advertising Campaign (2017-2021)
Bottled water	Borsec	Borsec, the Source of Health and Energy (<i>Borsec, izvor de sănătate și de energie</i>), Let's Wish Abundant Holidays! (<i>Să ne urăm unii altora sărbători îmbelșugate!</i>), Let's Celebrate Together the Great Union (<i>Să celebrăm împreună Marea Unire</i>);
	Dorna	Drink Dorna, Do Good (<i>Bei Dorna, faci bine</i>), Come On Out! (<i>Hai pe-afara!</i>), Shout for Life (<i>Strigăt de viață</i>);
	Aqua Carpatica	Caroling Romania (<i>Colindăm România</i>), AQUA Carpatica Kids (<i>AQUA Carpatica Kids</i>);
	Bucovina	Find The Way To Nature, Find The Way To Yourself (<i>Regăsește drumul spre natură, regăsește drumul spre tine</i>);
Durable goods	Arctic	Family Is Your Business (<i>Familia este business-ul tău</i>), The Arctic Effect on the Spirit (<i>Efectul Arctic asupra spiritului</i>), Functions in Your Life (<i>Funcții din viața ta</i>);
	Allview	Technology with a Soul (<i>Tehnologie cu suflet</i>);
	Savana	What's the Deal with Teflon? (<i>Care-i treaba cu Teflonul?</i>);
	Policolor	Beginners, they are helped by the paint (<i>Începători, îi ajută vopseaua</i>);
Hygiene and care products	Gerovital	Gerovital Beauty - The Most Beautiful Film Is Your Life (<i>Gerovital Beauty - Cel mai frumos film este chiar viața ta!</i>), Gerovital H3 Evolution, Gerovital Treatment (<i>Gerovital Tratament</i>), Gerovital H3 Hyaluron (<i>Gerovital H3 Hialuron</i>);
	Dero	There's One for Two (<i>E unul pentru doi</i>);
	Farmec	Farmec from the Heart (<i>Farmec din suflet</i>), Farmec Depilatory (<i>Farmec Depilatoare</i>), Beauty and Trust Are Grown in the Family (<i>Frumusețea și încrederea se cultivă în familie</i>);
	Elmplant	True Beauty Is Inspired by Nature (<i>Adevărata frumusețe este inspirată din natură</i>), Elmplant DETOX, Elmplant SUN, Elmplant Multi-COLLAGEN;
Alcoholic beverages	Triumf	Your Cleaning Experts (<i>Experții tăi în curățenie</i>);
	Ursus	What Begins with URSUS, Ends Epic (<i>Ce începe cu URSUS se termină epic</i>), URSUS Untold;
	Timișoreana	Tradition Goes On (<i>Tradiția merge mai departe</i>);
	Cotnari	This Is COTNARI Wine (<i>Acesta-i vinul de COTNARI</i>);
Dairy products	Bergembier	This Is Cotnari Wine (<i>Răcorim România!</i>);
	Ciuc	New Ciuc Radler (<i>Noul Ciuc Radler</i>);
	Napolact	Napolact Challenges Us to Have Weekend Mornings Every Day! (<i>Napolact ne provoacă să avem dimineți de weekend în fiecare zi!</i>), Napolact BIO, Invite the Quiet at Your Table! (<i>Poștește tihna la masa ta!</i>);
	Covalact	Covalact BIO, Too Good, Too Like in the Countryside (<i>Prea bun, prea ca la țară</i>);
Sweets	La Dorna	Your Creative Help in the Kitchen (<i>Ajutorul tău creativ în bucătărie</i>);
	Zuzu	Zuzu Divine – Divinely Fine (<i>Zuzu Divin – divin de fin</i>), Discover Dolce Vita! (<i>Descoperă la Dolce Vita!</i>);
	Heidi	Non-boring (<i>Neplictisitor</i>);
	Joe	JOE Dreams;
Retailers	Rom	Not This Year (<i>Nu anul ăsta!</i>);
	Corso	#Corsogood, Be More Corso (<i>Fii mai Corso!</i>), Corso's Ark (<i>Arca lui Corso</i>);
	Emag	Genius Days: April 6-8 (<i>Genius Days: 6-8 aprilie</i>), eMAG Genius, eMAG Genius (<i>Garantat la eMAG</i>), Find More Than You Think (<i>Găsești mai mult decât crezi</i>);

Product Category	Brand	Advertising Campaign (2017-2021)
	Dedeman	Where the Story Ends, the Real Life Begins (<i>Unde se termină povestea, începe viața adevărată</i>);
	Altex	Order Water, Juices, Wine and Beer Online from altex.ro (<i>Comandă-ți online apă, sucuri, vin și bere de pe altex.ro</i>);
	Mobexpert	Yours in 5 Minutes (<i>Al tău în 5 minute</i>), Mobexpert for the Apartment (<i>Mobexpert pentru apartament</i>), Discover the Touch Screens in Mobexpert Stores (<i>Descoperă ecranele tactile din magazinele Mobexpert</i>);
	Catena	Is Stress a Problem? Come to Catena! (<i>Stresul e o problema? Vino la Catena!</i>), Catena Wishes You a Happy Easter! (<i>Catena vă urează un Paște fericit!</i>), A Healthy Heart Loves More (<i>O inimă sănătoasă iubește mai mult</i>).

Source: Designed by the authors

The coding scheme was developed based on previous studies (Goffman, 1979; Browne, 1998; Plakoyiannaki & Zotos, 2008; Matthes et al, 2016) with some new categories related to the video advertisements included. The following categories regarding woman portray were included in the analysis: Role, Activities, Product user, Appearance, Verbal language, Body language, Paraverbal language, Clothing description, Interaction with the other characters of the ad, Interaction or positioning with the product, Setting and decor.

4. Analysis

The Next-Door Woman Stereotype

The Next-Door Woman Stereotype is extremely present in Romania being portrayed in 46.67% of analyzed campaigns. This can be found in commercials for bottled water, durable goods, hygiene and care products, alcoholic beverages, sweets, and retailers. The Next-Door woman is mostly young, but she can also be middle-aged. She has a filiform body or a common physical conformation. She is gentle, smiling, relaxed, and satisfied with her existence. The verbal communication used is colloquial and cordial. In some ads, she does not speak at all, but in others, she supports the entire auditory scenario. The paraverbal communication adapts to the information transmitted, the tone is friendly when addressing the audience or other characters, and exclamatory when presenting the product. Notably, she expresses her own opinions, without being influenced by any other characters and no connotative phrases are used to address her. The body language betrays her joy and delight. After using the product, the woman's well-being is noticed. The hands are used to handle or consume the product and they approach the camera, thus achieving a connection with the viewer. Even when she does not use the product, it is suggested that her pleasant appearance is a result of its use. Women's clothing is most of the time casual. With small exceptions, she wears elegant clothes when talking about special events.

Often this stereotype is portrayed alone in the ad, or there is no interaction between the woman and the other characters. The purpose of the singular portrait is to create a connection with the audience. The other characters have an admiring and friendly attitude towards her. They are by her side, have a protective attitude, and accompany her in the activities she carries out. Although the activities carried

out by the Next-Door Woman are extremely diverse, from relaxing indoors, to parties, socializing, walking in the park, and arranging meals, they are common activities for the average. The Next-Door Woman appears in the decor of the ordinary house, at the cafe, on the city streets, in the alleys of the park or the club.

The Active Woman Stereotype

The Active Woman Stereotype can be found in ads for bottled water and sweets categories. This stereotype is pictured in 15% of the campaigns. The Active Woman is young, filiform, and athletic. Her face is the testimony of a hectic life, but she has the power to smile and rejoice. The facial expressions of these states often appear after consuming the product. Verbal communication is colloquial. The phrases are dynamic to energize the atmosphere, but also exclamations that inspire consumers, or awake their desire for action. The woman's non-verbal communication suggests her energy. Even if it often seems slightly tired at the beginning of the spot, as soon as she consumes the product, the situation changes radically. The paraverbal communication is exclamatory and rhythmic to create an overall atmosphere consistent with the message to be conveyed. The clothing is sporty or casual to allow the woman to freely carry her activities. The woman either does not interact with the other characters, being extremely focused on her activity, or the other characters help her and have an extremely friendly attitude towards her. She consumes the product in each spot and the consumption is an integral part of her activity. The scenes usually take place in nature or on sports fields and in urban areas.

The Mother Stereotype

The Mother is found in 20% of analyzed ads. She considers her child the center of the universe and puts herself in second place. She makes sacrifices for their upbringing and care while denying her worth. The Mother is portrayed in a large number of ads. The stereotype can be found in the following analyzed categories: bottled water, hygiene and care products, durable goods, dairy products, and retailers. The woman is generally young, at most middle-aged, and her physical conformations are often common because she is distinguished by childcare and not by appearance. She is always smiling, and her face lights up when she looks at her child. Verbal communication is colloquial, and the phrases are descriptive and exclamatory, most often presenting the benefits of the product or the child's life. Body language suggests her love for the children and how important they are. She uses her hands and arms to initiate contact with them and makes protective gestures. If she seems overwhelmed by the disaster caused by the children, she quickly changes the condition, being helped by the product that brings joy to both her and the children. The paraverbal communication is the testimony of the character's sensitivity, the tone being emotional, friendly, and exclamatory. The clothing is always casual and in pale colors, suggesting that for the Mother, the child is the most important.

There is also an interesting aspect of portrayal with novelty elements, different from the classic stereotype. The woman is helped by the husband to take care of the child, who is part of almost all activities. The woman's activities are related to the development and upbringing of children or caring for the home and she rarely relaxes. The action often takes place inside the house or in their backyard.

The Sensual Woman Stereotype

The Sensual Woman Stereotype can be found in around 21% of analyzed ads for the following categories: hygiene and care products, alcoholic beverages, dairy products, sweets and retailers. The Sensual woman is young or middle-aged. She is filiform, has a low-cut neckline, a bright face and plump lips, most often highlighted with red lipstick, and facial expressions are intensely sensual. The look is piercing, and the smile is, of course, sensual. The voluptuous woman usually has no lines in the commercials, expressing herself through gestures, and the attention is focused on her physical attributes. The connotative language used by the man towards her is noticeable. The paraverbal communication completes the sensual atmosphere, the tone of speech being tempting, sugary. Body language is full of meanings, which is the main method of transmitting the message. The woman caresses her body, has a powerful look that emanates both eroticism and mystery. She oscillates between intimate caresses and exuberant, slightly lascivious movements that emphasize her ease and self-confidence.

The woman's clothing is in line with the attitude. She is wearing sensual clothes in bright colors. The woman is admired by the other characters that come to her aid. However, some ads show the superior attitude of the man who tends to see only woman's physical qualities and to objectify her. She sensually uses the product, caressing her body when applying or consuming it sensually. She holds the product in her hand and it is suggested that due to consumption she has also gained sensuality. The Sensual Woman attends parties and events and has romantic encounters.

The Housewife Stereotype

The Housewife Stereotype appears in 11.67% of the ads included in the sample for the following categories: hygiene and care products, alcoholic beverages and dairy products. The Housewife is portrayed at all ages and there is no physical pattern, the focus being on housework. The woman's language is colloquial, but there is a great frequency of archaic and regional words, even using of rhymes to transmit the message. The phrases are descriptive, and they present most of the time the product or process of cooking. Body language betrays the importance of housework, she is concentrated, sometimes even worried in fear that something is not perfect. The joy is to be seen on her face after receiving the appreciation of others. Paraverbal communication is observed in tune with this, which is a rhythmic and friendly one. The Housewife's clothing varies from a casual one to a traditional one, and the apron is present almost in every ad, which demonstrates that she takes her role seriously. The interaction with other characters seems to contradict the classical stereotype of women, the lack of man's involvement and his superiority existing in very few ads. Most characters have a friendly attitude towards her, appreciate and recognize her effort. The man helping the woman at home is an element of modernity. The woman uses the product for the fulfillment of household activities, and this gives her an air of superiority. Her activities take place in the dwelling, in the kitchen and the living room for an easy identification of the consumer with the framework; or outside the house, in a traditional yard, to make the transition in the *in illo tempore* of the old village, an archaic frame enhanced by traditional objects woven with folklore or clay motifs.

The Natural Beauty Stereotype

The Natural Beauty Stereotype is found in advertising commercials for hygiene and care products, but also in those for dairy products. This stereotype appears in 13.33% of the campaigns. The woman is portrayed at all ages, but the emphasis is placed on the bright, smiling face and firm skin. It has fine, angelic features and emanates naturalness, make-up is missing or is very discreet. Verbal communication is colloquial, poetic or even specialized, and the replies are designed to describe the atmosphere or present how the character is feeling after product consumption. Body language suggests admiration of her look, the woman caressing with contentment both the face and the body. Paraverbal communication supports the ingenuous attitude of the woman, the tone being friendly. Most of the time, the woman appears alone in advertising frames. When other characters appear, we notice a slight superiority in man's attitude, but fully respectful towards the woman. The woman's only activity is the consumption or description of the product, all in a décor that wants to create the impression of purity, which makes use of white backgrounds.

The Independent Woman Stereotype

The Independent Woman Stereotype only appears in 6.67% of ads and only in those for hygiene and care products. She is portrayed at all ages and all physical conformations, a sign that it matters what she does and not her physical appearance. Verbal communication is colloquial, and the woman speaks knowingly using descriptive phrases. There are also exclamation phrases or ones that show care for the female characters. Paraverbal communication is noticed by the friendly tone, rhymes, or exclamations. The woman body language demonstrates her self-confidence. She always has smart-casual or uniform clothing. The other characters recognize their expertise and ask for help. She is, generally, portrayed at work. She does not always use the product within the ad, most of the time being emphasized on the results of its use. When she uses it, the professional posture is highlighted. The decor is professional, office or lab, but also the inside of the house.

5. Discussion

The Next-Door Woman Stereotype is present in six out of seven studied product categories fact that is similar with the findings of Englis et al. (1994): she promotes a broad range of products. Both this and its high presents in ads makes this type of woman among the most preferred portray used in advertising in Romania. In comparison to other research, we can say that the same pattern is followed. The Next-Door Women have a friendly tone, wear casual clothes and are mostly young which is consistent with Englis et al. (1994). We observed that they not only wear casual clothes, but elegant ones when attending special events, which suggests that she promotes as well some outstanding products. A positive aspect of the portrays' is that the women are equal to men and other characters have a protective attitude towards them.

The Active Woman Stereotype is presented in ads for bottled water and sweets. The portrayal identified by us is similar to what other studies had found out.

Stănculescu (2009) also noticed that she has a lot of energy, a hectic life, and she is portrayed in the middle of an action, usually in the city or on the sports fields as in Englis et al. (1994) analysis. In the case of this stereotype as in the case of the Next-Door Woman, the female is helped by others, and they have a positive attitude towards her.

A more traditional portray is the Mother Stereotype which is present in a lot of ads where the product is seen as a saving solution that helps her to cope with her daily activities. Similar to the findings of Kitch (2001) and Eckert & McConnell-Ginet (2003), the woman makes sacrifices for her children, her existence is in second place and usually, her interactions are limited to those with the child. Different from the classic stereotype is the fact that she is helped by her husband when it comes to taking care of the children.

A portray in which women are appreciated mainly for their physical characteristics is the Sensual Women Stereotype. This stereotype is presented in a wide variety of product categories from hygiene and care products to alcoholic beverages and dairy products. She is young, filiform, sexy, has extremely sensual facial expressions, and the men usually objectify her and use connotative language towards her. She is wearing sexy clothes in bright colors that leave parts of her body visible to be admired, especially by the male gaze, and she also has romantic encounters. The consumption of the product gives her confidence and makes her gain sensuality. All these elements are consistent with previous research from Goffman (1979), Kitch (2001) and Moraru (2009).

Another traditional portray is the Housewife Stereotype. She is portrayed at all ages and physical conformation because what matters for her is the housework and being recognized for her household skills. Our results are mostly related to previous research because they show the same pattern as those illustrated by Kitterød & Rønsen (2011). In addition, we also found out some modern elements such as a woman being helped by a man that has a friendly attitude. Particular for Romanian commercials, there are the traditional elements such as wooden objects, folklore motifs or the traditional up-tempo expressions that make the transition to the old and archaic village typical for the Carpatho-Danubian area.

Women portrayed as the Natural Beauty Stereotype distinguish themselves by naturalness. Our research revealed that the accent is put on the bright face and firm skin fact that is in line with previous research from Solomon et al. (1992) and Moraru (2009).

The Independent Woman Stereotype is portrayed in a professional décor, at work being in a uniform or smart-casually dressed. The women are depicted at all ages and physical conformations because the accent is on their career and not on their physical appearance. The others recognize their expertise and they have the power to show their character and intelligence. These findings are connected with the results of previous research made by Hung & Li (2006), Moraru (2009), Plakoyiannaki & Zotos (2009) and Popescu et al. (2015). We have identified only one product category, hygiene and care, in which Independent women appear, this stereotype being represented in the same product category as in Bolliger's study (2008).

6. Conclusion

Although we found both modern and traditional portrayals of women in Romanian ads, the traditional ones are still very popular. Women are usually portrayed doing household chores or taking care of the children and are appreciated, especially for their physical appearance. The most common stereotype is the Next-Door Woman, but even though it is a modern portray, it still presents the woman only as pretty and nice, not as an intelligent person.

How the women are pictured entitled us to affirm that females' portrayals are strongly idealized in most of the cases in Romanian advertisements. Women depictions do not capture everyday reality. Although there is an evolution in the portrayal of the woman over time, it does not keep up with its true emancipation. Moreover, we have not found any campaigns to be part of the femvertising mainstream promoting women's talent, freedom and empowerment. So, we can conclude that advertising in Romania does not reflect the contemporary roles of the woman.

Limitations and Future Directions

The research had several limitations. First, we have analyzed advertising campaigns made by Romanian brands. Second, we considered only ad campaigns that were available on the brands' YouTube channels.

These limitations offer possibilities for further research. For instance, an analysis of all brands present on the Romanian market could be done. Furthermore, content from more social media platforms could be analyzed. These types of research offer the possibility to compare national versus international brand campaigns or to the differences that occur in communication from one social media platform to another. Besides these, another future direction could be to investigate female stereotypes by product category.

References

- Agabrian, M. (2006). *Analiza de conținut*. Iași: Polirom.
- Allport, G. W. (1954). *The Nature of Prejudice*. Palo Alto: Addison Wesley.
- Arens, W. F. (2013). *Contemporary Advertising and Integrated Marketing Communications*, New York: McGraw-Hill.
- Ashmore, R., & Del Boca, F. (1981). Cognitive Approaches in Stereotyping and Intergroup Behaviour. In D. L. Hamilton, *Conceptual approaches to stereotypes and stereotyping* (pp. 1-35). Hillsdale: Lawrence Erlbaum Associates.
- Bolliger, D. U. (2008). Perceived Gender Based Stereotypes in Educational Technology Advertisements. *TechTrends*, 52(3), 46-52.
- Browne, B. A. (1998). Gender Stereotypes in Advertising on Children's Television in the 1990s: A Cross-National Analysis, *Journal of Advertising*. *Journal of Advertising*, 27(1), 83-96.
- Chelcea, S. (2016). *Psihosociologie aplicată: Publicitatea*. Iași: Polirom.
- Collins, J. & Hussey, R., (2014). *Business Research - A Practical Guide for Undergraduate and Postgraduate Students*. 4th ed. Basingstoke: Palgrave.

- Cortese, A. J. (1999). *Provocateur Images of Women and Minorities in Advertising*. New York: Rowman and Littlefield.
- Courtney, A. E., & Lockeretz, S. W. (1971). A Woman's Place: An Analysis of the Roles Portrayed by Women in Magazine Advertisements. *Journal of Marketing Research*, 8(1), 92-95.
- Czopp, A. M., Kay, A. C., & Cheryan, S. (2015). Positive Stereotypes Are Pervasive and Powerful. Perspectives. *Psychological Science*, 10(4), 451-463.
- Deaux, K., & Lewis, L. (1984). Structure of Gender Stereotypes: Interrelationships Among Components and Gender Label. *Journal of Personality and Social Psychology*, 46(5), 991-1004.
- Eckert, P., & McConnell-Ginet, S. (2003). *Language and Gender*. New York: Cambridge University.
- Eisend, M. (2009). A Meta-Analysis of Gender Roles in Advertising. *Journal of the Academy of Marketing Science*, 34(4), 418-440.
- Englis, B. G., Solomon, M. R., & Ashmore, R. D. (1994). Beauty Before the Eyes of Beholders: The Cultural Encoding of Beauty Types in Magazine Advertising and Music Television. *Journal of Advertising*, 23(2), 49-64.
- European Institute of Gender Equality, (2020). *Indicele egalității de gen 2020 România*. [Online] Available at: <https://eige.europa.eu/gender-equality-index/2020/country> [Accessed 15 July 2021].
- Gilly, M. C., Graham, J. L., Wolfinbarger, M. F., & Yale, L. J. (1998). A Dyadic Study of Interpersonal Information Search. *Journal of the Academy of Marketing Science*, 26(2), 83-100.
- Goffman, E. (1979). *Gender Advertisements*. New York: Harper & Row.
- Grau, S. L., & Zotos, Y. C. (2016). Gender stereotypes in Advertising: A Review of Current Research. *International Journal of Advertising*, 35(5), 761-770.
- Grunberg, L. (coord.) (2005). *Mass media despre sexe: aspecte privind stereotipul de gen în mass media din România*, București: Tritonic.
- Holbrook, M. (1987). Mirror, Mirror, on the Wall, What's Unfair in the Reflections on. *Journal of Marketing*, 51(3), 95-103.
- Hung, K. H., & Li, S. Y. (2006). Images of the Contemporary Woman in Advertising in China: A Content Analysis. *Journal of International Consumer Marketing*, 19(2), 7-28.
- Kilbourne, J. (1999). *Deadly Persuasion: Why Women and Girls Must Fight the Addictive Power of Advertising*. New York: The Free.
- Kitch, C. (2001). *The Girl on the Magazine Cover: The Origins of Visual Stereotypes in American Mass Media*. Chapel Hill: The University of North Carolina.
- Kitterrød, R. H., & Rønsen, M. (2011). *Housewives in a dual-earner society. Who is a housewife in contemporary Norway?*. Oslo: Statistics Norway.
- Knoll, S., Eisend, M., & Steinhagen, J. (2011). Gender Roles in Advertising: Measuring and Comparing Gender Stereotyping on Public and Private TV Channels in Germany. *International Journal of Advertising*, 30(5), 867-888.
- Lyonski, S. (1985). Role Portrayals in British Magazine Advertisements', *European Journal of Marketing* 19(7), 37-55.
- Matthes, J., Prieler M., Adam, K. (2016). Gender-Role Portrayals in Television Advertising Across the Globe, *Sex Roles*, 75, 314-327.
- Mitchell, P. C. N., Taylor, W. (1990). Polarising Trends in Female Role Portrayal in UK Advertising, *European Journal of Marketing* 24(5), 41-49.
- Moraru, M. (2009). *Mit și publicitate*. București: Nemira.

- Parlamentul European, Gender Equality Strategy 2020-2025: Parliament's reaction and input, (2021). [Online] Available at: <https://www.europarl.europa.eu/news/ro/press-room/20210114IPR95617/gender-equality-strategy-2020-2025-parliament-s-reaction-and-input> [Accessed 15 July 2021].
- Plakoyiannaki, E., & Zotos, Y. (2009). Female Role Stereotypes in Print Advertising: Identifying Associations with Magazine and Product Categories. *European Journal of Marketing*, 43(11), 1411-1434.
- Plakoyiannaki, E., Mathioudaki, K., Dimitratos, P., & Zotos, Y. (2008). Images of Women in Online Advertisements of Global Products: Does Sexism Exist? *European Journal of Marketing*, 83(1), 101-112.
- Pollay, R. W. (1987). On the Value of Reflections on the Values in "The Distorted Mirror". *Journal of Marketing*, 51(3), 104-110.
- Popescu, M., Vasilescu, M., Nistor, I. M., & Medeleanu, M. (2015). *Stereotipuri feminine în cultura română*. București: RAO.
- Schroeder, J. E., & Zwick, D. (2004). Mirrors of Masculinity: Representation and Identity in Advertising Images. *Consumption, Markets and Culture*, 7(1), 21-52.
- Solomon, M. R., Ashmore, R. D., & Longo, L. C. (1992). The Beauty Match-Up Hypothesis: Congruence between Types of Beauty and Product Images in Advertising. *Journal of Advertising*, 21(4), 23-34.
- Stampler, L. (2014) Here's How Women Respond to All Those 'Female Empowerment' Ads. [Online] Available at: <https://time.com/3502904/heres-how-women-respond-to-all-those-female-empowerment-ads/> [Accessed 17 July 2021].
- Stănculescu, E. (2009). Stereotipurile de gen din perspectiva cogniției sociale. *Revista de psihologie*, 55(3-4), 213-226.
- Stoica, M., Miller, D. W., Ardelea, D. (2011). An examination of gender role portrayals in television commercials in Romania: A gender of nations approach, *Journal of Marketing Communications*, 17(4), 245-261.
- Tsichla, E. (2020). The Changing Roles of Gender in Advertising: Past, Present, and Future, *Contemporary Southeastern Europe*, 7(2), 28-44.
- Unlock Market Research. (2018). Cele mai puternice 100 de branduri românești în 2018, *Time* (September, 11). Retrieved July 10, 2021, from *Revista Biz*: <https://www.revistabiz.ro/cele-mai-puternice-100-de-branduri-romanesti-in-2018/>.
- Voci, A. (2014). Negative Stereotypes. In M. A. C, *Encyclopedia of Quality of Life and Well-Being Research* (pp. 4308-4310). Dordrecht: Springer.
- Zhou, N., & Chen, M. Y. (1997). A Content Analysis of Men and Women in Canadian Consumer Magazine Advertising: Today's Portrayal, Yesterday's Image? *Journal of Business Ethics*, 16(5), 485-495.
- Zotos, Y. C., & Tsichla, E. (2014). Female Stereotypes in Print Advertising: A Retrospective Analysis. *Procedia - Social and Behavioral Sciences*, 148, 446-454.

MEASURING EXPERIENCE IN INTERNATIONAL BUSINESS: A SYSTEMATIC LITERATURE REVIEW

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Abstract. The paper explores the indicators that measure the experience in international business. Literature review was used to ascertain the state of the art of the existing indexes and theories. The internationalisation of businesses is a fundamental strategic step to increase companies' competitive advantage and profits. Nevertheless, even though internationalisation is widely accepted as an important source of value for companies and is a broad object of investigation, there is still much to study about how to measure experience at the level of international business. The absence of a coherent approach to measure experience in international businesses in past empirical studies made it difficult to create a solution with theoretical concepts that would support further studies in this matter. The results are not contradictory, but complementary, as, through individual internationalization indicators, it is possible to evolve and create indices, such as the Transnationality Index or the Transnational Activities Spread Index. The biggest constraint on the analysed indices is the fact that they focus mainly on the internationalisation of transnational companies and the type of data that was used to build the indexes (secondary data). However, by studying international experience through the number of years and the network spread, it is possible to overcome some of the existing challenges.

Keywords: international experience, internationalisation experience, business experience, international business experience;

JEL classification: M16; F23; F20.

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1. Introduction

International experience is an important and intangible asset that can facilitate the internationalisation process and alleviate risks and problems related to the liability of foreignness (Barkema, Bell, & Pennings, 1996 in Batsakis & Singh, 2019). Firms with higher levels of international business experience are better prepared to mitigate potential problems during the internationalisation process, cope with complex differences in the new market, and end up managing associated costs of doing business in an international environment more effectively (Batsakis & Singh, 2019). Even though internationalisation is widely accepted as an important source of value for companies and it is a wide subject of research, there is still much to be studied about international experience and how to assess it (Slim & Slimane, 2006; Sommer, 2012; Tang & Gudergan, 2018). Despite the consolidation of globalisation, and the growing number of multinational companies, research in international businesses is still inconclusive regarding the measurement of international experience (Loncan & Nique, 2010; Tang & Gudergan, 2018). Different authors have opted for different ways to measure experience in international business, namely through the number of years the firm has been engaged in international activities (Batsakis & Mohr, 2017; Batsakis & Singh, 2019; Chung, Park, Lee, & Kim, 2015; Love, Roper, & Zhou, 2016; Tan & Sousa, 2019), through the firm's network extension (Chetty, Eriksson, & Lindbergh, 2006; Dow & Larimo, 2009; Rabbiosi, Elia, & Bertoni, 2012; Slangen & Hennart, 2008; just to name a few) while others, such as Johanson & Martín (2015), Putzhammer, Fainshmidt, Puck, & Slangen, (2018) and Tang & Gudergan (2018), even combined both to measure experience in international business. Other measures have also been proposed, such as indices or composite indicators (Ietto-Gillies, 1998; Sullivan, 1994; UNCTAD, 1995). The absence of a coherent approach to measure experience in previous research made it difficult to create a cumulative structure of theoretical concepts that provides purpose to subsequent studies (Sullivan, 1994). Notwithstanding, the existing measures allow us to understand the approaches taken in the study of international experience and the current state of the art, serving as a basis for future research in the area (Sommer, 2012).

This study aims to provide an overview of the different approaches and evaluate the advantages and disadvantages of each proposed indicator to measure the experience in international businesses. Having this in mind, the purpose of this work is to answer two research questions: what is the understanding of international businesses experience among academics? And what are the indicators used to assess international businesses? Furthermore, other terms for "international business experience" were considered to better understand the expressions that were used when studying this topic. Hence, to answer these research questions, this study is divided into five main sections. Firstly, the introduction reveals the context and the chosen approach. Then, the next section presents the research methodology. Thirdly, the literature review presents the study of the existing literature and reveals several perspectives regarding the existing measurements used to evaluate the experience in international businesses. The next section is the discussion, followed by the conclusion. An analysis of each measurement is done, as well as a general review of the theories found, the limitations of this work, recommendations for future research, and the managerial implications.

2. Methodology

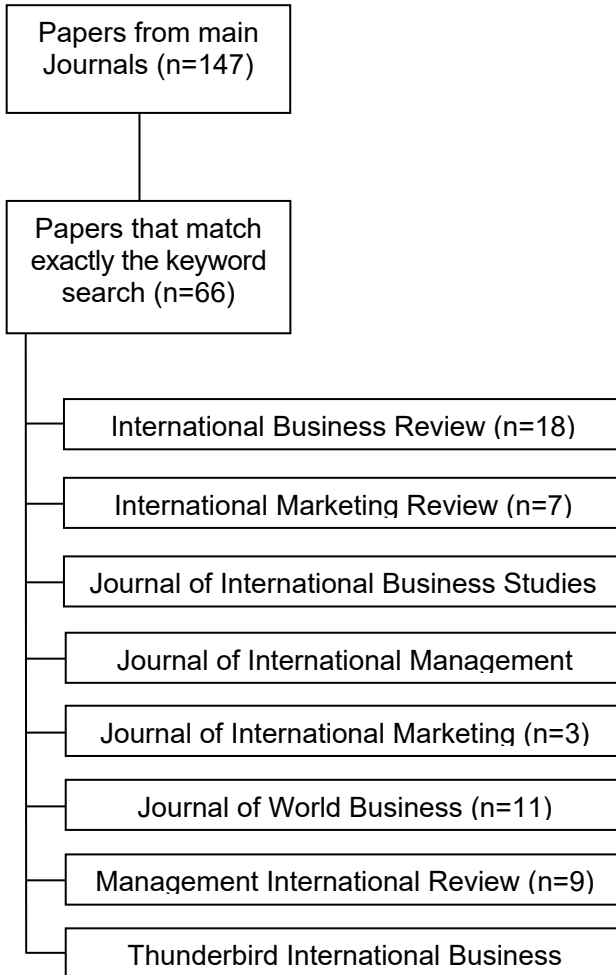
To effectively explore the issues related to the EU innovation policies and the sustainability of its energy sector a subset of literature has been selected to identify the best which is the motivation to innovate and what are the socio-economic benefits of innovation. Moreover, it is proposed to point out which are the existing impediments hampering the progress of the EU's energy market.

The methodology section should clarify the procedure that will be used in the systematic literature review. A systematic literature review allows the identification, evaluation of previous research so that new knowledge can be generated (Kitchenham, 2004; Torraco, 2005). The main steps to develop a literature review are the formulation of a research question, creation of a research plan, definition of inclusion and exclusion criteria, developing a research methodology and data collection, a literature review, assessment and discussion of results and future recommendations (Donato & Donato, 2019). Inclusion and exclusion criteria are defined based on the research question (Sampaio & Mancini, 2007).

According to Bradford's law, within each field of research, there are some journals that are the most prominent, as they contain most of the most relevant articles in the field (Bradford, 1934). Thus, in order to use Bradford's law, the search for scientific articles was restricted to a selected list of high impact journals in the area of international business presented by DuBois & Reeb (2000). According to this law, approximately one-third of these journals contain more than 70% of the total number of selected articles (López-Duarte, González-Loureiro, Vidal-Suárez, & González-Díaz, 2016). To select the articles a two-step process was followed. First, a keyword search was performed using the Scopus database with the keywords "international experience", "internationalisation" or "international business experience". In this research, we obtained 147 articles from the main journals in the area as mentioned above. Then, we filtered the articles that exactly mentioned the keywords in the title, abstract or keywords, and the final research was carried out within 66 articles.

Also, other relevant documents, such as reports, conference papers and articles from other journals were included, as their keywords matched the ones used in this study and they provided valuable information.

Figure 1 – Selected papers that matched the keyword research



3. Literature Review

3.1. Division of Themes

International experience is a relevant variable that helps to alleviate some of the threats encountered during the internationalisation process (Barkema et al., 1996; Szymura-Tyc, 2013). Firms with higher levels of international business experience are better prepared to face possible adversities in the internationalisation process, cope with complex differences in the new market, and end up managing associated costs of doing business in an international environment more effectively (Batsakis & Singh, 2019). However, several authors use this concept differently (Szymura-Tyc, 2013). Authors like Batsakis & Mohr, 2017; Batsakis & Singh, 2019; Chung et al., 2015; Love et al., 2016; Tan & Sousa, 2019 measured international

business experience through the number of years the firm has been involved in international activities. Moreover, other authors (among which Chetty, Eriksson, & Lindbergh (2006), Dow & Larimo (2009), Rabbiosi, Elia, & Bertoni (2012) and Slangen & Hennart (2008)) measured experience through the firm's network extension, while others, including Johanson & Martín (2015), Putzhammer, Fainshmidt, Puck, & Slangen, (2018) and Tang & Gudergan (2018), combined both criteria to measure experience in international business. Other measures were also proposed, such as indices or composite indicators (Ietto-Gillies, 1998; Sullivan, 1994; UNCTAD, 1995). International business experience should be further investigated, as the lack of experience can make it difficult to overcome barriers imposed by the international market (Schiavini & Scherer, 2015). In the view of Sommer (2012), international experience is an important source of information and it is used in a large number of studies, even though there is still much to be investigated about it. In particular, the author suggests that the conceptualisation and measurement of international experience are often done simplistically by using only secondary data available due to the lack of primary sources (Sommer, 2012).

In the table below shows the division made to organise the literature review: Number Of Years Of Foreign Operations & Network Extension, Managers' International Experience, and Internationalisation Indices/Composites.

Table 1 – Division of Themes

Theme	References
Number of Years of Foreign Operations	(Aguilera-Caracuel, Hurtado-Torres, & Aragón-Correa, 2012; Ali, Lee, & Camp, 2003; Batsakis & Mohr, 2017; Batsakis & Singh, 2019; Child et al., 2017; Chung et al., 2015; C. W. Hsu, Lien, & Chen, 2015; P. Y. Li & Meyer, 2009; Love et al., 2016; Mutinelli & Piscitello, 1997; Papadopoulos & Martín Martín, 2010; Prijcker, Manigart, Wright, & Maeseneire, 2012; Tan & Sousa, 2019)
Network Extension (Number of Foreign Countries where the Company Exports/Operates)	(Chetty et al., 2006; Dow & Larimo, 2009, 2011; Rabbiosi et al., 2012; Slangen & Hennart, 2008)
Number of Years of Foreign Operations & Network Extension	(Arregle, Miller, Hitt, & Beamish, 2018; Bai, Johanson, & Martín Martín, 2017; Evans, Mavondo, & Bridson, 2008; Hohenthal, Johanson, & Johanson, 2014; M. Johanson & Martín, 2015; Mohr & Batsakis, 2014; Mutinelli & Piscitello, 2001; Putzhammer et al., 2018; Schwens, Zapkau, Brouthers, & Hollender, 2018; Tang & Gudergan, 2018)
Managers' International Experience	(Bianchi, 2009; Boellis, Mariotti, Minichilli, & Piscitello, 2016; Bouquet, Morrison, & Birkinshaw, 2009; Chandra, Styles, & Wilkinson, 2009; Chen, Chang, & Hsu, 2017; Chen, Hsu, & Chang, 2016; Chen, Zou, Xu, & Chen, 2020; Child & Hsieh, 2014; Clark, Li, & Shepherd, 2017; Cloninger, 2004; Coeurderoy & Murray, 2008; Cui, Li, Meyer, & Li, 2015; García-García, García-Canal, & Guillén, 2017; Georgakakis, Dauth, & Ruigrok, 2016; González, 2019; Hollender, Zapkau, & Schwens, 2017; Hsieh et al., 2019; Hsu, Chen, & Cheng, 2013; Huett, Baum, Schwens, & Kabst, 2014; Khan & Lew, 2018; Le & Kroll, 2017; Li, Qian, & Qian, 2012; Li, 2018; Magnusson & Boggs, 2006; Maitland & Sammartino, 2015; Nielsen & Nielsen, 2011; Nielsen, 2010; O'Donnell & Jeong, 2000; Oura, Zilber, & Lopes, 2016; Oxelheim, Gregorič, Randøy, & Thomsen, 2013; Ramsey, Rutti, Lorenz, Barakat, & Sant'anna, 2017; Sousa & Tan, 2015; Yeoh, 2004)
International Indices/Composites	(Aybar & Ficici, 2009; Bortoluzzi, Chiarvesio, Di Maria, & Tabacco, 2014; Chen et al., 2017; Dörrenbächer, 2000; Elango & Pattnaik, 2007; Gaur, Ma, & Ding, 2018; Ietto-Gillies, 1998; Liao, 2015; Sullivan, 1994; UNCTAD, 1995)

3.2. Number of Years of Foreign Operations & Network Extension

Structural indicators are intended to illustrate a company's international involvement in a given period (Curwen & Whalley, 2006). Some examples of indicators that make up this way of measuring the internationalisation of a company are related to the activities carried out by the company at an international level, such as the total number of years the company has been operating abroad, number of markets in which a company is present, the number of foreign affiliates, the number of relationships established with other companies (e.g. strategic alliances), the proportion of foreign assets and goods supplied abroad, as well as the ratio of local labour to foreign labour (Dörrenbächer, 2000; Jankowska, 2011).

Several studies have used the number of years the company has been involved in foreign operations as a measurement of the firm's international experience (Aguilera-Caracuel et al., 2012; Ali et al., 2003; Arregle et al., 2018; Bai et al., 2017; Batsakis & Mohr, 2017). This way of measuring the international experience of a firm is associated to the depth and intensity of a firm's experience abroad (Battaglia & Neirotti, 2020; Cadogan, Diamantopoulos, & Siguaw, 2002; Erramilli, 1991; Miller, Lavie, & Delios, 2016). Another approach to measuring international experience is to focus on the network extension, that is, the number of countries in which the company is present.

Numerous authors (such as Chetty et al., 2006; Dow & Larimo, 2009, 2011; Rabbiosi et al., 2012; Slangen & Hennart, 2008) opted to measure the international business experience of the firm based on the extension of its network, i.e. through the number of foreign countries where the company operates. Similarly to what was described above concerning the number of years of international activity, here the number of regions where the firm operates measures the breadth and diversity of this experience (Battaglia & Neirotti, 2020; Cadogan et al., 2002; Erramilli, 1991; Miller et al., 2016).

Some authors, for example Arregle et al. (2018), Bai et al. (2017), Erramilli (1991), Hohenthal et al. (2014), Johanson & Martín (2015), Kogut & Singh (1988), Schwens et al. (2018) and Silva et al., (2012) adopted the combination of the number of years the firm has been engaged in international activities and the number of regions where the firm operates in an attempt to better measure international experience. These measures of international experience are related to the psychic distance argument, in the way that less experienced companies favour entering foreign markets that are similar to the country of origin (Johanson & Vahlne, 1977). Yet, as their experience abroad increases and becomes more diversified, these firms will increasingly seek other markets which are geographically and culturally distant (Erramilli, 1991).

3.3. Managers' International Experience

Although there are no consensual opinions, and doubts remain about whether attitudinal indicators can be measured with sufficient reliability, there are authors who encourage their use, as expressed by Perlmutter & Heenan (1979). To the authors, the existence of external and quantifiable dimensions, such as the percentage of investment abroad, are useful, but they are not enough. The more it is known about the reality of the

decision-making process, the more weight should be given to the aspects that influence executives' vision on international business (Perlmutter & Heenan, 1979).

Sullivan (1994) proposed to measure international experience as the number of years that managers have lived abroad. The author argues that this can be better measured statistically, and companies will gain more international predisposition the more international experience of top managers. The measure can be calculated as the total years that managers spent working abroad, divided by the number of years they have of working experience. Based on Sullivan's proposal, some authors based their measurement of international experience on management teams' international experience (Bianchi, 2009; Chandra et al., 2009; Clark et al., 2017; Hollender et al., 2017; Li et al., 2012; Yeoh, 2004). According to Sommer (2012), the way management teams' international experience is measured in these studies can be divided into using a dummy variable in a complementary way (managers have international experience vs managers do not have international experience) (for example Chen et al., 2016; Coeurderoy & Murray, 2008; Magnusson & Boggs, 2006), or by the time spent living, working or studying abroad as the main way to measure experience (Chen et al., 2020; Le & Kroll, 2017; Li, 2018; O'Donnell & Jeong, 2000, just to name a few).

3.4. Internationalisation Indices/Composites

Indices or composite indicators are designed by linking two or more individual indicators. Although several studies use individual indicators, the consensus opinion is that composite indicators are more suitable for measuring internationalisation (Dörrenbächer, 2000). This is because individual indicators are not very reliable when isolated since it is not possible to control the measurement error associated with them, or the influences of the external environment and the manipulation of the transfer price (Dörrenbächer, 2000).

The United Nations Conference on Trade and Development proposed a composite index of transnationality – the Transnationality Index – that assesses the degree of involvement of companies in international activities compared to their total of activities (UNCTAD, 1995). This index aims to provide an overview of a company's position in the internationalisation process. The transnationality index is calculated through the average of three ratios:

- The shares of foreign sales in total sales;
- The foreign assets in total assets;
- And foreign employment in total employment.

Furthermore, the Transnational Activities Spread Index proposed by Ietto-Gillies, based on the Network Spread Index and the Transnationality Index proposed by UNCTAD, focuses more on the spread of activities per countries in which the firm operates (Ietto-Gillies, 1998), and is therefore considered as an improved version of UNCTAD's Transnationality Index. The Transnational Activities Spread Index is calculated by doing the average of the ratios of foreign sales to total sales, foreign assets to total assets and foreign employment to total employment (the same ones as in the Transnationality Index), and then these are multiplied by the number of countries in which the company operates in proportion to the total of foreign countries in which it can operate (from the Network Spread Index) (Ietto-Gillies, 1998).

Ultimately, Sullivan (1994) proposed an index that covers three different dimensions by combining structural (ratio of foreign assets to total assets and ratio of foreign affiliates to total affiliates), performance (ratio of foreign sales to total sales) and attitudinal indicators (international experience of top management and psychic dispersion of international operations), the Degree of Internationalisation (DOI). This index has been used by several authors that argue that international experience is better measured by combining structural or performance ratios (Aybar & Ficici, 2009; Bortoluzzi et al., 2014; Chen et al., 2017; Elango & Pattnaik, 2007; Gaur et al., 2018; Liao, 2015).

The main disadvantage of using the number of years and markets in which a company has been engaged in international activities to assess its international experience is that these are over-simplistic measures, which do not bring additional information. The key limitation of the indices analysed is that they are mainly focused on the internationalisation of TNCs. Secondly, the fact that primary data is difficult to obtain, makes most of the researchers base their study on secondary data only, which may have incomplete information or not be specific to the researcher's needs. Or, whenever primary data exists, it is usually fragmented, the availability of data varies a lot from country to country, and, in the case of accounting figures, existing different accounting rules make the research more difficult.

We were able to find that all of the studies use experience as a secondary variable, and some of them (for example Chen et al., 2016; Coeurderoy & Murray, 2008; Magnusson & Boggs, 2006) use it as a dummy variable which does not allow a comprehensive measurement of experience in international business (Slim & Slimane, 2006; Sommer, 2012). At the end, it is possible to assess that there are methods that provide a more quantifiable measurement of experience in international business, as is the case of Silva et al. (2012) which adopts the number of years the firm has been engaged in international activities and the number of regions where the firm operates to better measure international experience of the firm. On another hand, after evaluating the different alternatives for measuring experience in international business, we can see that there are methods of measuring experience that do not provide sufficient information about the experience organisations have in doing businesses internationally. An example of this is the international experience of managers. By measuring top managers' international experience we are assessing experience as knowledge acquired in activities carried out abroad, whether through studies, work or personal life experiences. We cannot say that this knowledge is not relevant, however, when it comes to using this indicator as a measure of a company's experience in international business, it may provide misleading information as this experience is being measured taking into account one or several individuals in the top management team.

4. Discussion

The objective of this work is to provide an overview of the different approaches to assess international business and critically evaluate each one of them. Moreover, the purpose was also to answer two research questions: what is the understanding of international businesses experience among academics? And what are the indicators used to assess international businesses?

Even though globalisation is a contemporary matter, research in international business needs a better understanding of the concept of internationalisation

experience (Loncan & Nique, 2010; Tang & Gudergan, 2018). The existing problem when we approach international businesses is related to the existence of several ways to measure experience (Dörrenbächer, 2000). As we have previously seen, experience has been measured differently in past studies: through the number of years involved in international activities, the network extension, both measurements combined, and as indices or composite indicators.

Structural indicators are intended to illustrate the company's international involvement in a given period of time (Curwen & Whalley, 2006). As examples of this type of indicators, we have seen the number of markets in which the company operates abroad and the duration in years of the activities in which the company is involved internationally (Dörrenbächer, 2000). As seen aforementioned, some authors measure international experience by considering the number of years a company has been present abroad (Batsakis & Mohr, 2017; Batsakis & Singh, 2019; Chung et al., 2015; Love et al., 2016; Tan & Sousa, 2019). This way of measuring the international experience of a firm is associated to the depth and intensity of a firm's experience abroad and provides a straightforward and simple way to measure either SMEs or TNCs experience in international business. Considering the Network Extension, this measure is done by focusing on the number of countries in which the company is present. This measure takes on the breadth and diversity of experience in international business (Battaglia & Neirotti, 2020; Cadogan et al., 2002; Erramilli, 1991; Miller et al., 2016), and it is relevant given that many problems that could arise may be related to the geographical distribution of business activities. Having a network spread across different countries brings its advantages and disadvantages. On one hand, having activities spread through different countries can lower down the risk of having to rely on one market only and can bring new knowledge to the company. These can be translated into a higher competitive advantage. However, on the other hand, one limitation of this measure is that it fails to capture the importance of a particular country in the firm's operations. Countries are equally weighted, even if most international activities take place in a limited number of host markets. Furthermore, other authors combined both metrics and measured experience through the number of years a company has been present abroad and by the network spread (Arregle et al., 2018; Bai et al., 2017; Erramilli, 1991; Evans et al., 2008; Hohenthal et al., 2014; M. Johanson & Martín, 2015; Kogut & Singh, 1988; Mohr & Batsakis, 2014; Mutinelli & Piscitello, 2001; Putzhammer et al., 2018; Schwens et al., 2018; Silva et al., 2012; Tang & Gudergan, 2018). By combining both measurements, the experience can be assessed regarding the depth and intensity, and breadth and diversity of a firm's experience abroad. Measuring experience through the number of years of foreign operations and network extension can also be related to the psychic distance between markets, as companies with less experience abroad are more likely to choose to enter a foreign market that is psychically closer to the home market. However, as they gain experience throughout the years, they will become more diversified and, consequently, seek other markets which are further distant (Erramilli, 1991). Although easy to use, when applied in isolation, these indicators provide an overly simplistic assessment of the involvement of companies and their international businesses, ignoring many other factors that are considered relevant for assessing the international experience of a firm (Szymura-Tyc, 2013).

The internationalisation indices are designed by linking two or more individual indicators. In this study, we approached the UNCTAD's Transnationality Index, the Transnational Activities Spread Index (Letto-Gillies, 1998) and the Degree of Internationalisation (Sullivan, 1994). Including several indicators to measure the internationalisation of firms provides more significant results than using a single indicator since individual indicators make it difficult to control the measurement error, or the influences of the external environment and the manipulation of the transfer price (Dörrenbächer, 2000; Slim & Slimane, 2006). The Transnationality Index by the UNCTAD (1995) assesses the degree of involvement of companies in international activities compared to their total activities. This is calculated through the average of three ratios: shares of foreign sales in total sales, foreign assets in total assets and foreign employment in total employment. In this index, a company is considered to be internationalised if its foreign to total activities ratio is very high, regardless of whether those foreign activities happen in one or more country or region. Also, the interpretation of any results obtained through this index can only be applied to large companies, since their size and growth are linked to their activities abroad (Letto-Gillies, 1998). Consequently, this index cannot be applied to small and medium-sized companies, which represent the "backbone" of the European economy (Eurostat, 2019). However, Letto-Gillies's (1998) proposed an improved version of UNCTAD's Transnationality Index, the Transnational Activities Spread Index, which focuses more on the spread of activities per countries in which the firm operates. The Transnational Activities Spread Index is a combination of the average of the share of activities abroad, represented by the foreign sales to total sales, foreign assets to total assets and foreign employment to total employment (the same ratios used in the Transnationality Index); these are then multiplied by the number of countries in which the company operates in proportion to the total of foreign countries in which it can operate (Letto-Gillies, 1998). This way, this index allows us to conclude that the degree of internationalisation of a company increases, the more activities the company has abroad and the greater the spread of these activities in foreign countries. Ultimately, Sullivan (1994) proposes the Degree of Internationalisation which covers three different dimensions, combining structural (ratio of foreign assets to total assets and ratio of foreign affiliates to total affiliates), performance (ratio of foreign sales to total sales) and attitudinal indicators (international experience of top management and psychic dispersion of international operations). Despite combining three types of indicators, there are doubts about the feasibility to measure experience using the attitudinal indicators included in the index (Dörrenbächer, 2000).

Although there are no consensual opinions and doubts remain about whether attitudinal indicators can be measured with sufficient reliability (Sullivan, 1994), there are authors who encourage their use, as expressed by Perlmutter & Heenan (1979). Thus, more weight should be given to attitudinal indicators like the top managers' international experience, as this will influence their decision-making process. This way, Sullivan (1994) proposed an attitudinal indicator to measure international experience based on the number of years that managers have worked, lived and studied abroad divided by the number of years they have of working experience. Based on this proposal, some authors based their measurement of international experience on management teams' international experience (Bianchi, 2009; Chandra et al., 2009; Clark et al., 2017; Hollender et al., 2017; Li et al., 2012;

Yeoh, 2004). As observed, the way managers' international experience is measured either by using a dummy variable (managers have international experience vs managers do not have international experience) (for example Chen et al., 2016; Coeurderoy & Murray, 2008; Magnusson & Boggs, 2006) or by the years spent living, working or studying abroad (Chen et al., 2020; Le & Kroll, 2017; Li, 2018; O'Donnell & Jeong, 2000, just to name a few). Companies that rely on exporting and international operations, place considerable emphasis on managerial qualities necessary to conduct business on an international scale (Ali et al., 2003). Involvement in international activities and working abroad make executives aware of the nature and complexity of international operations. Thus, the experience abroad, whether due to work or studies, strengthens the commitment and the international involvement of the manager and consequently of the company, which will be more easily involved in international operations. The international experience that executives acquire while studying or working abroad allows them to expand horizons and acquire new knowledge and rethink strategies to apply in their companies. Although it is an indirect way of measuring the international experience of companies, the international experience of managers can help companies to leverage and detect new opportunities in foreign markets.

5. Conclusions

Building on the frameworks reviewed (number of years of foreign operations, network extension, managers' international experience and international indices/composites), it is possible to conclude that these are not contradictory on their scope nor on their approach to studying experience in international business. On the contrary, these models are complementary in the way that through individual international indicators we can measure experience by counting the number of years abroad and the number of countries where the company operates and build indices, such as the Transnationality Index and the Transnational Activities Spread Index. Nevertheless, of the models studied, the one that allows us to measure more clearly the experience in international business is the combination of the factors of: the number of years of foreign operations and network extension since through the years of experience and presence in different markets, managers and companies are learning and retaining knowledge regarding the decisions they make. Thus, this combination allows the experience in international business to be accurately measured through what has been learnt from entering each market over the years. This represents an easy way to estimate a metric measure because it requires the company's network extension, as well as the total number of years in which it is involved in international business.

Regarding managerial implications, this work provides a study of several indicators that allow the measurement of internationalisation of companies. This work provides an overview of the company's current situation and compares it with its competitors. In this sense, experience allows companies to acquire knowledge which allows them to anticipate possible problems in the international context (Cieřlik, Kaciak, & van Stel, 2018), as well as to explore new opportunities and cope with threats in the foreign market (Zou & Stan, 1998). As from a dynamic capabilities view, a firm needs to perceive international opportunities in foreign

markets, seize country-specific strategic decisions, and allocate intangible and tangible assets for developing or maintaining the firm's competitive position in the market (Tang & Gudergan, 2018), to which international experience will contribute, by allowing firms to better cope with the challenges imposed.

As future research directions a deeper analysis is needed to establish the utility of the frameworks in the assessment of the effects of international experience on company activities abroad (Letto-Gillies, 1998). Additionally, the adaptation and employment of internationalisation indices in the case of SMEs should also be studied. Lastly, the conceptualisation and the measurement of international experience are often done commonly by using secondary data available due to the lack of primary data sources (Sommer, 2012). More robust studies should be done based on primary data sources, with representative samples and better statistical models, such as panel data or time series analysis (Loncan & Nique, 2010). Having said that, some of the questions that would be interesting to see studied in future work on the subject would be: to what extent does the international experience of managers have an impact on the international expansion of companies (i.e. on FDI)? Can the indices mentioned in this work be adapted and applied to measure the international business experience of SMEs? And how do CEOs measure and compare the international experience of their companies?

References

- Aguilera-Caracuel, J., Hurtado-Torres, N. E., & Aragón-Correa, J. A. (2012). Does international experience help firms to be green? A knowledge-based view of how international experience and organisational learning influence proactive environmental strategies. *International Business Review*, 21(5), 847–861. <https://doi.org/10.1016/j.ibusrev.2011.09.009>
- Ali, A. J., Lee, M., & Camp, R. C. (2003). Export Attitudes of Taiwanese Executives. *Journal of Global Marketing*, 16(1–2), 27–46. https://doi.org/10.1300/J042v16n01_02
- Arregle, J. L., Miller, T. L., Hitt, M. A., & Beamish, P. W. (2018). The role of MNEs' internationalization patterns in their regional integration of FDI locations. *Journal of World Business*, 53(6), 896–910. <https://doi.org/10.1016/j.jwb.2018.07.004>
- Aybar, B., & Ficici, A. (2009). Cross-border acquisitions and firm value: An analysis of emerging-market multinationals. *Journal of International Business Studies*, 40(8), 1317–1338. <https://doi.org/10.1057/jibs.2009.15>
- Bai, W., Johanson, M., & Martín Martín, O. (2017). Knowledge and internationalization of returnee entrepreneurial firms. *International Business Review*, 26(4), 652–665. <https://doi.org/10.1016/j.ibusrev.2016.12.006>
- Barkema, H. G., Bell, J., & Pennings, J. M. (1996). Foreign entry, cultural barriers, and learning. *Strategic Management Journal*. [https://doi.org/10.1002/\(sici\)1097-0266\(199602\)17:2<151::aid-smj799>3.3.co;2-q](https://doi.org/10.1002/(sici)1097-0266(199602)17:2<151::aid-smj799>3.3.co;2-q)
- Batsakis, G., & Mohr, A. T. (2017). Revisiting the relationship between product diversification and internationalization process in the context of emerging market MNEs. *Journal of World Business*, 52(4), 564–577. <https://doi.org/10.1016/j.jwb.2016.11.005>

- Batsakis, G., & Singh, S. (2019). Added distance, entry mode choice, and the moderating effect of experience: The case of British MNEs in emerging markets. *Thunderbird International Business Review*, 61(4), 581–594. <https://doi.org/10.1002/tie.22046>
- Battaglia, D., & Neirotti, P. (2020). Dealing with the tensions between innovation and internationalization in SMEs: A dynamic capability view. *Journal of Small Business Management*, 26.
- Bianchi, C. (2009). Retail internationalisation from emerging markets: Case study evidence from Chile. *International Marketing Review*, 26(2), 221–243. <https://doi.org/10.1108/02651330910950439>
- Boellis, A., Mariotti, S., Minichilli, A., & Piscitello, L. (2016). Family involvement and firms' establishment mode choice in foreign markets. *Journal of International Business Studies*, 47(8), 929–950. <https://doi.org/10.1057/jibs.2016.23>
- Bortoluzzi, G., Chiarvesio, M., Di Maria, E., & Tabacco, R. (2014). Exporters moving toward emerging markets: A resource-based approach. *International Marketing Review*, 31(5), 506–525. <https://doi.org/10.1108/IMR-12-2013-0280>
- Bouquet, C., Morrison, A., & Birkinshaw, J. (2009). International attention and multinational enterprise performance. *Journal of International Business Studies*, 40(1), 108–131. <https://doi.org/10.1057/jibs.2008.64>
- Bradford, S. C. (1934). Sources of information on specific subjects. *Engineering*, 137, 85–86.
- Cadogan, J. W., Diamantopoulos, A., & Siguaw, J. A. (2002). Export market-oriented activities: Their antecedents and performance consequences. *Journal of International Business Studies*.
- Chandra, Y., Styles, C., & Wilkinson, I. (2009). The recognition of first time international entrepreneurial opportunities: Evidence from firms in knowledge-based industries. *International Marketing Review*, 26(1), 30–61. <https://doi.org/10.1108/02651330910933195>
- Chen, H. L., Chang, C. Y., & Hsu, W. T. (2017). Does Board Co-Working Experience Influence Directors' Decisions Toward Internationalization? *Management International Review*, 57(1), 65–92. <https://doi.org/10.1007/s11575-016-0309-4>
- Chen, H. L., Hsu, W. T., & Chang, C. Y. (2016). Independent directors' human and social capital, firm internationalization and performance implications: An integrated agency-resource dependence view. *International Business Review*, 25(4), 859–871. <https://doi.org/10.1016/j.ibusrev.2015.10.010>
- Chen, L., Zou, S., Xu, H., & Chen, Y. (2020). Entrepreneurial Orientation in Multinational Corporations: Antecedents and Effects. *Management International Review*, 60(1), 123–148. <https://doi.org/10.1007/s11575-019-00397-4>
- Chetty, S., Eriksson, K., & Lindbergh, J. (2006). The effect of specificity of experience on a firm's perceived importance of institutional knowledge in an ongoing business. *Journal of International Business Studies*, 37(5), 699–712. <https://doi.org/10.1057/palgrave.jibs.8400214>
- Child, J., Hsieh, L., Elbanna, S., Karmowska, J., Marinova, S., Puthusserry, P., Zhang, Y. (2017). SME international business models: The role of context and experience. *Journal of World Business*, 52(5), 664–679. <https://doi.org/10.1016/j.jwb.2017.05.004>
- Child, J., & Hsieh, L. H. Y. (2014). Decision mode, information and network attachment in the internationalization of SMEs: A configurational and contingency analysis. *Journal of World Business*, 49(4), 598–610. <https://doi.org/10.1016/j.jwb.2013.12.012>

- Chung, C. C., Park, H. Y., Lee, J. Y., & Kim, K. (2015). Human capital in multinational enterprises: Does strategic alignment matter". *Journal of International Business Studies*, 46(7), 806–829. <https://doi.org/10.1057/jibs.2015.15>
- Cieślik, J., Kaciak, E., & van Stel, A. (2018). Country-level determinants and consequences of overconfidence in the ambitious entrepreneurship segment. *International Small Business Journal: Researching Entrepreneurship*, 36(5), 473–499.
- Clark, D. R., Li, D., & Shepherd, D. A. (2017). Country familiarity in the initial stage of foreign market selection. *Journal of International Business Studies*, 49(4), 442–472. <https://doi.org/10.1057/s41267-017-0099-3>
- Cloninger, P. A. (2004). The effect of service intangibility on revenue from foreign markets. *Journal of International Management*, 10(1 SPEC ISS.), 125–146. <https://doi.org/10.1016/j.intman.2003.12.007>
- Coeurderoy, R., & Murray, G. (2008). Regulatory environments and the location decision: Evidence from the early foreign market entries of new-technology-based firms. *Journal of International Business Studies*, 39(4), 670–687. <https://doi.org/10.1057/palgrave.jibs.8400369>
- Cui, L., Li, Y., Meyer, K. E., & Li, Z. (2015). Leadership Experience Meets Ownership Structure: Returnee Managers and Internationalization of Emerging Economy Firms. *Management International Review*, 55(3), 355–387. <https://doi.org/10.1007/s11575-014-0221-8>
- Curwen, P., & Whalley, J. (2006). Measuring internationalisation in the mobile telecommunications industry. *International Business Review*, 15(6), 660–681.
- Donato, H., & Donato, M. (2019). Etapas na Condução de uma Revisão Sistemática. *Acta Médica Portuguesa*, 32(3), 227–235.
- Dörrenbächer, C. (2000). Measuring corporate internationalisation - A review of measurement concepts and their use. *Intereconomics*, 35(3), 119–126.
- Dow, D., & Larimo, J. (2009). Challenging the Conceptualization and Measurement of Distance and International Experience in Entry Mode Choice Research. *Journal of International Marketing*, 17(2), 74–98. <https://doi.org/10.1509/jimk.17.2.74>
- Dow, D., & Larimo, J. (2011). Disentangling the Roles of International Experience and Distance in Establishment Mode Choice. *Management International Review*, 51(3), 321–355. <https://doi.org/10.1007/s11575-011-0080-5>
- DuBois, F. L., & Reeb, D. (2000). Ranking the international business journals. *Journal of International Business Studies*, 31(4), 689–704.
- Elango, B., & Pattnaik, C. (2007). Building capabilities for international operations through networks: A study of Indian firms. *Journal of International Business Studies*, 38(4), 541–555. <https://doi.org/10.1057/palgrave.jibs.8400280>
- Erramilli, M. K. (1991). The Experience Factor in Foreign Market Entry Behavior of Service Firms. *Journal of International Business Studies*.
- Eurostat. (2019). *Key Figures on Europe*. Luxembourg.
- Evans, J., Mavondo, F. T., & Bridson, K. (2008). Psychic distance: Antecedents, retail strategy implications, and performance outcomes. *Journal of International Marketing*, 16(2), 32–63. <https://doi.org/10.1509/jimk.16.2.32>
- García-García, R., García-Canal, E., & Guillén, M. F. (2017). Rapid internationalization and long-term performance: The knowledge link. *Journal of World Business*, 52(1), 97–110. <https://doi.org/10.1016/j.jwb.2016.09.005>

- Gaur, A. S., Ma, X., & Ding, Z. (2018). Home country supportiveness/unfavorableness and outward foreign direct investment from China. *Journal of International Business Studies*, 49(3), 324–345. <https://doi.org/10.1057/s41267-017-0136-2>
- Georgakakis, D., Dauth, T., & Ruigrok, W. (2016). Too much of a good thing: Does international experience variety accelerate or delay executives' career advancement? *Journal of World Business*, 51(3), 425–437. <https://doi.org/10.1016/j.jwb.2015.11.008>
- González, C. (2019). Revealing a Social Dimension of Internationalization: Transnational Board Interlocks as a Social-Based Proxy for the Degree of Internationalization of the Firm. *Management International Review*, 59(2), 253–276. <https://doi.org/10.1007/s11575-018-0359-x>
- Heenan, D. A., & Perlmutter, H. V. (1979). Multinational Organization Development: A Social Architectural Perspective. *Administrative Science Quarterly*.
- Hohenthal, J., Johanson, J., & Johanson, M. (2014). Network knowledge and business-relationship value in the foreign market. *International Business Review*, 23(1), 4–19. <https://doi.org/10.1016/j.ibusrev.2013.08.002>
- Hollender, L., Zapkau, F. B., & Schwens, C. (2017). SME foreign market entry mode choice and foreign venture performance: The moderating effect of international experience and product adaptation. *International Business Review*, 26(2), 250–263. <https://doi.org/10.1016/j.ibusrev.2016.07.003>
- Hsieh, L., Child, J., Narooz, R., Elbanna, S., Karmowska, J., Marinova, S., Zhang, Y. (2019). A multidimensional perspective of SME internationalization speed: The influence of entrepreneurial characteristics. *International Business Review*, 28(2), 268–283. <https://doi.org/10.1016/j.ibusrev.2018.09.004>
- Hsu, C. W., Lien, Y. C., & Chen, H. (2015). R&D internationalization and innovation performance. *International Business Review*, 24(2), 187–195. <https://doi.org/10.1016/j.ibusrev.2014.07.007>
- Hsu, W. T., Chen, H. L., & Cheng, C. Y. (2013). Internationalization and firm performance of SMEs: The moderating effects of CEO attributes. *Journal of World Business*, 48(1), 1–12. <https://doi.org/10.1016/j.jwb.2012.06.001>
- Huett, P., Baum, M., Schwens, C., & Kabst, R. (2014). Foreign direct investment location choice of small- and medium-sized enterprises: The risk of value erosion of firm-specific resources. *International Business Review*, 23(5), 952–965. <https://doi.org/10.1016/j.ibusrev.2014.02.007>
- letto-Gillies, G. (1998). Different conceptual frameworks for the assessment of the degree of internationalization: an empirical analysis of various indices for the top 100 transnational corporations. *Transnational Corporations*, 7(1), 17–39.
- Jankowska, J. (2011). Measures of Company Internationalization. *Financial Aspects of Organizational Management*, 3.
- Johanson, J., & Vahlne, J.-E. (1977). The Internationalization Process of the Firm—A Model of Knowledge Development and Increasing Foreign Market Commitments. *Journal of International Business Studies*.
- Johanson, M., & Martín, O. (2015). The incremental expansion of Born Internationals: A comparison of new and old Born Internationals. *International Business Review*, 24(3), 476–496. <https://doi.org/10.1016/j.ibusrev.2014.10.006>

- Khan, Z., & Lew, Y. K. (2018). Post-entry survival of developing economy international new ventures: A dynamic capability perspective. *International Business Review*, 27(1), 149–160. <https://doi.org/10.1016/j.ibusrev.2017.06.001>
- Kitchenham, B. (2004). *Procedures for performing systematic reviews*. Keele University, Department of Computer Science.
- Kogut, B., & Singh, H. (1988). The Effect of National Culture on the Choice of Entry Mode. *Journal of International Business Studies*.
- Le, S., & Kroll, M. (2017). CEO international experience: Effects on strategic change and firm performance. *Journal of International Business Studies*, 48(5), 573–595. <https://doi.org/10.1057/s41267-017-0080-1>
- Li, L., Qian, G., & Qian, Z. (2012). Early internationalization and performance of small high-tech “born-globals.” *International Marketing Review*, 29(5), 536–561. <https://doi.org/10.1108/02651331211260377>
- Li, P. Y. (2018). Top management team characteristics and firm internationalization: The moderating role of the size of middle managers. *International Business Review*, 27(1), 125–138. <https://doi.org/10.1016/j.ibusrev.2017.05.011>
- Li, P. Y., & Meyer, K. E. (2009). Contextualizing experience effects in international business: A study of ownership strategies. *Journal of World Business*, 44(4), 370–382. <https://doi.org/10.1016/j.jwb.2008.11.007>
- Liao, T. J. (2015). Local clusters of SOEs, POEs, and FIEs, international experience, and the performance of foreign firms operating in emerging economies. *International Business Review*, 24(1), 66–76. <https://doi.org/10.1016/j.ibusrev.2014.06.002>
- Loncan, T., & Nique, W. (2010). Degree of Internationalization and performance: Evidence from emerging Brazilian multinational firms. *Journal of Globalization, Competitiveness & Governability*.
- López-Duarte, C., González-Loureiro, M., Vidal-Suárez, M. M., & González-Díaz, B. (2016). International strategic alliances and national culture: Mapping the field and developing a research agenda. *Journal of World Business*, 51(4), 511–524.
- Love, J. H., Roper, S., & Zhou, Y. (2016). Experience, age and exporting performance in UK SMEs. *International Business Review*, 25(4), 806–819. <https://doi.org/10.1016/j.ibusrev.2015.10.001>
- Magnusson, P., & Boggs, D. J. (2006). International experience and CEO selection: An empirical study. *Journal of International Management*, 12(1), 107–125. <https://doi.org/10.1016/j.intman.2006.01.002>
- Maitland, E., & Sammartino, A. (2015). Managerial cognition and internationalization. *Journal of International Business Studies*, 46(7), 733–760. <https://doi.org/10.1057/jibs.2015.9>
- Miller, S. R., Lavie, D., & Delios, A. (2016). International intensity, diversity, and distance: Unpacking the internationalization-performance relationship. *International Business Review*.
- Mohr, A., & Batsakis, G. (2014). Intangible assets, international experience and the internationalisation speed of retailers. *International Marketing Review*, 31(6), 601–620. <https://doi.org/10.1108/IMR-09-2013-0186>
- Mutinelli, M., & Piscitello, L. (1997). Differences in the strategic orientation of Italian MNEs in Central and Eastern Europe. The influence of firm-specific factors. *International Business Review*, 6(2), 185–205. [https://doi.org/10.1016/S0969-5931\(96\)00045-5](https://doi.org/10.1016/S0969-5931(96)00045-5)

- Mutinelli, M., & Piscitello, L. (2001). Foreign direct investment in the banking sector: The case of Italian banks in the '90s. *International Business Review*, 10(6), 661–685. [https://doi.org/10.1016/S0969-5931\(01\)00037-3](https://doi.org/10.1016/S0969-5931(01)00037-3)
- Nielsen, B. B., & Nielsen, S. (2011). The role of top management team international orientation in international strategic decision-making: The choice of foreign entry mode. *Journal of World Business*, 46(2), 185–193. <https://doi.org/10.1016/j.jwb.2010.05.003>
- Nielsen, S. (2010). Top management team internationalization and firm performance. *Management International Review*, 50(2), 185–206. <https://doi.org/10.1007/s11575-010-0029-0>
- O'Donnell, S., & Jeong, I. (2000). Marketing standardization within global industries: An empirical study of performance implications. *International Marketing Review*, 17(1), 19–33. <https://doi.org/10.1108/02651330010314696>
- Oura, M. M., Zilber, S. N., & Lopes, E. L. (2016). Innovation capacity, international experience and export performance of SMEs in Brazil. *International Business Review*, 25(4), 921–932. <https://doi.org/10.1016/j.ibusrev.2015.12.002>
- Oxelheim, L., Gregorič, A., Randøy, T., & Thomsen, S. (2013). On the internationalization of corporate boards: The case of Nordic firms. *Journal of International Business Studies*, 44(3), 173–194. <https://doi.org/10.1057/jibs.2013.3>
- Papadopoulos, N., & Martín Martín, O. (2010). Toward a model of the relationship between internationalization and export performance. *International Business Review*, 19(4), 388–406. <https://doi.org/10.1016/j.ibusrev.2010.02.003>
- Prijcker, S., Manigart, S., Wright, M., & Maeseneire, W. (2012). The influence of experiential, inherited and external knowledge on the internationalization of venture capital firms. *International Business Review*, 21(5), 929–940. <https://doi.org/10.1016/j.ibusrev.2011.11.001>
- Putzhammer, M., Fainshmidt, S., Puck, J., & Slangen, A. (2018). To elevate or to duplicate? Experiential learning, host-country institutions, and MNE post-entry commitment increase. *Journal of World Business*, 53(4), 568–580. <https://doi.org/10.1016/j.jwb.2018.03.004>
- Rabbiosi, L., Elia, S., & Bertoni, F. (2012). Acquisitions by EMNCs in Developed Markets: An Organisational Learning Perspective. *Management International Review*, 52(2), 193–212. <https://doi.org/10.1007/s11575-012-0134-3>
- Ramsey, J. R., Rutti, R. M., Lorenz, M. P., Barakat, L. L., & Sant'anna, A. S. (2017). Developing global transformational leaders. *Journal of World Business*, 52(4), 461–473. <https://doi.org/10.1016/j.jwb.2016.06.002>
- Sampaio, R., & Mancini, M. (2007). Estudos De Revisão Sistemática: Um Guia Para Síntese Criteriosa Da Evidência Científica. *Revista Brasileira de Fisioterapia*.
- Schiavini, J. M., & Scherer, F. L. (2015). Review of International Business Overcoming liability of outsidership in China: The experience of Brazilian companies in developing Guanxi. *Review of International Business*, 10(3), 44–57.
- Schwens, C., Zapkau, F. B., Brouthers, K. D., & Hollender, L. (2018). Limits to international entry mode learning in SMEs. *Journal of International Business Studies*, 49(7), 809–831. <https://doi.org/10.1057/s41267-018-0161-9>
- Silva, S. C., Bradley, F., & Sousa, C. M. P. (2012). Empirical test of the trust-performance link in an international alliances context. *International Business Review*, 21(2), 293–306.

- Slangen, A. H. L., & Hennart, J. F. (2008). Do multinationals really prefer to enter culturally distant countries through greenfields rather than through acquisitions? the role of parent experience and subsidiary autonomy. *Journal of International Business Studies*, 39(3), 472–490. <https://doi.org/10.1057/palgrave.jibs.8400356>
- Slim, A., & Slimane, A. S. (2006). Evaluate SMEs Internationalization. *International Journal of Business & Economic Strategy*, 2.
- Sommer, L. (2012). The Measurement of International Experience as a Dimension of Board Indices: Concept for an Improvement. *International Journal of Business Administration*, 3(4), 2–19.
- Sousa, C. M. P., & Tan, Q. (2015). Exit from a foreign market: Do poor performance, strategic fit, cultural distance, and international experience matter? *Journal of International Marketing*, 23(4), 84–104. <https://doi.org/10.1509/jim.15.0003>
- Sullivan, D. (1994). Measuring the Degree of Internationalization of a Firm. *Journal of International Business Studies*, 25(2), 325–342.
- Szymura-Tyc, M. (2013). Measuring the Degree of Firms' Internationalization at Their Early Stages of International Commitment. *Journal of Economics & Management*.
- Tan, Q., & Sousa, C. M. P. (2019). *Why Poor Performance is Not Enough for a Foreign Exit: The Importance of Innovation Capability and International Experience*. *Management International Review* (Vol. 59). Springer Berlin Heidelberg. <https://doi.org/10.1007/s11575-019-00384-9>
- Tang, R. W., & Gudergan, S. P. (2018). A Meta-analysis of the International Experience–Ownership Strategy Relationship: A Dynamic Capabilities View. *Management International Review*, 58(4), 541–570. <https://doi.org/10.1007/s11575-018-0349-z>
- Torraco, R. J. (2005). Writing Integrative Literature Reviews: Guidelines and Examples. *Human Resource Development Review*, 4(3), 356–367. <https://doi.org/10.1177/1534484305278283>
- UNCTAD. (1995). *World Investment Report 1995 Transnational Corporations and Competitiveness*. United Nations Publication. New York.
- Yeoh, P. L. (2004). International learning: Antecedents and performance implications among newly internationalizing companies in an exporting context. *International Marketing Review*, 21(4–5), 511–535. <https://doi.org/10.1108/02651330410547171>
- Zou, S., & Stan, S. (1998). The determinants of export performance: A review of the empirical literature between 1987 and 1997. *International Marketing Review*, 14(5), 333–356. <https://doi.org/10.1108/02651339810236290>

THE RELATIONSHIP BETWEEN JOB SATISFACTION AND THE CONGRUENCE OF DESIRED AND PERCEIVED JOB ATTRIBUTES: AN EXPLORATORY STUDY OF IT PROFESSIONALS

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Abstract. The main purpose of this study was to investigate whether employee job satisfaction is associated with the congruence between desired and perceived job attributes. The desired and perceived levels of 30 job attributes were measured on employees from a large Information Technology (IT) company based in Romania. Results indicate that employees who experience congruence between desired and perceived job attributes have higher levels of overall job satisfaction, confirming the assumptions of the value congruence theory. In addition, the results of this study show that employee job satisfaction is associated with both intrinsic and extrinsic factors i.e., job attributes. This indicates that extrinsic factors can also be a source of job satisfaction, the same as intrinsic factors, which is contrary to what Herzberg's motivation-hygiene theory assumes.

Keywords: job attributes; job satisfaction; the value congruence theory; IT professionals; newly-hired;

JEL classification: J24, M15.

1. Introduction

Information technology (IT) is currently one of the fastest-growing sectors, and thus there is a need for a continuous supply of high-quality IT professionals (Trauth et al., 2009). In addition, the retention of qualified employees represents a critical aspect for organizations given the high turnover rates of IT professionals (see Joseph et al., 2007, for a meta-analysis), especially during the early years of their employment (see Mihalca et al., *in press*).

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Research on employee turnover has shown that job satisfaction is negatively related to intentions to quit (i.e., turnover intentions), which in turn are positively associated with actual turnover (Boswell et al., 2005; Chen et al., 2011; for meta-analyses, see Griffeth et al., 2000; Tett and Meyer, 1993). Similarly, studies on turnover among IT professionals have indicated that job satisfaction is a key factor for turnover of these professionals (e.g., Chen, 2008; Niederman and Sumner, 2004). Therefore, in order to manage IT professionals' turnover, organizations need to identify the factors that positively influence their job satisfaction.

There are numerous factors that may influence employee job satisfaction (Chen, 2008). Among these factors, situational factors including attributes that are specific to a job (e.g., type of work, salary, opportunities for advancement) and attributes that are more widely reflective of the organizations (e.g., company size, reputation, and work environment) have been found to be important predictors of job satisfaction (e.g., Boswell et al., 2009; Hackman and Oldham, 1975). In addition, it has been found that employee job satisfaction is higher when there is a congruence between what employees want from their jobs (i.e., desired job attributes) and their perception of what they receive (i.e., perceived job attributes; e.g., Humphrys, 1981; O'Brien and Dowling, 1980; Warr and Inceoglu, 2012). The results of the existing studies on the relationship between employee job satisfaction and the congruence of desired and perceived job attributes are inconclusive. While some studies supported the hypothesis that job satisfaction is higher when the job attributes preferred by employees match the job attributes emphasized in their organizations (i.e., the value congruence hypothesis; e.g., Barrett, 1978), other studies did not support this hypothesis (e.g., Baker and Hansen, 1975). Furthermore, in the majority of these studies a limited number of desired and perceived job attributes (e.g., five job attributes; Humphrys, 1981; O'Brien and Dowling, 1980; for an exception, see Warr and Inceoglu, 2012) has been investigated. In order to improve the understanding of what job attributes influence employee job satisfaction and whether the congruence of desired and perceived job attributes relates with job satisfaction, a broader array of job attributes should be captured (cf. Chen et al., 2011). In the current study, a comprehensive list of job attributes, including items about flexible working hours, work-life balance, autonomy, in addition to the items commonly used in early studies (e.g., Harris and Fink, 1987; Turban et al. 1998; see Mihalca et al., *in press*) was used.

The main aim of this study was to determine whether IT professionals' job satisfaction is related to the congruence between their preferred job attributes and the job attributes that are emphasized in their organization. The current study also aimed at investigating (1) which job attributes are the most important for IT professionals when making job choice decisions and which job attributes are the most experienced in their organization, and (2) which of the desired and perceived job attributes are associated with job satisfaction.

2. Literature review

2.1. Job and organizational attributes

Job and organizational attributes refer to specific qualities or outcomes of the job or the organization, which can be used to enhance the attractiveness of a job for both prospective and current employees (Konrad et al., 2000). As mentioned

before, the attributes specific to a job include salary, type of work, opportunities for advancement, and the attributes that are more widely reflective of the organization include company size, location, reputation, work environment (Chapman et al., 2005). Throughout this study, I use the term “job attributes” for the sake of simplicity.

Behling et al. (1968) proposed three theories that explain the influence of job attributes on organizational attractiveness and job choice decisions: the objective factor theory, the subjective factor theory, and the critical contact theory. The objective and subjective factor theories are of particular relevance for this study, because its aim to understand how IT employees use information about job attributes when making job choice decisions. The objective factor theory assumes that job choice decisions are based on the evaluations that job applicants or prospective employees make about the advantages and disadvantages of tangible job attributes such as salary, fringe benefits, type of work (see Harold and Ployhart, 2008). These evaluations subsequently inform job applicants about the desirability of a job and influence their job choice behavior. According to the subjective factor theory, applicants assess the organization’s environment and make judgments about how well they fit with the organization in regard to their desires, needs, values, and traits (Behling et al., 1968). Thus, applicants’ job choices are influenced by their perceptions that the organization’s environment fits their desires, needs, values, and traits (Harold and Ployhart, 2008).

Another theory referring to individuals’ perceptions of subjective fit is Schneider’s (1987) attraction-selection-attrition theory, according to which individuals are attracted to jobs and/or organizations which have attributes that match their own characteristics (i.e., attraction component; see Erhart and Ziegert, 2005). Although initially individuals may be attracted to or selected by an organization, they are likely to leave the organization if a poor fit is perceived later on (i.e., attrition component; see Acikgoz, 2019). Therefore, organizations that want to attract and retain the best employees have not only to know what job attributes are most or least attractive for them, but be aware of the changing needs of employees and responding to these needs accordingly (cf. Harold and Ployhart, 2008).

Numerous studies have investigated individuals’ job attribute preferences and their importance for job choice decisions and organizational attractiveness (e.g., Boswell et al., 2003; Harris and Fink, 1987; Jurgensen 1978; Posner 1981; Turban et al., 1998; for meta-analyses, see Chapman et al., 2005; Uggerslev et al., 2012). Early studies on job attribute preferences were mostly focused on exploring which single attributes were rated as important in evaluating jobs, and whether these attributes influence job choices (e.g., Jurgensen 1978; Posner 1981). For example, in his study Jurgensen (1978) asked all job applicants of a utility company ($N = 57,000$) to rank the importance of 10 attributes in terms of what makes a job good or bad, and found that job security, advancement opportunity, type of work, and company characteristics were the most important attributes in their job choice decisions. Posner (1981) asked 148 college students to rate the importance of 18 job attributes and found that the most preferred job attributes were all pertaining to characteristics of job itself (e.g., challenging and interesting work, opportunity to use abilities, opportunity to learn).

These early studies were followed by studies that focused on the relationship between job attributes and different aspects of job choice such as recruiter behaviors (Harris and Fink 1987; Turban et al. 1998) and recruiting practices (Powell, 1984,

1991). In these studies, the underlying constructs of the job attributes measures were used to explore the relationship between applicant perceptions and job choice decisions. For example, in Powell's (1984, 1991) studies three underlying constructs, that is, job itself, compensation/security, and company/work environment were identified job attributes items such as challenging and interesting work, variety of activities, opportunity for rapid advancement loaded on job itself factor, items such as salary and fringe benefits loaded on compensation/security factor, and items such as training programs, location, and reputation of company loaded on company/work environment factor. In Powell's (1984) study, job attributes but not recruiting practices have been found to influence the probability of a job acceptance.

In these early studies, job attributes scales did not include items about the availability of flexible work schedules or work-life balance (Carless and Imber, 2007), which have become increasingly important in recent years for job applicants (Twenge and Kasser, 2013). For example, there is some evidence that applicants are more attracted to firms with flexible work schedules and a high level of work-life balance (e.g., Casper and Buffardi 2004). Work hours and work-life balance are also frequently mentioned as important factors in recruiting and retaining IT professionals, because these professionals have been found to work longer hours and have less work-life balance than their non-IT counterparts (Kuhn and Joshi 2009; see also Mihalca et al., *in press*). To address this issue, was used a comprehensive list of job attributes was used, including items about flexible working hours and work-life balance in addition to the items commonly used in early studies (e.g., Harris and Fink 1987; Turban et al. 1998).

2.2. Job satisfaction and factors that influence job satisfaction

Job satisfaction, defined as “the pleasurable emotional state resulting from the appraisal of one’s job as achieving or facilitating the achievement of one’s job values” (Locke, 1969; p. 316) represents one of the most frequently studied variables in organizational research (Dormann and Zapf, 2001). It has been associated with several important employee outcomes such as organizational commitment, turnover, absenteeism, organizational citizenship behaviors, and work performance (e.g., Cohrs et al., 2006; Keller and Semmer, 2013).

According to situational theories (e.g., Herzberg's motivation-hygiene theory, 1966; the Job Characteristics Model by Hackman and Oldham, 1976), job satisfaction is determined by characteristics of the job and work environment (see Cohrs et al., 2006). Herzberg (1966) developed a two-factor theory which argues that job satisfaction and dissatisfaction are two separate, and sometimes, unrelated constructs that are determined by different factors. Whereas job satisfaction is determined by intrinsic factors or motivators such as work itself, responsibility, recognition, and advancement, dissatisfaction is caused by extrinsic or hygiene factors such as salary, benefits, job security, supervision, and interpersonal relations (Judge et al., 2002). The most important difference between motivators and hygiene factors is that motivators contribute to personal growth, while hygiene factors contribute to the avoidance of physical and psychological discomfort (Sachau, 2007). Although this theory has an intuitive appeal, there is little empirical support for its assumptions (Judge et al., 2002). In addition, there is consistent empirical evidence

that both intrinsic and extrinsic factors can be sources of job satisfaction (e.g., Taylor and Westover, 2011), which is contrary to what Herzberg (1966) claimed.

Another situational theory of job satisfaction, which unlike Herzberg's (1966) theory has received more empirical support is the Job Characteristics Model developed by Hackman and Oldham (1976). According to this model, enriched jobs or jobs that have five core characteristics, that is, skill variety (the degree to which job requires a variety of different skills), task identity (the degree to which job requires doing a whole and identifiable piece of work), task significance (the degree to which job has an impact on the lives of others), autonomy (the degree to which job provides substantial freedom or control over work), and feedback (the degree to which work itself provides employees with performance information) are more satisfying and motivating. These work characteristics are assumed to increase job satisfaction through their influence on three critical psychological states, that is, experienced meaningfulness (the degree to which employees feel that the job is valuable and important), experienced responsibility (the degree to which employees feel responsible for work results), and knowledge of results (the degree to which employees are aware of their effectiveness at work; see Humphrey et al., 2007).

Research has provided evidence for the proposed relationship between the core job characteristics and several attitudinal and behavioral outcomes (e.g., job satisfaction, internal work motivation, job performance; see Fried and Ferris, 1987; Humphrey et al., 2007; Loher et al., 1985, for meta-analyses). Furthermore, research has revealed that of the many aspects of work situation that are associated with job satisfaction (e.g., salary, promotion opportunities, coworkers, supervision), the nature of work has the highest correlation with overall job satisfaction (see Judge et al., 2002).

2.3. Congruence between desired and perceived job attributes and its relationship with job satisfaction

The value congruence theory of job satisfaction (Locke, 1969) states that employees' job satisfaction is highest when their desired job attributes are congruent with what the job or the organization perceived as offering (see Humphrys, 1981). Several studies have investigated the relationship between the congruence of desired and perceived job attributes and job satisfaction (e.g., O'Brien and Dowling, 1980, Warr and Inceoglu, 2012), but the results are inconclusive. As already mentioned, some studies have reported a correlation between the congruence of desired and perceived job attributes and employee job satisfaction (e.g., Barrett, 1978; Humphrys, 1981; O'Brien and Dowling, 1980), however this correlation was lower than the correlation between perceived job attributes and job satisfaction. For example, in the study by O'Brien and Dowling (1980), the value congruence hypothesis was supported only for two job attributes (i.e., skill-utilization and variety), but not for the other three job attributes measured (i.e., influence, pressure, and social interaction). Moreover, this study indicated that perceived job attributes alone represent a much stronger predictor of job satisfaction than the congruence between desired and perceived job attributes.

In his study, Humphrys (1981) found only little support for the hypothesis that the congruence between desired and perceived job attributes is a better predictor of job satisfaction when the importance of job attributes is weighted. He found that unweighted discrepancy scores (i.e., difference scores used as a measure

of value congruence) also significantly predicted job satisfaction. In addition, the results indicated that the best predictor of job satisfaction is the perceived level of job attributes, not the congruence between desired and perceived job attributes, which supports the findings by O'Brien and Dowling (1980).

In a more recent study, Warr and Inceoglu (2012) tested the hypothesis that poor person-job fit causes lower levels of job satisfaction, using a sample of 840 employees from several countries (e.g., United Kingdom, Australia). Person-job fit, that is, the fit between wanted and actual levels of 33 job attributes was examined using both algebraic and absolute scoring. According to the authors, algebraic scoring (i.e., wanted-minus-actual levels of job attributes) emphasizes poor fit in a positive direction, indicating that employees want a specific job attribute more than they perceive their organization offers. On the contrary, absolute scoring emphasizes “wanting less in addition merely to wanting more” (p. 133). The results indicated that poor fit between wanted and actual levels of job attributes is negatively correlated to job satisfaction, especially in terms of absolute incongruence.

Based on prior research, I expect that employees who experience a match or congruence between the desired and the perceived job attributes will be more satisfied with their job. Thus, I postulate the following:

Hypothesis 1: The congruence between desired and perceived job attributes will positively correlate with job satisfaction of IT professionals.

3. Methodology

Sample description

The sample used in this study comprises 23 employees from a large IT company based in Romania. The mean age of respondents was 26.30 years ($SD = 4.02$) and their median job tenure was 8.00 months (range: 1-72 months). Thirteen of the respondents (56%) were males and ten (44%) of them were females. Respondents held a variety of job positions: 22% were IT developers, 22% were human resources (HR) consultants, 22% were middle managers, 17% were testers, 13% were quality assurance specialists, and one respondent was an intern. The other demographic data (e.g., level of education, type of contract) collected in this study is presented in Table 1 (see also Mihalca et al., *in press*).

Table 1: Sociodemographic characteristics of the sample (N = 23)

Variables		Frequency	Percentage
Gender	Female	10	44%
	Male	13	56%
Marital status	Married/in a relation	11	48%
	Single	11	48%
Children	Yes	2	9%
	No	21	91%
Level of education	Bachelor degree	14	61%

Variables		Frequency	Percentage
Major	Master degree	9	39%
	Computer science	9	39%
	Economics/Managem.	8	35%
	Humanities	5	22%
	Others	1	4%
Type of contract	Full-time	12	54%
	Part-time	5	23%
	Registered sole trader	3	14%
	Temporary	2	9%
Job satisfaction	Somehow satisfied	7	30%
	Very satisfied	16	70%

Note. Managem. = Management. One participant (4%) did not mention her/his marital status.

Measures

Desired job attributes. Employees' desired levels of various job attributes were measured with a 31-item questionnaire based on the most commonly used items in the recruitment literature (e.g., Harris and Fink, 1978; Turban et al., 1995; Uggerslev et al., 2012). The participants were requested to rate the importance of 31 job and organizational attributes when making job choice decisions, on a 7-point Likert scale, ranging from 1 (*not at all important*) to 7 (*extremely important*). The full list of desired job attributes can be seen in Figure 1.

Perceived job attributes. The perceived job attributes items were similar to those used to assess preferred or desired job attributes, but this time participants were asked to describe in which degree the company presents these job attributes. Participants rated their responses on a 7-point Likert scale from 1 = *absolutely false* to 7 = *absolutely true*. The full list of perceived job attributes can be seen in Figure 2. It should be noted that only 30 perceived job attributes were presented in the current study, as many participants did not rate the perceived level of the job attribute "location".

Job satisfaction. The overall job satisfaction of the employees was assessed using a single-item on a 4-point scale, ranging from *not at all satisfied* to *very satisfied*. The item used to measure job satisfaction was "How satisfied would you say you are with your job?". Single-item measures of job satisfaction have been found to be reliable and more robust than multiple-item scales (Wanous et al., 1997).

Procedure

Employees who were newly-hired or during the early years of their employment were invited to take part in the study. An e-mail invitation describing the purpose of the study was sent to the HR representative of the IT company, who then sent it to targeted employees. Employees were promised confidentiality, and oral consent was obtained from those who accepted to participate in the study. After completing a survey containing questions about preferred job attributes, job

satisfaction, and demographic factors (e.g., age, gender), participants rated the degree to which the listed job attributes are experienced in their organization (i.e., perceived job attributes) and then described in details during a semi-structured interview how these attributes are experienced in their jobs. All interviews were audiotaped, transcribed, and analyzed using thematic analysis, however these results will be reported elsewhere.

4. Results

Descriptive statistics

Means and standard deviations were computed for both desired and perceived job attributes (see Table 2).

Table 2: Means (M) and standard deviations (SD) of the desired and perceived job attributes

Job attributes items	Desired		Perceived	
	M	SD	M	SD
Good training opportunity	6.17	1.03	6.35	.78
Opp. for long-term career	6.52	.67	5.83	1.34
Variety in daily work	6.39	.89	5.96	1.07
Dynamic approach	5.87	1.18	6.26	.75
Friendly and informal culture	6.00	1.17	6.48	.73
Opp. for career develop. within organization	6.48	0.79	6.04	.77
Opp. for rapid career advancement	5.61	1.37	5.14	1.19
Freedom to work on own initiative	5.91	1.16	5.91	1.02
Opp. to do creative work	6.17	.89	5.77	1.07
Relaxed work atmosphere	6.26	.86	6.65	.57
Rewards based on performance	6.30	0.93	5.64	1.36
Opp. to travel	4.65	1.30	5.82	1.30
Good salary	6.35	0.78	5.65	1.56
Good fringe benefits	6.09	1.08	5.91	1.08
Reputation of the company	4.83	1.30	6.26	1.18
Size of the company	3.96	1.49	6.09	.79
Flexible working hours	6.17	0.98	6.48	.79
Relatively stress-free env.	4.91	1.83	5.30	1.18
Job security	6.00	1.28	6.26	1.14
Opp. to use individual abilities	6.35	0.88	6.17	.89
Challenging and interesting work	6.52	0.73	6.36	.90
Location of the company	4.22	1.74		
Opp. to learn and acquire new skills	6.30	0.93	6.35	.88
Support for initiative taking	6.00	1.00	6.17	.89
Provision of performance feedback	6.22	0.95	6.00	1.38
Opp. for teamwork	5.30	1.22	6.74	.54
Autonomy in duration/way of doing job	5.04	1.19	5.53	1.44
Work-life balance	6.56	0.66	4.86	1.71
Frequent salary increases	6.00	1.13	6.00	1.45
Good relations with supervisors	6.30	1.22	6.70	.63
Corporate social responsibility	4.56	1.73	6.65	.78

Note. Opp. = opportunity; develop. = development; env. = environment.

The mean importance ratings for the 31 desired job attributes are presented in Figure 1. Analyzing Figure 1, it can be seen that work-life balance was the most important job attribute for the employees, with a mean of 6.56. Challenging and interesting work as well as opportunities for long-term career development ($M = 6.52$) were among the top rated job attributes when making job choice decisions. Opportunities for career development within the organization ($M = 6.48$) and variety in daily work ($M = 6.39$) were next, indicating employees' desire for professional growth to take on high-level positions. Good salary ($M = 6.35$) was rated sixth behind the job attributes related to career development and type of work (e.g., challenging and interesting work). The least important job attributes were corporate social responsibility ($M = 4.56$), location ($M = 4.22$), and size of the company ($M = 3.96$).

Fig. 1: Mean ratings of desired job attributes

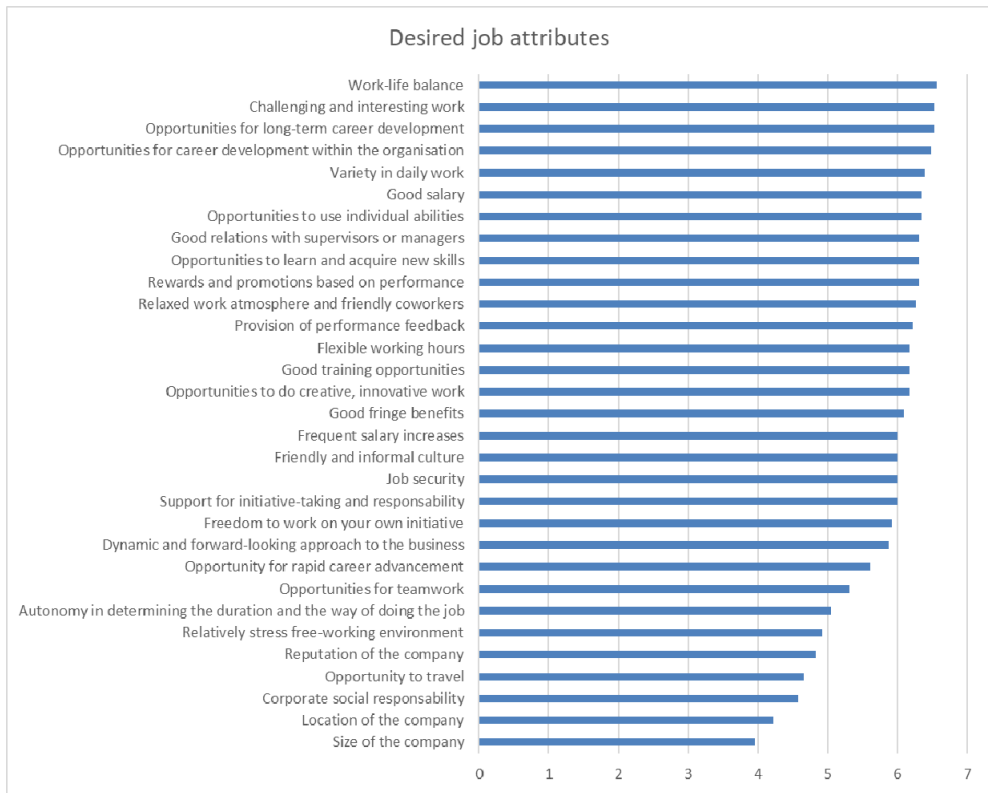
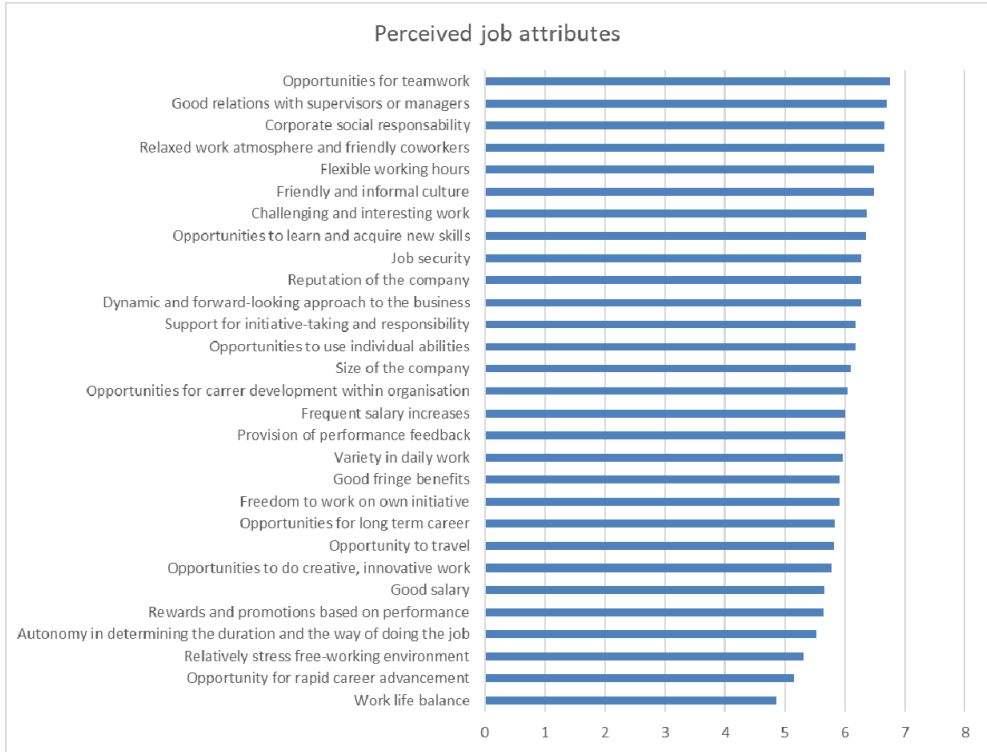


Figure 2 presents the means of perceived job attributes. As can be seen in Figure 2, employees rated opportunities for teamwork ($M = 6.74$) as the most experienced job attribute in their company. Good relations with supervisors or managers ($M = 6.70$), corporate social responsibility, and relaxed atmosphere and friendly coworkers ($M = 6.65$) were among the top rated perceived job attributes. Flexible working hours and friendly and informal culture ($M = 6.48$) were rated fifth and sixth highest. The perceived job attributes rated lowest by the employees

were: relatively stress free-working environment ($M = 5.30$), opportunity for rapid career advancement ($M = 5.14$), and work-life balance ($M = 4.86$).

Fig. 2: Mean ratings of perceived job attributes



Correlations between desired and perceived job attributes and job satisfaction

Correlation analyses were conducted to examine the relationship between desired job attributes and job satisfaction as well as between perceived job attributes and job satisfaction. Kendall's tau correlations were computed between-subjects because of the non-normal distribution of the data and the small sample size (see Tables A1 and A2 in Annex 1). As can be seen in Table A1, job satisfaction was positively and significantly correlated with 12 out of 31 desired job attributes. The strongest positive correlations were obtained between job satisfaction and the following desired job attributes: relaxed atmosphere and friendly coworkers ($\tau = .64$, $p = .002$), job security ($\tau = .64$, $p = .001$), provision of performance feedback ($\tau = .57$, $p = .005$), and reputation of the company ($\tau = .55$, $p = .005$). It is noteworthy that none of the desired job attributes strongly related to job satisfaction are among the top ten-rated job attributes, and only one of all job attributes (i.e., opportunities to use individual abilities), which correlated moderately with job satisfaction is among the top ten-rated job attributes.

Regarding the correlations between job satisfaction and perceived job attributes, 16 out of 30 perceived job attributes were positively and statistically correlated with overall job satisfaction (see Table A2). It is noteworthy that the majority of the perceived job attributes that correlated strongly with job satisfaction are intrinsic attributes such as challenging and interesting work ($\tau = .78, p = .000$), autonomy in determining the duration and the way of doing the job ($\tau = .54, p = .005$), provision of performance feedback ($\tau = .53, p = .005$), opportunities for career development within organization ($\tau = .51, p = .011$), support for initiative taking and responsibility ($\tau = .51, p = .011$), and are not placed in the top-ten experienced job attributes (except for challenging and interesting work). However, job satisfaction was also correlated, strongly and moderately, with extrinsic job attributes such as opportunity to travel ($\tau = .66, p = .001$), frequent salary increases ($\tau = .48, p = .014$), and good fringe benefits ($\tau = .39, p = .046$).

Correlation between congruence of desired and perceived job attributes and job satisfaction

To test the hypothesis that congruence between desired and perceived job attributes correlates with job satisfaction, I first computed the within-person gamma correlations as a measure of this congruence. The within-person gammas were calculated by correlating the ranking of desired job attributes with the ranking of perceived job attributes for each individual participant. Gamma provides a measure of the congruence between desired and perceived job attributes, which is independent of the absolute values of the ratings of these job attributes categories. This means that participants who rated high the job attributes can have the same gamma as participants who rated low these job attributes. As in the case of any correlation coefficients, gamma values range between -1.00 and +1.00. A value of one indicates a perfect congruence, that is, all desired job attributes are ranked in the same order as the perceived job attributes, whereas a value of zero indicates no congruence. A value of minus one indicates that the desired job attributes are not experienced by employees in their company or that the perceived job attributes are not important for participants when making job choice decisions.

Next, to test whether gamma was related to job satisfaction, I computed a Kendall's tau correlation between gamma and the score of overall job satisfaction. The correlation was significant ($\tau = .34, p = .031$, one-tailed), indicating that the more participants experience a congruence between the desired and perceived job attributes, the more they are satisfied with their job, and the more they experience a discrepancy (i.e., no congruence), the less they are satisfied with their job.

5. Conclusion

The main aim of this study was to investigate whether IT professionals' job satisfaction is associated with the congruence between what they want from a job and what they get from the job or organization. Results indicate that the congruence between desired and perceived job attributes relates positively to job satisfaction, which is consistent with previous studies that found support for the assumptions of the value congruence theory (e.g., Humphrys, 1981; O'Brien and Dowling, 1980).

One major implication of these results is that organizations should pay attention to the job attributes that employees are looking for and should narrow the discrepancy between desired and perceived job attributes in order to enhance the levels of job satisfaction among their employees. The most preferred job attributes for the employee sample included in this study were intrinsic factors referring to type of work (e.g., challenging and interesting work, variety in daily work), career development (e.g., opportunities for long-term career development), and supportive work environment (e.g., work-life balance). This suggests that intrinsic factors are more important for IT professionals when making job choice decisions than extrinsic factors such as salary (rated as the sixth most important job attribute), fringe benefits, and job security. These results are partially consistent with prior research (e.g., Kuhn and Joshi, 2009; Trauth et al., 2009). For example, in their study Kuhn and Joshi (2009) investigated gender differences in job attribute preferences of prospective IT professionals and found that work-life balance, social interaction, and salary were the most preferred job attributes by both men and women.

It is noteworthy that the most preferred job attributes are not among the top rated perceived job attributes, except for challenging and interesting work that was rated as the seventh most experienced job attribute. The largest discrepancies between desired and perceived job attributes occurred in the ratings of size of the company, corporate social responsibility, work-life balance, opportunity to travel, good salary (the difference is over 1.00 point). Except for work-life balance, for all the other mentioned job attributes, the identified discrepancies indicate that IT employees experienced these specific job attributes more than desired (i.e., the perceived level is above the desired level). In the case of work-life balance and other three job attributes for which the differences were over .50 points (i.e., good salary, opportunities for long-term career, rewards and promotions based on performance), employees wanted greater amounts of those job attributes than are perceived to be present in the organization.

Another interesting finding is that only a very few top rated desired and perceived job attributes are related to job satisfaction. In particular, job satisfaction correlated with opportunities to use individual abilities, which was rated as the seventh most important job attribute, as well as with challenging and interesting work, and opportunities to learn and acquire new skills that were rated as the seventh and the eighth most experienced job attributes in the organization. One possible explanation for this finding is that employees are not aware of which job attributes are the most important predictors of their job satisfaction, or they are not able to determine the hierarchy of their job values (Humphrys, 1981). To increase employee awareness of the desired job attributes that are responsible for job satisfaction, it may be useful for organizations to increase the perceived level of the intrinsic job attributes that are associated with job satisfaction, as it has been found that this may result in an increase of the desired level of those specific job attributes (see Humphrys, 1981). In this study, the majority of the perceived job attributes related to job satisfaction were intrinsic factors referring to the nature of work, advancement, recognition, and responsibility.

The results of this study also suggest that employee job satisfaction is associated with both intrinsic and extrinsic factors, which contradicts the assumptions of Herzberg's motivation-hygiene theory (1966). However, these results are in

accordance with the findings of studies, which have revealed that both intrinsic and extrinsic factors can be sources of job satisfaction (e.g., Mihalca et al., *in press*; Taylor and Westover, 2011).

Implications of the results for recruitment and retention of IT professionals should be considered with caution in view of the limitations of this study. First, this study focuses on self-reported job attributes, and thus is subject to enhanced social desirability response biases. Future studies should use other methods to capture the desired and perceived job attributes of IT sector employees (e.g., policy capturing; see Mihalca et al., *in press*), or include objective measures of job attributes (O'Brien and Dowling, 1980) to diminish the biases associated with self-reported data. Second, the study used a very small, non-representative sample of employees, which was obtained from a single IT company. It would be useful to replicate the results using a larger and more diverse employee sample, from multiple organizations in the same industry. The use of a larger sample will also allow to test the value congruence hypothesis using regression analyses and to determine whether job satisfaction is more strongly related to the congruence between desired and perceived job attributes than to job attributes alone (e.g., O'Brien and Dowling, 1980). Third, this is a cross-sectional study, which cannot provide information about cause-and-effect relationships (e.g., relationship between job attributes and job satisfaction) or track the changes in job attribute preferences over time. As the perceived importance of job attributes have been found to change over time as a result of employee work experience (see Mihalca et al., *in press*), future research should employ longitudinal designs to determine to what extent the desired and perceived job attributes, and their relationship with job satisfaction might change over time.

Future research avenues should also focus on investigating whether the value congruence theory is more applicable to employees with certain individual characteristics such as ability, personality (e.g., high self-efficacy, high need achievement; cf. Humphrys, 1981).

To conclude, the findings reported in this study pinpoint the need to find an appropriate balance between desired and perceived job attributes as a useful approach to increase employee job satisfaction.

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Annex 1

Table A1: Correlations between desired job attributes and job satisfaction

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.
1. Dynamic approach	-												
2. Relaxed work atmosphere	.55**	-											
3. Good fringe benefits	.38*	.42*	-										
4. Reputation of the company	.24	.43*	.45*	-									
5. Size of the company	.37*	.65**	.29	.66**	-								
6. Relatively stress-free environment	.39*	.56**	.48**	.37*	.47**	-							
7. Job security	.46*	.64**	.54**	.62**	.39*	.42*	-						
8. Opp. to use individual abilities	.28	.30	.44*	.30	.22	.37*	.26	-					
9. Support for initiative taking	.45*	.49*	.60**	.40*	.28	.34	.51*	.36	-				
10. Provision of performance feedback	.28	.39*	.68**	.48**	.25	.36*	.60**	.49*	.68**	-			
11. Autonomy in duration/way of doing job	.45	.55**	.32	.54**	.55**	.36*	.40*	.35	.30	.30	-		
12. Corporate social resp.	.18	.40*	.50**	.62**	.38*	.44**	.38*	.66**	.42*	.48**	.50**	-	
13. Job satisfaction	.39*	.64**	.47*	.55**	.49**	.40*	.64**	.42*	.44*	.57**	.45*	.43*	-

Note. *, ** Correlations are significant at the .05 level and .01 level, respectively (two-sided). Due to space limit, only desired job attributes that correlated significantly with job satisfaction are reported here. Opp. = opportunity; resp. = responsibility.

Table A2: Correlations between perceived job attributes and job satisfaction

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.
1. Opp. for long-term career	-																
2. Variety in daily work	.12	-															
3. Opp. for career develop. within organization	.37*	.36	-														
4. Opp. for rapid career advancement	.45*	.21	.13	-													

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.
5. Freedom to work on own initiative	.35	.57**	.64**	.13	-												
6. Opp. to do creative work	.45*	.49**	.58**	.24	.69**	-											
7. Rewards based on performance	.56**	.26	.39*	.42*	.43*	.44*	-										
8. Good fringe benefits	.28	.49**	.42*	.40*	.48*	.58**	.39*	-									
9. Opp. to travel	.34	.39*	.59**	.36	.59**	.48*	.47*	.55**	-								
10. Opp. to use individual abilities	.26	.43*	.22	.44*	.40*	.53**	.40*	.43*	.35	-							
11. Challenging and interesting work	.35	.54**	.53**	.43*	.62**	.55**	.38	.62**	.72**	.56**	-						
12. Opp. to learn and acquire new skills	.42*	.41*	.40*	.42*	.53**	.55**	.53**	.64**	.64**	.33	.66**	-					
13. Support for initiative taking	.61**	.17	.41*	.51**	.51**	.42*	.55**	.36	.57**	.42*	.58**	.64**	-				
14. Provision of performance feedback	.41*	.43*	.52**	.26	.64*	.74**	.43*	.38*	.42*	.46*	.61**	.50**	.54**	-			
15. Autonomy in duration/way of doing job	.41*	.33	.52*	.34	.64**	.37*	.49**	.39*	.83**	.27	.63**	.52**	.66**	.40*	-		
16. Frequent salary increases	.67**	.10	.44*	.36	.44*	.40*	.60**	.34	.64**	.20	.41*	.62**	.66**	.38*	.65**	-	
17. Job satisfaction	.39*	.40*	.51*	.45*	.48*	.45*	.42*	.39*	.66**	.48**	.78**	.42*	.51*	.53**	.54**	.48*	-

Note. *, ** Correlations are significant at the .05 level and .01 level, respectively (two-sided). Due to space limit, only perceived job attributes that correlated significantly with job satisfaction are reported here. Opp. = opportunity; develop. = development; resp. = responsibility

References

- Acikgoz Y. (2019) Employee recruitment and job search: Towards a multi-level integration, *Human Resource Management Review*, 29 (1), 1-13
- Baker S. H., Hansen R. A. (1975) Job design and worker satisfaction: A challenge to assumptions, *Journal of Occupational Psychology*, 48 (2), 79-91
- Barrett G. V. (1978) Task design, individual attributes, work satisfaction, and productivity. In: Negandhi A. R., Wilpert B. (eds). *Work organization research: European and American perspectives*. Kent, OH: Kent State University Press, 261-278
- Behling O., Labovitz G., Gainer M. (1968) College recruiting-theoretical base, *Personnel Journal*, 47 (1), 13-19
- Boswell W. R., Boudreau J. W., Tichy J. (2005) The relationship between employee job change and job satisfaction: the honeymoon-hangover effect, *Journal of Applied Psychology*, 90 (5), 882-892
- Boswell W. R., Roehling M. V., LePine M. A., Moynihan L. M. (2003) Individual job-choice decisions and the impact of job attributes and recruitment practices: A longitudinal field study, *Human Resource Management*, 42 (1), 23-37
- Boswell W. R., Shipp A. J., Payne S. C., Culbertson S. S. (2009) Changes in newcomer job satisfaction over time: Examining the pattern of honeymoons and hangovers, *Journal of Applied Psychology*, 94 (4), 844-858
- Carless S. A., Imber A. (2007) Job and organizational characteristics: A construct evaluation of applicant perceptions, *Educational and Psychological Measurement*, 67 (2), 328-341
- Casper W. J., Buffardi L. C. (2004) Work-life benefits and job pursuit intentions: The role of anticipated organizational support, *Journal of Vocational Behavior*, 65 (3), 391-410
- Chapman D. S., Uggerslev K. L., Carroll S. A., Piasentin K. A., Jones D. A. (2005) Applicant attraction to organizations and job choice: A meta-analytic review of the correlates of recruiting outcomes, *Journal of Applied Psychology*, 90 (5), 928-944
- Chen, L. H. (2008) Job satisfaction among information system (IS) personnel, *Computers in Human Behavior*, 24 (1), 105-118
- Chen G., Ployhart R. E., Thomas H. C., Anderson N., Bliese P. D. (2011) The power of momentum: A new model of dynamic relationships between job satisfaction change and turnover intentions, *Academy of Management Journal*, 54 (1), 159-181
- Cohrs J. C., Abele A. E., Dette D. E. (2006) Integrating situational and dispositional determinants of job satisfaction: Findings from three samples of professionals, *The Journal of Psychology*, 140 (4), 363-395
- Dormann C., Zapf D. (2001) Job satisfaction: A meta-analysis of stabilities, *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, 22 (5), 483-504
- Ehrhart K. H., Ziegert J. C. (2005) Why are individuals attracted to organizations?, *Journal of Management*, 31 (6), 901-919

- Fried Y., Ferris G. R. (1987) The validity of the job characteristics model: A review and meta-analysis, *Personnel Psychology*, 40 (2), 287-322
- Griffeth R. W., Hom P. W., Gaertner S. (2000) A meta-analysis of antecedents and correlates of employee turnover: Update, moderator tests, and research implications for the next millennium, *Journal of Management*, 26 (3), 463-488
- Hackman J. R., Oldham G. R. (1975) Development of the job diagnostic survey, *Journal of Applied Psychology*, 60 (2), 159 -170
- Hackman J. R., Oldham G. R. (1976) Motivation through the design of work: Test of a theory, *Organizational Behavior and Human Performance*, 16 (2), 250-279
- Harold C. M., Ployhart R. E. (2008) What do applicants want? Examining changes in attribute judgments over time, *Journal of Occupational and Organizational Psychology*, 81 (2), 191-218
- Harris M. M., Fink L. S. (1987) A field study of applicant reactions to employment opportunities: Does the recruiter make a difference?, *Personnel Psychology*, 40 (4), 765-784
- Herzberg F.I. (1966) *Work and the nature of man*. Cleveland, World publishing company
- Humphrey S. E., Nahrgang J. D., Morgeson F. P. (2007) Integrating motivational, social, and contextual work design features: A meta-analytic summary and theoretical extension of the work design literature, *Journal of Applied Psychology*, 92 (5), 1332–1356
- Humphrys P. (1981) The effect of importance upon the relation between perceived job attributes, desired job attributes and job satisfaction, *Australian Journal of Psychology*, 33 (2), 121-133
- Joseph D., Ng K. Y., Koh C., Ang S. (2007) Turnover of information technology professionals: A narrative review, meta-analytic structural equation modeling, and model development, *MIS Quarterly*, 31 (3), 547-577
- Judge T. A., Parker S. K., Colbert A. E., Heller D., Ilies R. (2002) Job satisfaction: A cross-cultural review. In: Anderson N., Ones D. S., Sinangil H. K., Viswesvaran C. (eds). *Handbook of Industrial, Work and Organizational Psychology, Vol. 2. Organizational Psychology*. Sage Publications, Inc., 25–52
- Jurgensen C. E. (1978) Job preferences (What makes a job good or bad?), *Journal of Applied Psychology*, 63 (3), 267-276
- Keller A. C., Semmer N. K. (2013) Changes in situational and dispositional factors as predictors of job satisfaction, *Journal of Vocational Behavior*, 83 (1), 88-98
- Konrad A. M., Corrigan E., Lieb P., Ritchie Jr J. E. (2000) Sex differences in job attribute preferences among managers and business students, *Group & Organization Management*, 25 (2), 108-131
- Kuhn K., Joshi K. D. (2009) The reported and revealed importance of job attributes to aspiring information technology: a policy-capturing study of gender differences, *ACM SIGMIS Database: the DATABASE for Advances in Information Systems*, 40 (3), 40-60
- Locke E. A. (1969). What is job satisfaction?, *Organizational Behavior and Human Performance*, 4 (4), 309-336
- Loher B. T., Noe R. A., Moeller N. L., Fitzgerald M. P. (1985) A meta-analysis of the relation of job characteristics to job satisfaction, *Journal of Applied Psychology*, 70 (2), 280- 289

- Mihalca L., Mengelkamp C., Brendea G., Metz D. (in press) Job attribute preferences of incoming university students and newly-hired employees in the context of the Romanian labour market
- Niederman F., Sumner M. (2004) Effects of tasks, salaries, and shocks on job satisfaction among MIS professionals, *Information Resources Management Journal (IRMJ)*, 17 (4), 49-72
- O'Brien G. E., Dowling P. (1980) The effects of congruency between perceived and desired job attributes upon job satisfaction, *Journal of Occupational Psychology*, 53 (2), 121-130
- Posner B. Z. (1981) Comparing recruiter, student, and faculty perceptions of important applicant and job characteristics, *Personnel Psychology*, 34 (2), 329-339
- Powell G. N. (1984) Effects of job attributes and recruiting practices on applicant decisions: A comparison, *Personnel Psychology*, 37 (4), 721-732
- Powell G. N. (1991) Applicant reactions to the initial employment interview: Exploring theoretical and methodological issues, *Personnel Psychology*, 44 (1), 67-83
- Sachau D. A. (2007) Resurrecting the motivation-hygiene theory: Herzberg and the positive psychology movement, *Human Resource Development Review*, 6 (4), 377-393
- Schneider S. C. (1987) Information overload: Causes and consequences, *Human Systems Management*, 7 (2), 143-153
- Taylor J., Westover J. H. (2011) Job satisfaction in the public service: The effects of public service motivation, workplace attributes and work relations, *Public Management Review*, 13 (5), 731-751
- Tett R. P., Meyer J. P. (1993) Job satisfaction, organizational commitment, turnover intention, and turnover: path analyses based on meta-analytic findings, *Personnel Psychology*, 46 (2), 259-293
- Trauth E. M., Quesenberry J. L., Huang H. (2009) Retaining women in the US IT workforce: theorizing the influence of organizational factors, *European Journal of Information Systems*, 18 (5), 476-497
- Turban D. B., Forret M. L., Hendrickson C. L. (1998) Applicant attraction to firms: Influences of organization reputation, job and organizational attributes, and recruiter behaviors, *Journal of Vocational Behavior*, 52 (1), 24-44
- Twenge J. M., Kasser T. (2013) Generational changes in materialism and work centrality, 1976-2007: Associations with temporal changes in societal insecurity and materialistic role modelling, *Personality and Social Psychology Bulletin*, 39 (7), 883-897
- Uggerslev K. L., Fassina N. E., Kraichy D. (2012) Recruiting through the stages: A meta-analytic test of predictors of applicant attraction at different stages of the recruiting process, *Personnel Psychology*, 65 (3), 597-660
- Wanous J. P., Reichers A. E., Hudy M. J. (1997) Overall job satisfaction: how good are single-item measures?, *Journal of Applied Psychology*, 82 (2), 247-252
- Warr P., Inceoglu I. (2012) Job engagement, job satisfaction, and contrasting associations with person-job fit, *Journal of Occupational Health Psychology*, 17 (2), 129-138

CO-WORKERS SUPPORT AND JOB PERFORMANCE

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Abstract. In the context of a global pandemic affecting businesses worldwide, management focus is oriented to what would enhance the employees' work performance even in crisis situations. This paper aims to identify, explore and explain the relationships between social support, task performance and organizational citizenship behaviour as well as different demographic data which might influence these variables. The final goal is to propose relevant solutions and recommendations for managers and practitioners in human resources which could be easily applied and have a major impact on individual performance as well as on the overall performance of the organization. The quantitative research is based on a sociological survey consisting of two standardized questionnaires based on tested Likert scales measuring co-workers perceived support, employees' task performance and organizational citizenship behaviour. The sample consists of 300 pairs of employees and their direct supervisors working in services companies based in Romania. The survey's results are analysed by performing correlation and regression analyses in JASP 0.14.1.0 free software. The results show positive relationships between the variables yet it proves that co-workers' support is not relevant for task performance. Valuable information regarding OCB and task performance can be added to the previous job performance research. Statistically significant relationships with demographic data could not be obtained. Further studies might consider a larger sample consisting of Europeans in more than one country as well as comparative analyses between countries and companies' fields of activity.

Key words: workplace social support, task performance, organizational citizenship behaviour, extra-role performance, co-workers support

JEL classification: M12

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1. Introduction

Since 2020, the global pandemic has been one of the most challenging factors affecting businesses worldwide. Although we are living in the era of technology where information flow is faster than anything, being forced to move to a digital world has been tough for everyone, in some countries more than in others. A lot of changes appeared in various fields of activity and it confused plenty of human beings in regard with their new normal. Managers and human resources (HR) managers had to find the best way to ease the work and improve job performance of their employees or at least, keep it at the optimal levels existent before the pandemic.

Taking into consideration the fact that everyone's "new normal" included lack of social interaction, the necessity of research on the social support and job performance topic emerged. The small detail that might make the difference can be daily social interaction everyone had in the workplace consisting of informal interactions, organizational citizenship behaviours (OCB) and other activities. The scarce literature in the field raised some further proposals from which the current research started. This paper's purpose is to bring new information relevant for the European workforce market as previous studies on the topic were only a few and were focused more on the Asian or American countries' population. Precisely, it aims to formulate pertinent recommendations and solutions for HR practitioners and managers in Europe, with a focus on Eastern Europe, which will help in facing unfortunate events like global crises whilst keeping organizational outcomes at a desired level.

This paper is based on quantitative research to explain and identify the relationship between social support and job performance. The data was collected via two standardized questionnaires consisting of Likert scales measuring co-workers' support in employees' case and task performance and OCBI (individual organizational citizenship behaviour) in supervisors' case. The research design is also a novelty element brought by the current survey seeing that little research on the topic used supervisor's evaluation instead of self-evaluation.

In the following sections of this paper, relevant and valuable literature in the field will be briefly presented as well as the methodology used and the results, discussions, limitations, and practical implications.

2. Literature review

To have an in-depth overview on the theoretical concepts, this paper works with, relevant aspects in the literature will be presented trying to explain the workplace social support, job performance and organizational citizenship behaviour as well as different relationships identified between these variables.

2.1. Social support in the workplace

Social support in the workplace is explained as a set of actions or behaviours aimed to help others at the workplace (Deelstra et al., 2003 *apud* Harris et al., 2007) performed by both colleagues and supervisors (Karasek and Theorell, 1990 *apud* Chou, 2015). This kind of behaviours consist of mentoring, emotional support,

offering task and problem solving support or just informing others about hierarchies in the organization (Hill et al., 1989 *apud* Harris et al., 2007). Hobfoll (1988 *apud* Chou, 2015) emphasized the importance of co-workers as key resources of the employees. Mentoring as workplace social support type (Hill et al., 1989 *apud* Harris et al., 2007) is defined as an organizational activity in which an employee with higher work experience in the organization is supporting a new hired or someone promoted in a new position by guiding them with both technical and organizational knowledge (Pânișoară and Pânișoară, 2016). Jensen et al. (2018) conducted a qualitative study in which were involved employees from different companies in Netherlands and showed that mentoring relationships can improve individual performance for both mentor and protégé leading to the future overall development of the organization. Taking this into consideration, the current paper will focus on co-workers' support as workplace social support.

2.2. Job performance

Job performance, as key concept of the current paper, is a multi-dimensional concept according to various authors describing it (Sonnentag, Volmer and Spychala, 2008). On short, job performance is the extent to which an employee achieves specific standards established by the organization (Nayyar, 1994 *apud* Muchhal, 2014) and can be also described through those individuals' behaviours which are relevant for the organizational objectives (Muchhal, 2014).

Job performance is perceived as the result of one's behaviour on the one hand and as behaviour, on the other hand (Sonnentag et al., 2008). Armstrong (2018) states that in performance management, there should be taken into consideration both the results and the behaviours that lead to those results. This mention is consistent with the literature stating that there exist different types of job performance, two of which being the most popular: task performance and contextual performance (Muchhal, 2014). Task performance refers to those activities specific to a certain position and differs from a position to another whilst contextual performance consists of activities which are common to a variety of job types (Muchhal, 2014). Summarily, task performance includes achieving all the activities mentioned in the job description whilst contextual performance covers organizational citizenship behaviour and pro-active attitudes (Muchhal, 2014). Last but not least, adaptive performance is the third type of performance identified however not as researched as the first two (Campbell et al., 1993 *apud* Sonnentag et al., 2008). It mostly regards one's ability to adapt explained through plenty of dimensions such as crisis management, stress management, problem solving, etc. (Pulakos et al., 2000 *apud* Sonnentag et al., 2008).

2.3. Organizational citizenship behaviour

Organizational citizenship behaviour is the last key concept of this current paper and therefore, it will be briefly explained. As previously stated, it is the stable part of the contextual dimension of performance (Muchhal, 2014). It is known as a freewill or pro social behaviour, separated from the mandatory tasks required in the job description of an employee (Jha and Jha, 2010). Throughout the time, studies demonstrated that organizational citizenship behaviour leads to organizational

success, enhancing productivity, effective use of resources and overall performance (Tambe and Shanker, 2014). Organ (1997 *apud* Tambe and Shanker, 2014) defines the organizational citizenship behaviour as those contributions an individual brings to the development of social and psychological context, supporting task performance. Williams and Andersen (1991 *apud* Jha and Jha, 2010; Tambe and Shanker, 2014) divided this concept into two categories: OCB-I (interpersonal organizational citizenship behaviour) which is oriented towards individuals and OCB-O which is oriented towards the organizational level. Some of the factors determining OCB are the following: Individual dispositions such as positive or negative affectivity and agreeableness might predict OCB according to Organ and Ryan (1995, *apud* Jha & Jha, 2010); Group cohesiveness - employees' work group tends to have a high influence on individuals' attitudes and behaviours (Jha & Jha, 2010) and when the group is cohesive, individuals are more sensitive about supporting others (Schachter et al., 1951 *apud* Jha and Jha, 2010). Organ (1990 *apud* Jha & Jha, 2010) explained the fact that the work group may predict OCB through social exchange theory, OCBs appearing as an effort group members make in order to maintain the exchange relationships in the group; Employee attitudes – the positive attitudes such as job satisfaction or organizational commitment seem to be the ones determining OCB; Leader-member exchange; Organizational justice.

2.4. Social support and job performance

Although all the three concepts explained above are widely studied, research on the relationships between these variables seems to be exiguous. Amarnah et al. (2010) conducted a correlational and descriptive study on the effect of co-workers support on job performance among medical staff in Jordan. A positive relationship was discovered between co-workers support and job performance. Contradictorily, Tran et al. (2018) showed that between Vietnam nurses only supervisor's support is a direct predictor of job performance whilst co-workers' support is not relevant. According to Park et al. (2004), a high perceived workplace social support is positively linked to a higher level of work control, lower depression level and higher work performance. Following Talebzadeh and Karatepe's study in 2020 on flight attendants from three different companies, it seems that work engagement mediated co-workers' and supervisor's effects on job satisfaction, task performance, creative and extra-role performance. Social support from co-workers is not significant for task performance yet is a key resource for extra-role and creative performance (Talebzadeh and Karatepe, 2020). Aydin and Tuzun (2019) found that both co-workers' and supervisor's support are linked to both in-role and extra-role performance. A theoretical approach provided by Chiaburu and Harrison's meta-analytic study in 2008 brings valuable information for the current study. It was proven that co-workers represent a great resource for employees' efficiency, significant positive relationships being discovered between their support and both task performance and organizational citizenship behaviour (Chiaburu and Harrison, 2008). Consistent explanations for the positive relationship between workplace support and organizational citizenship behaviour can be found in the reciprocity theory (Gouldner *apud* Chiaburu and Harrison, 2008). Despite the existent evidence, there is a strong need for more consistent findings on the relationship between social support and job performance,

with a focus on the relationship between task performance and social support as well as social support and different dimensions of OCB.

3. Methodology

The current research is based on quantitative data and aims to identify the existence of different relationships between co-workers' support, task performance and OCBI as well as their power and direction. Therefore, the current paper tries to be an explanatory survey rather than a descriptive one (Chelcea, 2001).

The present research formulates three main hypotheses based on the above stated literature review:

H1: Higher perceived co-workers' support is positively linked with higher task performance.

H2: Higher perceived co-workers' support is positively associated with a stronger tendency to manifest organizational citizenship behaviours.

H3: A high task performance is positively linked with organizational citizenship behaviours.

To collect the data, two standardized questionnaires were used as research instruments and were filled in by pairs consisting of employees and their direct supervisors. The questionnaires were self-administered and were sent via online platforms to the respondents. The research design provides good accuracy in job performance assessment, since it is not based on self-evaluation, but on the feedback provided by their direct supervisors are in charge of it.

The sample consists of 300 pairs of respondents, employees and their direct supervisors working in services, hospitality, and IT organizations from Romania. The average age of the respondent employees is 30 and their organizational tenure is 2.93 years, whilst supervisors' average age is 39 and organizational tenure is 8 years.

The questionnaires use Likert scales. The scale measuring perceived co-workers support (Susskind et al. 2001) aims to identify the link between employees' perceptions and attitudes towards work in services companies and customers' satisfaction. Their hypothesis was that co-workers support is positively linked to customer orientation and customer satisfaction. The items are scored from 1 to 7, where 1 stands for "totally disagree" and 7 stands for "totally agree". Task performance scale was used by Liden, Wayne & Stilwell (1993) in their longitudinal survey on leader-member exchange. It consists of 4 items scored on a scale from 1 to 7, where 1 stands for "totally disagree" and 7 stands for "totally agree". The OCB-I scale contains 5 items scored from 1 to 7 where 1 stands for "never" and 7 stands for "always". These items were extracted from Lee & Allen's survey in 2002 on OCB and WDB (work deviant behaviour) which were chosen from a pool of different scales' items measuring OCBs, scales that were tested and validated before.

All the three scales went through a single-test analysis conducted in JASP 0.14.1.0 in order to test their internal consistency. Tables 1, 2 and 3 show good internal consistency of the scales.

Table 1. Co-workers support scale reliability

Frequentist Scale Reliability Statistics	
Estimate	Cronbach's α
Point estimate	0.897

Table 2. Task performance scale reliability

Frequentist Scale Reliability Statistics	
Estimate	Cronbach's α
Point estimate	0.907

Table 3. OCBI scale reliability

Frequentist Scale Reliability Statistics	
Estimate	Cronbach's α
Point estimate	0.882

As control variables, both employees and supervisors indicated their age, sex, education level and organizational tenure in years. In the current paper, some analyses were conducted using demographic data as well.

4. Results

To analyse the results, correlation and regression analyses were conducted using JASP 0.14.1.0 free software.

4.1. Co-workers support and task performance

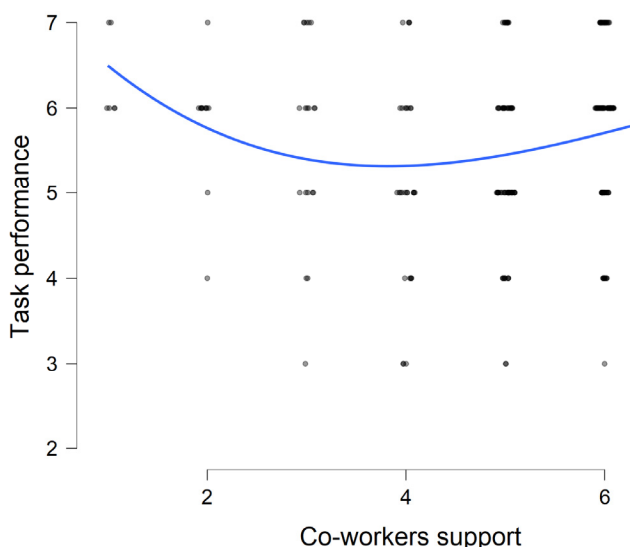
Testing the first hypothesis, the Pearson correlation showed no statistically significant relationship between the variables. The findings reveal a positive relationship, showing that the presence of perceived co-workers' support is associated with increased task performance (Table 4). The hypothesis was confirmed only partially. This result is consistent with other studies which showed that co-workers' support is not relevant for employees' task performance (Tran et al., 2018; Talebzadeh and Karatepe, 2020). On the other hand, the findings contradict other studies, which revealed that co-workers' support is significant for task performance (Chiaburu & Harrison, 2008; Amarneh et al., 2010; Park et al., 2004).

Table 4. Co-workers' support and task performance

Pearson's Correlations		Co-workers support	Task performance
Variable			
1. Co-workers support	Pearson's r	—	
	p-value	—	
2. Task performance	Pearson's r	0.107	—
	p-value	0.065	—

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

Graphic 1. Regression graph – co-workers’ support and task performance



According to the regression graph, a high task performance is mostly predicted by either a low or high level of perceived co-workers’ support, moderate levels of co-workers’ support being associated with a medium task performance. Potential explanations were not found in the verified literature yet might exist in studies regarding social support or job performance.

4.2. Co-workers support and organizational citizenship behaviour

Table 5. Co-workers’ support and OCBI

Pearson's Correlations		Co-workers support	OCBI
Variable			
1. Co-workers support	Pearson's r	—	
	p-value	—	
2. OCBI	Pearson's r	0.285 ***	—
	p-value	< .001	—

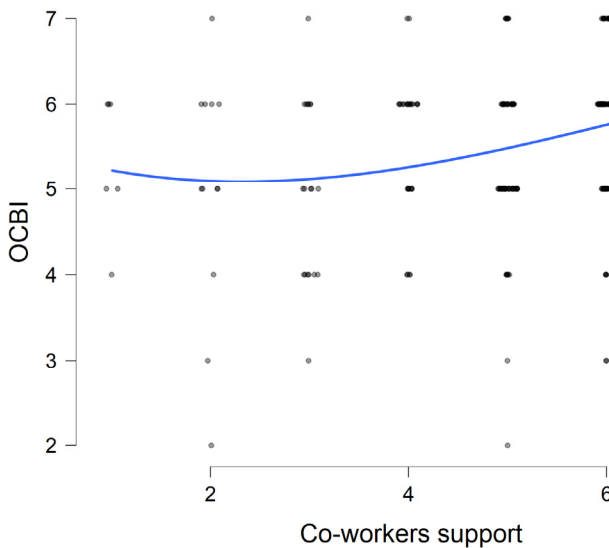
* p < .05, ** p < .01, *** p < .001

As Table 5 illustrates, there is a strong and positive correlation between co-workers’ support and organizational citizenship behaviour. This result is consistent to other findings in the literature (Talebzadeh & Karatepe, 2020; Aydin & Tuzun, 2019) showing that high co-workers’ support is associated with high organizational citizenship behaviour and vice-versa. The relationship may be explained through reciprocity theory (Gouldner, 1960 *apud* Chiaburu & Harrison, 2008) or social exchange theory (Blau, 1964 *apud* Chiaburu & Harrison, 2008). Social exchange theory is mostly explained through social interactions which lead to social obligations (Emerson, 1976 *apud* Cropanzano & Mitchell, 2005) and it is based on the reciprocity norms studied by Gouldner (1960). On short, these norms state that when someone offers

something, something will be returned as well and usually, the reciprocity norms are influenced by the individuals' culture (Cropanzano & Mitchell, 2005).

Therefore, the second hypothesis of the study was also confirmed and the regression graph (Figure 2) supports Pearson correlation illustrating the fact that high perceived co-workers' support is associated with employees' OCBI, returning the help received in a way or another.

Figure 2. Regression Graph – Co-workers' support and OCBI



4.3. Organizational citizenship behaviour and task performance

Within the complexity of job performance, two popular dimensions are the task performance and extra-task performance, including here organizational citizenship behaviours. In table 6, there can be seen a statistically significant and positive correlation between organizational citizenship behaviour and task performance. Both variables, as dimensions of the performance, seem to be related to each other positively and thus, the third hypothesis is confirmed.

This means that high performers tend to engage in OCBI yet those who manifest this type of behaviours, might also exceed in their job tasks.

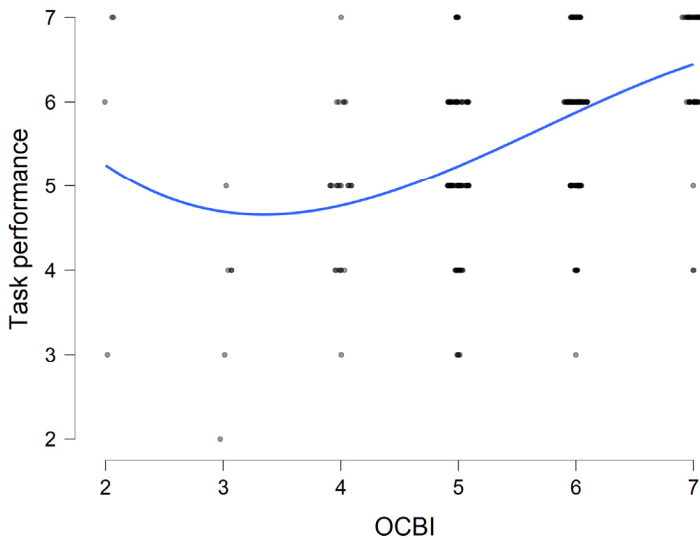
Table 6. Organizational citizenship behaviour and task performance

Pearson's Correlations		
Variable		Task performance
2. OCBI	Pearson's r	0.471 ***
	p-value	< .001

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

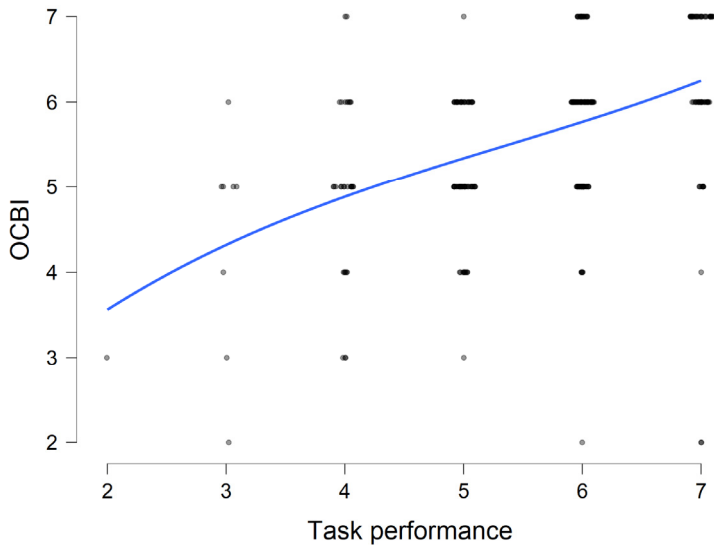
Previous studies, although insufficient, provide some explanations supporting the current findings. Hoffman et al. (2007) conducted a meta-analysis aiming to distinguish between OCB and task performance and to examine the relationship between the two variables as well. Their results show that task performance and OCB are distinct concepts, yet highly and positively linked to each other. Nasir et al. (2011) conducted a correlational survey on OCB and task performance, having supervisor's ratings for task performance and revealing a positive and significant link between these variables as well. Another survey conducted by Bruque et al. (2015) found a positive and linear relationship between OCB and task performance whilst other findings indicate a curvilinear relationship between the two variables (Rapp, Bachrach & Rapp, 2013 *apud* Bruque, 2015). These findings are also consistent with what is revealed within the current survey, curvilinear relationships being showed in Graphic 3 and 4 showing how one variable is modifying in relationship to the other.

Graphic 3. Regression Graph – OCBI and task performance



According to Graphic 3, it can be seen that only an increased level of manifesting OCBI leads to higher task performance. This can be explained through Janssen et al. (2011) survey's results showing that mentoring programs improve the performance of both mentors and protégés.

Graphic 4. Regression graph – Task performance and OCBI



Graphic 4 illustrates that high level of task performance lead to high involvement in interpersonal organizational citizenship behaviours. This means that high performers tend to manifest OCBI due to the fact that they are key resources for others through sharing valuable information regarding in-role activities and general information about the organization (Hobfoll, 1988 *apud* Chou, 2015).

Demographic data proved to be irrelevant in predicting task performance, OCBI or perceived co-workers' support. Analyses conducted resulted in poor statistically significant relationships between the variables.

5. Discussion and conclusions

The current survey's results revealed positive and statistically significant relationships between co-workers' support and OCBI as well as between OCBI and task performance. Two out of three hypotheses were confirmed. However, unlike expected, there was no significant relationship between co-workers' support and task performance. However, future studies may try to use co-workers' support as a mediator. It is highly linked to OCBI and OCBI is highly and positively linked to task performance.

On one hand, the results illustrate how reciprocity norms and social exchange theory apply in organizations by enhancing the work environment and supporting the overall productivity and performance as well. This is a future direction which should be perpetuated in order to have a deeper insight in how it works and what can be done on purpose to build and maintain teams defined by helpfulness and positivity whilst taking measures to avoid work deviant behaviours and general negativity.

On the other hand, these results emphasize the difference between task performance and OCB and focus on their significant relationship. High performers

tend to engage in behaviours oriented towards others while these behaviours enhance individuals' task performance. This study brings new information to the literature studying both OCB and task performance whilst very few studies focus on the link between them.

A limitation of the survey is related to the convenient sample, which makes the results impossible to generalize to the general population. Thus, further studies should explore the relationship between social support and task performance applied on randomised samples and in various contexts. For future studies in this field, using qualitative research methods might be a great advantage to obtain in-depth results on the topic and suggest potential explanations for the non-convergent findings. It is also recommended to perform a more complex research design by introducing mediators or moderators of the relationships and perpetuate the social exchange theory. For more practical implications, studies can be conducted comparing different fields of activity in terms of co-workers' support relationship with task performance and OCBI.

6. Practical implications

As one of the main purposes of this current paper was to formulate practical recommendations for managers and human resources managers, few ideas will be briefly presented based on the results.

Although co-workers' support does not have a direct relationship with task performance, it is highly connected to OCBI which is in turn, related to task performance. Therefore, one of the recommendations would be to encourage social interaction and helpful behaviours between co-workers through programs such as *work buddy* and having coffee together in the mornings, things which can be applied in both online and offline contexts.

Giving the fact that manifesting OCBI is linked to high task performance, HR managers might think of different types of rewards to encourage OCBs generally as well as OCBI. The rewards might be material or a simple public recognition of such behaviours.

Lastly, another proposal is to implement formal mentoring programs which can be developed both online and offline, for the new hires. Besides an informal buddy, a mentor in an experienced colleague will help in increasing task performance as well as exchange of helpful behaviours.

These proposals should be seen more as starting points which can be developed by the HR managers who can elaborate more specific solutions based on internal studies.

References

- Amarneh, B. H., Abu Al-Rub, R. F., and Abu Al-Rub, N. F. (2010). Co-workers' support and job performance among nurses in Jordanian hospitals. *Journal of research in nursing*, 15(5), pp. 391-401.
- Armstrong, M. (2006). *Performance management: Key strategies and practical guidelines*. 3rd ed. London and Philadelphia: Kogan Page Limited.

- Aydın, E., și Kalemci Tüzün, I. (2019). Organizational support sources and job performance relations: what about occupational commitment? *Anatolia*, 30(3), pp. 379-389.
- Bruque, S., Moyano, J., & Piccolo, R. (2016). OCB and external–internal social networks: effects on individual performance and adaptation to change. *The International Journal of Human Resource Management*, 27(1), 1-22.
- Chelcea, S. (2001). *Metodologia cercetării sociologice: metode cantitative și calitative*. București: Editura Economică
- Chiaburu, D. S., and Harrison, D. A. (2008). Do peers make the place? Conceptual synthesis and meta-analysis of coworker effects on perceptions, attitudes, OCBs, and performance. *Journal of applied psychology*, 93(5), p.1082
- Chou, P. (2015). The effects of workplace social support on employee's subjective well-being. *European Journal of Business and Management*, 7(6), 8-19.
- Cropanzano, R., and Mitchell, M. S. (2005). Social exchange theory: An interdisciplinary review. *Journal of management*, 31(6), 874-900.
- Harris, J. I., Winkowski, A. M., & Engdahl, B. E. (2007). Types of workplace social support in the prediction of job satisfaction. *The career development quarterly*, 56(2), 150-156.
- Hoffman, B. J., Blair, C. A., Meriac, J. P., and Woehr, D. J. (2007). Expanding the criterion domain? A quantitative review of the OCB literature. *Journal of Applied psychology*, 92(2), 555.
- Janssen, S., Tahitu, J., van Vuuren, M., and de Jong, M. D. (2018). Coworkers' perspectives on mentoring relationships. *Group & organization management*, 43(2), pp.245-272.
- Jha, S., and Jha, S. (2010). Determinants of organizational citizenship behaviour: A review of literature. *Journal of Management & Public Policy*, 1(2).
- Lee, K., and Allen, N. J. (2002). Organizational citizenship behavior and workplace deviance: The role of affect and cognitions. *Journal of applied psychology*, 87(1), p. 131
- Liden, R. C., Wayne, S. J., and Stilwell, D. (1993). A longitudinal study on the early development of leader-member exchanges. *Journal of Applied Psychology*, 78, pp. 662-674.
- Muchhal, D. S. (2014). HR practices and Job Performance. *IOSR journal of humanities and social science (IOSR-JHSS)*, 19(4), pp. 55-61.
- Nasir, R., Mohammadi, M. S., Wan Shahrazad, W. S., Fatimah, O., Khairudin, R., and Halim, F. (2011). Relationship between organizational citizenship behavior and task performance. *The social sciences*, 6(4), pp. 307-312
- Pânișoară, G. and Pânișoară I.O., 2016. *Managementul resurselor umane*. 3rd ed., Iași: Polirom.
- Park, K. O., Wilson, M. G., and Lee, M. S. (2004). Effects of social support at work on depression and organizational productivity. *American journal of health behavior*, 28(5), pp. 444-455
- Sonnentag, S., Volmer, J., and Spychala, A. (2008). Job performance. *The Sage handbook of organizational behavior*, 1, 427-447.
- Susskind, A. M., Kacmar, K. M., and Borchgrevink, C. P. (2003). Customer service providers' attitudes relating to customer service and customer satisfaction in the customer-service exchange. *Journal of Applied Psychology*, 88, pp. 179–187.

- Talebzadeh, N., and Karatepe, O. M. (2019). Work social support, work engagement and their impacts on multiple performance outcomes. *International Journal of Productivity and Performance Management*.
- Tambe, S., and Shanker, M. (2014). A Study of Organizational Citizenship Behavior (OCB) And Its Dimensions: A Literature Review. 70 *International Research Journal of Business and Management-IRJBM*.
- Tran, K. T., Nguyen, P. V., Dang, T. T., and Ton, T. N. (2018). The impacts of the high-quality workplace relationships on job performance: a perspective on staff nurses in Vietnam. *Behavioral sciences*, 8(12), p. 109.