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PROFILES OF CAREER CALLING ON A ROMANIAN
TEACHERS' SAMPLE: A CLUSTER ANALYSIS

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Abstract

Calling in career is an important topic of research due to its relevant implications, both for individuals and organizations. Despite the increasing interest in investigating this subject, there are few research projects addressing calling in education. Therefore, the aim of this study is to identify and describe the components of calling on a sample of 758 Romanian school teachers. A *k-means* cluster analysis was performed to examine participants calling characteristics. Three types of calling merged: *transcendent and prosocial active calling* (cluster 1, N=215), *positive self-centred calling* (cluster 2, N=255), *lack of calling* (cluster 3, N=288). Cluster 1 and cluster 2 could be described as high on calling dimensions, high on core self-evaluations, high on intrinsic religiosity, and low on emotional exhaustion. Cluster 1 was also high on career adaptability components, altruism and relationship with others as core work values. Cluster 2 and cluster 3 were low on those variables. Moreover, cluster 3 performed high on emotional exhaustion. Implications for research on calling and career counselling practice are discussed.

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Keywords: Career calling, school teachers, career adaptability, core self-evaluations, cluster analysis.



1. Introduction

The 21st century careers are dynamic, unpredictable and focused on personal and professional development of the individual. In this context, identifying meaningful profession becomes the bedrock of career success (Duffy & Sedlacek, 2007; Peterson, Park, Hall, & Seligman, 2009). Furthermore, recent researchers have emphasized the relevance of studying passion and meaning in life and career (Michaelson, Pratt, Grant, & Dunn, 2013). To address this topic, they investigated the construct of calling.

From a career construction theory (Savickas, 2002) perspective, calling is a continuous process, closely related to adaptability, as well as to many internal (values, identity etc) and external (career success, well-being) factors (Weeks & Schaffert, 2017). More specific, Duffy and Dik (2013) defined calling as a central belief that personal career is an essential dimension of a meaningful life that contributes to the public good or to the development of the society. Experiencing a calling is a personal goal which involves deliberate actions for improving ones' career (Hall & Chandler, 2005). One critical issue for researchers is understanding the role of calling across different cultures and occupations. More efforts are needed in order to gain valuable new insights about calling characteristics and results for non-western populations and working adults in diverse professions (Duffy & Dik, 2013; Park, Kim, Lim, & Shon, 2019).

Careers in educational settings are characterised by high levels of intrinsic motivation, complex vocational mechanisms, meaning derived from individual and common values. Over the course of time, it has been held that the didactic profession is essentially one based on calling. Notwithstanding, few studies have investigated didactic calling from a psychological perspective.

Romanian educational system has a lot of challenges as low wages and problematic social prestige of teaching careers. In this context, identifying motivational factors that contribute to teachers' well-being and career commitment is essential for improving the quality of education (Watt & Richardson, 2007). Consequently, this study aims to facilitate in-depth understanding of the calling in educational field, with the purpose of leading to efficient teachers' training programmes.

2. Problem Statement

Teaching careers are traditionally associated with having a calling (Mattingly, 1975; Dinham & Scott, 2000) and the motivation for teaching has gained considerable interest to many researchers (Ames & Ames, 1984; Sylvia & Hutchison, 1985). Teacher's motivation has strong influence over the quality of education and their effects on students' learning outcomes and behaviour. Even though calling in educational setting has often been recognised as an important factor with relevant impact on teacher motivation, there are relatively few empirical studies investigating this topic. On the other hand, it is still unclear how common the calling among teachers is. A study conducted on a sample of teachers from Australia, New Zealand and England concluded that 49% of the Australian teachers, 45% of the English teachers and 46% of the teachers from New Zealand asserted that they "have always wanted to become teachers", a statement strongly in favour of a "calling" to teach (Dinham & Scott, 2000, p. 284). Previous studies brought strong evidences that teaching is perceived as a calling by those engaged in this profession. In Eastern Europe, one study on teachers in Croatia and Slovenia revealed that 83% from teachers in Croatia and 68% from Slovenia reported high levels of calling (Thompson & Bunderson, 2018). The impact of

career as a calling is supported by studies showing that the intrinsic aspects of teaching, such as the collaboration with the students and the proactive attitude toward meeting their emotional and social needs are bringing the greatest satisfaction for teachers (Richardson & Watt, 2006). More, many studies showed that teachers who reported calling in their careers have been actively involved in didactic activities and were proactive in finding positive aspects of their profession and in deriving meaning from social interactions (Buskist, Benson, & Sikorski, 2005).

Accordingly, calling is an important source of meaning in work, being a research topic that paves the way for an inquiry into the conditions that allow an individual to fulfil his potential (Cameron, Bright, & Caza, 2004; Steger & Dik, 2010).

A series of studies linked the presence of calling to positive emotionality, clarity of self, decision comfort, life meaning (Steger, Pickering, Shin, & Dik, 2010; Wrzesniewski, McCauley, Rozin, & Schwartz, 1997). A sense of calling has an important role in understanding attitudes, emotions and behaviors related to career development and work life (Dik & Duffy, 2009).

As a process, calling has its roots in self-reflection and in the endeavour to find a personal meaning, some authors considering that pro-social values are also components of calling (Dik & Duffy, 2009; Elangovan, Pinder, & McLean, 2010).

Special attention has been paid in published literature to the sources of calling, to the mechanisms that explain the perception of the presence of calling. Accordingly, one of the most common approaches to calling is that of Wrzesniewski et al. (1997). He defines calling as a way to contribute to something beyond self, greater than the self, which implies a sense of meaning in life. Elangovan et al. (2010) define calling as “a course of action in pursuit of pro-social intentions embodying the convergence of an individual’s sense of what he or she would like to do, should do, and actually does” (p. 430). Dik & Duffy (2009), defined calling as being an action orientation reference to the course of action used to enact one’s calling, a sense of clarity of purpose and personal meaning corroborated with prosocial orientation.

So far, many studies investigated personal dimensions related to perceiving or living a calling. In our study we selected the psychological constructs which demonstrated strong empirical relation with calling, especially for similar samples. Accordingly, we investigated: personality, intrinsic religiosity, career adaptability, burnout, work values.

Career adaptability is the central mechanism in the process of career development (Super, 1990). Both theoretical and empirical, career adaptability is an important correlate of calling (Guo et al., 2014; Praskova, Hood, & Creed, 2014). It refers to a set of cognitive resources engaged to accurately anticipate and manage vocational development tasks (Savickas, 2002). More specific, career adaptability implies concern, control, curiosity and confidence regarding career development process (Savickas, 2002). So far, calling was strongly related with confidence as essential component of career decisions (Hall & Chandler, 2005).

Second, the relation between personality dimensions and calling can bring relevant results for understanding the main antecedents of calling. For example, one study conducted by Hirschi (2011) concluded that positive core self-evaluations (Judge, Erez, Bono, & Thoresen, 2003) are one essential component of calling. More specific, positive self-evaluations facilitate career goals and bring a meaningful understanding of self and career.

Third, previous empirical research related prosocial personality orientations (Bott et al., 2017) and religiosity (Hernandez, Foley, & Beitin, 2011) with calling exploration. In the same time, career engagement and proactive career development behaviors contribute to living calling (Mack, 2007; Bott et al., 2017). Prosocial work values are important dimensions of calling, which means that individuals with strong calling have self-transcendent values (altruism, relations with others) (Dik & Duffy, 2009). Regarding, religiosity, the results of metaanalysis conducted by Hernandez et al. (2011) concluded that relation with God is a significant predictor of calling and life satisfaction. Also, Duffy (2006) illustrated the role of religiosity in career decision process and Dik, Sargent, and Steger (2008) found a strong positive relation between intrinsic religiosity and calling.

Last, calling is related with high levels of well-being and work satisfaction (Duffy, Allan, Autin, & Bott, 2013; Elangovan et al., 2010), positive emotions and coping (Cardador & Caza, 2012), but also with low levels of burnout (Hagmaier & Abele, 2012).

3. Research Questions

The present study proposes a person-centered, typological approach of calling and attempts to address the following research questions: What shared characteristics can be observed among subgroups of teachers with and without a calling? Can we identify unshared elements that differentiate subgroups of individuals who have calling? We applied cluster analysis to identify essential components of calling, which distinguish between different groups of the sample (similar with Hirschi's (2011) study conducted on a sample of German undergraduates). Typological approaches are based on the assumption that discrete typologies, or groups, exist within a more heterogenous and extended set of observations, such as the population or a randomly selected group.

In our research, we start from the assumption that calling is a cultural construct that implies a continuous process of assessing the meaning in career. Any person can discern a calling, which can emerge in any field of work (Wrzesniewski et al., 1997). Participants to the study might significantly differ in their characteristics and it is necessary to identify subgroups that are relevant to the sample of teachers (Molenaar, 2004; Vondracek & Porfeli, 2003). These assumptions of the person-centred approaches are adequate, considering the diversity of concepts related to calling and the strenuous attempt to generalise the results.

4. Purpose of the Study

The aim of the study is to apply one typological approach of calling in order to identify the differences and common characteristics of teachers in our sample. In the framework of this study, we had as a starting point the research conducted by Hirschi in 2011. We added new several variables which showed strong relations with calling in previous studies (conducted in the last seven years). More, in order to decide which dimensions to include in our cluster analysis, we reviewed previous studies on Romanian samples in order to decide which dimensions to include in our cluster analysis (Dumulescu, Balazsi, & Opre, 2015; Dumulescu, Filip, & Opre, 2015).

4.1. Hypothesis

Starting from recent results in literature, which were presented in the previous section, we propose the following hypotheses:

- H1. Teachers with a sense of calling in their career possess positive core self-evaluation
- H2. Teachers with a sense of calling in their career possess high career adaptability
- H3. Teachers with a sense of calling in their career possess self-transcendent values (altruism, relationships)
- H4. Teachers with a sense of calling in their career possess intrinsic religiosity
- H5. Teachers without a sense of calling in their career possess emotional exhaustion

5. Research Methods

5.1. Participants and procedure

756 teachers from public education system participated in the study. The mean age was 42.1 years (SD=9.4). A slight majority were females (84.7%) and 15.2 % were males. The largest group was represented by participants living in urban areas-85.5%, as opposed to 15.3% in rural areas. Participants were evenly distributed regarding the levels of education they worked in: 17.4% were pre-school teachers, 25.6% were primary school teachers, 24.1% were secondary school teachers, 32.9% high-school teachers.

The research instruments were sent to schools by Teaching Training Centre (Hunedoara County). Participation was voluntary. Data was collected by the Teaching Training Centre and sent to the research team.

5.2. Research instruments

The Multidimensional Calling Measure (Hagmaier & Abele, 2012)

Calling was measured using the Romanian version of Multidimensional Calling Measure Scale adapted and validated on Romanian population by Dumulescu, Balazsi, Manuil, and Opre (2019). MCM has three sub scales (8 items), and the answers are offered on a Likert scale from 1 (strong disagreement) to 6 (strong agreement). The first sub scale refers to calling as *transcendent guiding force*, the second is named *sense and meaning and value-driven behaviour* and the third one *identification and person-environment-fit*. A non-exhaustive list of items includes: "I follow an inner calling that guides me through my career", "My profession helps me make the world a better place", "Through my profession, I can fulfil my personal potential".

The Core Self Evaluations Scale (Judge et al., 2003)

The core self-evaluations were assessed using CSES. This is a scale consisting of 12 items that measure peoples' beliefs regarding career success. Some examples are: "I am confident I will attain career success" and "I don't think career success is under my control" (scored the other way round). The internal consistency of the scale is α Cronbach =.86.

Religious orientation scale -Revised (Tiliopoulos, Bikker, Coxon, & Hawkin, 2007).

The scale contains 14 items, and the answers are scored on a Likert scale with 5 points (1= strong disagreement, 5= complete agreement). We used only the subscale regarding intrinsic religiosity. Higher scores indicate higher levels of specific religious orientation. Item example: "My approach of life is based on my religion". The internal consistency coefficient for intrinsic dimension is : $\alpha = 0.85$ for the intrinsic dimension.

Work values Scale (Cable & Edwards, 2004)

WV is a 24-items scale based on the circumplex model of human values developed by Schwartz (1992). This model is organised on two axes that distinguish between basic human motivations. The first axis is openness to change v. conservatism, which distinguishes values in terms of seeking intellectual and emotional interests v. safety and maintaining the status quo. The second axis is self-development v. self-transcendancy, which organises values in terms of seeking self-interest v. the promotion of common good. Starting from this model Edwards and Cable (2002) identified 8 key values– altruism, relationships, pay, security, authority, prestige, diversity and autonomy and every single one of these is measured using this scale eih 3 items. In the present study, we used only 2 key-values subscales (self-transcendent values)-altruism and relations with other. Example of items include: "Being of service to society"; "Forming relationships with coworkers".

Career Adapt-Abilities Inventory - CAAS- international version (Savickas & Porfeli, 2012)

The scale contains 24 items, four subscales (concern, control, curiosity, confidence) and total score that indicates general career adaptability. Participants answer to every item using a scale from 1 (weak) to 5 (strong). Examples of items include: "Planning how to achieve my goals", "Taking responsibility for my actions", "Investigating options before making a choice", "Working up to my ability". The Alpha cronbach coefficients are: curiosity- $\alpha = 0.85$, control- $\alpha = 0.87$, confidence- $\alpha = 0.87$, concern= $\alpha = 0.85$

Malsach Burnout Inventory (Aluja, Blanch, & García, 2005).

MBI is an instrument measuring burnout on three dimensions. Emotional exhaustion was assessed using the subscale on the affective dimension of burnout. It has 9 items, and the answers are on a Likert scale from 1 (never) to 6 (every day). The items include: "I feel emotionally exhausted because of my job", "I feel exhausted when I wake up in the morning and I have to cope with another working day".

6. Findings

We have used the SPSS 22.0 software. Table 01 presents the bivariate correlations among the assessed variables. Our hypotheses were confirmed: calling was positively related to career adaptability (confidence, concern, curiosity, control), core self-evaluation, intrinsic religiosity, self-transcendent values (altruism, relationships) and negatively related to emotional exhaustion.

Table 01. Bivariate correlations

	1	2	3	4	5	5	7	8	9	10	11	12
1. MCM-IP Identification & P-E-Fit	1											
2.MCM-TGF Transcendent guiding Force	.706	1										
3. MCM-SMVB Sense and Meaning & Value-driven Behavior	.325	.322	1									
4. Core self evaluations	.457	.524	.094	1								
5. CAAS_concern	.395	.391	.106	.349	1							
6. CAAS_control	.387	.399	.042	.429	.651	1						
7. CAAS_curiosity	.199	.200	.072	.227	.632	.713	1					
8. CAAS_confidence	.281	.303	.075	.358	.650	.695	.752	1				
9. ROS_Intrinsic	.147	.163	.225	.004	.147	.003	.051	.124	1			
10. WV_Altruism	.367	.455	.229	.351	.513	.493	.486	.456	.092	1		
11. WV_Relatii cu ceilalti	.425	.454	.200	.323	.435	.462	.404	.390	.053	.604	1	
12. emotional exhaustion	-.290	-.295	-.079	-.447	-.027	-.142	-.029	-.019	-.078	-.108	-.226	1

p<.001

In order to derive a typology of callings, cluster analysis was applied. This represents a person-centred method based on data, used to identify different groups of participants from a sample, based on a number of assessed variables. We have applied cluster analysis with a two-step procedure (Gore, 2000). First, one hierarchical cluster analysis was employed, using Ward's method on squared Euclidian distance, and the appropriate number of clusters was established using the theoretical meaningfulness of each cluster and its explanatory power. The results show that the three calling groups solution is appropriate for our data. Second, we have employed a *k* iterative method, with the purpose of making a final repartition of students into cluster groups. Before making use of the *k*-means cluster analysis, we have standardised the variables to ensure that differences in scales do not alter data classification. The solution with three clusters is presented in the Table 02 and Figure 01.

Table 02. Final Cluster Centers

	Cluster 1	Cluster 2	Cluster 3
Sense and Meaning & Value-driven Behavior	.17104	.28524	-.41288
Identification & P-E-Fit	.61930	.33820	-.75249
Transcendent guiding Force	.72519	.38382	-.86378
Career adaptability_concern	1.11687	-.16737	-.64678
Career adaptability_curiosity	1.11105	-.31594	-.45765
Career adaptability_confidence	1.22000	-.25032	-.63951
Career adaptability_control	1.18469	-.17568	-.69033

Core self evaluations	.64887	.32463	-.73067
Intrinsic religiosity	.24931	.06375	-.28488
Work values_Altruism	.94463	-.09430	-.57856
Work values_Relationships	.83527	-.02135	-.58461
Burnout_emotional exhaustion	-.13037	-.18321	.28405

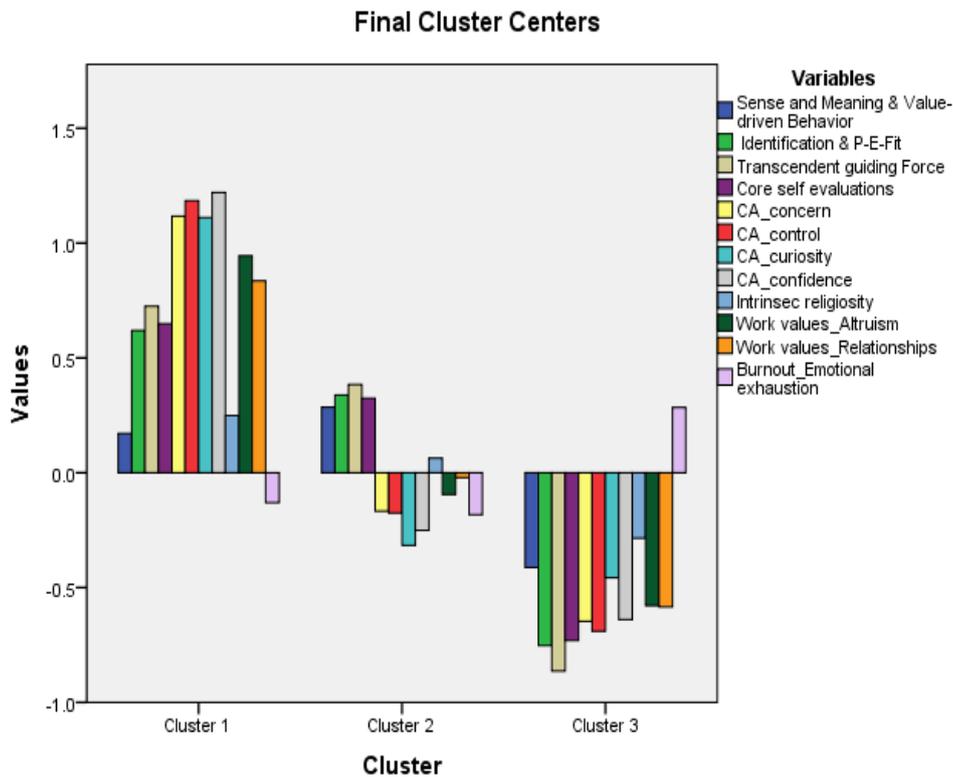


Figure 01. Final Clusters Centers

Figure 01- Graphic representation of clusters. Axis oY represents standardised scores (z). These constitute the distance between the cluster average and the standardised average of the sample. Z scores constitute the distance between the cluster average and the total standardised average of the sample and may be construed as effect size.

Cluster 1 (N=215) consisted of participants with high scores on all calling dimensions (sense and meaning and value-driven behaviour- $z=0.17$, identification and person-environment-fit- $z=0.61$, transcendent guiding force- $z=0.72$) high scores on career adaptability dimensions (concern- $z=1.11$, curiosity- $z=1.11$, confidence- $z=1.22$, control- $z=1.18$), on core self-evaluations ($z=0.64$), high intrinsic religiosity ($z=0.24$), altruism as core value ($z=0.94$), relationship score value ($z=0.83$). This cluster had low/negative scores on emotional exhaustion ($z=-0.13$). We named this cluster: *Transcendent and prosocial active calling*.

Cluster 2 (N=255) consisted of participants who had a positive perception of their own calling (sense and meaning and value-driven behaviour- $z=0.28$, identification and person-environment-fit- $z=0.33$, transcendent guiding force- $z=0.38$). At the same time, members of this group had high scores on core self-evaluations ($z=0.32$), intrinsic religiosity ($z=0.06$). We named this cluster *Positive self-centered calling*.

Cluster 3 (N=288) consisted of participants who had a negative perception of their calling (have reported a lack of calling). On sense and meaning and value-driven behaviour, they scored $z=-0.41$, on identification and person-environment-fit $z=-0.75$ and on transcendent guiding force $z=-0.86$. Regarding career adaptability, the group reported low scores (concern $z=-0.64$, curiosity $z=-0.45$, confidence $z=-0.63$, control $z=-0.69$). At the same time, the group reported negative core self-evaluations $z=-0.73$, negative intrinsic religiosity ($z=-0.28$), lack of altruism ($z=-0.57$), lack of care for relationships ($z=-0.58$). In contrast with the other clusters, cluster 3 reported extremely high emotional exhaustion scores ($z=0.28$). We named this cluster *Lack of calling*.

ANOVA tests indicated that the differences between the clusters are statistically significant ($p < 0.01$) for all the drawn comparisons (F coefficient being located between 20.19 and 530.01)

7. Conclusion

The importance of calling in career has been investigated in many recent studies focusing on characteristics of calling and its effects on individual well-being, positive career development and organisational outcomes (Thompson & Bunderson, 2018; Duffy & Dik, 2013). Investigating a sample of Romanian teachers, the results showed that three distinct groups of participants could be identified: *Transcendent and prosocial active calling*, *Positive self-centered calling*, *Lack of calling*. The characteristics of the first two groups provide valuable insights into the meaning of calling.

The existence of these three groups supports the idea that some characteristics can be considered fundamental components of calling. First, our results revealed that core self-evaluations are a key component of calling. Core self-evaluations are personality characteristic defined as positive evaluations of oneself. Individuals with positive self-evaluations, with a positive career perception, are more willing to make career changes. Also, they have relevant objectives related to their own values and they perceive their own career as a source of personal meaning. Consequently, core self-evaluations are an important source of motivation and of career meaning, supporting a professional pro-active behaviour, career commitment and the capacity to deal with job-related stress (Thompson & Bunderson, 2018). Taking all these into consideration, our assertion that core self-evaluations are a key component of calling is justified.

Second, other essential component of calling is intrinsic religiosity. Our results are in line with previous studies indicating that intrinsic religiosity is linked to better understanding of ones calling (Cahalan & Schuurman, 2016). Additionally, participants with high religious identity perceive their career as being more meaningful, and are more prosocial values and behaviours (Smith, 2003). Simultaneously, our results confirm Hirschi's (2011) conclusions that people with high calling engage in deep self-exploration. We can thus infer that the presence of calling implies also a call to action. The adaptability construct in our research paper, which includes concern, curiosity, control, confidence is similar to the self-exploring constructs proposed by Hirschi (2011). At the same time, the results support once again the idea that calling strengthens career adaptability (concern for career, taking responsibility for the career, exploring career opportunities, self-efficacy beliefs in achieving career goals) (Savickas, 2002). More, our study suggest that calling implies proactive behaviours for improving career development process. The finding that calling is closely related to career self-efficacy has also been supported by past results (Elangovan et al., 2010; Hall & Chandler, 2005).

Corroborating our results, we can conclude there are a number of mechanisms through which calling may lead to positive personal and organisational results: individuals with calling (a) have positive self-evaluations, (b) are more actively involved in career development, have career adaptability strategies, (c) have secure connection to God (intrinsic religiosity), (d) have pro-social values (altruism, relationships). More specific, a teacher with calling has high self-efficacy regarding didactic strategies and classroom management strategies, emotional stability and positive control over the educational process. More, calling implies curiosity and positive concern regarding career, which facilitate a strong engagement in their career development and students' learning outcomes. Those are connected with self-transcendent, prosocial values and ethical behaviors derived from intrinsic religiosity.

As we previously presented, despite the similarities with previous studies (Hirschi, 2011; Dik & Shimizu, 2018), there are also several differences in our results which may be explained by culture and by specific nature of the sample.

The conclusion of the present study should be interpreted in the light of some limits. First, even though the person-centered approach reflects the true nature of data, it is limited in offering generalizable results. So, the replication of the study in other samples is necessary in order to be able to generalise the results. Another limitation may be the nature of the sample, teaching careers being essentially and traditionally calling careers. Moreover, all measurements were based on self-evaluation, which may alter the relation between the constructs. Conducting studies on individuals from different professions would be needed in order to attain a more complex understanding of this construct (calling).

An important contribution to the present study is that it emphasizes the relevance of calling in education and also in the context of dynamic, person-centered, contemporary careers. Investigating components of calling in teaching careers can bring strong insights for developing a calling along with a sense of self-clarity, meaning and continuity along the transitions and challenges (Rawat & Nadavulakere, 2014). For practice, the conclusions may help counsellors and educational policies specialists to develop effective recommendations and measures for developing sustainable meaning in teaching careers. This would allow teachers to develop a sense of personal coherence, to value their profession and to engage in meaningful changes with great social impact.

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