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Theories and Measures of Occupational Calling: a Review and Research Agenda

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The meanings and values that people attribute to their jobs not only influence important work-related outcomes, such as job satisfaction, commitment and involvement, but also affect the individual's general well-being and quality of life (Brief, Nord, 1990; Zika, Chamberlain, 1992; Steger, Dik, Duffy, 2012; Steger, Frazier, Oishi, Kaler, 2006). Perceiving a sense of purpose and meaningfulness in our work, and feeling driven by a vocation to put our talents to good use and make a positive contribution to the world around us has health benefits (Peterson, Seligman, 2004; Seligman, 2002). Dik and Duffy (2009) identified shortcomings in research on the experience of purpose and meaning in one's working role, and proposed that we focus on the constructs of *calling* and *vocation*. People who feel they are responding to a calling see their work as a purpose in life (Hall, Chandler, 2005). Unlike the idea of career centered on the organization and defined using objective and impersonal criteria, a calling is the subjective experience of career as a versatile and multiform process – *protean career* – in which individuals are self-directed towards the goal of achieving psychological success (Dobrow, 2004; Hall, 2004).

This might all seem to have little to do with day-to-day reality, but empirical evidence shows that a sizable proportion of workers in various occupations would say that they feel a calling towards their profession (Dik, Duffy, Eldridge, 2009; Wrzesniewski, McCauley, Rozin, Schwartz, 1997). Forty percent of the individuals questioned by Duffy and Sedlacek (2010) said that it was mostly or totally true that they felt a calling towards their occupation (and the same was true in Hunter, Dik, Banning, 2009). According to the findings of research on vocational psychology, people with a calling thus seem to form a salient category that is associated with important aspects of these individuals' experiences in their professions and in other spheres.

The aim of this review is to summarize the state of the art on the theoretical and operational conceptualization of calling, taking a look at the most relevant theoretical and empirical contributions on this construct. We briefly outline the meaning of the various components of a calling on which the authors taken for reference tend to agree, and we systematize the scales used to measure it in empirical studies.

Definitions of occupational calling

The idea that any profession might be seen as a calling dates back to the Protestant Reformation and its ethic of labor as doing God's work, but the meanings attributed to the construct have changed over time (Baumeister, 1991; Hall, Chandler, 2005; Schuurman, 2004). It is generally believed to have both theoretical and practical importance, but for the time being it has not been unequivocally defined in the literature, nor is there any consensus on its key elements.

Drawing on previous research, Dobrow (2004) presented an integrated view of calling consisting of seven elements: passion, identity, need to do or urgency, longevity, pervasiveness ("a calling engulfs one's consciousness", Dobrow, 2004, p. 4), sense of meaning, and self-esteem. The author later focused on an operative conceptualization (Dobrow, Tosti-Kharas, 2011), suggesting that a calling is "a consuming, meaningful passion people experience toward a domain" (p. 1005).

Calling had previously been defined as: a summons to serve God (Davidson, Caddell, 1994); an attitude to one's job motivated by a need for personal satisfaction and a desire to have a positive impact on society (Bellah, Madsen, Sullivan, Swidler, Tipton, 2007); a sense of passion and direction conferred on humans by a superior being (Sellers, Thomas, Batts, Ostman, 2005); a job that someone perceives as their goal in life (Hall, Chandler, 2005); and as a person's proper place in the working world (Bunderson, Thompson, 2009). Calling has been seen as a sentiment (Dobrow, 2013), an attitude (Wrzesniewski *et al.*, 1997), a course of action (Elangovan, Pinder, McLean, 2010), a job *per se* (Hall, Chandler, 2005), and as a driving force from outside or, to be more specific, a transcendent summons (Dik *et al.*, 2009).

Drawing from Bellah, Sullivan, Tipton, Madsen, and Swindler (1985), Wrzesniewski *et al.* (1997), and Davidson and Caddell (1994) claim that there are three different ways to perceive an occupation: as a job, a career or a calling. People who consider their work as a job are interested mainly in obtaining material compensation for their efforts. They are motivated es-

sentially by extrinsic incentives such as salary, and do not see their occupation as a fundamental part of the self (Bellah, Madsen, Sullivan, Swidler, Tipton, 1996). Work is a means to an end; it provides the resources they need to have a satisfactory life outside the workplace. People who perceive their work as a career, on the other hand, invest much more in their occupational role and are not content with material compensation alone. Their priority and main source of satisfaction lie in advancing their career within the organization where they work. These individuals are interested in the power attached to a role within the organization, in improving their social standing and nurturing their self-esteem (Bellah *et al.*, 1985). Finally, people who experience their work as a calling cannot imagine their life without it; their work is a core part of their identity. They work not to advance their careers or for monetary compensation, but for the sense of personal satisfaction and enrichment that their profession seems to afford them. Their motivation is intrinsic and their work satisfies them on a deeper level, like a sort of nourishment for the self (Bellah *et al.*, 1996). The definitions proposed by the various authors are essentially compatible for the former two attitudes (work as a job or as a career), but not for the third. Their idea of a calling may attribute more importance to the spiritual and religious dimension, as in Davidson and Caddell (1994), or to personal fulfillment, as in the model proposed by Wrzesniewski *et al.* (1997), in which there is no spiritual or religious dimension at all. Steger, Pickering, Shin and Dik (2010) provided empirical support for a view of calling that focuses on people seeing their work as having meaning, but not necessarily in the religious sense. Taking this latter approach, having a calling means experiencing one's work as being inseparable from one's life, deriving satisfaction from it, and considering it useful to others. A calling can thus be defined by three key elements: *occupational satisfaction*, *intrinsic and prosocial motivation* and *involvement*. Consistently with this conceptualization, Berg, Grant and Johnson (2010) define a calling as a job that someone: (a) feels called to do; (b) expects to find intrinsically pleasing and meaningful; and (c) sees as a fundamental part of their identity.

For Bunderson and Thompson (2009), a calling is a role in society that a person feels destined to occupy because of their talents or gifts. The person is seen as having been created for, or destined to occupy a particular place according to the division of labor in society (Durkheim, 1984) in order to contribute to the common good. Dik and Duffy (2009) tried to offer a definition of the construct by pooling the various contributions in the literature: "A calling is a transcendent summons, experienced as originating beyond the self, to approach a particular life role in a manner oriented toward demonstrating or deriving a sense of purpose or meaningfulness, and that

holds other-oriented values and goals as primary sources of motivation" (Dik, Duffy, 2009, p.427). In this model, a calling has three defining elements, a *transcendent summons* (which is not necessarily religious), the *significance* associated with the role, and a *prosocial orientation*. The mention of an external source from which the calling originates only partially alludes to a religious component; it also refers to the needs of society or family ties. The transcendent summons may be any driving force that individuals experience as coming from outside or beyond the self. The reference to meaningfulness concerns the process by which an occupation become the goal of life. A person's work helps to make sense of, and give meaning and importance to life. Extending this concept of the meaningfulness of a person's occupational role or, in a more general sense, of their social role, some authors see a calling as a *mission*, a process that forms an individual's sense of identity as a result of actions they take to achieve their goals (Norton, 1976) or a clear sense of their identity (Duffy, Sedlacek, 2007). The last element of the definition shifts the focus to the other, to the prosocial motives for embarking on a particular activity in life. People who feel they have obeyed a calling believe that what they do is directly or indirectly helping others. A calling is therefore a personal goal, but oriented towards others too (Bellah *et al.*, 1985; Dick, Duffy, 2009; Wrzesniewski *et al.*, 1997). Elangovan, Pinder, and McLean (2010) place the emphasis on individual agency, defining a calling as "a course of action in pursuit of prosocial intentions embodying the convergence of an individual's sense of what he or she would like to do, should do, and actually does" (Elangovan *et al.*, 2010, p. 430). In their idea of a calling focusing on self-realization, Elangovan *et al.* (2010) identify three dimensions: a call to action; a clear goal or mission; and a prosocial intent. This three-dimensional conceptualization is very similar to those described previously, the main difference lying in the emphasis that Elangovan *et al.* (2010) place on the doing, on the actions that an individual's interests, values, attitudes, orientations and beliefs (all essential elements of a calling) drive and motivate him or her to perform. People who feel called to a particular course of action identify themselves with what they do. According to Higgins's theory of self-discrepancy (1987), the clarity of purpose and perception of meaningfulness characterizing people with a calling derive from a congruence between the multiple selves (the ideal self, ought self, and actual self). By following their calling, people commit to making what they actually do coincide with what they feel they ought to do, and would like to do. The consequent reduction in self-discrepancy promotes their goals and personal identity, and the meaningfulness they attribute to their actions. Elangovan *et al.* (2010) see prosocial motivation as a core dimension of a calling too, but with a

stronger focus on subjectivity and personal identity. They insist more on the individuals themselves seeing a prosocial value in what they do in response to their calling. It is the individuals' intention to contribute to the common good that qualifies their motives as prosocial, even though others might not necessarily see their actions, or the outcomes of their actions as contributing to the good of society.

Dobrow and Tosti-Kharas (2011) underscore the subjective nature of a calling even more, defining it as a person's profound passion for a domain extremely significant to them, a phenomenon involving their identity and associated with a sense of inevitability and destiny. This internal psychological construct has an external object (domain or occupation) and a particular setting. It is not binary – either present or absent in a given person – but exists along a continuum ranging from a weaker to a stronger influence. The authors also emphasize that the object of a calling is not necessarily work-related, but may include life domains or studies, volunteering work, family, and even artistic and sporting activities.

Components of a calling

The origin of the summons and the prosocial aspect

The various definitions outlined above implicitly show that, with the growing attention of the psychologists to the topic, the interpretation of calling has gradually changed from a strictly religious to an essentially secular construct, in which the religious element is just one of the conditions that can give rise to the sense of a transcendent summons. The classical approach saw calling as coming from a divine source. With the construct's secularization, the religious dimension has been replaced by a generically spiritual and transcendent sense (Dik, Duffy, 2009; Bunderson, Thompson, 2009). The calling still originates from outside or beyond the individual, but may stem from social needs, or fate, and have nothing to do with God. To systematize the contributions to the literature and clarify the picture, we can distinguish between two main theoretical approaches. The first, *neoclassical* view, as explained by Baumeister (1991), emphasizes the sense of destiny and prosocial duty. The calling identifies:

> […] that place in the world of productive work that one was created, designed, or destined to fill by virtue of God-given gifts and talents, and the opportunities presented by one's station in life. (Bunderson, Thompson, 2009, p. 38).

The *modern* view focuses on the subjective nature of calling. In contrast with the neoclassical approach, it is an internal guide that directs individuals towards a full realization of the self, to experience the satisfaction deriving from a consistency between their occupational and social roles and their personal identity. The idea of a summons remains in a general sense of confidence and trust in an established order of things (destiny) that happen for a reason (Bunderson, Thompson, 2009). This same concept lies behind the transcendent summons described by Duffy and Sedlacek (2007; Dik, Duffy, 2009), but virtually disappears from the *modern* definitions of calling. For instance, Dobrow and Tosti-Kharas (2011) configure a calling as an expression of free will, not of following any preordained design or other's will, although a feeling of being *destined* for a given job or activity persists (*ibidem*). This sense of destiny – typical of the *neoclassical* view – is actually closely related to the concept of *needing to do* or urgency postulated in the *modern* approaches (Dobrow, 2004): feeling called to occupy a certain place in the order of things implies the need to move in a given direction. Especially in Elangovan *et al.* (2010), the focus is on agency as an essential trait of people experiencing their work as a calling. Both the neoclassical and the modern theoretical approaches thus see practical action as a distinctive dimension of the construct, which is not limited to representing a coherent set of beliefs, attitudes and motives concerning one's job, but necessarily implicates an individual's actual behavior.

The classical (religious) definition of a calling identifies another characterizing attribute of the construct on which the two theoretical approaches do not differ substantially, i.e. its prosocial orientation. The final goal of the summons and the motives drives the action that is taken are to contribute directly or indirectly to the good of society (Bellah *et al.*, 1996; Dik, Duffy, 2009). For Raatikainen (1997), a calling necessarily consists in "a service task aiming to help people" (Raatikainen, 1997, p. 1112). In the neoclassical definitions, this prosocial motivation takes priority: a calling is "a meaningful beckoning toward activities that are morally, socially, and personally significant" (Wrzesniewski, Dekas, Rosso, 2009, p.115). We find this attention to the common good in the modern theoretical approaches too, but the emphasis is more on the individual's subjective perception of it. Dobrow (2011) says that the goal or purpose of an occupation experienced as a calling is to benefit "themselves, their families, and/or society" (Dobrow, 2011, p. 8). Elangovan *et al.* (2010) likewise insist on the subjectivity of the prosocial value attributed to an intention or action: a person may feel called to a profession in the conviction that it is to the benefit of society without this perceived utility being manifest or salient for other members of society.

Awareness of the calling

Another aspect on which the various theoretical approaches converge concerns an individual's awareness of having a calling. People's interest in a given job or career is guided by the self and by personal values, and self-reflection enables this vocation to emerge. Weiss, Skelley and Haughey (2003) underscored that being aware of having an occupational vocation particularly relies on acknowledging that one's work has a directly or indirectly prosocial role. The authors add that a calling derives from a process of introspection and discernment that guides individuals towards one career rather than another and enables them to recognize the course their life will take. Dobrow (2004) claims that, even though people who experience a strong sense of calling may not explicitly define their work as such, they are always aware of how much their work is central to their personal identity, the passion with which they do their job, the meaning it has in their lives, and the sense of urgency with which they do it. Just as people lose themselves in an activity when they experience flow and engagement (Csikszentmihalyi, 1991; 1997), so too does a calling pervade their identity and awareness.

The matter of the awareness of a calling is part of the debate on how people discover their vocation. Hall and Chandler (2005) claim that one of the main differences between the religious and secular views concerns how people come to identify their calling. In the former case, the summons comes from a superior being, other than the self, and the calling is acknowledged by means of a process of discernment and listening. In the latter, secularized view, the calling originates from within the individual and consequently demands a process of introspection and self-reflection – which may also benefit from meditation or exchanges of views with other people, for instance.

Meaningfulness and passion

Dobrow and Tosti-Kharas (2011) define a calling as a "consuming, meaningful passion people experience toward a domain" in work-related and other contexts (p. 1005). The term "consuming" is used to lend a sense of destiny, or inevitability (Bunderson, Thompson, 2009), and of the core importance of this construct for the definition of the self (Wrzesniewski *et al.*, 1997). People approach their work with a "subjective, self-relevant view of [its] meaning" (Dobrow, 2004, p. 20). Hall and Chandler (2005) consider a calling as the greatest form of subjective career success. Being

involved in a given activity can be significant on several levels. To avoid having to distinguish between individual meaning and social value, Dobrow (2004) adopts a broader, more comprehensive view, suggesting a subjective definition of meaningful involvement that includes benefits for oneself, for others and/or for society at large. According to Elangovan *et al.* (2010), achieving a consistency between the multiple selves – ideal, conditional and real – promotes the fundamental clarity, meaningfulness and directionality needed to be able to experience a calling. A clear idea of the meaningfulness and of the mission and purpose of an action is a necessary condition for someone feeling summoned to be able to identify themselves in a course of action. The sense of meaningfulness stemming from the question "why am I here?" is closely connected with, and often preceded by, the construction of an individual's identity, i.e. by the answer to the question "who am I?".

A professional vocation – seen as a search for meaningfulness and an expression of personal identity – is generally associated with sentiments of passion, or strong emotional inclinations toward work-related activities that individuals find interesting, important and worthy of their time and energy. Such professional activities enable them to achieve their fundamental personal goals, to give their lives meaning and purpose, to express their personalities, and to contribute to the common good (Berg, Grant, Johnson, 2010).

Differences between similar constructs

To arrive at a precise and unequivocal definition of a calling we need to identify some distinctive traits that distinguish it from other, similar constructs, and particularly from those explaining the psychological importance of people's occupations in their lives. Job and work involvement are cognitive or belief states that reflect the degree to which people identify with their jobs (Kanungo, 1982; Brooke, Russell, Price, 1988). Work engagement is:

> […] a positive, fulfilling work-related state of mind, that is characterized by vigor, dedication, and absorption […] (Schaufeli, Bakker, Salanova, 2006, p. 702).

Career commitment is the degree to which people identify with and feel involved in the course of their career, and how strongly motivated they are to continue along a chosen path (Hall, 1971; Blau, 1985). Career salience is

the "perceived importance of work and a career in one's total life" (Greenhaus, 1971, p. 209). Although there are theoretical overlaps between these various constructs and the concept of calling (such as a fulfilling state of mind, identification with one's role, and importance of work and career in one's life), the elements that clearly distinguish a calling from the other above-mentioned constructs are the meaningfulness of the work or domain, and the prosocial component (Duffy, Sedlacek, 2010). Callings and vocations are also defined by an attitude to the work as a goal in itself, instead of focusing on the values of a *protean career*, which Hall (2004) defines as

> […] a career that is self-determined, driven by personal values rather than organizational rewards, and serving the whole person, family, and life purpose. (Hall, 2004, p. 2).

The two key elements in this latter orientation are self-determination and reference to personal values. Individuals feel driven to follow a given path in life, a *path with a heart* – a concept similar to the idea of following or seeking to respond to a calling. The two constructs differ, however, as Hall and Chandler explain (2005), in that the protean career does not necessarily implicate a belief that the profession serves a specific purpose. The authors suggest that a protean orientation is a necessary but not sufficient condition for a calling, because it does not include an awareness of having a strong sense of purpose.

What Amabile, Hill, Hennessey, and Tighe (1994) called work preference comes very close to the idea of calling. It mainly concerns the intrinsic and extrinsic motivational framework that influences people's approach to their professions. It includes the elements of satisfaction and interest, but not the summons, the sense of destiny, of identifying with one's work, and its meaningfulness. A calling also seems to have a temporal and situational solidity that distinguishes it from such episodic experiences as work engagement and flow (Csikszentmihalyi, 1991), which are associated with the performance of a particular task or activity at a given time. The different attitudes to work – seen as a job, a career, or a calling – proposed by Wrzesniewski *et al.* (1997) identify people's subjective sense of the meaningfulness of their work, distinguishing those who find it satisfying and consider their job inseparable from their self-concept from those who work for other reasons. According to Dik, Eldridge, Steger, and Duffy (2012), a calling orientation differs from a calling *per se* in that, although it refers to the social value of the occupation and to personal fulfillment, it does not include any element of being summoned, of a destiny or mission. Some definitions of calling (cf. Elangovan *et al.*, 2010) come very close to

Maslow's self-actualization (1954), which has to do with optimizing abilities and fulfilling one's potential. A person's commitment in the domain of expressing their calling merges with their efforts to fulfill their potential and define their identity, but does not necessarily lead to the achievement of these goals. People may be committed to their vocation but fail to reach a state of self-realization, as happens when a calling goes unheeded, or when someone is searching for their calling in life.

The concept that possibly comes closest to calling, however, is vocational identity achievement, a goal approached by people who go through phases of identity crisis and self-exploration (Marcia, 1980), and then reach the decidedness and involvement related to their vocational identity (Holland, 1997; Holland *et al.*, 1993). Both calling and vocational identity achievement rely on the individual having a clear idea of what they want to do in their working life. As Hirschi and Herrmann (2012) suggested, experiencing a calling should favor self-concept clarity, occupational identification, career commitment and decidedness – all conditions that in turn facilitate the realization of one's professional identity. A calling appears to be a prerequisite for career identity, a precondition that – through cognitive and, to some extent, emotional processes – makes it easier to realize one's professional self.

Measuring a calling: features and applicability of the available scales

Working with different definitions of a calling necessarily entails exchanging views on a variety of operationalization and research hypotheses functional case-by-case to the chosen reference framework. The strategies for measuring callings described in the literature cater for different approaches: dividing samples into three categories by attitude to work as a job, career or calling (Peterson, Park, Hall, Seligman, 2009; Wrzesniewski *et al.*, 1997); using specific scales for a given profession (Bunderson, Thompson, 2009; Dobrow, Tosti-Kharas, 2011; Serow, 1994); or with multiple-item scales that may be one-dimensional (Dobrow, Tosti-Kharas, 2011; Dreher, Holloway, 2007; Treadgold, 1999) or multidimensional (Dik *et al.*, 2012).

One of the first tools developed to measure the calling construct was the Work-Life Questionnaire (Wrzesniewski *et al.*, 1997), comprising two measures of orientation to one's profession. The first stimulus describes three types of attitude and working behavior characteristic of people who see their work as a job, career or calling. Respondents are asked to indicate

to what degree they feel they resemble the profiles described. They may also be administered 18 true-false sentences describing work-related sentiments and conduct associated with the three orientations. The Job orientation measured with this tool has been found to correlate negatively with the Calling orientation, r (n = 135) = – .52, $p<.01$; and neither Job, r (n = 135) = – .01, nor Calling, r (n = 135) = – .14, correlate with Career, which is therefore independent. The tool is not designed specifically for a given profession, it measures callings towards work in general. This makes it easy to use in various settings, but less sensitive to experiences associated with particular professional domains (Dobrow, Tosti-Kharas, 2011). It can be useful for investigating workers' health, performance, and career progress, but – in its present form – it is unable to quantify the calling perceived by people engaging in unpaid activities or non-professional domains. The authors also provide no details of any specific psychometric tests used to check the scale's reliability and validity.

The Neoclassical Calling Scale developed by Bunderson and Thompson (2009) comprises 6 items for measuring the calling construct, defined and operationalized according to its neoclassical interpretation. It was tested on a sample of zookeepers and was therefore originally domain-specific, but the authors also produced a context-free version. By comparison with other scales on calling, it emphasizes the dimension of work as a passion, the summons as a source of transcendent meaning, and the perception of fit between the self and the job.

The Calling and Vocation Questionnaire (CVQ), and the Brief Calling Scale (BCS) were both developed and validated by Dik, Eldridge, Steger and Duffy (2012). The CVQ consists of 24 items divided into six subscales for measuring both the *presence of* and the *search for* three dimensions: a transcendent summons, purposeful work, and a prosocial orientation. The BCS (Dik, *et al.*, 2012; Duffy, Sedlacek, 2007) comprises 4 items – two on the presence and two on the search – referring directly to the concept of calling, not to its specific dimensions. An analysis on the validity of this scale (Table 1) confirmed patterns of correlations with career decidedness, self-concept clarity, self-efficacy in decision-making, meaning of life, intrinsic occupational motivation, and materialism (Dik, Steger, 2008; Duffy, Sedlacek, 2007). The BCS is easy to use but has several limitations. It uses the term "calling" in formulating the items without providing respondents with a definition of this term, which may be ambiguous or complicated. Individuals might therefore answer differently depending on what meaning they attribute to the word, and not knowing how respondents would define a calling makes their scores difficult to interpret. The items are also very similar to one another, ensuring the scale a high internal consistency but

reducing its capacity to represent the multiple dimensions of the construct.

The CVQ was developed to overcome some of the weaknesses of previously-existing measures of calling. It aims to reflect the multifaceted aspects of a calling, going beyond the mere distinction between job, career and calling (Dik *et al.*, 2012). It should be applicable to different sample populations, and not only to specific types of worker (Bunderson, Thompson, 2009; Dobrow, Tosti-Kharas, 2011; Serow, 1994). The authors also claim that multi-dimensional definitions of the calling construct (like all the latest ones, be they neoclassical or modern) make the one-dimensional scales developed and adopted by many other authors inappropriate (Dobrow, Tosti-Kharas, 2011; Dreher, Holloway, Schoenfelder, 2007; Treadgold, 1999; Elangovan *et al.*, 2010). The CVQ is readily adaptable to different academic or professional domains. It often uses the term "calling" in the items, but the instructions for completing the questionnaire provide a clear definition of the term. Examples of items include: "I am pursuing my current line of work because I believe I have been called to do so" (presence of transcendent summons), "I am looking for work that will help me live out my life's purpose" (search for purposeful work), "Making a difference for others is the primary motivation in my career" (presence of prosocial orientation). The scale was tested on a sample of approximately one thousand students and workers (Dik *et al.*, 2012). In addition to using the CVQ, the first study also measured the following elements: the importance of the calling; efficacy in career decisions (CDSE-SF; Betz, Hammond, Multon, 2005); intrinsic and extrinsic motivation (WPI; Amabile *et al.*, 1994); and satisfaction with life (SWLS; Diener, Emmons, Larson, Griffin, 1985). In a second study, the following tools were used: the CVQ and BCS; Job orientations (Wrzesniewski *et al.*, 1997), the Work Hope Scale (WHS; Juntunen, Wettersten, 2006); Prosocial work motivation (Grant, 2008); and Meaning in life (MLQ; Steger *et al.*, 2006). The CVQ showed strong evidence of test-retest reliability and internal consistency (see Table 1). The CVQ-presence scale correlated positively with intrinsic motivation, and more weakly with CDSE, satisfaction in life, and extrinsic motivation. The CVQ-search scale correlated moderately well with intrinsic motivation, and more weakly with extrinsic motivation, while the relationship with CDSE and satisfaction with life were not statistically significant. The results thus show a good concurrent validity. In another sample, the CVQ was compared with the BCS using a multitrait-multimethod analysis. The convergent validity was good for the scores on the scales measuring both the presence of and the search for a calling. The correlations between self-reported and informant-reported measures were: $r = .27$ for BCS-presence; $r = .37$ for BCS-search; $r = .51$ for CVQ-presence; and $r = .36$ for CVQ-search. The scores on the scales developed by Dik *et al.* (2012) correlated little or not

at all with those obtained for the job, career and calling descriptions used by Wrzesniewski *et al.* (1997), demonstrating that they measure different constructs.

As for concurrent validity, the BCS-presence and CVQ-presence scales showed a moderately strong positive correlation with Work hope, Prosocial motivation, and Meaning in life; and so did the BCS-search and CVQ-search. The correlations between CVQ-presence and CVQ-search were stronger than those between BCS-presence and BCS-search, suggesting that the brief scale is better able to distinguish between these two aspects (the presence of and the search for a calling).

The scale for measuring callings developed by Dobrow and Tosti-Kharas (2011) includes 12 items. It is domain-specific and different formulations have to be used for different samples (in their article, the authors provide versions for music, the arts, business and management). The scale can measure the calling individuals experience not only for an occupational domain or activity in which they are currently employed, but also for a domain in which they wish to be employed. It is useful for testing populations of workers or students. The tool aims to overcome some of the limits identified by the authors in other published scales. In particular, Dobrow and Tosti-Kharas (2011) criticized the job, career and calling descriptions proposed by Wrzesniewski *et al.* (1997) because they are non-specific, not related to particular domains of activity, but focus on assessing people's general work attitude and experience. As for the Bunderson and Thompson scale (2009), which operationalizes the calling construct from the neoclassical viewpoint, Dobrow and Tosti-Kharas (2011) said that it fails to consider the subjective meaningfulness of the domain/work. The Dobrow and Tosti-Kharas scale (2011) has the advantage of having been already adapted to some activity domains, referring alternately to behavior, identity and professional title. Examples of items include: "I would sacrifice everything to be a musician / an artist / in business / a manager", "The first thing I often think about when I describe myself to others is that I'm a musician / an artist / in business / a manager", "I feel a sense of destiny about being a musician – either amateur or professional / an artist either amateur or professional / in business / a manager". Analyses were run to test the tool's internal and time-dependent convergent and concurrent validity and reliability using four versions of the scale adapted to different samples (n=1500, for a total of 2278 observations). All four scales revealed a high internal consistency, with *Cronbach's Alpha* (Cronbach, 1951) always greater than .88. The test-retest results indicate a moderate stability in the short and long term (at 2 months, 3.5 years, and 7 years).

Table 1

	Dobrow, 2011	MCM Hagmaier, Abele, 2012	CVQ Dik, El-dridge, Steger, Duffy, 2012	BCS Dik, El-dridge, Steger, Duffy, 2012
Number of items	12	9	24	4
Factors	1	3	6	2
Sample	n=1500 Four domain samples: music, art and business students, man-agement (work-ers)[a]	Studies 1, 2, 3: German working adults (n_{s1}=211, n_2=204). Study 4: American adults n=85	Study 1 n = 456 students Study 2 n = 134 students	Study 2 n = 134 stu-dents
Internal consistency				
	α = [.88, .90, .90, .94]	Studies 2 and 3 TGF_{t1} α=[.86, .84] $SMVB_{t1}$ α=[.85, .85]; IP_{t1} α=[.88, .88] Study 3 TGF_{t2} α=.85; $SMVB_{t2}$ α=.81, IP_{t2} α=.84	Presence α t1 =.89, αt2=.90; Search αt1 =.87, α t2 =.91	Presence α =.79 Search α =.82
Test-retest				
	2 months[b]: r_1=.83[***], r_2.86[***] 3.5 years[b]: r_1=.41[***] 7 years[b]: r_1=.38[***]	Study 3: 3.5 months TVG r(52)=.72[***] ; SMVB r(52) =.70[***] ; IP r(52)=.68[***]	1 month Pres-ence r(333) =.75 Search r(333) =.67	
Convergent, concurrent and discriminant validity				
BCS (Dik et al., 2012)		Studies 3 and 4 TGF r =[.61, .73][***]; SMVB r =[.33, .49][***]; IP [r=.38 .55][***]	Presence r=.69** Search r =.46**	
Multitrait-multimethod analysis[c]			Presence r=.51**; Search r =.36**	Presence r =.27**; Search r =.37**
Neoclassical calling (Bunderson, Thomp-son, 2009)	r_4 =.59[***]			

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	Dobrow, 2011	MCM Hagmaier, Abele, 2012	CVQ Dik, El-dridge, Steger, Duffy, 2012	BCS Dik, El-dridge, Steger, Duffy, 2012
Calling orientation and paragraph (Wrzesniewski et al., 1997)	r_1=.19***, r_2= .27***, r_4= .61**		Presence r=.27** Search r=.03 ns	Presence r=.24**; Search r = –.10 ns
Self-defined 2-item calling (Duffy, Sedlacek, 2007)	r_4 =.48***			
Work engagement (UWES; Schaufeli et al., 2006)	r_4 =.58***			
Job involvement (Kanungo, 1982)	r_4=.68***			
Satisfaction (with life or job)[d]	3.5 year[b]: r_1=.23*** 7 years[b]: r_1=.18* 6 weeks[b]: r_2=.46** r_3=.54, r_4=.49***	Studies 3 and 4 TGF r(204, 85) =[.24**, .31**] SMVB r(204, 85) =[.29, .38]*** ; IP r(204, 85) =[.60, .42]***	Study 1 Presence r =.14*; Search r= .09 ns Study 2 Presence r = .08 ns; Search .00 ns	Presence r= .01 ns Search r=-.07 ns
Burnout (Oldenburg Burnout Inventory; Demerouti et al., 2003)		Study 4 TGF r(85) = [-.52***, – .20*] SMVB r(85) = [-.47***, – .15 ns] IP r(85) = [-.59***,-.23*]		
Career-related self-efficacy (Higgins et al., 2008)	3.5 years r_1=.20** 7 years r_1=.21** r_3=.29*** r_4=.30***			
Clarity of professional identity (Dobrow, Higgins, 2005)	3.5 years r_1=.21** 7 years r_1=.18** Time 1 r_3=.34*** r_4=-.10 ns			
Career insight (Day, Allen, 2004)	3.5 years r_1=.25*** 7 years r_1=.21** Time 1 r_3=.48*** r_4.47***			

	Dobrow, 2011	MCM Hagmaier, Abele, 2012	CVQ Dik, Eldridge, Steger, Duffy, 2012	BCS Dik, Eldridge, Steger, Duffy, 2012
Career Decision Self-Efficacy scale (Betz, Hammond, Multon, 2005)			*Study 1* Presence $r =.17^{**}$ Search $r = .11$ ns	
Career orientation (Wrzesniewski et al., 1997)	$r_1 =.22^{***}$, $r_2 =31^{**}$, $r_3 =.28^{***}$, $r_4 =.43^{***}$			
Intrinsic motivation (Amabile et al., 1994)	$r_1 =.28^{***}$, $r_2 =.45^{**}$, $r_3= .06$ ns, $r_4=.39^{***}$		*Presence* $r =.27^{**}$ Search $r =.31^{**}$	
Extrinsic motivation (Amabile et al., 1994)	$r_1 =.09$ ns, $r_2 =.23$ ns, $r_4 =.21^*$, $r_3=.51^{***}$		*Presence* $r =.12^*$ Search $r =.16^{**}$	
Optimism (various scales) and Religiosity (Scheier et al., 1994)	Optimism $r_1 =.02$ ns, $r_4 =.11$ ns Religiosity $r_1 =.03$ ns, $r_2 =.10$ ns, $r3 =-.05$ ns			
Work Hope scale (Juntunen, Wettersten, 2006)			*Presence* $r =.35^{**}$ Search $r = .04$ ns	Presence $r=.34^{**}$ Search $r= -.23^*$
Prosocial work motivation (Grant, 2008)			*Presence* $r=.54^{**}$ Search $r=.45^{**}$	Presence $r=.25^{**}$ Search $r = .03$ ns
Meaning in Life Questionnaire (Steger, et al., 2006)			*Presence* $r=.50^{**}$ Search $r = .16$ ns	Presence $r=.59^{**}$ Presence $r= -.19^*$

Note. a Sample 1=musicians, Sample 2=art, Sample 3=Business, Sample 4= Manager; b correlation with calling at Time 1; c correlations between self-reported and informant-reported measures of calling; d Single item job satisfaction in Dobrow (2011), Job satisfaction (Baillod, Semmer, 1994) in Hagmaier, Abele (2012), Satisfaction with Life scale (SWLS; Diener, Emmons, Larson, Griffin, 1985) in Dik, Eldridge, Steger, Duffy, 2012; s = study number; t = time in longitudinal studies; TGF= MCM subscale Transcendent Guiding Force; SMVB = MCM subscale Sense and Meaning and Value-driven Behavior, IP= MCM subscale Identification and P-E-Fit.
*$p<.05$ **$p<.01$ ***$p<.001$ ns = not significant*

Exploratory and confirmatory factor analyses support a one-dimensional structure that explains 42% to 62% (mean 50%) of the overall variance in

the four samples. To analyze its convergent validity, the Dobrow and Tosti-Kharas (2011) scale was compared with the measure of calling developed by Bunderson and Thompson (2009), the BCS (Duffy, Sedlacek, 2007), the Utrecht Work Engagement Scale (UWES; Schaufeli *et al.*, 2006), and Kanungo's job involvement scale (1982). To analyze its discriminant and concurrent validity, the scale was also compared with the measures of work orientation (Wrzesniewski *et al.*, 1997), intrinsic and extrinsic motivation (Amabile *et al.*, 1994), optimism (Scheier *et al.*, 1994) and religiousness (Koenig, McCullough, Larson 2011; Schwartz, Huismans, 1995). The results of these studies show that the measure of a calling identified with the scale proposed by Dobrow and Tosti-Kharas (2011) correlates significantly with a calling and career work orientation (Wrzesniewski *et al.*, 1997), the neoclassical scale (Bunderson, Thompson, 2009), the BCS (Duffy, Sedlacek, 2007), work commitment, and work involvement. The measure also correlates with intrinsic motivation when musicians, artists and managers are tested, and with extrinsic motivation for managers and business students, while it does not correlate with optimism, religiousness, gender, or age. On the whole, these results suggest that the measure has a good concurrent validity and can discriminate between indicators coming close to the calling construct.

Finally, the Multidimensional Calling Measure (MCM) is a recently-introduced tool developed by Hagmaier and Abele (2012). The authors aimed to produce a scale capable of identifying the multidimensional structure of the construct according to the theoretical definition suggested by Elangovan *et al.* (2010). The scale comprises 9 item and measures 3 factors: identification and person-environment fit (IP), transcendent guiding force (TGF), sense, meaning and value-driven behavior (SMVB). The scale was tested in two studies, one on a sample of 204 German workers and the other on a sample of 85 North American workers. The test-retest validity after 3.5 months was good and the three factors correlated with one another, with a mean $r = .51$. The scale was compared with the BCS (Dik *et al.*, 2012) for convergent validity, a job satisfaction Kunin-scale (Baillod, Semmer, 1994), and a burnout measure (Oldenburg Burnout Inventory; Demerouti, Bakker, Vardakou, Kantas, 2003). TGF was the factor that correlated the most with the one-dimensional measure of calling proposed by Dik at al. (2012), while IP emerged as the best predictor of job satisfaction, and both had a buffer effect on burnout (Hagmaier, Abele, 2012).

Table 1 briefly compares the psychometric characteristics of the four main, most recently published tools for measuring the calling construct, i.e. the Dobrow and Tosti-Kharas scale (2012), the Multidimensional Calling Measure (Hagmaier, Abele, 2012), the Calling and Vocation Questionnaire, and the Brief Calling Scale (Dik *et al.*, 2012).

Conclusions: open questions and future lines of research

Despite being rooted in the well-established theoretical and empirical tradition of vocational psychology, and in the more recent sphere of positive psychology, research on the calling construct is still in its early stages. A growing interest in its theoretical implications and potential applications – in counselling, and improving people's performance and experience of their work – make this construct important both in research on vocational behavior and for the purpose of providing vocational guidance. Investing in training methods designed to make the most of people's vocations would undeniably benefit their academic or professional careers.

Having a calling and being able to follow it up in one's profession is a more human and rewarding way of working. The idea of a calling is so fundamental to a person's identity and so strongly linked to their profession (see Dik, Duffy, 2009; Hall, Chandler, 2005) that it could shed a different light on people's organizational behavior, career choices, training and education. Emerging research on callings has demonstrated that motivation, satisfaction, and career path management tend to differ between people who see their occupation as a calling and those who see it simply as a job (Davidson, Caddell, 1994; Hall, Chandler, 2005; Wrzesniewski *et al.* 1997). A sense of calling is associated with lower levels of stress and depression (Treadgold, 1999), and supported by the acquisition of meta-competences that improve performance (Hall, Chandler, 2005). A sense of meaningfulness and personal mission are elements that characterize people who seek to follow their calling, with positive effects on their prosocial behavior and organizational citizenship (Dobrow, 2004).

There are still various aspects relating to the origin, development, measurement, and very nature of calling that need to be clarified. A first aspect on which it is important to concentrate concerns the theoretical definition of this construct. Although the literature is converging towards a tripartite framework, there is still no general consensus on the three components involved. In particular, we need to establish the importance of the source (destiny or transcendent summons), not only to arrive at an unequivocal and shared definition of what a calling is, but also to clarify its place in a nomological network of similar constructs. Having clarified its theoretical attributes, we can proceed with an unequivocal operationalization that will enable us to draw conclusions on the construct per se, no longer wondering whether our conclusions depend on how we have chosen to measure it.

Another unsolved issue concerns how we define and identify the weight of prosocial motivation in our conceptualization of calling. For instance, if empirical evidence were to demonstrate that prosocial motivation is a de-

terminant of calling, the consequence might be that this construct could only be applied to the specific sector of human services and helping professions. A step in this direction was made when the prosocial component was conceived as a subjective perception of direct or indirect utility to society. In this sense, there could be a prosocial motivation even in people working in sectors typically characterized by self-referenced and individualistic behavior (e.g. to maximize earnings). Awareness of a calling and its pervasiveness in a person's consciousness are another area warranting further study. If a calling is not consciously felt, it could be implicit in the individual's self-concept, and this would affect its measurability and its influence on the individual's behavior and way of thinking. Once these steps have been taken, one of the most urgent questions to answer concerns how individuals develop a calling, also in relation to their social and structural setting (e.g. the opportunities offered by their environment), and to certain personal variables that might influence the development of a calling (e.g. ability, personality traits, motives).

In describing its historical and conceptual background, and how it has changed over time and with different theoretical approaches, this article underscores the complexity of the construct. Its similarities with other constructs and, even more, the still debated differences between the neoclassical and modern approach are still making it difficult to arrive at an unequivocal definition of calling that can fully embody all the various theoretical proposals. Although we identified several characteristics of the construct that are common to the various theoretical stances – meaningfulness, prosocial orientation, awareness and passion – and we compared five fairly robust measures, we conclude that there is still no substantial consensus on the theoretical definition and operationalization of calling. This is unavoidably an obstacle to any future research and to the applicability of its findings. It will therefore be essential to find answers to the questions emerging from the present contribution.

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