

# The impact of calling on angel investing

Rui Falcão

*Universidade de Aveiro, Aveiro, Portugal and  
COREangels Network SA, Aveiro, Portugal*

António Carrizo Moreira

*Universidade de Aveiro, Aveiro, Portugal and  
CICEE—Research Center in Business and Economics, UAL, Lisbon, Portugal, and*

Maria João Carneiro

*Universidade de Aveiro, Aveiro, Portugal*

International  
Journal of  
Entrepreneurial  
Behavior &  
Research

2475

Received 4 September 2024  
Revised 25 February 2025  
25 May 2025  
Accepted 14 July 2025

## Abstract

**Purpose** – What compels business angels (BAs) to invest beyond financial returns? For many, it's a deeper sense of calling—an alignment of purpose, values, and the desire to create lasting economic and societal impact. Traits like specialised skills, risk-taking, and a commitment to fostering innovation suggest that BAs may find profound meaning in their work. This paper aims to extend the Work as Calling Theory to the BAs' context, analysing the impact of calling on BAs' involvement in their work activities and on the value perceived from investing, referred to as the Angel Perceived Investment Value (APIV).

**Design/methodology/approach** – A questionnaire survey involving 869 BAs worldwide was carried out. Structural equation modelling was used to test the proposed research model.

**Findings** – The findings indicate a positive correlation between calling and both BAs' involvement and APIV. Moreover, involvement was found to partially mediate the relationship between calling and APIV, contributing to perceptions of greater value.

**Originality/value** – This study is the first to analyse in depth the impacts of calling within the context of business angels (BAs), focusing specifically on the value they derive from their investment activities. It also uniquely examines the mediating role of involvement in tasks related to the startups, the angel groups and the ecosystem. This research offers actionable suggestions to help BAs better manage the expectations arising from their sense of calling while maximizing the value they derive from their investment activities.

**Keywords** Business angels, Calling, Perceived investment value, Involvement

**Paper type** Research article

## 1. Introduction

Many individuals perceive their work and life purpose as a calling (Cain *et al.*, 2018; Duffy and Dik, 2013). This growing interest in the concept of calling extends to its contemporary relevance for personal fulfilment and professional identity (e.g. Park *et al.*, 2019; Robertson *et al.*, 2024). The Work as Calling Theory (WCT), proposed by Duffy *et al.* (2018), suggests that a sense of calling induces goal-directed behaviour, motivating individuals to engage and persist in their calling domain. Calling has been shown to positively impact employees' involvement in their tasks, career development, satisfaction and well-being (Hirschi, 2011; Park *et al.*, 2019). It also benefits the organisations they work for by fostering responsibility, promoting constructive approaches, and enhancing work performance (Chen *et al.*, 2025). At a certain point in their careers, individuals may seek to bring to life their emergent callings that had not previously been given the opportunity to be realised (Sturges and Bailey, 2023). After several years in a managerial or entrepreneurial career, some individuals begin to feel a sense of calling to take steps toward angel investing (Falcão *et al.*, 2024).

Business angels (BAs) are known for investing their own money in high-risk start-ups and actively contributing to helping entrepreneurs to solve significant problems and achieve business success, particularly at early stages, where initial support is crucial (Morales-Alonso *et al.*, 2020). BAs differ substantially from other start-up investors primarily because they invest their own money, are responsible for their investment decisions (Kaiser and Kuckertz,



International Journal of Entrepreneurial  
Behavior & Research  
Vol. 31 No. 10, 2025  
pp. 2475-2497  
© Emerald Publishing Limited  
e-ISSN: 1758-6534  
p-ISSN: 1355-2554  
DOI 10.1108/IJEBR-09-2024-0926

2025; Rose, 2014), and are deeply involved with the start-ups they invest in (Falcão *et al.*, 2023a; Macht and Robinson, 2009). Despite not all angels having the same level of involvement with their startups, their groups, and the ecosystem, involvement with the invested startups plays a crucial role in defining what it means to be an angel (Mason, 2016). Moreover, involvement has been used to distinguish angels from other passive financial investors (Lahti, 2011). Traits associated with BAs, such as specific skills and acting through investments for the benefit of others and society, suggest that many BAs may experience a sense of calling (Cardador and Caza, 2012; McKaskill, 2009; Rose, 2014; Shane, 2009).

Despite the importance of calling and its potential benefits for individuals, organisations and society, no studies have explored the calling of BAs. Moreover, while BAs differ from other investors due to their involvement and preference for the early stage, there is no research on how BAs' involvement, driven by calling, may lead to higher levels of Angel Perceived Investment Value (APIV). This study addresses this gap by analysing the impact of BAs' calling on their involvement and perceived investment value, also examining the mediating role of involvement between calling and APIV. A model was developed based on the WCT (Duffy *et al.*, 2018) and tested using Structural Equation Modelling. This model suggests that the more BAs feel a calling, the more they are likely to engage in meaningful activities that help them live out their calling. It also indicates that fulfilling a calling through such involvement enhances the perceived value of their investments. The present paper extends the WCT (Duffy *et al.*, 2018) to the context of BAs, exploring the role of involvement in responding to their sense of calling and its impact on their investing activity. This research also contributes to the development of strategies that increase the positive outcomes of calling within the BAs activity.

The paper is organised into several sections. Following this introduction, a literature review explores the concept of calling and its potential outcomes for business angels (BAs). Next, the methodology of the empirical research is detailed, followed by a discussion and analysis of the findings. Finally, the paper concludes with key implications, limitations and suggestions for future research.

## 2. Literature review

### 2.1 Calling

The concept of work as a calling has its roots in the protestant reformation in the sixteenth century, based on the idea that calling represents an obligation inspired by God to devote one's work (whatever it may be) to serving others (Thompson and Bunderson, 2019).

Since the Reformation, the concept of a religious calling has become secularised, influenced by two main perspectives – the neoclassical and the modern view (Alfan *et al.*, 2024). The neoclassical perspective conceptualises calling at work as a personally meaningful career driven by an external source, aimed at a pro-social, altruistic and greater common good (Duffy and Dik, 2013). In this perspective, individuals seek to address the needs of others, guided by a sense of duty or destiny aligned with their unique, innate characteristics, talents and opportunities (Bunderson and Thompson, 2009). Conversely, the modern view emphasises internal motives such as intrinsic interest, self-fulfilment, passion, personal meaning and enjoyment (Praskova *et al.*, 2014; Thompson and Bunderson, 2019). Individuals perceive their calling as something organic, emanating from the depths of their hearts and souls (Weiss *et al.*, 2003). Specifically, calling is seen as an occupation individuals are drawn to, expecting it to be enjoyable, meaningful and central to their identity (Berg *et al.*, 2010; Praskova *et al.*, 2015; Wrzesniewski *et al.*, 1997). In this view, callings are subjective, internal and directed toward a specific domain (Dobrow and Tosti-Kharas, 2011). Those who feel a calling seek intrinsically rewarding work that holds personal and social meaning, contributes to society (Berg *et al.*, 2010) and is morally inseparable from their lives (Dobrow and Tosti-Kharas, 2011).

Research has integrated both the neoclassical and modern views of calling, positioning it on a continuum between duty to help others and self-expression and fulfilment (Dik and Shimizu, 2019; Thompson and Bunderson, 2019). The argument is that a calling based solely on a duty

and destiny, without passion and fulfilment, lacks the ability to inspire a strong connection with one's work, while callings without societal contribution are less likely to generate feelings of meaningful work. Passion has already been identified as a powerful ingredient for businesses' success (Chen *et al.*, 2022).

In the work context, calling is seen as a developmental and dynamic construct, defined as a "self-set, salient, high order career goal" (Praskova *et al.*, 2015, p. 93) pursued through goal-directed behaviour. The theoretical foundations of work as a calling are grounded in career development, goal-setting and goal-pursuit theories (Bagozzi and Dholakia, 1999; Locke and Latham, 1991, 2019). Responding to a calling requires a clear action orientation and proactive engagement with career goals to facilitate its pursuit (Hirschi, 2011).

Developing commitment to one's work may also help to strengthen the perception that work was pursued as a calling (Duffy *et al.*, 2018) and that, therefore, more value was obtained. Consequently, calling may play a crucial role in perceiving to get more value from one's work, due to the intention and spirit with which work is done when one feels called.

In the last years, empirical studies have contributed to developing theoretical models of work as a calling (Cain *et al.*, 2018; Duffy *et al.*, 2018, 2019; Ugwu and Onyishi, 2018), identifying predictors (e.g. perceiving a calling) and outcomes (e.g. goal-directed effort, professional involvement, career commitment, job and life satisfaction). Despite the substantial research on calling in the last 20 years, theoretical tensions, conceptual clarifications, and open questions still remain (Dobrow *et al.*, 2019), as there is no research on the outcomes of calling in the context of BAs. This reinforces the need for further empirical research on calling in specific contextual work domains, as in the domain of BAs, especially concerning the impact of calling on the perceived value related to the investments they undertake.

## 2.2 The business angel calling

Approximately 50% of adults perceive their work as a calling (Duffy and Dik, 2013; Wrzesniewski *et al.*, 1997). Thompson and Bunderson (2019) suggest that certain occupations, due to their unique skills requirements and economic sacrifices for public benefit, are more likely to evoke a sense of calling. The concept of work as a calling encompasses a sense of purpose, meaning, and a compelling desire to contribute (Duffy, R. *et al.*, 2019), which closely aligns with the investing activities of business angels. Their primary motivations for becoming investors are often driven by a strong desire to support and add value to entrepreneurs aiming to solve relevant problems (Hoyos-Iruarrizaga *et al.*, 2017). Moreover, angel literature suggests that angel investing is often motivated by the perceived public benefits of job creation and local economy support (Rose, 2014; Shane, 2009), reflecting altruistic and symbolic values in addition to economic ones. Similarly, individuals with a sense of calling are motivated to seek greater meaning and create a positive impact on others' lives (Cardador and Caza, 2012). This aligns with the motivations of angel investors who choose to invest in risky startups without financial guarantees, driven by the higher purpose of addressing significant problems and positively impacting society (McKaskill, 2009).

Two definitions of calling are particularly relevant for BAs. One describes calling as "a consuming, meaningful passion people experience toward a domain" (Dobrow and Tosti-Kharas, 2011, p. 1003), reflecting the passionate involvement typical of angels (Cardon *et al.*, 2009; McKaskill, 2009). Another defines career calling as "a largely self-set, salient, future-oriented career goal that is *personally meaningful, other-oriented*, and involves *active engagement*" (Praskova *et al.*, 2015, p. 102). This definition matches the active, hands-on involvement that characterises BAs (Macht and Robinson, 2009) and supports the idea that angel candidates seek to co-create value with the start-ups they engage with (Fili and Grünberg, 2016; Politis, 2008). Moreover, the sense of duty to give back to society and support entrepreneurs legitimates the noble nature of calling of the angel's mission (Rose, 2014; Shane, 2009).

Considering the BAs' literature and the definitions of calling suggested by [Dobrow and Tosti-Kharas \(2011\)](#) and [Praskova et al. \(2015\)](#), this study assumes angel calling as a long-term, enjoyable and meaningful passion for angel investing, which results in active engagement with entrepreneurs for value co-creation.

*2.2.1 Angel calling and active involvement with BA work.* According to the WCT, work-related experiences can influence individuals' perception of a calling ([Duffy et al., 2018](#)). Calling literature highlights that active engagement with one's work is essential for experiencing a calling ([Dobrow, 2013](#)). Callings are also associated with a strong inclination towards activities that require considerable time and energy ([Dobrow et al., 2019](#); [Vallerand et al., 2003](#)). Individuals who strongly feel a calling perceive their involvement in their calling domain as meaningful ([Rosso et al., 2010](#)) and central to their identity ([Dobrow and Tosti-Kharas, 2011](#)). Such individuals often find it difficult to envision themselves engaged in other types of work ([Bunderson and Thompson, 2009](#)). Furthermore, a sense of calling predicts goal-directed efforts and active engagement in professional development ([Hirschi, 2011](#); [Praskova et al., 2014](#)), leading to increased subjective and objective career success ([Hall and Chandler, 2005](#)).

Angel investing involves an intense relationship with entrepreneurs, their start-ups and other players in the ecosystem, such as incubators, accelerators and investor partners. What sets angels apart from other financial investors is their involvement, as their added value comes not only from their capital but also from their active contribution. As the literature shows, not all BAs are highly involved in their activities, with some adopting a more passive approach than others ([Bonini et al., 2018](#)). Typically, angels negotiate or agree with invested entrepreneurs on the type, timing, and frequency of their involvement ([Lahti, 2011](#)). Angel involvement typically begins before the investment is closed and includes scouting for start-ups, listening to pitches, presenting them to investment committees, making investment decisions and conducting due diligence ([Wirtz et al., 2017](#)). Post-investment, angels continue their formal or informal involvement to co-create value until an exit occurs ([Fili and Grünberg, 2016](#); [Politis, 2008](#)). Despite differences in the intensity and nature of their operational involvement ([Lahti, 2011](#); [Politis, 2008](#)), both angels and entrepreneurs perceive angels' involvement with start-ups as their most relevant contribution ([Bonnet et al., 2022](#)). Previous research on calling suggests a calling-effort relationship, arguing that people experiencing a stronger sense of calling invest more effort in their work tasks and find those tasks more enjoyable ([Tosti-Kharas et al., 2024](#)). Considering the arguments referred above, the following hypothesis is proposed:

*H1. Angel calling positively influences angel involvement.*

*2.2.2 Angel calling and perceived investment value.* A calling is an activity pursued for its intrinsic meaning and personal value. The purpose of angel investing is value creation, benefiting the angels themselves, the start-up, and society as a whole ([Rose, 2014](#)). Extensive research explores the motivations and goals driving individuals to engage in angel activity, highlighting various types of intrinsic and extrinsic goals (e.g. [Edelman et al., 2017](#); [Morrisette, 2006](#)). To gain a comprehensive understanding of the holistic value perceived by BAs in their work, previous research on angel goals ([Falcão et al., 2023a](#)) built upon and extended the Perceived Investment Value (PIV) framework developed by [Puustinen et al. \(2013\)](#) for stock market investors. The extended framework, termed Angel Perceived Investment Value (APIV), encompasses five macro goal dimensions: economic, emotional, symbolic, functional, and entrepreneurial—the last being unique to angel investors. Research on APIV revealed a hierarchy of angel goals, emphasising the primacy of symbolic goals, which were found to hold greater relevance than economic goals ([Falcão et al., 2023a](#)). This prioritisation challenges the stereotype of angel investors being primarily driven by economic gains and opens the door to exploring the role of a sense of calling in angel investing.

The perceived investment value shares a strong correlation and similarities with the investors' satisfaction dimension; however, it differs in that it captures both pre-investment

and post-investment aspects, whereas investor satisfaction focuses solely on the post-investment experience (Puustinen *et al.*, 2013). Angel investing is far more than a financial endeavour; it is a multifaceted experience. The literature on angel investors strongly emphasises their holistic nature and the diverse range of goals they pursue. Unlike other types of passive investors (e.g. venture capitalists, pure financial investors), the entrepreneurial dimension characterises the active “hands-on” involvement nature of BAs with their investments as an important source of personal satisfaction (e.g. Fili and Grünberg, 2016; Hoyos-Iruarrizaga *et al.*, 2017; Politis, 2008). Research on calling also highlights the significant role of calling in predicting positive work-related outcomes such as life satisfaction (Duffy *et al.*, 2018), job satisfaction (Shang *et al.*, 2022), and career satisfaction (Xie *et al.*, 2016). Also, superior job performance results from higher levels of job involvement (Chen *et al.*, 2025), which aligns closely with the intentions of angel investors. Angels often aim to actively engage with startups to enhance the likelihood of their investment success.

This demonstrates both subjective and objective indicators of success in work and deep fulfilment. Therefore, the following hypothesis is formulated:

H2. The higher the angel calling, the higher the angel perceived investment value.

*2.2.3 Angel involvement and perceived investment value.* The WCT posits that living a calling raises positive attitudes such as satisfaction, as individuals feel motivated and believe they are contributing to the “greater good” (Duffy *et al.*, 2018, p. 430). Similarly, the involvement process in a pleasant activity is expected to enhance the value-added to the startups and the angels (Kerr *et al.*, 2014; Wiltbank, 2009), thereby contributing to their satisfaction. Beyond the monetary investment, angels’ involvement in mentoring, knowledge sharing and networking with other angels helps the new ventures and contributes to the personal development of the angels too (Kerr *et al.*, 2014). Angel involvement in post-investment activities is perceived as an opportunity to mitigate agency risk (Carpentier and Suret, 2015), secure angel funds, and help entrepreneurs avoid management mistakes, including those experienced by the angels in previous start-ups (Ramadani, 2012). Research on angels found that higher involvement in start-ups leads to better financial results and easier access to follow-on funds (Wiltbank, 2009). Moreover, called individuals who are fulfilled by their work activities exhibit higher levels of desire to be involved in core activities to practice their callings, promoting their job involvement, resulting in improved task and contextual performance (Chen *et al.*, 2025). Furthermore, when people feel a strong calling toward their work, they find their work effortless and tend to work more in calling-relevant tasks, to maximise the value of their calling (Tosti-Kharas *et al.*, 2024). Considering the above evidence, it seems reasonable to postulate that the more engaged angels are in their work due to experiencing and validating an angel calling, the higher the perceived value they derive from their investing activity. Therefore, the following hypothesis is presented:

H3. Angel involvement positively influences angel perceived investment value.

*2.2.4 The mediating role of angel involvement between calling and perceived investment value.* As previously hypothesised, angel calling positively influences perceived investment value. Nevertheless, when BAs involve themselves in activities of the BA’s ecosystem aligned with their calling, this may help angels achieve the purposes underlying their calling, including improving the startup performance and increasing the entrepreneurs’ skills, and may result in the perception of a higher investment value. Hence, some researchers argue that people must live their calling by undertaking various activities in the calling domain (Dobrow, 2013; Duffy *et al.*, 2018). This involvement process may result in greater perceived investment value, derived from the sensation of duty accomplished, due to having carried out relevant tasks that contribute to improving something in the world (Duffy *et al.*, 2018). This involvement may also contribute for BA’s perceiving a higher investment value because of the satisfaction of being directly involved in activities which people were motivated to engage on to pursue their calling (Duffy *et al.*, 2018), which they find meaningful (Rosso *et al.*, 2010) and that contribute

to reinforce their identity (Dobrow and Tosti-Kharas, 2011). Therefore, the following hypothesis is proposed:

- H4.* Angel involvement has a mediating role between calling and perceived investment value.

The conceptual model directly relates calling, as an antecedent, to angel perceived investment value, as the dependent variable, and indirectly through involvement. As such, involvement plays a mediating role.

### 3. Research methods

This paper aims to understand the effect of a calling in the BAs' domain, particularly whether and to what extent calling affects their angel involvement and the perceived investment value of their activity.

An online questionnaire was developed and administered to a database of 10,000 BAs, compiled from various sources, including: the Portuguese Federation of Business Angels (FNABA); IAPMEI – Certified Business Angels investing in Portugal; and a personal database of one of the authors, a professional BA, affiliated member of European Business Angels Network (EBAN) and connected to angels worldwide through LinkedIn. The research was also supported by the World Business Angels Forum (WBAF), which facilitated the distribution to its members.

The questionnaire included questions to measure angel calling, angel perceived investment value (APIV), angel involvement, and sociodemographic profiles of the BAs. Angel calling was assessed using the 12-item scale developed by Dobrow and Tosti-Kharas (2011) to measure the degree to which angels perceive a “consuming, meaningful passion people experience toward a domain” (p. 1001), in this case, angel investing. APIV was operationalised through an adapted version of the scales of Puustinen *et al.* (2013) and Falcão *et al.* (2023b), with 29 items. Angel involvement is based on the scale used by Hoyos-Iruarrizaga *et al.* (2017, p. 959). Since the angel market has changed in recent years, shifting from solo investing to investing through angel groups and networks, the operational involvement of angels has evolved as well (Mason *et al.*, 2016). Therefore, the scale of involvement was extended to include not only the post-investment value-added activities with the startups, but also participation in angel groups, syndicates and other ecosystem activities. Angels were asked how frequently they participate in angel activities in general, in activities directly with start-ups, angel groups, and the ecosystem. All items were evaluated on a 7-point Likert scale ranging from 1 = never/strongly disagree to 7 = always/strongly agree. The questionnaire was in English, the language spoken by BAs when they contact their foreign counterparts. All the people invited to answer the questionnaire were informed about the objective of the study, the kind of data asked, and were assured of the confidentiality of their data. Only those willing to participate in the study in a voluntary way answered the questionnaire.

Reflective measurement models were used since validated and adapted scales were employed. Those scales are ideal when the focal constructs support the causal direction between constructs and their measures (Hoyle, 2012).

The sociodemographic section captured information on BAs' gender, age, country of residence, and experience in angel investing, including years of experience, number of invested start-ups, percentage of time devoted to BA activities, and amount of invested capital.

A pilot study was conducted with five BAs to pre-test the questionnaire, leading to minor rewording of some items. Subsequently, emails were sent inviting BAs to participate. A 12% response rate was achieved, yielding 1,225 responses from 79 different countries. However, 356 questionnaires were incomplete, resulting in 869 usable responses, corresponding to a 9% response rate.

The respondents were predominantly male (84.1%) and fell primarily within the 41–50 (35%) and 51–60 (31%) age groups (Table 1). The sample exhibited geographical diversity,

with the USA, Portugal, and the United Kingdom being the most highly represented countries. On average, respondents possessed 8.2 years of angel investing experience and had invested in an average of 13.7 start-ups. Notably, the majority (50.6%) invested between €50,000 and €500,000.

Covariance-based Structural Equation Modelling (CB-SEM) was employed to test the model, which can be used for both theory confirmation and theory development (Byrne, 2001; Hair *et al.*, 2019). AMOS 22 software was used to run CB-SEM. The “two-step approach”, proposed by Anderson and Gerbing (1988), was used to assess the empirical model proposed. The measurement model’s reliability and validity were assessed for both first and second-order models, followed by evaluating the path coefficients within the structural model.

Before evaluating the measurement and structural models, AMOS 22 software was employed to test the normality of the items and to confirm multivariate normality. Although the latter was not confirmed, the maximum likelihood (ML) procedure was utilised. According to Chou and Bentler (1995), ML is quite robust to violations of normality, producing reliable estimates in terms of bias and consistency.

Exploratory factor analysis confirmed that all items belong to the original construct, and confirmatory factor analysis (CFA) examined the psychometric properties to assess two measurement models (Byrne, 2001; Hair *et al.*, 2019). The first model included all the constructs of the first-order structure, and the second model considered the second-order constructs. Finally, the goodness of fit for the measurement models and for the structural model was assessed by analysing  $\chi^2$ , IFI, TLI, CFI and RMSEA (Byrne, 2001; Hair *et al.*, 2019). These are standard procedures implemented in high-quality journals (Day *et al.*, 2015; Zimmermann *et al.*, 2020).

To mitigate the issues posed by common method bias (CMB), following Podsakoff *et al.* (2003) and Jordan and Troth (2020), participants were informed about the importance of the

**Table 1.** Business angel investors profile ( $n = 869$ )

Gender	N	%	Number of invested start-ups	Country of residence	%
Female	138	15.9	Mean, median	13.7; 7	USA 13.6
Male	731	84.1	Standard deviation	25.5	Portugal 7.3
Age			Experience as a BA		UK 5.1
20–30	30	3.5	Number of years	8.2	Spain 4.2
31–40	137	15.8			Italy 4.1
41–50	306	35.2	The geographical area where the investments are made	%	Brazil 4.0
51–60	267	30.7	Country of residence	45.0	France 3.1
61–70	105	12.1	Only outside	3.2	Germany 2.9
>70	24	2.8	Country of residence and outside	51.8	India 2.4
					Canada 1.8
Amount invested in BA activities (€)			% of time dedicated to the BA activities		Australia 1.5
<20k	108	12.4	mean	32.2	Finland 1.5
[20-50k]	81	9.3	median	25.0	Switzerland 1.4
[50k-100k]	144	16.6	mode	10.0	Denmark 1.4
[100k-250k]	148	17.1	Standard Deviation	26.7	Netherlands 1.2
[250-500k]	147	16.9	% angel time distribution		Singapore 0.9
[500k-1M]	112	12.9	to angel groups	22.3	Belgium 0.8
[1–3M]	67	7.7	to start-ups	46.9	Turkey 0.8
>3M	61	7.0	to ecosystem	30.7	Poland 0.7
					Others 40.8

**Source(s):** Authors’ own work

research for BAs and their activities. Moreover, the survey was kept as short as possible, avoiding ambiguous items that might lead to multiple interpretations. Finally, the different focal constructs were separated into distinct blocks to disrupt respondents' patterns and encourage focused attention on the questions and constructs being evaluated.

Harman's single-factor test was employed to assess the effects of CMB (Podsakoff and Organ, 1986), as BAs responded to the entire questionnaire without any temporal break. This test is the most widely used to assess CMB (Podsakoff *et al.*, 2003). Complementarily, based on Green (1991), differences between early ( $n = 75$ ) and late respondents ( $n = 81$ ) were examined. However, all the first-order constructs analysed showed no statistical differences for early and late respondents.

## 4. Analyses of results

### 4.1 Measurement models

Convergent validity was verified by the average variance extracted (AVE), whereas discriminant validity was evaluated by comparing the AVE of each construct with the shared variance between constructs. Based on the analysis of this model, a set of items (Ent5, Ent6, Eco1, Eco2, Eco3, Eco8, Eco9, Eco10, Em4, and Est1) were excluded following Byrne's recommendations (2001). A minimum factor loading score of 0.7 was applied (Hair *et al.*, 2019) to confirm convergent validity. Consequently, some items were removed to improve the measurement model.

The goodness of fit of the measurement model ( $\chi^2/df = 2.854$ ; Incremental Fit Index (IFI) = 0.937; Tucker-Lewis Index (TLI) = 0.930; Comparative Fit Index (CFI) = 0.937; Root Mean Square Error of Approximation (RMSEA) = 0.047) are within the recommended values (Hu and Bentler, 1995), which supports the validity of the first-order measurement model.

Table 2 shows the reliability and validity of the measurement model, analysed by examining composite reliability (CR) and the average variance extracted (AVE) scores. The CR, AVE and factor loadings were tested following generally accepted levels (CR > 0.70; AVE > 0.50 and factor loadings > 0.70), indicating acceptable measurement properties and convergent validity. Two items have a factor loading lower than 0.70, which is also accepted (Hair *et al.*, 2019).

Table 3 shows the convergent and discriminant validity of the first-order constructs. Convergent validity was assessed by computing the AVE, which is presented along the diagonal, with a minimum threshold value of 0.5 (Hair *et al.*, 2019). Similarly, all constructs present composite reliability (CR) greater than 0.7, indicating satisfactory internal consistency of the items. Discriminant validity was assessed by comparing the AVE of each construct with the shared variance between constructs. This shared variance is presented above the diagonal and is represented by the square of the correlation between the variables. In this case, the AVE of each construct exceeds its shared variance with any other construct (Farrell, 2010; Fornell and Larcker, 1981). Complementarily, discriminant validity is also confirmed since the square root of the AVE for each construct is greater than the bivariate correlation values with the other constructs in the model, presented below the diagonal (Chin, 1998; Fornell and Larcker, 1981).

The importance of each first-order dimension was verified through a second-order factor ( $\chi^2/df = 2.942$ ; IFI = 0.932; TLI = 0.927; CFI = 0.932; RMSEA = 0.048). As in the first-order measurement model, all indices exceed the recommended threshold, providing support for the validity of the second-order measurement model (Hu and Bentler, 1995).

According to Marsh and Hocevar (1985) and Day *et al.* (2015), the existence of the higher-order structure can be validated statistically. As such, the target-coefficient (T) was calculated according to the following formula [ $T = \chi^2 \text{ 1st Order} / \chi^2 \text{ 2nd Order}$ ]. In this case,  $T = 2214.78 / 2377.21 = 0.931$ , which exceeds the recommended value of 0.7 (Segars and Grover, 1998), justifying the use of the second-order model.

The regression weights of APIV and Involvement in its dimensions are significant at  $p < 0.001$ , and the loadings of the other dimensions on their items are significant at  $p < 0.001$  (Table 4).

**Table 2.** First order standardised measurement model

	Mean	Standard deviation	Standardised loadings	Cronbach's alpha	AVE	CR
Ent3←Entrep	5.975	1.081	0.791	0.804	0.563	0.837
Ent2←Entrep	5.336	1.479	0.692			
Ent1←Entrep	5.761	1.211	0.844			
Eco4←EconEff	6.015	1.036	0.792	0.933	0.561	0.789
Eco5←EconEff	5.953	1.087	0.753			
Eco6←EconEff	5.946	1.118	0.798			
Eco7←EconEff	5.552	1.349	0.649			
Em3← Emotions	4.800	1.501	0.829	0.836	0.632	0.837
Em2← Emotions	4.960	1.463	0.786			
Em1← Emotions	4.923	1.482	0.769			
Alt4←Altruism	5.197	1.474	0.891	0.868	0.687	0.868
Alt3←Altruism	4.928	1.584	0.794			
Alt2←Altruism	5.571	1.403	0.798			
Est5←Esteem	4.728	1.586	0.896	0.930	0.770	0.930
Est4←Esteem	5.081	1.483	0.860			
Est3←Esteem	4.883	1.519	0.890			
Est2←Esteem	4.910	1.515	0.863			
Call11←Calling	3.817	1.823	0.716	0.910	0.560	0.919
Call10←Calling	4.419	1.732	0.731			
Call8←Calling	4.038	1.855	0.774			
Call7←Calling	4.577	1.639	0.789			
Call6←Calling	4.004	1.706	0.701			
Call5←Calling	3.596	1.655	0.743			
Call3←Calling	5.060	1.410	0.779			
Call2←Calling	4.068	1.569	0.784			
Call1←Calling	5.595	1.309	0.710			
GenAct3←GenAct	4.486	1.4779	0.712	0.830	0.633	0.837
GenAct2←GenAct	4.740	1.5667	0.876			
GenAct1←GenAct	4.935	1.3682	0.791			
Startup4←Startup	5.064	1.312	0.799	0.877	0.594	0.879
Startup3←Startup	5.462	1.311	0.845			
Startup2←Startup	5.069	1.401	0.717			
Startup1←Startup	5.383	1.314	0.775			
Startup5←Startup	4.744	1.421	0.709			
BAGro7←BAGroup	3.466	1.873	0.790	0.871	0.654	0.908
BAGro6←BAGroup	4.147	1.771	0.829			
BAGro5←BAGroup	4.101	1.823	0.887			
BAGro4←BAGroup	4.311	1.790	0.817			
BAGro2←BAGroup	4.191	1.748	0.744			
BAeco3←Ecosystem	3.594	1.727	0.821	0.831	0.633	0.837
BAeco2←Ecosystem	3.828	1.838	0.841			
BAeco1←Ecosystem	4.655	1.432	0.719			

**Source(s):** Authors' own work

When applying Harman's single-factor test to the items comprising the APIV and Involvement constructs, neither of them accounted for most of the variance. Consequently, common method variance is not a concern in this study (Podsakoff and Organ, 1986).

#### 4.2 Structural model

After testing the reliability, validity and fit of the measurement model and the second-order constructs, the structural model, comprising relationships between the latent variables – calling, involvement and APIV – was assessed. The assessment of the structural model involved several steps (Appendix- Table A1). First, the overall model's goodness of fit was

**Table 3.** Discriminant validity

Constructs	1	2	3	4	5	6	7	8	9	10
1. EconEff	<i>0.749</i>	0.255	0.144	0.311	0.218	0.316	0.113	0.101	0.056	0.036
2. Emotions	0.505	<i>0.795</i>	0.361	0.494	0.423	0.235	0.063	0.086	0.053	0.029
3. Altruism	0.380	0.601	<i>0.929</i>	0.549	0.408	0.296	0.082	0.163	0.052	0.072
4. Esteem	0.558	0.703	0.741	<i>0.877</i>	0.518	0.407	0.064	0.109	0.063	0.058
5. Entrep	0.467	0.650	0.639	0.720	<i>0.750</i>	0.286	0.108	0.188	0.062	0.063
6. Calling	0.562	0.485	0.544	0.638	0.535	<i>0.748</i>	0.176	0.221	0.143	0.132
7. GenAct	0.336	0.250	0.287	0.252	0.328	0.420	<i>0.796</i>	0.403	0.283	0.383
8. Startup	0.318	0.293	0.404	0.330	0.434	0.470	0.635	<i>0.770</i>	0.185	0.305
9. BAgrouop	0.236	0.230	0.228	0.250	0.248	0.378	0.532	0.430	<i>0.808</i>	0.356
10. Ecosystem	0.191	0.171	0.268	0.240	0.250	0.363	0.619	0.552	0.597	<i>0.796</i>

**Note(s):** Square root of corresponding AVEs is presented along the diagonal in italic; Correlations are presented below the diagonal; Shared variances (squared correlations) are presented above the diagonal

**Source(s):** Authors' own work

tested considering various measures. Then, direct relationships between first-order constructs were analysed, considering path coefficients and respective significance levels (Hair *et al.*, 2019). Indirect and total impacts were calculated to complement the analysis of direct impacts, with the significance of indirect impacts being assessed using the Sobel test. Finally, the mediating effect of involvement between calling and APIV was analysed, comparing the direct and total effects between these two constructs, as well as considering the criteria of Holmbeck (1997) and Baron and Kenny (1986).

All indexes of the goodness of fit of the structural model ( $\chi^2/df = 2.981$ ; IFI = 0.930; TLI = 0.926; CFI = 0.930; RMSEA = 0.048) exceed the recommended values (Hu and Bentler, 1995), supporting the validity of the structural model hypothesised.

Figure 1 shows the results of the structural model. The model confirms that Calling positively influences ( $\beta = 0.520$ ;  $p < 0.01$ ) Involvement. Moreover, it also reveals that Calling positively influences ( $\beta = 0.627$ ;  $p < 0.01$ ) APIV and that Involvement slightly influences APIV ( $\beta = 0.091$ ;  $p < 0.05$ ). As such, one can validate hypotheses H1, H2 and H3. Sex was used as a control variable ( $\beta = 0.024$ ;  $p = 0.457$ ) and was not statistically significant.

The structural model confirms calling as a significant antecedent of both angel perceived investment value (APIV) and involvement. Involvement mediates the relationship between calling and APIV.

Table 5 presents the direct, indirect and total effects of the variables of the model. To analyse the individual indirect effect between Calling and APIV, the product of the two components (the two direct impacts) was calculated (Calling→Involvement)\* (Involvement→APIV) =  $0.520 \times 0.091 = 0.047$  (Baron and Kenny, 1986). Using the Sobel test, the indirect effect is also statistically significant at the 1% level (Sobel, 1982). As both the direct and the indirect effects of calling on APIV are statistically significant and the direct effect explains 93% ( $\beta = 0.627/\beta = 0.674$ ) of the total effect, according to Holmbeck (1997) and Baron and Kenny (1986), one can also claim that involvement partially mediates the relationship between calling and APIV.

Given the varying backgrounds, experience and degrees of stakeholder engagement among BAs (Mason *et al.*, 2016), a Multigroup Analysis (MGA) was conducted to explore potential differences between highly experienced ( $n = 370$ , seven or more years of experience) and novice angels ( $n = 479$ , six or fewer years of experience). The analysis aimed to assess how APIV is influenced by calling and involvement, as well as how involvement is shaped by calling within each group.

Following the guidelines set by Jöreskog and Sörbom (1993), the results, illustrated in Figure 1, reveal no statistically significant differences between novice and experienced

**Table 4.** Second-order model – standardised weights and loadings

Variables	Standardised weights*	Standardised loadings*
GenAct←Invol	0.806	
Startup←Invol	0.740	
BAGroup←Invol	0.664	
Ecosystem←Invol	0.765	
Esteem←APIV	0.912	
Altruism←APIV	0.780	
Emotions←APIV	0.760	
EconEff←APIV	0.603	
Entrep←APIV	0.787	
Eco4←EconEff		0.784
Eco5←EconEff		0.750
Eco6←EconEff		0.794
Eco7←EconEff		0.649
Em3←Emotions		0.825
Em2←Emotions		0.779
Em1←Emotions		0.765
Alt4←Altruism		0.891
Alt3←Altruism		0.787
Alt2←Altruism		0.790
Est4←Esteem		0.891
Est3←Esteem		0.854
Est2←Esteem		0.885
Est5←Esteem		0.858
Ent3←Entrep		0.781
Ent2←Entrep		0.685
Ent1←Entrep		0.844
Call11←Calling		0.607
Call10←Calling		0.709
Call8←Calling		0.753
Call7←Calling		0.770
Call6←Calling		0.678
Call5←Calling		0.720
Call3←Calling		0.760
Call2←Calling		0.763
Call1←Calling		0.691
GenAct3←GenAct		0.706
GenAct2←GenAct		0.877
GenAct1←GenAct		0.785
Startup4←Startup		0.798
Startup3←Startup		0.841
Startup2←Startup		0.714
Startup1←Startup		0.772
Startup5←Startup		0.707
BAGro7←BAGroup		0.788
BAGro6←BAGroup		0.827
BAGro5←BAGroup		0.886
BAGro4←BAGroup		0.814
BAGro2←BAGroup		0.742
BAeco3←Ecosystem		0.813
BAeco2←Ecosystem		0.841
BAeco1←Ecosystem		0.719

**Note(s):** \* $p < 0.001$ **Source(s):** Authors' own work

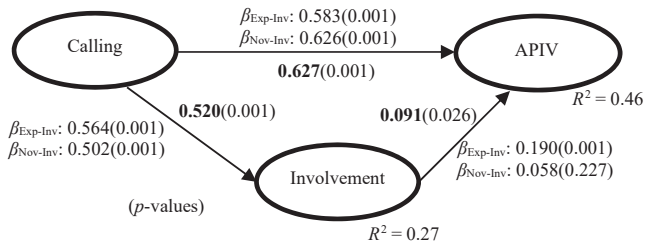


Figure 1. Structural model. Source: Authors’ own work

Table 5. Direct, indirect and total effects

	Dependent variables					
	Direct Involvement	APIV	Indirect Involvement	APIV	Total Involvement	APIV
Calling	0.520	0.627	–	0.047	0.520	0.674
Involvement	–	0.091	–	–	–	0.091

Source(s): Authors’ own work

investors concerning the relationships between Calling and APIV, and between Calling and Involvement. However, a key distinction emerges in the relationship between Involvement and APIV. While this relationship is statistically significant for experienced angels, it does not hold statistical significance for their novice counterparts. Finally, the MGA reveals that involvement only mediates the Calling-APIV relationship for experienced BAs, as the relationship between involvement and perceived value is not statistically significant for novice BAs. As such, the direct effects for experienced angels explain 85% ( $0.626 / ((0.564 * 0.190) + 0.626)$ ) of the total effect, whereas for novice angels, experience does not moderate the direct (Calling-APIV) relationship.

### 5. Discussion

Analysing the angel phenomena through the lens of calling offers a new perspective on the particular role of involvement. This investigation aimed to understand the role of involvement in responding to the angel calling and how it influences the perceived value of the angel investing activity. It was noted that those with strong work calling orientations find their involvement in the calling domain intrinsically rewarding and central to their identity (Dobrow and Tosti-Kharas, 2011).

The results validate hypothesis 1, confirming a direct and positive influence ( $\beta = 0.520$ ) of BAs’ sense of calling on angel involvement. This finding aligns closely with the Work as a Calling Theory proposed by Duffy et al. (2018), which suggests that perceiving a calling positively affects actively living out that calling. These results corroborate previous research in other fields (Chen et al., 2025; Praskova et al., 2014), demonstrating that the perception of work as a calling leads to higher involvement. This impact also applies directly to BAs, suggesting that those who experience a sense of calling are more likely to be actively involved in their activities.

The study reveals that BAs dedicate significant time to activities directly with the startups (46.9%), alongside considerable time to angel groups tasks (22.3%) and other ecosystem activities (30.7%). Involvement with startups is particularly important, such as scouting for start-ups and listening to pitches (Wirtz et al., 2017). However, involvement with angel groups

and broader ecosystem activities also contributes to fulfilling their calling. Recent calling literature highlights that experiencing a calling in a group increases perceptions of meaning, belonging, competence and positive emotional outcomes (Buis *et al.*, 2019). Signs of appreciation and gratitude from others further enhance self-efficacy and self-worth (Grant and Gino, 2010), encouraging individuals to invest more time and energy in activities that contribute to their feelings of competence (Bandura, 1977; Ryan and Deci, 2000).

The results emphasise that the stronger the calling BAs feel, the more actively they engage in BAs' activities. This finding supports Dobrow's (2013) assertion that active involvement with work is essential to living a calling. Moreover, for BAs with a higher sense of calling, the angel experience is not delegable to managers of angel groups acting as agents on their behalf. These called angels desire direct involvement in their activities, affirming that active participation is central to fulfilling their sense of calling.

The results also validate hypothesis 2, confirming a strong positive influence ( $\beta = 0.627$ ) of angel calling on the Angel Perceived Investment Value. The findings suggest that a higher sense of calling enhances the value angels perceive from their activities in several dimensions of value, including esteem, altruism, emotion, economic and entrepreneurial value.

According to WCT (Duffy *et al.*, 2018), answering a calling involves performing work inseparable from life and contributing to the common good (Wrzesniewski *et al.*, 1997). Likewise, angels who perceive their work as a calling recognise entrepreneurial impact as a relevant contribution to society, enhancing their self-esteem. Investing can be a mechanism for creating meaning, driven by feelings of achievement and self-worth (Rosso *et al.*, 2010). Supporting young entrepreneurs and investing in successful startups provide opportunities for personal and professional growth, enhancing social reputation (Maus *et al.*, 2024; Ramadani, 2009). BAs may also perceive altruistic value by giving back to society, helping to solve global problems, increasing their sense of self-worth and dignity (Rosso *et al.*, 2010).

For instance, mentoring entrepreneurs allows angels to express altruism by supporting startups while receiving recognition and appreciation in return, which enhances their self-esteem and sense of purpose. Similarly, listening to pitches and networking with other entrepreneurs adds an element of enjoyment and emotional value to their investment activities.

By answering their callings, BAs also enhance their sense of belonging to the entrepreneurial community. Being an angel means joining an elite network of investors with opportunities to collaborate with successful individuals and further the ethos of entrepreneurship (Rose, 2014). Many angels, as former entrepreneurs, find meaning in reconnecting with entrepreneurship and advancing their careers (Politis and Landström, 2002). Answering a calling also implies emotional engagement with the calling domain. Enjoyment and fun are key outcomes of angel investing, often cited as significant motivators (McKaskill, 2009). Engaging with other angels and entrepreneurs creates opportunities for shared experiences and interpersonal connections, fostering an emotionally fulfilling environment (Rosso *et al.*, 2010). As highlighted in previous studies, individuals with a strong sense of calling often prioritise psychological satisfaction over financial gains (Bunderson and Thompson, 2009). This research reaffirms that financial outcomes are not the sole driving force for BAs; those with a higher sense of calling derive satisfaction from the investment process itself.

Finally, the results confirm a positive but weak direct influence ( $\beta = 0.096$ ) of involvement on perceived value, confirming hypothesis 3. While involvement with startups is a known source of meaning and enjoyment, the weak relationship may stem from the varied preferences of entrepreneurs and angels regarding deep involvement. Excessive involvement or unsolicited advice may be perceived as a threat to entrepreneurs' authority and leadership, as noted by Collewaert (2012). Angels must carefully balance their desire to contribute with respect for entrepreneurs' autonomy. Likewise, entrepreneurs should manage the investor relationship diligently to avoid disengagement and demotivation for reinvestment. Nevertheless, the positive influence of involvement on perceived value suggests that BAs perceive greater value in their role when they actively engage themselves in tasks to support the entrepreneurs, the angel group and the ecosystem directly. By contributing with

mentorship, networking and experience, in addition to their financial investment, they enhance the overall value.

The study also reveals that BAs' involvement plays a mediating role between their sense of calling and their perceived investment value (APIV). The model for the whole sample reveals that although the angel investors' sense of calling is a key driver of how they perceive the value of their investment, involvement plays a mediating role in this scope, besides having a low impact on APIV. Findings suggest that when BAs involve themselves in activities of their angel calling domain, they are likely to perceive a higher investment value, since the activities they carry out are meaningful to them, reinforce their identity and give them a sense of duty accomplished. This reinforces the perspectives of [Dobrow and Tosti-Kharas \(2011\)](#) and [Rosso et al. \(2010\)](#), that undertaking activities that enable one to pursue a calling may contribute to enhancing identity and to finding one's role meaningful.

Finally, as a result of the differences between experienced and novice business angels, in which involvement only mediates the Calling-APIV relationship for experienced BAs and not for novice BAs, it is possible to claim that involvement activities among experienced angels may enhance BAs' perceived investment value as a result of giving sense for continuing to develop the BAs' role. Similarly, this may also suggest that the involvement of novice angels is less rewarding than that of other angels, eventually due to the greater knowledge and skills of more experienced angels for dealing with their ecosystem and ensuring more gratifying forms of involvement. However, the MGA confirms the importance of calling for both APIV and involvement for the two groups of investors analysed—experienced and novice BAs.

## 6. Implications, limitations and suggestions for future research

The present research offers several relevant implications for business angels and those who interact with or support them, such as angel group leaders, network managers, entrepreneurs and policymakers. The study reveals that the stronger BAs feel called to their role, the more value they perceive in their investing activities. This highlights the importance of understanding the angels' callings holistically and helping BAs to pursue them. To maximise the perceived value of executing their callings, efforts should focus on providing angels with a balanced mix of economic, esteem, entrepreneurial, altruistic and emotional value. The results highlight that a stronger sense of calling leads to greater involvement in work activities, indicating the intrinsic motivation of BAs to be engaged in tasks related to their roles. Angels should, therefore, avoid delegating their activities to contracted group managers, much like a musician cannot delegate the act of playing an instrument to experience the joy of performing. Active participation allows BAs to derive intrinsic value from their involvement while making meaningful contributions to the entrepreneurial ecosystem. Cultivating a trustworthy and engaged relationship with founders will nurture a sense of gratitude and fairness, potentially safeguarding angels and early-stage investors in later rounds from aggressive contracting practices by venture capitalists and later-stage investors.

For entrepreneurs, the findings emphasise the importance of fostering meaningful relationships and alignment with BAs. Such alignment goes beyond the assumption that angels invest solely for financial gain, encouraging relationships grounded in active involvement and shared tasks creating additional value for the angels and the startup. By fostering deeper involvement, entrepreneurs and angel group managers can enhance angels' satisfaction and the value they derive from their experiences, ultimately increasing their motivation to invest further financial resources. This, in turn, benefits both entrepreneurs and society by increasing their chances of securing additional funding for startups, promoting job creation and strengthening innovation. Satisfied and engaged angels can foster a virtuous cycle of re-investment intentions and positive advocacy through word-of-mouth, amplifying their impact on the entrepreneurial ecosystem and society as a whole.

For angel group managers, the findings emphasise the importance of organising and designing activities that allow angels to fully embrace their callings. This involves

encouraging angels to take on personal, direct, and active roles within startups—such as mentoring entrepreneurs—within angel groups by participating in activities promoting good practices and within the broader ecosystem—by sharing their entrepreneurial journeys, engaging in events and debating. Such involvement can significantly enhance their sense of fulfilment and foster both personal and professional growth. Importantly, managers should avoid assuming excessive delegation of angels' tasks and responsibilities. Ensuring that business angels actively intervene, rather than having group managers acting on their behalf, is crucial to preserving their sense of value and fulfilment. Angels need to experience their calling firsthand to truly live out and derive meaning from their angel journey. Nevertheless, the MGA's findings also suggest that different approaches may be needed to involve novices and experienced BAs in activities of their ecosystem and to ensure that they will perceive a higher investment value as a result of this involvement.

Finally, government agencies and support organisations should recognise the broader societal impact of angel investments and work to create more initiatives to attract individuals to angel investing while facilitating their pursuit of living their callings. Examples include contributing to their professional recognition through training and certification programs (symbolic value), developing tax incentives and co-investment schemes (economic value), or creating mechanisms to facilitate their exit from startups (esteem and economic value). By engaging with BAs and providing platforms for their active support in the different phases of the investing process, policymakers can help angels derive greater sense from their callings while advancing the common good.

Despite offering significant contributions, this study has several limitations that highlight opportunities for future research. Taking into account the large sample size (869 respondents) and the diverse geographical origins of the participants, the results can be generalised to the population of business angels. However, further research is needed to examine how cultural differences influence calling, involvement and Angel Perceived Investment Value across different countries and continents. This research was conducted exclusively among BAs, and while the findings may have broader applicability, their transferability should not be assumed without considering the specific characteristics of the target population and the contextual nuances under evaluation.

First, it would be valuable to analyse the perspective of the entrepreneurs regarding the angels' sense of calling and to foster a deeper dialogue between them. This could provide a more balanced view of the feasibility of angel calling and how entrepreneurs interact with them. More importantly, it could be challenging to identify how both parties could cooperate and help each other in fulfilling their callings.

Second, the study's cross-sectional design limits its ability to capture changes over time. In the fast-evolving entrepreneurial ecosystems, where rapid developments are common, longitudinal studies could offer valuable insights into how the angel calling evolves dynamically. Third, qualitative research could further illuminate the subjective dimensions of BAs' callings, an area that remains underexplored. Such studies could complement the current findings by providing richer, more nuanced understandings of this phenomenon.

Fourth, future qualitative investigations could explore why involvement in specific tasks does not have a stronger impact on APIV. This would help clarify the mechanisms underlying these dynamics. Fifth, BAs represent a highly heterogeneous group, varying significantly in investment typologies, investment amounts, and degrees of involvement. While this study includes a diverse sample of BAs, future research could refine the model by focusing on subgroups of BAs with distinct investment profiles.

Sixth, testing the model in different geographical and cultural contexts would be essential to determine whether the findings hold across distinct environments. Additionally, further research could examine how BAs' sense of calling influences their interactions with entrepreneurs, the amount of investment they provide, and their approach to exits. For instance, do so-called angels remain involved with startups for longer periods? Finally, it

would be valuable to compare the sense of calling experienced by BAs investing within angel groups versus those investing independently to uncover potential differences.

## 7. Conclusions

This research extends the study of calling conducted in other areas to the context of BAs, opening a new line of research on the consequences of their calling. Moreover, it expands previous investigations on the benefits of calling to explore the impacts of calling on the angel perceived investment value. The findings suggest that angel investing involves a chain of multiple value exchanges, where monetary transactions are just one part of the process. The angel calling requires working in the calling domain, which underscores why direct involvement is so relevant in angel activity.

The paper provides relevant theoretical contributions. First, it broadens the scarce research on the outcomes of calling and initiates a line of research on the outcomes of calling to the BAs domain, where no studies are known. Second, it extends the WCT proposed by [Duffy et al. \(2018\)](#) to the context of BAs, particularly analysing the influence of calling on the Angel Perceived Investment Value. Third, it reveals that calling positively impacts both involvement with work and APIV. Moreover, it shows that involvement with work partially mediates the relationship between calling and APIV.

Additionally, this research has important implications for both BAs, entrepreneurs and other stakeholders dealing with BAs, such as managers of angel groups and policymakers. It offers valuable insights to help BAs live their callings and achieve their goals, while also providing guidance for entrepreneurs and other stakeholders on how to engage BAs in ways that encourage deeper involvement and enhance the perceived value of their contributions.

## Appendix

**Table A1.** Measurement items used

Scale	Items
Economic Efficiency APIV	Eco1. is an inexpensive way to invest Eco2. is priced fairly (management fees) Eco3. gives me access to public co-investment Eco4. is a great way to earn money Eco5. is an efficient way to diversify investments Eco6. increases my wealth adequately in view of the risk I bear Eco7. is a convenient way to invest Eco8. is an easy way to invest Eco9. is not unnecessarily time-consuming Eco10. allows me to remain active
Emotions APIV	Em1. is a nice way to spend time Em2. provides the excitement of risk-taking Em3. is entertaining Em4. is a challenging experience
Altruism APIV	Alt1. gives me the opportunity to make the world a better place Alt2. it is a way to give back to society Alt3. gives me the opportunity to express benevolence toward other people Alt4. encourages me to have a life with a higher purpose

(continued)

**Table A1.** Continued

Scale	Items
Esteem APIV	Est1. makes me feel fulfilled Est2. boosts my self-esteem Est3. gives me sheer joy Est4. makes me feel valuable Est5. increases my self-confidence
Entrepreneurial APIV	Ent1. allows me to be part of entrepreneurship Ent2. gives me the pleasure to begin something from scratch Ent3. gives me the opportunity for involvement with startups Ent4. allows me to mentor entrepreneurs Ent5. maintains my entrepreneurship spirit without direct responsibility Ent6. allows me to create an entrepreneurial legacy
Calling	Call 1. I am passionate about being a Business Angel Call 2. I enjoy being a Business Angel more than anything else Call 3. Being a Business Angel gives me immense personal satisfaction Call 4. I would sacrifice everything to be a Business Angel Call 5. The first thing I often think about when I describe myself to others is that I'm a Business Angel Call 6. I would continue being a Business Angel even in the face of severe obstacles Call 7. I know that being a Business Angel will always be part of my life Call 8. I feel a sense of destiny about being a Business Angel Call 9. Being a Business Angel is always in my mind in some way Call 10. Even when not acting as a Business Angel, I often think about being Business Angel Call 11. My existence would be much less meaningful without my involvement as Business Angel Call 12. Being a Business Angel is a deeply moving and gratifying experience for me
Angel Involvement with general activities	GenAct1. Deal flow (discovering generic investment opportunities) GenAct2. Startup scouting (identifying and pre-selecting the best startups) GenAct3. Due diligence (contributing to the due diligence of the startups) GenAct4. Post investment monitoring (taking part in the post-investment monitoring of the startups)
Angel Involvement with the startups	Startup1. Share experience (sharing your industrial experience with the entrepreneurs) Startup2. Management support (supporting the entrepreneurs in management tasks) Startup3. Networking (supporting the entrepreneurs with networking) Startup4. Endorsement (taking part in activities of endorsement and reinforcement of the credibility of the startup) Startup5. Acquisition of new customers (contributing to attract new customers for the startup) Startup6. Operational Tasks (contributing by doing direct operational tasks in the startups) Startup7. Attract investment partners (supporting the startup attracting investment partners) Startup8. Participate in exit activities (having active participation to lead the startup to an EXIT or acquisition)

(continued)

**Table A1.** Continued

Scale	Items
Angel involvement with the BA Group	<p>BAgro1. Lead investor (lead investor, assuming the control of the round)</p> <p>BAgro2. investment committees (participating in startup investment decision committees of your angels group)</p> <p>BAgro3. Events and seminars for members of the angels group (participating in events and seminars organised by your angels group)</p> <p>BAgro4. General Meetings of the angels group (participating in the General Assemblies\ general meetings of your angels group)</p> <p>BAgro5. Angels board participation and advising (you giving advice and mentoring to the leaders\gatekeepers of your angel group)</p> <p>BAgro6. Invite new angel's (participating in the attraction of new angels to the group)</p> <p>BAgro7. Gatekeeper (acting as gatekeeper or group leader)</p>
Angel Involvement with other organisations of the BA's ecosystem	<p>BAeco1. Entrepreneurial events (participation in public entrepreneurial events, Demo Days or other public investor events)</p> <p>BAeco2. Startup Jury Member (participation as a jury member on startup awards)</p> <p>BAeco3. Angel Testimonial (speaking, or giving testimonials in public events concerning your angel investor role)</p> <p>BAeco4. Angel Association (being a member\participating in activities of the National, European or International angels association, e.g. FNABA, APBA, EBAN, ABAN, BAE)</p>

**Source(s):** Authors' own work

## References

- Alfan, R., Solehuddin, M., Nurihsan, J. and Yustiana, Y.R. (2024), "Understanding career calling: historical roots and practical relevance for school counselors", *Jurnal Konseling dan Pendidikan*, Vol. 12 No. 3, pp. 129-138, doi: [10.29210/1122600](https://doi.org/10.29210/1122600).
- Anderson, J.C. and Gerbing, D.W. (1988), "Structural equation modeling in practice: a review and recommended two-step approach", *Psychological Bulletin*, Vol. 103 No. 3, pp. 411-423, doi: [10.1037/0033-2909.103.3.411](https://doi.org/10.1037/0033-2909.103.3.411).
- Bagozzi, R.P. and Dholakia, U. (1999), "Goal setting and goal striving in consumer behavior", *Journal of Marketing*, Vol. 63 No. 4, pp. 19-32, doi: [10.2307/1252098](https://doi.org/10.2307/1252098).
- Bandura, A. (1977), "Self-efficacy: toward a unifying theory of behavioral change", *Psychological Review*, Vol. 84 No. 2, pp. 191-215, doi: [10.1037//0033-295x.84.2.191](https://doi.org/10.1037//0033-295x.84.2.191).
- Baron, R.M. and Kenny, D.A. (1986), "The moderator-mediator variable distinction in social psychological research: conceptual, strategic, and statistical considerations", *Journal of Personality and Social Psychology*, Vol. 51 No. 6, pp. 1173-1182, doi: [10.1037/0022-3514.51.6.1173](https://doi.org/10.1037/0022-3514.51.6.1173).
- Berg, J.M., Grant, A.M. and Johnson, V. (2010), "When callings are calling: crafting work and leisure in pursuit of unanswered occupational callings", *Organization Science*, Vol. 21 No. 5, pp. 973-994, doi: [10.1287/orsc.1090.0497](https://doi.org/10.1287/orsc.1090.0497).
- Bonini, S., Capizzi, V., Valletta, M. and Zocchi, P. (2018), "Angel network affiliation and business angels' investment practices", *Journal of Corporate Finance*, Vol. 50, pp. 592-608, doi: [10.1016/j.jcorpfin.2017.12.029](https://doi.org/10.1016/j.jcorpfin.2017.12.029).
- Bonnet, C., Capizzi, V., Cohen, L., Petit, A. and Wirtz, P. (2022), "What drives the active involvement in business angel groups? The role of angels' decision-making style, investment-specific human

- capital and motivations”, *Journal of Corporate Finance*, Vol. 77, 101944, doi: [10.1016/j.jcorpfin.2021.101944](https://doi.org/10.1016/j.jcorpfin.2021.101944).
- Buis, B.C., Ferguson, A.J. and Briscoe, J.P. (2019), “Finding the ‘I’ in ‘Team’: the role of groups in an individual’s pursuit of calling”, *Journal of Vocational Behavior*, Vol. 114, pp. 88-99, doi: [10.1016/j.jvb.2019.02.009](https://doi.org/10.1016/j.jvb.2019.02.009).
- Bunderson, J.S. and Thompson, J.A. (2009), “The call of the wild: zookeepers, callings, and the double-edged sword of deeply meaningful work”, *Administrative Science Quarterly*, Vol. 54 No. 1, pp. 32-57, doi: [10.2189/asqu.2009.54.1.32](https://doi.org/10.2189/asqu.2009.54.1.32).
- Byrne, B.M. (2001), “Structural equation modelling with AMOS, EQS, and LISREL: comparative approaches to testing for the factorial validity of a measuring instrument”, *International Journal of Testing*, Vol. 1 No. 1, pp. 55-86, doi: [10.1207/s15327574ijt0101\\_4](https://doi.org/10.1207/s15327574ijt0101_4).
- Cain, L., Busser, J. and Kang, H.J. (2018), “Executive chefs’ calling: effect on engagement, work-life balance and life satisfaction”, *International Journal of Contemporary Hospitality Management*, Vol. 30 No. 5, pp. 2287-2307, doi: [10.1108/ijchm-02-2017-0105](https://doi.org/10.1108/ijchm-02-2017-0105).
- Cardador, M.T. and Caza, B.B. (2012), “Relational and identity perspectives on healthy versus unhealthy pursuit of callings”, *Journal of Career Assessment*, Vol. 20 No. 3, pp. 338-353, doi: [10.1177/1069072711436162](https://doi.org/10.1177/1069072711436162).
- Cardon, M.S., Wincent, J., Singh, J. and Drnovsek, M. (2009), “The nature and experience of entrepreneurial passion”, *Academy of Management Review*, Vol. 34 No. 3, pp. 511-532, doi: [10.5465/amr.2009.40633190](https://doi.org/10.5465/amr.2009.40633190).
- Chen, C., Zhang, J., Tian, H. and Bu, X. (2022), “The impact of entrepreneurial passion on entrepreneurial success and psychological well-being: a person-centered investigation”, *International Journal of Entrepreneurial Behaviour and Research*, Vol. 31 Nos 2/3, pp. 369-389, doi: [10.1108/IJEBr-12-2021-0977](https://doi.org/10.1108/IJEBr-12-2021-0977).
- Carpentier, C. and Suret, J.M. (2015), “Angel group members’ decision process and rejection criteria: a longitudinal analysis”, *Journal of Business Venturing*, Vol. 30 No. 6, pp. 808-821.
- Chen, H.C., Chen, I.H. and Ng, C.T.S. (2025), “Calling and job involvement: the role of prosocial motivation in the performance of mission-driven organization”, *The Journal of General Psychology*, Vol. 152 No. 1, pp. 58-86, doi: [10.1080/00221309.2024.2349763](https://doi.org/10.1080/00221309.2024.2349763).
- Chin, W.W. (1998), “The partial least squares approach to structural equation modeling”, in Marcoulides, G.A. (Ed.), *Modern Methods for Business Research*, Lawrence Erlbaum Associates, London.
- Chou, C.-P. and Bentler, P.M. (1995), “Estimates and tests in structural equation modeling”, in Hoyle, R.H. (Ed.), *Structural Equation Modeling: Concepts, Issues and Applications*, Sage, Thousand Oaks, pp. 37-55.
- Collewaert, V. (2012), “Angel Investors’ and Entrepreneurs’ intentions to exit their ventures: a conflict perspective”, *Entrepreneurship Theory and Practice*, Vol. 36 No. 4, pp. 753-779, doi: [10.1111/j.1540-6520.2011.00456.x](https://doi.org/10.1111/j.1540-6520.2011.00456.x).
- Day, M., Lichtenstein, S. and Samouel, P. (2015), “Supply management capabilities, routine bundles and their impact on firm performance”, *International Journal of Production Economics*, Vol. 164, pp. 1-13, doi: [10.1016/j.ijpe.2015.02.023](https://doi.org/10.1016/j.ijpe.2015.02.023).
- Dik, B.J. and Shimizu, A.B. (2019), “Multiple meanings of calling: next steps for studying an evolving construct”, *Journal of Career Assessment*, Vol. 27 No. 2, pp. 323-336.
- Dobrow, S.R. (2013), “Dynamics of calling: a longitudinal study of musicians”, *Journal of Organizational Behavior*, Vol. 34 No. 4, pp. 431-452, doi: [10.1002/job.1808](https://doi.org/10.1002/job.1808).
- Dobrow, S.R. and Tosti-Kharas, J. (2011), “Calling: the development of a scale measure”, *Personnel Psychology*, Vol. 64 No. 4, pp. 1001-1049, doi: [10.1111/j.1744-6570.2011.01234.x](https://doi.org/10.1111/j.1744-6570.2011.01234.x).
- Dobrow, S.R., Weisman, H., Heller, D. and Tosti-Kharas, J. (2019), “Calling attention to 20 years of research: a comprehensive meta-analysis of calling”, *Academy of Management Proceedings*, Briarcliff Manor, NY, Vol. 10510.12789

- Duffy, R.D. and Dik, B.J. (2013), "Research on calling: what have we learned and where are we going?", *Journal of Vocational Behavior*, Vol. 83 No. 3, pp. 428-436, doi: [10.1016/j.jvb.2013.06.006](https://doi.org/10.1016/j.jvb.2013.06.006).
- Duffy, R.D., Dik, B.J., Douglass, R.P., England, J.W. and Velez, B.L. (2018), "Work as a calling: a theoretical model", *Journal of Counseling Psychology*, Vol. 65 No. 4, pp. 423-439, doi: [10.1037/cou0000276](https://doi.org/10.1037/cou0000276).
- Duffy, R.D., Douglass, R.P., Gensmer, N.P., England, J.W. and Kim, H.J. (2019), "An initial examination of the work as calling theory", *Journal of Counseling Psychology*, Vol. 66 No. 3, pp. 328-340, doi: [10.1037/cou0000318](https://doi.org/10.1037/cou0000318).
- Edelman, L.F., Manolova, T.S. and Brush, C.G. (2017), "Angel investing: a literature review", *Foundations and Trends in Entrepreneurship*, Vol. 13 Nos 4-5, pp. 265-439, doi: [10.1561/03000000051](https://doi.org/10.1561/03000000051).
- Falcão, R., Carneiro, M.J. and Moreira, A.C. (2023a), "Why do business angels invest? Uncovering angels' goals", *Cogent Business and Management*, Vol. 10 No. 2, 2234134, doi: [10.1080/23311975.2023.2234134](https://doi.org/10.1080/23311975.2023.2234134).
- Falcão, R., Moreira, A.C. and Carneiro, M.J. (2023b), "What's in it for me? The perceived investment value of business angels", *The International Journal of Entrepreneurship and Innovation*, doi: [10.1177/14657503231213310](https://doi.org/10.1177/14657503231213310).
- Falcao, R., Moreira, A.C. and Carneiro, M.J. (2024), "Challenges of business angels: does career matter?", *Baltic Journal of Management*, Vol. 19 No. 6, pp. 76-93, doi: [10.1108/bjm-08-2023-0330](https://doi.org/10.1108/bjm-08-2023-0330).
- Farrell, A. (2010), "Insufficient discriminant validity: a comment on bove, pervan, beatty, and shiu (2009)", *Journal of Business Research*, Vol. 63 No. 3, pp. 324-327, doi: [10.1016/j.jbusres.2009.05.003](https://doi.org/10.1016/j.jbusres.2009.05.003).
- Fili, A. and Grünberg, J. (2016), "Business angel post-investment activities: a multi-level review", *Journal of Management and Governance*, Vol. 20 No. 1, pp. 89-114, doi: [10.1007/s10997-014-9296-7](https://doi.org/10.1007/s10997-014-9296-7).
- Fornell, C. and Larcker, D.F. (1981), "Structural equation models with unobservable variables and measurement error: algebra and statistics", *Journal of Marketing Research*, Vol. 18 No. 3, pp. 382-388, doi: [10.1177/002224378101800313](https://doi.org/10.1177/002224378101800313).
- Grant, A.M. and Gino, F. (2010), "A little thanks goes a long way: explaining why gratitude expressions motivate pro-social behavior", *Journal of Personality and Social Psychology*, Vol. 98 No. 6, pp. 946-955, doi: [10.1037/a0017935](https://doi.org/10.1037/a0017935).
- Green, K. (1991), "Reluctant respondents, differences between early, late, and nonresponders to a mail survey", *The Journal of Experimental Education*, Vol. 59 No. 3, pp. 268-276, doi: [10.1080/00220973.1991.10806566](https://doi.org/10.1080/00220973.1991.10806566).
- Hair, J.F., Black, W.C., Babin, B.J. and Anderson, R.E. (2019), *Multivariate Data Analysis*, CENGAGE Learning EMEA, Hampshire UK.
- Hall, D.T. and Chandler, D.E. (2005), "Psychological success: when the career is a calling", *Journal of Organizational Behavior*, Vol. 26 No. 2, pp. 155-176, doi: [10.1002/job.301](https://doi.org/10.1002/job.301).
- Hirschi, A. (2011), "Callings in career: a typological approach to essential and optional components", *Journal of Vocational Behavior*, Vol. 79 No. 1, pp. 60-73, doi: [10.1016/j.jvb.2010.11.002](https://doi.org/10.1016/j.jvb.2010.11.002).
- Holmbeck, G.N. (1997), "Toward terminological, conceptual, and statistical clarity in the study of mediators and moderators: examples from the child-clinical and paediatric psychology literature", *Journal of Consulting and Clinical Psychology*, Vol. 65 No. 4, pp. 599-610, doi: [10.1037/0022-006x.65.4.599](https://doi.org/10.1037/0022-006x.65.4.599).
- Hoyle, R.H. (2012), *Handbook of Structural Equation Modeling*, Guilford Press.
- Hoyos-Iruarrizaga, J., Fernández-Sainz, A. and Saiz-Santos, M. (2017), "High value-added business angels at post-investment stages: key predictors", *International Small Business Journal*, Vol. 35 No. 8, pp. 949-968, doi: [10.1177/0266242616686401](https://doi.org/10.1177/0266242616686401).
- Hu, L.-T. and Bentler, P.M. (1995), "Evaluating model fit", in Hoyle, R.H. (Ed.), *Structural Equation Modeling: Concepts, Issues, and Applications*, Sage, Thousand Oaks, pp. 76-99.
- Jordan, P. and Troth, A. (2020), "Common method bias in applied settings: the dilemma of researching in organizations", *Australian Journal of Management*, Vol. 45 No. 1, pp. 3-14, doi: [10.1177/0312896219871976](https://doi.org/10.1177/0312896219871976).

- Jöreskog, K.G. and Sörbom, D. (1993), *Lisrel 8: Structural Equation Modeling with the SIMPLIS Command Language*, Scientific Software International, Lincolnwood.
- Kaiser, M. and Kuckertz, A. (2025), "Emotions and entrepreneurial finance: analysis of venture capitalists' and business angels' digital footprints on Twitter", *The International Entrepreneurship and Management Journal*, Vol. 21 No. 1, p. 35, doi: [10.1007/s11365-024-01018-9](https://doi.org/10.1007/s11365-024-01018-9).
- Kerr, W.R., Lerner, J. and Schoar, A. (2014), "The consequences of entrepreneurial finance: evidence from angel financings", *Review of Financial Studies*, Vol. 27 No. 1, pp. 20-55, doi: [10.1093/rfs/hhr098](https://doi.org/10.1093/rfs/hhr098).
- Lahti, T. (2011), "Categorization of angel investments: an explorative analysis of risk reduction strategies in Finland", *Venture Capital*, Vol. 13 No. 1, pp. 49-74, doi: [10.1080/13691066.2010.543322](https://doi.org/10.1080/13691066.2010.543322).
- Locke, E. and Latham, G.P. (1991), "A theory of goal setting and task performance", *Academy of Management Review*, Vol. 16 No. 2, pp. 480-483, doi: [10.2307/258875](https://doi.org/10.2307/258875).
- Locke, E. and Latham, G.P. (2019), "The development of goal setting theory: a half century retrospective", *Motivation Science*, Vol. 5 No. 2, pp. 93-105, doi: [10.1037/mot0000127](https://doi.org/10.1037/mot0000127).
- Macht, S.A. and Robinson, J. (2009), "Do business angels benefit their investee companies?", *International Journal of Entrepreneurial Behavior and Research*, Vol. 15 No. 2, pp. 187-208, doi: [10.1108/13552550910944575](https://doi.org/10.1108/13552550910944575).
- Marsh, H.W. and Hocevar, D. (1985), "Application of confirmatory factor analysis to the study of self-concept. First- and higher order factor models and their invariance across groups", *Psychological Bulletin*, Vol. 97 No. 3, pp. 562-582, doi: [10.1037/0033-2909.97.3.562](https://doi.org/10.1037/0033-2909.97.3.562).
- Maus, C., Greven, A., Kurth, N. and Brettel, M. (2024), "How do investor characteristics of business angels and venture capitalists predict the occurrence of co-investments?", *Journal of Business Economics*, Vol. 94 No. 5, pp. 763-811, doi: [10.1007/s11573-023-01185-1](https://doi.org/10.1007/s11573-023-01185-1).
- Mason, C. (2016), "Researching business angels: definitional and data challenges", in Mason, C.M. and Landström, H. (Eds), *Handbook of Research on Business Angels*, Edward Elgar Publishing, Cheltenham, UK, pp. 25-52.
- Mason, C., Botelho, T. and Harrison, R. (2016), "The transformation of the business angel market: empirical evidence and research implications", *Venture Capital*, Vol. 18 No. 4, pp. 321-344, doi: [10.1080/13691066.2016.1229470](https://doi.org/10.1080/13691066.2016.1229470).
- McKaskill, T. (2009), *An Introduction to Angel Investing - a Guide to Investing in Early Stage Entrepreneurial Ventures*, Breakthrough Publications, Melbourne.
- Morales-Alonso, G., Vila, G.A., Lemus-Aguilar, I. and Hidalgo, A. (2020), "Data retrieval from online social media networks for defining business angels' profile", *Journal of Enterprising Communities*, Vol. 14 No. 1, pp. 57-75, doi: [10.1108/jec-10-2019-0095](https://doi.org/10.1108/jec-10-2019-0095).
- Morrisette, S.G. (2006), "The profile and motivations of bank angel investors", *Frontiers of Entrepreneurship Research*, Vol. 26 No. 2, pp. 3-28.
- Park, J., Kim, S., Lim, M. and Sohn, Y.W. (2019), "Having a calling on board: effects of calling on job satisfaction and job performance among South Korean newcomers", *Frontiers in Psychology*, Vol. 10, p. 1584, doi: [10.3389/fpsyg.2019.01584](https://doi.org/10.3389/fpsyg.2019.01584).
- Podsakoff, P.M. and Organ, D.W. (1986), "Self-reports in organizational research: problems and prospects", *Journal of Management*, Vol. 12 No. 4, pp. 531-544, doi: [10.1177/014920638601200408](https://doi.org/10.1177/014920638601200408).
- Podsakoff, P.M., MacKenzie, S.B., Lee, J.-Y. and Podsakoff, N.P. (2003), "Common method biases in behavioural research: a critical review of the literature and recommended remedies", *Journal of Applied Psychology*, Vol. 88 No. 5, pp. 879-903, doi: [10.1037/0021-9010.88.5.879](https://doi.org/10.1037/0021-9010.88.5.879).
- Politis, D. (2008), "Business angels and value added: what do we know and where do we go?", *Venture Capital*, Vol. 10 No. 2, pp. 127-147, doi: [10.1080/13691060801946147](https://doi.org/10.1080/13691060801946147).

- Praskova, A., Hood, M. and Creed, P.A. (2014), "Testing a calling model of psychological career success in Australian young adults: a longitudinal study", *Journal of Vocational Behavior*, Vol. 85 No. 1, pp. 125-135, doi: [10.1016/j.jvb.2014.04.004](https://doi.org/10.1016/j.jvb.2014.04.004).
- Politis, D. and Landström, H. (2002), "Informal investors as entrepreneurs - the development of an entrepreneurial career", *Venture Capital*, Vol. 4 No. 2, pp. 78-101, doi: [10.1080/13691060210816](https://doi.org/10.1080/13691060210816).
- Praskova, A., Creed, P.A. and Hood, M. (2015), "The development and initial validation of a career calling scale for emerging adults", *Journal of Career Assessment*, Vol. 23 No. 1, pp. 91-106, doi: [10.1177/1069072714523089](https://doi.org/10.1177/1069072714523089).
- Puustinen, P., Maas, P. and Karjaluo, H. (2013), "Development and validation of the perceived investment value (PIV) scale", *Journal of Economic Psychology*, Vol. 36 No. 1, pp. 41-54, doi: [10.1016/j.joep.2013.02.009](https://doi.org/10.1016/j.joep.2013.02.009).
- Ramadani, V. (2009), "Business angels who they really are?", *Strategic Change*, Vol. 18 Nos 7/8, pp. 249-258, doi: [10.1002/jsc.852](https://doi.org/10.1002/jsc.852).
- Ramadani, V. (2012), "The importance of angel investors in financing the growth of small and medium sized enterprises", *International Journal of Academic Research in Business and Social Sciences*, Vol. 2 No. 7, pp. 306-322.
- Robertson, K., Lautsch, B.A. and Hannah, D.R. (2024), "Living life 'to the core': enacting a calling through configurations of multiple jobs", *Human Relations*, Vol. 78 No. 4, 00187267241251956.
- Rose, D.S. (2014), *Angel Investing*, John Wiley & Sons, Hoboken, NJ.
- Rosso, B.D., Dekas, K.H. and Wrzesniewski, A. (2010), "On the meaning of work: a theoretical integration and review", *Research in Organizational Behavior*, Vol. 30C, pp. 91-127, doi: [10.1016/j.riob.2010.09.001](https://doi.org/10.1016/j.riob.2010.09.001).
- Ryan, R.M. and Deci, E.L. (2000), "Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being", *American Psychologist*, Vol. 55 No. 1, pp. 68-78, doi: [10.1037//0003-066x.55.1.68](https://doi.org/10.1037//0003-066x.55.1.68).
- Segars, A.H. and Grover, V. (1998), "Strategic information systems planning success: an investigation of the construct and its measurement", *MIS Quarterly: Management Information Systems*, Vol. 22 No. 2, pp. 139-162, doi: [10.2307/249393](https://doi.org/10.2307/249393).
- Shane, S. (2009), *Fool's Gold: The Truth Behind Angel Investing in America*, Oxford University Press, New York.
- Shang, W., Zhang, G. and Wang, Y. (2022), "Career calling and job satisfaction of ideological and political education teachers in China: the mediating role of occupational self-efficacy", *Sustainability*, Vol. 14 No. 20, 13066, doi: [10.3390/su142013066](https://doi.org/10.3390/su142013066).
- Sobel, M.E. (1982), "Asymptotic intervals for indirect effects in structural equations models", in Leinhardt, S. (Ed.), *Sociological Methodology*, Jossey-Bass, San Francisco.
- Sturges, J. and Bailey, C. (2023), "Walking back to happiness: the resurgence of latent callings in later life", *Human Relations*, Vol. 76 No. 8, pp. 1256-1284, doi: [10.1177/00187267221095759](https://doi.org/10.1177/00187267221095759).
- Thompson, J.A. and Bunderson, J.S. (2019), "Research on work as a calling...and how to make it matter", *Annual Review of Organizational Psychology and Organizational Behavior*, Vol. 6 No. 1, pp. 421-443, doi: [10.1146/annurev-orgpsych-012218-015140](https://doi.org/10.1146/annurev-orgpsych-012218-015140).
- Tosti-Kharas, J., Dobrow, S.R. and Kappes, H.B. (2024), "Do what you love and you'll never work a day in your life? Testing fundamental assumptions about calling, effort, and enjoyment", *Journal of Management Scientific Reports*, Vol. 2 No. 1, pp. 100-130, doi: [10.1177/27550311241233673](https://doi.org/10.1177/27550311241233673).
- Ugwu, F.O. and Onyishi, I.E. (2018), "Linking perceived organisational frustration to work engagement: the moderating roles of sense of calling and psychological meaningfulness", *Journal of Career Assessment*, Vol. 26 No. 2, pp. 220-239, doi: [10.1177/1069072717692735](https://doi.org/10.1177/1069072717692735).
- Vallerand, R.J., Blanchard, C., Mageau, G.A., Koestner, R., Ratelle, C., Léonard, M., Gagné, M. and Marsolais, J. (2003), "Les passions de l'âme: on obsessive and harmonious passion", *Journal of Personality and Social Psychology*, Vol. 85 No. 4, pp. 756-767, doi: [10.1037/0022-3514.85.4.756](https://doi.org/10.1037/0022-3514.85.4.756).

- Weiss, J.W., Skelley, M.F., Haughey, J.C. and Hall, D. (2003), "Calling, new careers and spirituality a reflective perspective for organizational leaders and professionals", in Pava, M.L. and Primeaux, P. (Eds), *Spiritual Intelligence at Work: Meaning, Metaphor, and Morals*, Emerald Group Publishing Limited, pp. 175-201, doi: [10.1016/S1529-2096\(03\)05009-0](https://doi.org/10.1016/S1529-2096(03)05009-0).
- Wiltbank, R. (2009), *Siding with the Angels - Business Angel Investing – Promising Outcomes and Effective Strategies*, British Business Angels Association, London.
- Wirtz, P., Bonnet, C. and Cohen, L. (2017), "Angel cognition, human capital, and active involvement in business-angel-networks' governance and management", *Emerging Trends in Entrepreneurial Finance Conference*, SSRN, p. 40, doi: [10.2139/ssrn.2919383](https://doi.org/10.2139/ssrn.2919383).
- Wrzesniewski, A., Mccauley, C., Rozin, P. and Schwartz, B. (1997), "Jobs-careers-and-calling", *Journal of Research in Personality*, Vol. 31 No. 1, pp. 21-33, doi: [10.1006/jrpe.1997.2162](https://doi.org/10.1006/jrpe.1997.2162).
- Xie, B., Xia, M., Xin, X. and Zhou, W. (2016), "Linking calling to work engagement and subjective career success: the perspective of career construction theory", *Journal of Vocational Behavior*, Vol. 94 No. 1, pp. 70-78, doi: [10.1016/j.jvb.2016.02.011](https://doi.org/10.1016/j.jvb.2016.02.011).
- Zimmermann, R., Ferreira, L. and Moreira, A.C. (2020), "How supply chain strategies moderate the relationship between innovation capabilities and business performance", *Journal of Purchasing and Supply Management*, Vol. 26 No. 5, pp. 100-658, doi: [10.1016/j.pursup.2020.100658](https://doi.org/10.1016/j.pursup.2020.100658).

### Further reading

- Ahn, J., Dik, B.J. and Hornback, R. (2017), "The experience of career change driven by a sense of calling: an interpretative phenomenological analysis approach", *Journal of Vocational Behavior*, Vol. 102, pp. 48-62, doi: [10.1016/j.jvb.2017.07.003](https://doi.org/10.1016/j.jvb.2017.07.003).
- Blaseg, D. and Hornuf, L. (2024), "Playing the business angel: the impact of well-known business angels on venture performance", *Entrepreneurship Theory and Practice*, Vol. 48 No. 1, pp. 171-204, doi: [10.1177/10422587231153603](https://doi.org/10.1177/10422587231153603).
- Crocker, J. and Park, L.E. (2004), "The costly pursuit of self-esteem", *Psychological Bulletin*, Vol. 130 No. 3, pp. 392-414, doi: [10.1037/0033-2909.130.3.392](https://doi.org/10.1037/0033-2909.130.3.392).
- Kariv, D., Krueger, N., Cisneros, L. and Kashy-Rosenbaum, G. (2023), "Embedding the marketing angle into the pursuit of entrepreneurial propensity: roles of perceived feasibility and desirability and stakeholders' support", *International Journal of Entrepreneurial Behaviour and Research*, Vol. 31 Nos 2/3, pp. 587-608, doi: [10.1108/IJEBR-02-2022-0171](https://doi.org/10.1108/IJEBR-02-2022-0171).
- Klyver, K., Lindsay, N.J., Kassicieh, S.K. and Hancock, G. (2017), "Altruistic investment decision behavior in early-stage ventures", *Small Business Economics*, Vol. 48 No. 1, pp. 135-152, doi: [10.1007/s11187-016-9771-4](https://doi.org/10.1007/s11187-016-9771-4).
- Mahapatra, T. (2014), "The exit phase of individual angels, angel syndicates and corporate angels", *Journal of Management Research*, Vol. 14 No. 2, pp. 87-100.
- Mason, C.M., Harrison, R. and Botelho, T. (2015), "Business angel exits: strategies and processes", in Hussain, J.G. and Scott, J.M. (Eds), *Research Handbook on Entrepreneurial Finance*, Edward Elgar, Cheltenham, UK, pp. 102-124.
- Morrisette, S.G. (2007), "A profile of angel investors", *Journal of Private Equity*, Vol. 10 No. 3, pp. 52-66, doi: [10.3905/jpe.2007.686430](https://doi.org/10.3905/jpe.2007.686430).
- Sullivan, M.K. and Miller, A. (1996), "Segmenting the informal venture capital market: economic, hedonistic, and altruistic investors", *Journal of Business Research*, Vol. 36 No. 1, pp. 25-34, doi: [10.1016/0148-2963\(95\)00160-3](https://doi.org/10.1016/0148-2963(95)00160-3).
- White, B.A. and Dumay, J. (2017), "Business angels: a research review and new agenda", *Venture Capital*, Vol. 19 No. 3, pp. 183-216, doi: [10.1080/13691066.2017.1290889](https://doi.org/10.1080/13691066.2017.1290889).

### Corresponding author

Maria João Carneiro can be contacted at: [mjcarneiro@ua.pt](mailto:mjcarneiro@ua.pt)

For instructions on how to order reprints of this article, please visit our website:

[www.emeraldgroupublishing.com/licensing/reprints.htm](http://www.emeraldgroupublishing.com/licensing/reprints.htm)

Or contact us for further details: [permissions@emeraldinsight.com](mailto:permissions@emeraldinsight.com)