



Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.



Exploring the future of startup leadership development

Lisa Prommer^a, Victor Tiberius^a, Sascha Kraus^{b,*}

^a University of Potsdam, Faculty of Economics and Social Sciences, Potsdam, Germany

^b Durham University, Durham University Business School, Durham, United Kingdom



ARTICLE INFO

Keywords:

Startup
Leadership development
Delphi study
Forecasting
Foresight

ABSTRACT

Leadership development (LD) is a crucial success factor for startups to increase their human capital, survival rate, and overall performance. However, only a minority of young ventures actively engage in LD, and research rather focuses on large corporations and SMEs, which do not share the typical startup characteristics such as a rather young workforce, flat hierarchies, resource scarcity, and high time pressure. To overcome this practical and theoretical lack of knowledge, we engage in foresight and explore which leadership development techniques will be most relevant for startups within the next five to ten years. To formulate the most probable scenario, we conduct an international, two-stage Delphi study with 27 projections among industry experts. According to the expert panel, the majority of startups will engage in leadership development over the next decade. Most startups will aim to develop the leadership capabilities of their workforce as a whole and use external support. The most prominent prospective LD measures in startups include experiential learning methods, such as action learning, developmental job assignments, multi-rater feedback, as well as digital experiential learning programs, and developmental relationships such as coaching in digital one-to-one sessions. Self-managed learning will play a more important role than formal training.

1. Introduction

Firms develop the leadership capabilities of their workforce to increase their firm competitiveness and performance (Conger, 1998; Day et al., 2014; Garavan et al., 2016; Lowe and Gardner, 2000). Leadership development (LD) can be defined as “the process of preparing individuals and collectives to effectively engage in leading-following interactions” (DeRue and Myers, 2014, p. 835). It also refers to the development of social capital by improving workplace relationships, collective meaning, and interpersonal competence (Day, 2000; Van Velsor et al., 2010).

Especially for startups, leadership capital is considered to be a crucial determinant of their success (Cardon and Stevens, 2004; Ensley et al., 2006a,2006b; Gupta et al., 2004; Vecchio, 2003; Thakur, 1999; Kamm et al., 1990; Wiedeler and Kammerlander, 2019). There is a special need for startup leadership development (SLD) as new ventures often have difficulties in recruiting new employees (Barber et al., 1999) and often employ young, rather inexperienced staff (Kempster and Cope, 2010; Ouimet and Zarutskie, 2014). They also have fewer structures and routines that could serve as leadership substitutes (Ensley et al., 2006a,2006b; Kerr and Jermier, 1978). The high failure rate of startups (Carroll and Hannan, 2000; Singh et al., 1986; Stinchcombe, 1965) could potentially be reduced by SLD measures.

Despite its importance, SLD is under-developed in practice and research is scarce, as it rather focuses on established large firms (Smith et al., 1999) and SMEs (Jennings and Beaver, 1997), which, however, differ in their characteristics. From the broad and

* Corresponding author.

E-mail addresses: lprommer@yahoo.com (L. Prommer), tiberius@uni-potsdam.de (V. Tiberius), sascha.kraus@zfke.de (S. Kraus).

ever-evolving variety of LD techniques (DeRue and Myers, 2014; Hernez-Broome and Hughes, 2004), firms have to select those which best fit their specific needs and resources (Collins and Holton, 2004). For startups, the scarcity of financial resources (Davila et al., 2003; Garavan et al., 2016; Hill and Stewart, 2000; Ensley et al., 2002; Smith et al., 1999; Stinchcombe, 1965) and high time pressure (Bryan, 2006) limit SLD options (Cardon and Stevens, 2004).

Against this background, we employ strategic foresight (Fergnani, 2020; Iden et al., 2017; Rohrbeck et al., 2015; Semke and Tiberius, 2020) and ask the research question: Which SLD techniques will be most relevant within the next five to ten years? To formulate a plausible scenario, we conduct an international, two-stage Delphi study.

Our results forecast that most startups will, with external support, actively develop their leadership capital across the entire organization. Startups will mainly use experiential learning methods and developmental relationships to advance their leadership capacities. Self-managed learning activities will be important, but somewhat less predominant.

2. Formulation of projections

2.1. Dissemination and stakeholders of SLD

Due to the relevance of leadership capital for startup performance, young ventures might increase their SLD efforts. All of the following projections relate to the time horizon of the next five to ten years. *P1: Most startups will engage in LD programs.*

As the majority of startups has limited human resources and, among them, LD experience is scarce (Quimet and Zarutskie, 2014), startups might prefer external LD providers. *P2: Most startups will heavily rely on external support to develop their leaders, rather than hiring training staff.*

Due to their flat hierarchies, many startup employees have to engage in shared leadership tasks (Ensley et al., 2006a, 2006b). Equipping lower echelons with leadership skills also helps to build a leadership pipeline (Griffith et al., 2019). *P3: Most startups will develop not only (prospective) executives, but the leadership skills of all employees, regardless of their formal positions.*

2.2. Core startup leadership development methods

We distinguish between formal training and education, experiential learning, developmental relationships, and self-managed learning (Van Velsor et al., 2010; Yukl, 2010). While P4 to P7 address the prevalence of the four main categories, the following sections will examine each category in greater detail. *The predominant form(s) of LD in startups will be ... P4: formal training and education, which occurs during a defined time period and is conducted away from the trainee's immediate worksite (e.g., executive education or leadership seminars). P5: experiential learning, i.e., learning through hands-on experience within operational job assignments (e.g., action learning or job rotation). P6: developmental relationships, i.e., social/peer learning formats (e.g., coaching, mentoring, or communities of exchange). P7: self-managed learning, conducted by individuals on their own (e.g., reading books, watching videos, listening to audio files, or using interactive computer programs).*

2.3. Formal training and education

In the flipped or inverted classroom concept, students use class time for knowledge application and group-based problem-solving activities, whereas they acquire new knowledge off classroom. This method increases student engagement (Abeysekera and Dawson, 2015; Bishop and Verleger, 2013; Gilboy et al., 2015), saves time, and can be more effective than traditional didactics (Mason et al., 2013; Missildine et al., 2013; O'Flaherty and Phillips, 2015). *P8: Most formal training will occur in the form of flipped classrooms, i.e., the theoretical part is learned outside the classroom, and the practical part is learned in class.*

Online education allows participants to learn anytime, anywhere (Arbaugh, 2000; Jiang and Ting, 2000; Rourke et al., 1999), enables access to far-distanced trainers (Means et al., 2013), and saves costs (Bell et al., 2017; Jung and Rha, 2000; Noe et al., 2014; Salas et al., 2012; Sally, 2003; Volery and Lord, 2000). As a consequence, online learning solutions are growing rapidly (Kimoglu et al., 2017; Stone et al., 2015). *P9: A large proportion of instructor-led training for startup LD will be replaced by digital learning formats (e.g., Massive Open Online Courses or virtual classrooms).*

Face-to-face formats might not be completely replaced, but enriched with online sessions. This blended learning is considered to be more efficient and effective (Garrison and Kanuka, 2004; Means et al., 2013). It also increases student satisfaction (Tang et al., 2005). *P10: Within the next five to 10 years, instructor-led classroom training will, to a large extent, be combined with web-/technology-based formats and form blended learning programs.*

2.4. Experiential learning

Learning from experience is often considered to be the most effective LD method, as it refers to real work situations (Carter and Jones-Evans, 2006; Kolb and Kolb, 2005; Leal-Rodriguez and Albort-Morant, 2019; McCall, 2004; Van Velsor et al., 2010; Yukl, 2010). However, the sustaining learning effects might fall short if too task-focused (Day, 2000). *P11: The majority of startups will have set up formal structures for planned experiential learning for LD.*

As educational technology (EdTech) is advancing, also experiential learning might be offered online. *P12: The majority of startups will use digital experiential learning programs (e.g., serious games, simulations, or e-action learning) for LD.*

Also action learning is considered as an effective LD tool (Boshyk, 2002; Gibb, 2009; Keys, 1994). It allows participants to solve real,

novel, and complex problems (Carter and Jones-Evans, 2006; Revans, 1982) and to learn rapidly in real-time (Skipton Leonard and Lang, 2010). P13: *The majority of startups will use action learning (e.g., working in mixed small groups on real company-based projects, such as developing a new strategy or solving a problem) for LD.*

Developmental job assignments can have a strong learning impact as they involve considerable challenges (Van Velsor et al., 2010). Stretching job assignments also fosters succession planning (Hall and Seibert, 1992). P14: *The majority of startups will use developmental job assignments (e.g., job rotation or internal or external work placements) for LD.*

Feedback can be an effective LD tool (Atwater and Waldman, 1998; Day, 2000; Seifert and Yukl, 2010; Van Rensburg and Prideaux, 2006) as it can increase self-awareness (Barney and Hansen, 1994) and self-efficacy (Gist and Mitchell, 1992). Also the learning transfer from other LD initiatives can be improved with feedback (Kluger and DeNisi, 1996; Smith-Jentsch et al., 2001). Multi-rater feedback can capture varying performance perceptions (Day, 2000). P15: *The majority of startups will use multi-rater feedback and regular assessments as an integral part of most LD initiatives.*

Outdoor challenges can improve self-awareness, self-efficacy, and teamwork (Glass and Benshoff, 2002; Hattie et al., 1997; Jones and Oswick, 2007). However, they are time-consuming and costly. P16: *Outdoor challenges will not play an important role in SLD.*

Especially large firms use assessment centers to identify budding leaders and to define training needs (Hinrichs, 1978; Thornton, 1992; Wollowick and McNamara, 1969; Yukl, 2010). The feedback from these measures can improve participants' leadership performance (Byham, 1971; Engelbrecht and Fischer, 1995). However, they involve high time and cost requirements. P17: *Assessment centers will not play an important role in SLD.*

2.5. Developmental relationships

Coaching, as a widely popular and effective LD tool (Evers et al., 2006; Feldman and Lankau, 2005; Grant, 2014; Jones et al., 2015), uses collaborative, retrospective, and target-focused elements to reach goals set out by the coachee (Smither, 2011). P18: *The majority of startups will use regular coaching for LD.*

Leaders play an important role in HR development (Ellinger and Bostrom, 1999; Evered and Selman, 1989) and can also be involved in LD (Groves, 2007). P19: *Leaders will play an important role in their SLD initiatives, as many will be involved in teaching, facilitating, or coaching.*

To be effective, coaches need a strong understanding of the business and the coachee (Diedrich and Kilburg, 2001; Wasylshyn, 2003). Therefore, internal rather than external coaches have shown a stronger impact (Jones et al., 2015) and are less costly. P20: *The majority of startup leaders will be coached by other leaders or internal coaches/peers rather than by external coaches.*

Startups can also engage external coaches for online sessions, which are flexible and less costly. First studies suggest that e-coaching is comparably effective as offline coaching (Fielden and Hunt, 2011; Geissler et al., 2014; Jones et al., 2015; Rock et al., 2012, 2014). P21: *External coaching for LD will occur mainly via digital technologies rather than face to face.*

Compared to one-to-one coachings, peer group coachings are more cost-effective and allow participants to learn from each other (Aas and Vavik, 2015). They can increase their commitment, mutual trust, and collaboration (Kets de Vries, 2005). P22: *The majority of startups will use group coaching rather than one-on-one coaching for LD.*

Mentors foster the job performance and career success (Eby et al., 2008; Wanberg et al., 2003; Ragins et al., 2000) and thus the overall development of their protégé (Mullen, 1994; Wanberg et al., 2003). Relying on available resources, they are affordable (Corner, 2014). P23: *The majority of startups will set up internal mentoring structures as an integral part of their LD.*

Firms can benefit from interorganizational alliances by knowledge exchange (Franco and Esteves, 2020; Liebeskind et al., 1996; Marchiori and Franco, 2020; Powell, 1990) and interorganizational learning (Almeida et al., 2003; Doz, 1996; Powell et al., 1996; Von der Oelsnitz and Tiberius, 2007). Such collaborations could also address SLD. P24: *The majority of startups will form networks and communities of exchange with other startups, in which they support each other regarding their LD activities.*

2.6. Self-managed learning

In self-managed or self-directed learning, the learner decides what, when, and how to learn (Abbott and Dahmus, 1992; Guglielmino and Guglielmino, 2001). As founders are highly self-directed regarding the entrepreneurial process, this learning style clearly relates to their behavior (Fust et al., 2017; Harms, 2015). However, it is unclear if this also applies to startup managers and employees that are hired by the founder (Hubner, 2020). Online learning formats already addressed above are predestined for self-managed learning. P25: *Self-managed learning activities for SLD will take place largely via digital learning formats (e.g., online learning, videos, games, or quizzes).*

Collaborative learning can be implemented online. In social networks, peers can exchange knowledge and support (Confessore and Kops, 1998). P26: *The participation and exchange in digital social networks (e.g., peer learning communities or e-mentoring platforms) will play an important role in startup leaders' self-managed learning activities.*

The effectiveness of self-managed techniques is still insufficiently studied (Day et al., 2014). Learning performance is highly dependent on motivation and self-learning skills (Boyce et al., 2010; Song and Hill, 2007), and not all employees may have the prerequisites. Self-managed learning is only effective when aligned with the business objectives and other LD activities (Confessore and Kops, 1998; Guglielmino and Guglielmino, 2001). P27: *Self-managed learning activities for SLD will show low success rates.*

3. Methodology

To develop the aspired scenario, an international, two-stage Delphi study was conducted. The method is used for forecasting

developments characterized by uncertainty or a lack of empirical evidence (Powell, 2003; Skulmoski et al., 2007) and has been employed more than 175 times in business research since 1975 (Flostrand et al., 2020), also in HR development (McGuire and Cseh, 2006; Morris et al., 2013; Olshfski and Joseph, 1991). Whereas the scenario technique aims to identify multiple future scenarios (Gausemeier et al., 1998; Tiberius, 2019; Tiberius et al., 2020), Delphi studies focus on the trend scenario, from today's view.

We preferred the Delphi method over other forecasting methods due to a reasonable relation between benefits and disadvantages. For example, crowdsourcing could also be used for forecasting (Flostrand, 2017). However, a much larger sample of lay-persons would have been required. This would have increased costs and would probably have led to a poorer forecasting accuracy as SLD is a very specific field where lay persons can hardly contribute (Rowe and Wright, 1999). Prediction markets as another alternative method would have involved much higher technical requirements and a multi-round procedure with many participants who continuously "trade" all projections (Arrow et al., 2008; Tiberius and Rasche, 2011). Prediction markets also show a lower accuracy than Delphi studies, and participants are less satisfied with the process (Graefe and Armstrong, 2011).

To select the study participants, we conducted purposive sampling (Guest et al., 2006) based on expertise (McKenna, 1994; Welty, 1971; Winkler and Moser, 2016). As usual for Delphi studies, we searched for heterogeneous experts to ensure the consideration of divergent views (Gordon, 1994; Rowe and Wright, 1999) and to reduce the groupthink or bandwagon effect (Janis, 1972; Winkler and Moser, 2016). As a constituent characteristic of the Delphi technique, the same panel is asked to assess the projections (at least) twice, whereby the experts are shown the first round results in the second round with the goal of an increasing consensus (Dalkey and Helmer, 1963; Hasson et al., 2000; Linstone and Turoff, 1975; Rowe and Wright, 1999; Skulmoski et al., 2007; Tiberius and Hirth, 2019; Woudenberg, 1991). In the first round, 53 experts participated, and in the second 38 panelists remained. Table 1 shows the detailed panel structure.

A pretest was conducted between 16 and 25 January 2020, the first survey round from 1 to 15 February 2020, and the second from 24 February to 9 March 2020. The panelists rated the 27 projections on a four-point Likert scale (1 = "strongly disagree," 2 = "somewhat disagree," 3 = "somewhat agree," 4 = "strongly agree"). The even scale was chosen to avoid the tendency to the middle.

4. Results

The results of both Delphi rounds can be found in Table 2. The median ($x_{0.5}$) rather than the mean is preferred, as it is more resistant to outliers (Gordon, 1994; Rowe and Wright, 1999). The interquartile range (IQR = $x_{0.75} - x_{0.25}$) indicates the scattering around the median and shows the dispersion of opinions, which should stay stable or decrease in the second round. The lower the IQR, the higher is the level of consensus.

Experts strongly agreed with P1, P5, P6, P18, and P19, somewhat agreed to P2, P3, P7 to P10, P12 to P17, P20, P21, and P23 to P27, somewhat disagreed with P4, P11, and P22. No projection was completely rejected. The general response tendency did not change significantly between the two rounds. For P1 and P19, the experts' acceptance slightly increased. For P14, P15, P17, P18, P21, P22, and P25, the experts reached a higher overall consensus. No IQR was higher than 1. Therefore, the iteration was ended.

Based on these results, the following scenario can be formulated: The majority of startups will engage in LD programs over the next five to 10 years. In doing so, startups will aim to develop the leadership abilities of all employees, not only budding leaders. To put SLD into practice, startups will rely largely on outsourcing rather than hiring. Experiential learning and developmental relationships will be the pivotal SLD methods. Self-managed learning will be somewhat less predominant. Also formal training and education will not be the

Table 1
Panel demographics.

	1st Round (N = 53)		2nd Round (N = 38)	
Age Group	n	%	n	%
18–24 years	0	0.0	0	0.0
25–34 years	11	20.8	8	21.1
35–44 years	16	30.2	12	31.6
45–54 years	15	28.3	10	26.3
55–64 years	7	13.2	5	13.2
65 or older	4	7.5	3	7.9
Regions	n	%	n	%
AMER	12	22.6	8	21.1
APAC	9	17.0	7	18.4
EMEA	30	56.6	21	55.3
Other/global	2	3.8	2	5.3
Field of work ^a	n	%	n	%
LD researcher	9	15.5	7	16.3
Startup employee	8	13.8	6	14.0
Startup manager/founder	15	25.9	11	25.6
Startup service provider	21	36.2	15	34.9
State institution employee	1	1.7	1	2.3
Other	4	6.9	3	7.0

^a Multiple entries were possible.

Table 2

Descriptive statistics.

Projection	1st Round (N = 53)		2nd Round (N = 38)		Differences	
	$x_{0.5}$	IQR	$x_{0.5}$	IQR	$\Delta x_{0.5}$	ΔIQR
Section 1: Dissemination and Stakeholders of Startup LD						
1: Engagement in LD	3	1	3.5	1	0.5	0
2: Relying on external support	3	1	3	1	0	0
3: LD for all employees	3	1	3	1	0	0
Section 2: Core Leadership Development Methods						
4: Formal Training and Education	2	1	2	1	0	0
5: Experiential Learning	4	1	4	1	0	0
6: Developmental Relationships	4	1	4	1	0	0
7: Self-managed Learning	3	1	3	1	0	0
Section 3: Formal Training and Education						
8: Flipped Classroom	3	1	3	1	0	0
9: Digital Learning	3	1	3	1	0	0
10: Blended Learning	3	1	3	1	0	0
Section 4: Experiential Learning						
11: Formal Structures for Experiential Learning	2	1	2	1	0	0
12: Digital Experiential Learning	3	1	3	1	0	0
13: Action Learning	3	1	3	1	0	0
14: Developmental Job Assignments	3	1	3	0	0	-1
15: Multi-rater Feedback and Regular Assessments	3	2	3	0.75	0	-1.25
16: Outdoor Challenges	3	2	3	1	0	-1
17: Assessment Centers	3	1	3	0.75	0	-0.25
Section 5: Developmental Relationships						
18: Regular Coaching	4	1	4	0	0	-1
19: Involvement of Leaders	3	1	4	1	1	0
20: Internal Rather Than External Coaches	3	1	3	1	0	0
21: Digital External Coaching	3	2	3	1	0	-1
22: Group Coaching	2	1	2	0.75	0	-0.25
23: Internal Mentoring Structures	3	1	3	1	0	0
24: Networks with other Startups	3	1	3	1	0	0
Section 6: Self-Managed Learning						
25: Digital Self-Managed Learning	3	1	3	0	0	-1
26: Digital Social Networks	3	0	3	0	0	0
27: Low Success Rates of Self-Managed Learning	3	1	3	1	0	0

$x_{0.5}$ = median; IQR = interquartile range.

main SD instruments. Experiential learning will occur in a rather informal and unplanned manner. Digital experiential learning programs, such as serious games or simulations, will be used by the majority of startups. The same applies to action learning, developmental job assignments, as well as regular performance evaluation and multi-rater feedback. Outdoor challenges and assessment centers, however, will not have a high relevance. Regular coaching will be the most widely used form of developmental relationships. Coaching will occur mainly online, and one-on-one coachings will be preferred over group coachings. To this end, startups will rely on internal rather than external coaches. Internal mentoring programs and SLD support networks and communities of exchange with other startups will be popular. In general, startup managers will play an integral role in SLD. Self-managed learning will largely occur online. Participation and exchange in digital social networks will also play an important role. However, self-managed learning for SLD will probably show low success rates. Where formal training and education is applied, it will most often occur in a flipped classroom concept, and will be widely replaced and combined with digital learning formats.

5. Discussion

This study explored which LD tools startups will most likely use in the next five to ten years. The expert panel agreed to almost all projections. Therefore, our discussion focuses on two aspects of these findings: Why were three projections disagreed with? And can the high overall agreement be considered trustworthy?

Regarding the first question, the experts expect startups to predominantly engage in informal rather than formal training formats (P4). Executive education and leadership seminars as the two examples mentioned in the projection require the employee to leave the workplace. Accordingly, the time spent for learning is not available for work. Considering startups' scarce resources (Davila et al., 2003; Garavan et al., 2016; Hill and Stewart, 2000; Ensley et al., 2002; Smith et al., 1999; Stinchcombe, 1965) and time constraints (Bryan, 2006), it is plausible for them to favour informal training settings, which better comply with their characteristics such as lean structures and processes and a strong emphasis on cost-efficiency. The same argumentation applies to the rejected P11, which assumed that startups would set up formal structures for planned experiential learning. Considering the cost factor, it might, at first sight, surprise that P22, suggesting a primacy of group over one-to-one coachings, was rejected. However, P20 and P21 placed immediately before P22 suggested the predominant use of internal and online coachings, which are even more cost-conscious. A closer look at the different respondent segments reveals that only startup service providers were less cost- and time-sensitive and had a stronger tendency towards

formal trainings, which makes sense as they do not have to deal with resource scarcity but, in contrast, generate their revenues by selling formal trainings.

Regarding the second question, the overall agreement has to be viewed with some differentiation. In general, Delphi studies might suffer from the desirability bias, the risk that the experts rated according to their wishful thinking rather than the probability (Ecken et al., 2011; Winkler and Moser, 2016). Many of the addressed SLD methods might sound attractive but when it comes to their implementation, they could turn out inefficient. However, it has to be noted that the panel strongly agreed only to five projections, whereas most projections only received a limited agreement. Therefore, the scenario implies a nuanced judgment.

As with most research, our Delphi study implies several limitations (Studen and Tiberius, 2020). First, despite the broad acceptance of the Delphi technique, the scenario is not guaranteed to come true in every detail. Even though no forecasting methodology can provide full forecast accuracy, future researchers might employ other techniques such as crowdsourcing or prediction markets. Second, the number of projections had to be limited to avoid a low response and high dropout rate. Future research could explore a narrower scope of SLD aspects in greater detail. As proposed by some panelists, future studies could also differentiate between different startup stages or sizes. Third, despite efforts to assemble a balanced panel, a regional bias towards EMEA can not be ruled out. Future research could have a stronger focus on other regions. Fourth, the economic crisis caused by the COVID-19 pandemic pressurizes entrepreneurial ventures (Kraus et al., 2020; Kuckertz et al., 2020) and thus might change SLD activities in the future in a way not predicted by this study.

6. Conclusion

The Delphi scenario developed in this study suggests that startups will engage in LD and, in doing so, focus on informal and cost-conscious learning arrangements. Additionally, advancements in learning technology will play an important role in the future of SLD.

Our findings contribute to the largely unexplored field of research on the intersection of startups and LD as it addresses an under-researched success factor. It also contributes to LD research as SLD requirements differ in regards to context factors. Scholars can build on our findings and examine the suitability of the suggested training forms in the startup context. Entrepreneurs and LD professionals can adjust their SLD activities to the practically relevant insights from our developed scenario.

Funding

This work received no funding.

Author statement

Lisa Prommer: Conceptualization; Methodology; Data Curation; Formal analysis; Writing - Original Draft. Victor Tiberius: Conceptualization; Methodology; Writing - Original Draft; Writing - Review & Editing. Sascha Kraus: Conceptualization; Writing - Original Draft; Writing - Review & Editing.

Declaration of competing interest

None.

References

- Aas, M., Vavik, M., 2015. Group coaching: a new way of constructing leadership identity? *Sch. Leader. Manag.* 35 (3), 251–265.
- Abbott, J., Dahmus, S., 1992. Assessing the appropriateness of self-managed learning. *J. Manag. Dev.* 11 (1), 50–60.
- Abeysekera, L., Dawson, P., 2015. Motivation and cognitive lead in the flipped classroom: definition, rationale and a call for research. *High Educ. Res. Dev.* 34 (1), 1–14.
- Almeida, P., Dokko, G., Rosenkopf, L., 2003. Startup size and the mechanisms of external learning: increasing opportunity and decreasing ability? *Res. Pol.* 32 (2), 301–315.
- Arbaugh, J.B., 2000. Virtual classroom characteristics and student satisfaction with internet-based MBA courses. *J. Manag. Educ.* 24 (1), 32–54.
- Arrow, K.J., Forsythe, R., Gorham, M., Hahn, R., Hanson, R., Ledyard, J.O., et al., 2008. The promise of prediction markets. *Science* 320 (5878), 877.
- Atwater, L., Waldman, D., 1998. 360 Degree feedback and leadership development. *Leader. Q.* 9 (4), 423–426.
- Barber, A.E., Wesson, M.J., Roberson, Q.M., Taylor, M.S., 1999. A tale of two job markets: organizational size and its effects on hiring practices and job search behavior. *Person. Psychol.* 52 (4), 841–868.
- Barney, J.B., Hansen, M.H., 1994. Trustworthiness as a source of competitive advantage. *Strat. Manag. J.* 15 (S1), 175–190.
- Bell, B.S., Tannenbaum, S.I., Ford, J.K., Noe, R.A., Kraiger, K., 2017. 100 years of training and development research: what we know and where we should go. *J. Appl. Psychol.* 102 (3), 305–323.
- Bishop, J.L., Verleger, M.A., 2013. The flipped classroom: a survey of the research". In: ASEE National Conference Proceedings, vol. 30, pp. 1–18, 9.
- Boshyk, Y., 2002. Action Learning Worldwide: Experiences of Leadership and Organizational Development. Palgrave Macmillan, London, UK.
- Boyce, L.A., Zaccaro, S.J., Wisecarver, M.Z., 2010. Propensity for self-development of leadership attributes: understanding, predicting, and supporting performance of leader self-development. *Leader. Q.* 21 (1), 159–178.
- Bryan, J., 2006. Training and performance in small firms. *Int. Small Bus. J.* 24 (6), 635–660.
- Byham, W.C., 1971. The assessment center as an aid in management development. *Train. Dev.* 25 (12), 10–22.
- Cardon, M.S., Stevens, C.E., 2004. Managing human resources in small organizations: what do we know? *Hum. Resour. Manag. Rev.* 14 (3), 295–323.
- Carroll, G.R., Hannan, M.T., 2000. Why corporate demography matters: policy implications of organizational diversity. *Calif. Manag. Rev.* 42 (3), 148–163.
- Carter, S., Jones-Evans, D., 2006. Enterprise and Small Business: Principles, Practice and Policy. Pearson Education, Harlow, England.

- Collins, D.B., Holton, E.F., 2004. The effectiveness of managerial leadership development programs: a meta-analysis of studies from 1982 to 2001. *Hum. Resour. Dev. Q.* 15 (2), 217–248.
- Confessore, S.J., Kops, W.J., 1998. Self-directed learning and the learning organization: examining the connection between the individual and the learning environment. *Hum. Resour. Dev. Q.* 9 (4), 365–375.
- Conger, J.A., 1998. Qualitative research as the cornerstone methodology for understanding leadership. *Leader. Q.* 9 (1), 107–121.
- Corner, J., 2014. The fast are eating the slow: mentoring for leadership development as a competitive method". *Ind. Commerc. Train.* 46 (1), 29–33.
- Dalkey, N., Helmer, O., 1963. An experimental application of the delphi method to the use of experts. *J. Inst. Manag. Sci.* 9 (3), 458–467.
- Davila, A., Foster, G., Gupta, M., 2003. Venture capital financing and the growth of startup firms. *J. Bus. Ventur.* 18 (6), 689–708.
- Day, D.V., 2000. Leadership development: a review in context. *Leader. Q.* 11 (4), 581–613.
- Day, D.V., Fleenor, J.W., Atwater, L.E., Sturm, R.E., McKee, R.A., 2014. Advances in leader and leadership development: a review of 25 years of research and theory. *Leader. Q.* 25 (1), 63–82.
- DeRue, D.S., Myers, C.G., 2014. Leadership development: a review and agenda for future research". In: Day, D.V. (Ed.), *The Oxford Handbook of Leadership and Organizations*. Oxford University Press, New York, NY), pp. 832–855.
- Diedrich, R.C., Kilburg, R.R., 2001. Further consideration of executive coaching as an emerging competency. *Consult. Psychol. J. Pract. Res.* 53 (4), 203–204.
- Doz, Y., 1996. The evolution of cooperation in strategic alliances: initial conditions or learning processes? *Strat. Manag. J.* 17 (S1), 55–83.
- Eby, L.T., Allen, T.D., Evans, S.C., Ng, T., DuBois, D.L., 2008. Does mentoring matter? A multidisciplinary meta-analysis comparing mentored and non-mentored individuals. *J. Vocat. Behav.* 72 (2), 254–267.
- Ecken, P., Gnatzy, T., von der Gracht, H.A., 2011. Desirability bias in foresight: consequences for decision quality based on Delphi results. *Technol. Forecast. Soc. Change* 78 (9), 1654–1670.
- Ellinger, A., Bostrom, R., 1999. Managerial coaching behaviors in learning organizations. *J. Manag. Dev.* 18 (9), 752–771.
- Engelbrecht, A.S., Fischer, A.H., 1995. The managerial performance implications of a developmental assessment center process. *Hum. Relat.* 48 (4), 387–404.
- Ensley, M.D., Hmieleski, K.M., Pearce, C.L., 2006a. The importance of vertical and shared leadership within new venture top management teams: implications for the performance of startups. *Leader. Q.* 17 (3), 217–231.
- Ensley, M.D., Pearce, C.L., Hmieleski, K.M., 2006b. The moderating effect of environmental dynamism on the relationship between entrepreneur leadership behavior and new venture performance. *J. Bus. Ventur.* 21 (2), 243–263.
- Ensley, M.D., Pearson, A.W., Amason, A.C., 2002. Understanding the dynamics of new venture top management teams: cohesion, conflict, and new venture performance. *J. Bus. Ventur.* 17 (4), 365–386.
- Evered, R.D., Selman, J.C., 1989. Coaching and the art of management. *Organ. Dynam.* 18 (2), 16–32.
- Evers, W.J., Brouwers, A., Tomic, W., 2006. A quasi-experimental study on management coaching effectiveness. *Consult. Psychol. J. Pract. Res.* 58 (3), 174–182.
- Feldman, D.C., Lankau, M.J., 2005. Executive coaching: a review and agenda for future research. *J. Manag.* 31 (6), 829–848.
- Fernani, A., 2020. Corporate Foresight: A New Frontier for Strategy and Management. *Academy of Management Perspectives* (in press).
- Felden, S.L., Hunt, C.M., 2011. Online coaching: an alternative source of social support for female entrepreneurs during venture creation. *Int. Small Bus. J.* 29 (4), 345–359.
- Flostrand, A., 2017. Finding the future: crowdsourcing versus the delphi technique. *Bus. Horiz.* 60, 229–236.
- Flostrand, A., Pitt, L., Bridson, S., 2020. The Delphi Technique in Forecasting— A 42-year Bibliographic Analysis (1975–2017). *Technological Forecasting and Social Change* 150, forthcoming.
- Franco, M., Esteves, L., 2020. Inter-clustering as a network of knowledge and learning: multiple case studies. *J. Innovat. Knowl.* 5 (1), 39–49.
- Fust, A.P., Jenert, T., Winkler, C., 2017. Experiential or self-regulated learning: a critical reflection of entrepreneurial learning processes. *Enterpren. Res. J.* 8 (2), 1–11.
- Gausemeier, J., Fink, A., Schlake, O., 1998. Scenario management: an approach to develop future potentials. *Technol. Forecast. Soc. Change* 59 (2), 111–130.
- Garavani, T., Watson, S., Carberry, R., O'Brien, F., 2016. The antecedents of leadership development practices in SMEs: the influence of HRM strategy and practice. *Int. Small Bus. J.* 34 (6), 870–890.
- Garrison, D.R., Kanuka, H., 2004. Blended learning: uncovering its transformative potential in higher education. *Internet High Educ.* 7 (2), 95–105.
- Geissler, H., Hasenbein, M., Kanatouri, S., Wegener, R., 2014. E-coaching: conceptual and empirical findings of a virtual coaching programme. *J. Evid. Based Coach. Mentor.* 12 (2), 165–187.
- Gibb, A., 2009. Meeting the development needs of owner managed small enterprise: a discussion of the centrality of action learning. *Action Learn. Res. Pract.* 6 (3), 209–227.
- Gilboy, M.B., Heinrichs, S., Pazzaglia, G., 2015. Enhancing student engagement using the flipped classroom. *J. Nutr. Educ. Behav.* 47 (1), 109–114.
- Gist, M., Mitchell, T., 1992. Self-efficacy: a theoretical analysis of its determinants and malleability. *Acad. Manag. Rev.* 17 (2), 183–211.
- Glass, J.S., Benshoff, J.M., 2002. Facilitating group cohesion among adolescents through challenge course experiences. *J. Exp. Educ.* 25 (2), 268–277.
- Gordon, T.J., 1994. The delphi method. *Futur. Res. Methodol.* 2 (3), 1–30.
- Grant, A.M., 2014. The efficacy of executive coaching in times of organisational change. *J. Change Manag.* 14 (2), 258–280.
- Graef, A., Armstrong, J.S., 2011. Comparing face-to-face meetings, nominal groups, delphi and prediction markets on an estimation task. *Int. J. Forecast.* 27 (1), 183–195.
- Griffith, J.A., Baur, J.E., Buckley, M.R., 2019. Creating comprehensive leadership pipelines: applying the real options approach to organizational leadership development. *Hum. Resour. Manag. Rev.* 29 (3), 305–315.
- Groves, K.S., 2007. Integrating leadership development and succession planning best practices. *J. Manag. Dev.* 26 (3), 239–260.
- Guest, G., Bunce, A., Johnson, L., 2006. How many interviews are enough? An experiment with Data saturation and variability. *Field Methods* 18 (1), 59–82.
- Guglielmino, P.J., Guglielmino, L.M., 2001. Moving toward a distributed learning model based on self-managed learning. *SAM Adv. Manag. J.* 66 (3), 36.
- Gupta, V., MacMillan, I.C., Surie, G., 2004. Entrepreneurial leadership: developing and measuring a cross-cultural construct. *J. Bus. Ventur.* 19 (2), 241–260.
- Hall, D.T., Seibert, K.W., 1992. Strategic management development: linking organizational strategy, succession planning, and managerial learning. In: Montross, D.H., Shinkman, C.J. (Eds.), *Career Development: Theory and Practice*. Charles C Thomas, Springfield, IL), pp. 255–275.
- Harms, R., 2015. Self-regulated learning, team learning and project performance in entrepreneurship education: learning in a lean startup environment. *Technol. Forecast. Soc. Change* 100, 21–28.
- Hasson, F., Keeney, S., McKenna, H., 2000. Research guidelines for the Delphi survey technique. *J. Adv. Nurs.* 32 (4), 1008–1015.
- Hattie, J., Marsh, H.W., Neill, J.T., Richards, G.E., 1997. Adventure education and outward bound: out-of-class experiences that make a lasting difference. *Rev. Educ. Res.* 67 (1), 43–87.
- Hernez-Broome, G., Hughes, R.J., 2004. Leadership development: Past, present, and future. *Hum. Resour. Plann.* 27 (1), 24–32.
- Hill, R., Stewart, J., 2000. Human resource development in small organizations. *J. Eur. Ind. Train.* 24 (2/3/4), 105–117.
- Hinrichs, J.R., 1978. An eight-year follow-up of a management assessment center. *J. Appl. Psychol.* 63 (5), 596–601.
- Hubner, S., 2020. When entrepreneurs become leaders: how entrepreneurs deal with people management. *Int. J. Entrepreneurial Ventur.* 12 (2), 161–182.
- Iden, J., Methlie, L.B., Christensen, G.E., 2017. The nature of strategic foresight research – a systematic literature review. *Technol. Forecast. Soc. Change* 116, 87–97.
- Janis, I.L., 1972. Victims of Groupthink: A Psychological Study of Foreign-Policy Decisions and Fiascoes. Houghton Mifflin, Boston, MA.
- Jennings, P., Beaver, G., 1997. The performance and competitive advantage of small firms: a management perspective. *Int. Small Bus. J.* 15 (2), 63–75.
- Jiang, M., Ting, E., 2000. A study of factors influencing students' perceived learning in a web-based course environment. *Int. J. Educ. Telecommun.* 6 (4), 317–338.
- Jones, P.J., Oswick, C., 2007. Inputs and outcomes of outdoor management development: of design, dogma and dissonance. *Br. J. Manag.* 18 (4), 327–341.
- Jones, R.J., Woods, S.A., Guillaume, Y.R.F., 2015. The effectiveness of workplace coaching: a meta-analysis of learning and performance outcomes from coaching. *J. Occup. Organ. Psychol.* 89 (2), 249–277.
- Jung, I., Rha, I., 2000. Effectiveness and cost-effectiveness of online education: a review of the literature. *Educ. Technol.* 40 (4), 57–60.
- Kamm, J.B., Shuman, J.C., Seeger, J.A., Nurick, A.J., 1990. Entrepreneurial teams in new venture creation: a research agenda. *Enterpren. Theor. Pract.* 14 (4), 7–17.

- Kempster, S., Cope, J., 2010. Learning to lead in the entrepreneurial context. *Int. J. Entrepren. Behav. Res.* 16 (1), 5–34.
- Kerr, S., Jermier, J.M., 1978. Substitutes for leadership: their meaning and measurement. *Organ. Behav. Hum. Perform.* 22 (3), 375–403.
- Kets de Vries, M.F., 2005. Leadership group coaching in action: the Zen of creating high performance teams. *Acad. Manag. Perspect.* 19 (1), 61–76.
- Keys, L., 1994. Action learning: executive development of choice for the 1990s. *J. Manag. Dev.* 12 (8), 50–56.
- Kimiloglu, H., Ozturan, M., Kutlu, B., 2017. Perceptions about and attitude toward the usage of e-learning in corporate training. *Comput. Hum. Behav.* 72 (C), 339–349.
- Kluger, A.N., DeNisi, A., 1996. The effects of feedback interventions on performance: a historical review, a meta-analysis, and a preliminary feedback intervention theory. *Psychol. Bull.* 119 (2), 254–284.
- Kolb, A., Kolb, D., 2005. Learning styles and learning spaces: enhancing experiential learning in higher education. *Acad. Manag. Learn. Educ.* 4 (2), 193–212.
- Kraus, S., Clauß, T., Breier, M., Gast, J., Zardini, A., Tiberius, V., 2020. The economics of COVID-19: initial empirical evidence on how family firms in five European countries cope with the corona crisis. *Int. J. Entrepren. Behav. Res.* 26 (5), 1067–1092.
- Kuckertz, A., Brändle, L., Gaudig, A., Hinderer, S., Reyes, C.A.M., Prochotta, A., Steinbrink, K.M., Berger, E.S.C., 2020. Startups in times of crisis – a rapid response to the COVID-19 pandemic. *J. Bus. Ventur. Insights* 1, e00169.
- Leal-Rodriguez, A.L., Albort-Morant, G., 2019. Promoting innovative experiential learning practices to improve academic performance: empirical evidence from a Spanish Business School. *J. Innovat. Knowl.* 4 (2), 97–103.
- Liebeskind, J., Oliver, A., Zucker, L., Brewer, M., 1996. Social networks, learning, and flexibility: sourcing scientific knowledge in new biotechnology firms. *Organ. Sci.* 7 (4), 428–443.
- Linstone, H., Turoff, M., 1975. The Delphi Method: Techniques and Applications. Addison-Wesley, Reading, MA.
- Lowe, K.B., Gardner, W.L., 2000. Ten years of the leadership quarterly: contributions and challenges for the future. *Leader. Q.* 11 (4), 459–514.
- Marchiori, D., Franco, M., 2020. Knowledge transfer in the context of inter-organizational networks: foundations and intellectual structures. *J. Innovat. Knowl.* 5 (2), 130–139.
- Mason, G.S., Shuman, T.R., Cook, K.E., 2013. Comparing the effectiveness of an inverted classroom to a traditional classroom in an upper-division engineering course. *IEEE Trans. Educ.* 56 (4), 430–435.
- McCall, M.W., 2004. Leadership development through experience. *Acad. Manag. Perspect.* 18 (3), 127–130.
- McGuire, D., Cséh, M., 2006. The development of the field of HRD: a Delphi study. *J. Eur. Ind. Train.* 30 (8), 653–667.
- McKenna, H.P., 1994. The Delphi technique: a worthwhile research approach for nursing? *J. Adv. Nurs.* 19 (6), 1221–1225.
- Means, B., Toyama, Y., Murphy, R., Baki, M., 2013. The effectiveness of online and blended learning: a meta-analysis of the empirical literature. *Teach. Coll. Rec.* 115 (3), 1–47.
- Missildine, K., Fountain, R., Gosselin, K., 2013. Flipping the classroom to improve student performance and satisfaction". *J. Nurs. Educ.* 52 (10), 597–599.
- Morris, M.H., Webb, J.W., Fu, J., Singhal, S., 2013. A competency-based perspective on entrepreneurship education: conceptual and empirical insights. *J. Small Bus. Manag.* 51 (3), 352–369.
- Mullen, E.J., 1994. Framing the mentoring relationship as an information exchange. *Hum. Resour. Manag. Rev.* 4 (3), 257–281.
- Noe, R.A., Clarke, A.D.M., Klein, H.J., 2014. Learning in the twenty-first-century workplace. *Ann. Rev. Organ. Psychol. Organ. Behav.* 1 (1), 245–275.
- O'Flaherty, J., Phillips, C., 2015. The use of flipped classrooms in higher education: a scoping review. *Internet High Educ.* 25, 85–95.
- Olshfski, D., Joseph, A., 1991. Assessing training needs of executives using the delphi technique. *Publ. Prod. Manag. Rev.* 14 (3), 297–301.
- Quimet, P., Zarutskie, R., 2014. Who works for startups? The relation between firm age, employee age, and growth. *J. Financ. Econ.* 112 (3), 386–407.
- Powell, C., 2003. The Delphi technique: myths and realities. *J. Adv. Nurs.* 41 (4), 376–382.
- Powell, W., 1990. Neither market nor hierarchy: network forms of organization. *Res. Organ. Behav.* 12, 295–336.
- Powell, W., Koput, K., Smith-Doerr, L., 1996. Interorganizational collaboration and the locus of innovation: networks of learning in biotechnology. *Adm. Sci. Q.* 41 (1), 116–145.
- Ragins, B.R., Cotton, J.L., Miller, J.S., 2000. Marginal mentoring: the effects of type of mentor, quality of relationship, and program design on work and career attitudes. *Acad. Manag. J.* 43 (6), 1177–1194.
- Revans, R., 1982. What is action learning? *J. Manag. Dev.* 1 (3), 64–75.
- Rock, M., Gregg, M., Gable, R., Zigmond, N., Blanks, B., Howard, P., Bullock, L., 2012. Time after time online: an extended study of virtual coaching during distant clinical practice. *J. Technol. Teach. Educ.* 20 (3), 277–304.
- Rock, M.L., Schumacker, R.E., Gregg, M., Howard, P.W., Gable, R.A., Zigmond, N., 2014. How are they now? Longer term effects of eCoaching through online bug-in-the-ear technology. *Teach. Educ. Spec. Educ.* 37 (2), 161–181.
- Rohrbeck, R., Battistella, C., Huizingh, E., 2015. Corporate foresight: an emerging field with a rich tradition. *Technol. Forecast. Soc. Change* 101, 1–9.
- Rourke, L., Anderson, T., Garrison, D.R., Archer, W., 1999. Assessing social presence in asynchronous text-based computer conferencing. *J. Distance Educ.* 14 (2), 50–71.
- Rowe, G., Wright, G., 1999. The Delphi technique as a forecasting tool: issues and analysis. *Int. J. Forecast.* 15 (4), 353–375.
- Salas, E., Tannenbaum, S., Kraiger, K., Smith-Jentsch, K., 2012. The science of training and development in organizations: what matters in practice. *Psychol. Sci. Publ. Interest* 13 (2), 74–101.
- Sally, S., 2003. E-learning in small organisations. *Educ + Train* 45 (8–9), 506–516.
- Seifert, C.F., Yukl, G., 2010. Effects of repeated multi-source feedback on the influence behavior and effectiveness of managers: a field experiment. *Leader. Q.* 21 (5), 856–866.
- Semke, L.-M., Tiberius, V., 2020. Corporate foresight and dynamic capabilities: an exploratory study. *Forecasting* 2, 180–193.
- Singh, J.V., Tucker, D.J., House, R.J., 1986. Organizational legitimacy and the liability of newness. *Adm. Sci. Q.* 31 (2), 171–193.
- Skipton Leonard, H., Lang, F., 2010. Leadership development via action learning. *Adv. Develop. Hum. Resour.* 12 (2), 225–240.
- Skulmoski, G.J., Hartman, F.T., Krahn, J., 2007. The Delphi method for graduate research. *J. Inf. Technol. Educ.* 6 (1), 1–21.
- Smith, A., Whittaker, J., Clark, J.L., Boocock, G., 1999. Competence based management development provision to SMEs and the providers' perspective. *J. Manag. Dev.* 18 (6), 557–572.
- Smither, J.W., 2011. Can psychotherapy research serve as a guide for research about executive coaching? An agenda for the next decade. *J. Bus. Psychol.* 26 (2), 135–145.
- Smith-Jentsch, K.A., Campbell, G.E., Milanovich, D.M., Reynolds, A.M., 2001. Measuring teamwork mental models to support training needs assessment, development, and evaluation: two empirical studies. *J. Organ. Behav.* 22 (2), 179–194.
- Song, L., Hill, J.R., 2007. A conceptual model for understanding self-directed learning in online environments. *J. Interact. Online Learn.* 6 (1), 27–42.
- Stinchcombe, A.L., 1965. Social structure and organizations". In: March, J.G. (Ed.), *Handbook of Organizations*. Routledge, New York, NY, pp. 142–193.
- Stone, D.L., Deadrick, D.L., Lukaszewski, K.M., Johnson, R., 2015. The influence of technology on the future of human resource management. *Hum. Resour. Manag. Rev.* 25 (2), 216–231.
- Studen, L., Tiberius, V., 2020. Social media, quo vadis? Prospective development and implications. *Future Internet* 12 (9), 146.
- Tang, M., Byrne, R., Lippitt, R., 2005. Regular vs. online vs. blended: a qualitative description of the advantages of the electronic modes and a quantitative evaluation". In: Richards, G. (Ed.), *E-learn: World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education*, Association for the Advancement of Computing in Education (AACE), pp. 442–448. Vancouver, Canada.
- Thakur, S.P., 1999. Size of investment, opportunity choice and human resources in new venture growth: some typologies. *J. Bus. Ventur.* 14 (3), 283–309.
- Thornton, G.C., 1992. Assessment Centers in Human Resource Management. Addison-Wesley, Reading, MA.
- Tiberius, V., 2019. Scenarios in the strategy process: a framework of ordiances and constraints. *Eur. J. Futur. Res.* 7, 7.
- Tiberius, V., Hirth, S., 2019. Impacts of digitization on auditing: a Delphi study for Germany. *J. Int. Account. Audit. Taxat.* 37, 100288.
- Tiberius, V., Siglow, C., Sendra-García, J., 2020. Scenarios in business and management: the current stock and research opportunities. *J. Bus. Res.* 121, 235–242.
- Tiberius, V., Rasche, C., 2011. Prognosemärkte. *Zeitschrift für Planung & Unternehmenssteuerung* 21 (4), 467–472.

- Van Rensburg, T., Prideaux, G., 2006. Turning professionals into managers using multisource feedback. *J. Manag. Dev.* 25 (6), 561–571.
- Van Velsor, E., McCauley, C.D., Ruderman, M.N., 2010. The Center for Creative Leadership: Handbook of Leadership Development. Jossey-Bass, San Francisco, CA.
- Vecchio, R.P., 2003. Entrepreneurship and leadership: common trends and common threads. *Hum. Resour. Manag. Rev.* 13 (2), 303–327.
- Volery, T., Lord, D., 2000. Critical success factors in online education. *Int. J. Educ. Manag.* 14 (5), 216–223.
- Von der Oelsnitz, D., Tiberius, V.A., 2007. Zur dynamisierung interorganisationaler lernstrategien. *Managementforschung* 17, 121–159.
- Wanberg, C., Welsh, E., Hezlett, S., 2003. Mentoring research: a review and dynamic process model. *Res. Person. Hum. Resour. Manag.* 22, 39–124.
- Wasylshyn, K., 2003. Executive coaching: an outcome study. *Consult. Psychol. J. Pract. Res.* 55 (2), 94–106.
- Welty, G., 1971. A critique of some long-range forecasting developments. *Bull. Int. Stat. Inst.* 54, 403–408.
- Wiedeler, C., Kammerlander, N., 2019. Learning the ropes of entrepreneurship: understanding internal corporate venturing for family firms from an entrepreneurial learning perspective. *Rev. Managerial Sci.* forthcoming.
- Winkler, J., Moser, R., 2016. Biases in future-oriented delphi studies: a cognitive perspective. *Technol. Forecast. Soc. Change* 105, 63–76.
- Wollowick, H.B., McNamara, W.J., 1969. Relationship of the components of an assessment center to management success. *J. Appl. Psychol.* 53 (5), 348–352.
- Woudenberg, F., 1991. An evaluation of Delphi. *Technol. Forecast. Soc. Change* 40 (2), 131–150.
- Yukl, G., 2010. Leadership in Organizations, seventh ed. Pearson Education, Upper Saddle River, NJ.