The Role of Business Coaching for New Venture Performance:  
An Investigation of Effectiveness and Effects

1 Introduction

Entrepreneurship is widely considered to be a driving force for economic and social development (cf. Acs et al., 2012, Carree and Thurik, 2010, Benz and Frey, 2008, Zahra and Wright, 2016). New ventures play a crucial role in this context and are accompanied by governmental and private support institutions with financial resources, but also with content-related advice and coaching (e.g. McAdam and Marlow, 2011, Crișan et al., 2019, Stayton and Mangematin, 2018). At the same time, entrepreneurs face serious challenges and high risks related to launching and sustaining their ventures (e.g. Aspelund et al., 2005, Castrogiovanni, 1996, Soto-Simeone et al., 2020). The survival of such companies is a natural prerequisite for their long-term performance and the above-mentioned support measures are aimed at providing assistance in this regard.

Considerable funds are provided by governmental bodies for this purpose. For example, Germany spends 170 Million Euro per year on start-up support (BMF, 2020a, BMF, 2020b). However, a profound understanding of how the founding success and "survival" of new ventures can be supported has not yet been sufficiently established (e.g. Soto-Simeone et al., 2020, Saura et al., 2019, de Mol et al., 2020). Such an understanding is necessary, on the one hand, for a theoretically well-founded informative capability on the drivers of new venture performance, and, on the other hand, for the practical implementation of goal-oriented support for entrepreneurs.

In this context, the potential effects and the effectiveness of business coaching (BC) have not been sufficiently investigated so far (Clegg et al., 2005, Schutte and Steyn, 2015), particularly in the entrepreneurship field (Crompton et al., 2012). This paper therefore aims to empirically investigate the role of BC in entrepreneurship using data on new technology-based firms (NTBFs) in order to answer the following research questions: (RQ1) Does offering BC support the chances of survival of NTBFs in the early founding stages? and (RQ2) Which underlying factors account for the effectiveness of BC in an entrepreneurial context?

2 Definitions and Relevant Literature

For understanding the research subject of this paper, we first need to define the fundamental terms BC and NTBF.

There is no common definition of BC in the academic literature so far (Schutte and Steyn, 2015, Bond and Seneque, 2013). Earlier definitions seem to focus on the opportunity for improving individual and organizational performance offered by coaching (Fournies, 1978) while more recent definitions focus on the process of BC as such (Bond and Seneque, 2013, Clegg et al., 2005). On this basis, we define BC as an intervention aimed at enhancing the organizational performance by
closing the knowledge gap of entrepreneurs in process of learning and change based on a collaborative relationship between a coach and the entrepreneur(s).

NTBFs represent a sub-group of start-ups that are of particularly positive influence on the economy (Bertoni et al., 2011). Following the definition of Luggen (2004), NTBFs are newly founded businesses focusing on economic exploitation of technology-based innovation.

Looking into previous research on new venture support through BC, we find that quantitative research on its effectiveness is very limited (Crompton et al., 2012). Most available studies focus on business training as an instrument for improving welfare of developing countries and reduce poverty (e.g. Martinez et al., 2015, Karlan and Valdivia, 2011). Moreover, most theoretical discussions on BC seem to focus on established firms rather than entrepreneurial activities and new ventures (e.g. Berman and Bradt, 2006, Joo, 2005, Leedham, 2004).

A model of the BC that specifically addresses the role of entrepreneurs was developed by (Crompton et al., 2012) and is set out in Figure 1. It describes BC as a multi-level approach depending on personal traits of coach and coachee, the development of the coachee and the consequent impact on a business.

In our empirical investigation, we aim to contribute to a better understanding of the underlying mechanisms of BC that are potentially affecting new venture performance by focusing on the characteristics of the BC process, the BC content, and the coach (matching) on the input side as well as the entrepreneurs' perceptions of their impact on the NTBF development on the output side.

3 Methodology

To answer the research questions of this paper, we used an online survey addressed to early-stage NTBFs from Baden-Württemberg in Germany associated with bwcon, a professional
association supporting new ventures in the federal state. All participants in the study have approached bwcon and received entrepreneurial support in the form of compact training (group sessions twice a month) or additional business coaching (individual sessions, networking, experienced mentors).

We received 81 completed surveys, however, only 67 participants answered all mandatory questions. In addition, four participants were found to belong to the same ventures, with two of them appearing to have the same identity. A double response was possible, as one person received two survey invitations on different e-mail addresses. The survey consists of a total of 26 questions, including closed questions using a five-point Likert scale, Yes/No questions as well as open questions. It is carried out in German due to the native language of the participants. The evaluation of the data includes both descriptive statistics as well as hypothesis tests.

4 Excerpt from Preliminary Results

Crompton et al. (2012) highlight three aspects of BC that we can adapt to the entrepreneurship support context. These are the role of the coach, the content of the coaching and the impact or results of the coaching.

Table 1: Ranking of Actual Roles of the Coach vs. Ideal Roles of the Coach

<table>
<thead>
<tr>
<th>Rank</th>
<th>Actual Roles of the Coach</th>
<th>m</th>
<th>SD</th>
<th>Ideal Roles of the Coach</th>
<th>m</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sparring Partner</td>
<td>4.19</td>
<td>0.84</td>
<td>Sparring Partner</td>
<td>3.49</td>
<td>0.69</td>
</tr>
<tr>
<td>2</td>
<td>Listener</td>
<td>4.03</td>
<td>1.01</td>
<td>Networker</td>
<td>3.38</td>
<td>0.76</td>
</tr>
<tr>
<td>3</td>
<td>Networker</td>
<td>3.22</td>
<td>1.34</td>
<td>Motivator / Catalyst</td>
<td>3.16</td>
<td>0.76</td>
</tr>
<tr>
<td>4</td>
<td>Consultant</td>
<td>3.16</td>
<td>1.34</td>
<td>Listener</td>
<td>3.11</td>
<td>0.61</td>
</tr>
<tr>
<td>5</td>
<td>Trainer</td>
<td>3.14</td>
<td>1.27</td>
<td>Consultant</td>
<td>2.86</td>
<td>0.82</td>
</tr>
<tr>
<td>6</td>
<td>Motivator / Catalyst</td>
<td>3.05</td>
<td>1.29</td>
<td>Trainer</td>
<td>2.84</td>
<td>0.93</td>
</tr>
</tbody>
</table>

To gain a better understanding of various roles a coach can perform, participants were asked to rate the actual role of their coach and compared to that, rate the ideal role of a coach for a successful venture support program. The scale of the actual role of the coach ranged between ‘strongly disagree’ = 1 and ‘strongly agree’ = 5. In contrast, the scale range of the ideal roles of the coach had only 4 points due to technical reasons, which obliged participants to give a tendency. In order to evaluate the results, means and standard deviations were calculated and ranked in descending order of the mean values. Table 1 outlines the ranking for both perspectives. Please note that the means and standard deviations of the ideal roles are lower due to a four-point Liker scale. Clearly, a coach as a sparring partner who gives neutral feedback is the most predominant role of the actual and ideal coach. This is also the only rank which matches and shows a rather low standard deviation. Furthermore, the role of a networker seems to be very important since it takes the second place among the ideal roles of the coach and the third place among the actual roles of the coach. A great discrepancy of the real and ideal roles can be noted for the role of a motivator / catalyst. The evaluation shows that coaches as motivators / catalysts take a bottom position in the ranking of actual roles (m = 3.05; SD = 1.29). However, participants see this role on
the third place among ideal roles \( (m = 3.16; SD = 0.76) \). Consultants and trainers can be found in the second half of both rankings and therefore, seem to have inferior importance compared to other stated roles. Besides the proposed roles, two more roles have been suggested by respondents: business partner and helper.

Table 2: Ranking of Contents of Business Coaching

<table>
<thead>
<tr>
<th>Rank</th>
<th>Contents of Business Coaching</th>
<th>( m )</th>
<th>( SD )</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Exchange Experience with Coach</td>
<td>4.38</td>
<td>0.72</td>
</tr>
<tr>
<td>2.</td>
<td>Advice Regarding Funding and Support Programs</td>
<td>4.03</td>
<td>1.01</td>
</tr>
<tr>
<td>3.</td>
<td>Establishment of Relevant Networks</td>
<td>4.00</td>
<td>0.94</td>
</tr>
<tr>
<td>4.</td>
<td>Creation of a Business Plan</td>
<td>3.68</td>
<td>1.38</td>
</tr>
<tr>
<td>5.</td>
<td>Legal Advice</td>
<td>3.27</td>
<td>1.17</td>
</tr>
<tr>
<td>6.</td>
<td>Crucial Business Skills</td>
<td>3.08</td>
<td>1.04</td>
</tr>
</tbody>
</table>

Another question in the survey dealt with possible contents of the coaching and their respective importance from participants’ point of view. For this purpose, respondents were asked to rate six stated subjects on a five-point Likert scale according to their importance from ‘very unimportant’ \( = 1 \) to ‘very important’ \( = 5 \). Moreover, a blank input box was included for the collection of additional answers. The results of this question were analysed by computing the mean and the standard deviation for each content. Afterwards, the contents were ranked in descending order of their mean value. The results of the evaluation are presented in Table 2. It is worth noting that the exchange of experience with the coach is the most important subject with the highest mean value of \( m = 4.38 \). Moreover, it is remarkable that the standard deviation of \( SD = 0.72 \) is the smallest among all calculated \( SD \)-values. It seems that most participants agree on the great importance of experience exchange in coaching sessions. The second most important subject according to the mean of the ratings is getting advice regarding funding and support programs \( (m = 4.03; SD = 1.01) \), on the third place – almost equally as important as the previous content – is the establishment of relevant networks \( (m = 4.00; SD = 0.94) \). The ranking is continued with the creation of a business plan, legal advice and finally the transfer of crucial business skills, which is at the bottom of the ranking with \( m = 3.08 \) and \( SD = 1.04 \). It is important to point out that the standard deviation of the creation of a business plan is the highest. This indicates that the opinions of entrepreneurs on the importance of that feature strongly vary. At this point, a parallel to the contradictory views of researchers on that subject – presented in subsection 2.5.4.2 – can be drawn. Some participants suggested other answers such as the creation and evaluation of a business model, developing trust in the own strengths and working on weaknesses.

Regarding the results of the coaching, we studied a variety of aspects. One of them concerns the participant satisfaction and venture survival capability. Based on the work of Chrisman and McMullan (2004), the following hypothesis was derived:

\( H_1: \) Subjective measurements of participant satisfaction with business coaching are not correlated with measurements of new venture survival capability.
In order to test the stated hypothesis, the Pearson correlation between participant satisfaction and the survival capability index has to be computed. The underlying sample includes all ventures participating in bwcon’s business coaching (36 in total).

The results of the analysis revealed the following values: \( r = -0.186 \) with \( p = 0.278 \). Since \( p > 0.05 \) no significant correlation can be observed between the two variables. Therefore, it can be noted that the findings support the tested hypothesis.

\( H_2: \) Business coaching positively influences the survival capability of new technology-based ventures.

To test this hypothesis, a one-tailed t-test – revealing the difference in survival capability between business coaching participants and compact training participants – is performed. The sample counts 66 ventures, whereas 30 ventures belong to the compact training group and the rest belongs to the business coaching group.

The results of the analysis revealed the following means of the survival capability index: \( m_{BC} = 12.250 \) (business coaching) and \( m_{CT} = 6.967 \) (compact training), with a \( p < 0.001 \). Consequently, the survival capability index of business coaching participants is on average almost double as high as the survival capability of those who only received a compact training. Hence, these findings strongly support the last hypothesis.

5 Further Development

As we continue to develop this paper, we plan to integrate our empirical findings in more detail into the existing literature on the role of the BC in the context of new ventures. We also aim to take a comprehensive perspective on the already published findings from the RCT together with the results of the survey discussed here. In doing so, we aim to contribute to a better understanding of BC’s role in the entrepreneurial ecosystem, on the one hand to broaden our theoretical knowledge in this field, and on the other hand to provide advice on how BC can support new venture performance.
Editors
Dr. Kevin Reuther
Prof. Dr. Thorsten Posselt

Authors
Dr. Kevin Reuther
Dr. Christina Ungerer
Prof. Dr. Guido H. Baltes

Contact and further Information
Universität Leipzig
Faculty of Economics and Management Science
Professorship for the Management and Economics of Innovation
Data-Driven and Impact-Oriented Entrepreneurship Research Unit
Grimmaische Straße 12
04109 Leipzig

Phone: +49 341 231039-100
E-Mail: innova@wifa.uni-leipzig.de
Web: www.uni-leipzig.de

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