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The Resource-Based View in Entrepreneurship: A Content-Analytical Comparison of Researchers' and Entrepreneurs' Views

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The resource-based view (RBV) is one of the most influential perspectives in the organizational sciences. Although entrepreneurship researchers are increasingly leveraging the RBV's tenets, it emerged in strategic management. Despite some important similarities between entrepreneurship and strategic management, there are also important differences, raising questions as to whether and to what extent the RBV needs to be adapted for the entrepreneurship field. As a first step toward answering these questions, this study focuses on resources as the fundamental building block of the RBV and presents a content-analytical comparison of researchers' and practicing entrepreneurs' resource conceptualizations to derive similarities and differences between established theory and entrepreneurial practice. We find that although the two conceptualizations exhibit some overlap, there are also important differences in the emphasis on different dimensions of resources and ownership requirements, as well as in the understanding of how those resources shape outcomes. These results suggest important contextual conditions when applying the RBV's tenets within the field of entrepreneurship.

Introduction

As the field of entrepreneurship matures (Busenitz et al. 2003), entrepreneurship researchers continue to leverage theoretical perspectives from other, more established fields in the organizational sciences to understand entrepreneurs and entrepreneurial ventures (Ireland, Webb, and Coombs 2005). The resource-based view (RBV) has grown into one of the most influential theoretical perspectives in the organizational sciences (Barney, Wright,

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and Ketchen 2001), and entrepreneurship researchers have built on insights from this theory to understand the determinants of entrepreneurial venture performance (e.g., Alvarez and Busenitz 2001; Chandler and Hanks 1994; Chrisman, Bauerschmidt, and Hofer 1998; Wiklund and Shepherd 2003). Indeed, within entrepreneurship, *Google Scholar*'s citation counts show that Barney's (1991) and Wernerfelt's (1984) seminal RBV articles continue to attract more and more interest. This suggests that the RBV is being leveraged with greater frequency in entrepreneurship and that it is becoming increasingly influential.

The RBV emerged in the field of strategic management, however, which tends to study larger, more established organizations. Moreover, the RBV was intended to help researchers understand why some firms enjoy a competitive advantage, and thereby outperform other firms (Barney 1991). According to the RBV, "strategic" resources—resources that are valuable, rare, inimitable, and nonsubstitutable—are the key differentiators between firms that have advantages vis-à-vis those that do not (Barney 1991). A growing body of evidence supports this notion, and researchers continue to identify the types of resources that meet these criteria (Barney and Arikan 2001; Crook et al. 2008).

Despite important similarities between the fields of strategic management and entrepreneurship, and despite strategic management theories, such as the RBV, offering important insights into entrepreneurs and entrepreneurial ventures, two issues persist. First, though the RBV has become increasingly popular, it has been criticized as resources remain ill-defined, inconsistent, and even contradictory across studies (e.g., Bromiley and Fleming 2002; Priem and Butler 2001a, 2001b). In other words, researchers have not yet arrived at a consensus definition of resources and their dimensions, leaving some RBV researchers puzzled as to what exactly constitutes a resource (Kraaijenbrink, Spender, and Groen 2010). Second, there are important differences between the fields of strategic management and entrepreneurship. One key difference is that entrepreneurship researchers study younger and smaller ventures that are in a pursuit of growth, whereas strategic management researchers study larger, established organizations (Carland et al. 1984; Ireland, Webb, and Coombs 2005). Thus, extant RBV research likely focuses on resources that are more relevant to larger, more established organizations. Indeed, Stevenson (1983) defined entrepreneurship as "the pursuit of opportunity beyond the resources that you currently control." Accordingly, entrepreneurial ventures might require different resources, or use these resources differently, to survive and prosper compared with larger, more established organizations (Unger et al. 2011; Wiklund and Shepherd 2009). For example, certain resources (e.g., slack, scientific, and technical resources) have been identified as highly useful for high-technology ventures when faced with adverse shocks that threaten their survival (De Carolis et al. 2009); and Chrisman, Chua, and Kellermanns (2009) showed that resources have a differential impact in family and nonfamily firms. Without addressing this difference, only limited theoretical progress can be made within the field as well as potentially less impactful prescriptions for entrepreneurs (Bettis 1991; Whetten 1989).

Because of such differences, it remains unclear whether or not "the tenets of the resource-based view are applicable to both entrepreneurial ventures and established firms" (Hitt et al. 2002, p. 4). Instead, when entrepreneurship researchers apply theories developed in other fields, such as the RBV, they should "discuss how the assertions/assumptions remain the same or change when used to form theory-driven testable relationships dealing with entrepreneurship questions" (Ireland, Webb, and Coombs 2005, p. 124).

Given the increasing influence of the RBV in entrepreneurship, its origin in a different field, and potential differences between entrepreneurial ventures and larger, established organizations in their understanding of resources, we set out to close the gap between what we know and what we should know about the RBV in the context of entrepreneurship. In particular, our study empirically derives and compares researchers' and entrepreneurs' conceptualizations of resources by utilizing content analysis to distill resource definitions from a sample of 117 published articles in influential academic journals and from a sample of 201 practicing entrepreneurs. Our results show both some overlap between the two conceptualizations, but also identify a number of important differences between researchers' and entrepreneurs' resource definitions. Moreover, both researcher

and entrepreneur samples, albeit with different emphases, included *outcomes* associated with resources—such as the creation of products and/or services, of value/success, and of a competitive advantage—as an integral part of their resource conceptualizations.

We intend to make three contributions. First, by decomposing a representative sample of scholarly resource definitions into their different dimensions and by comparing the importance of each dimension across definitions, we shed light on agreements and disagreements among researchers on what constitutes the main elements of an academic resource definition and thereby address the criticisms of the RBV regarding the conceptualization of resources (e.g., Kraaijenbrink, Spender, and Groen 2010; Priem and Butler 2001a, 2001b). Second, by comparing researchers' and entrepreneurs' resource definitions, we shed light on agreements and disagreements between the RBV and entrepreneurial practice. This allows us to investigate whether resources are viewed to have the same or different dimensions and to differentiate among resources that are considered more "strategic" to entrepreneurs. Third, and more broadly, our study helps increase awareness about the unique conditions when applying the RBV's tenets within the domain of entrepreneurship.

Literature Review

The RBV traces its intellectual roots to Edith Penrose (1959), who focused on the role of resources in enabling or constraining organizational growth. She defined resources as "the physical things a firm buys, leases, or produces for its own use, and the people hired on terms that make them effectively part of the firm" (Penrose 1959, p. 60). Over more than 50 years, researchers have built on Penrose's insights, and as the RBV evolved, researchers have focused more specifically on "strategic resources" (Amit and Schoemaker 1993). Strategic resources are those resources that (1) have value, such that they can be leveraged to increase customer value or cut costs; (2) are rare, such that competitors do not have access to the same or a very similar resource to compete away the value; and (3) are difficult to substitute and/or imitate, which allows the organization to stay ahead of competitors (Barney 1991). The central assertion within the RBV is that organizational advantages are enhanced to the extent that an organization possesses strategic resources (Barney 1991, 2001), and a recent meta-analysis of the available empirical evidence supports this assertion (Crook et al. 2008).

The RBV developed initially in the field of strategic management. Though there is considerable overlap between strategic management and entrepreneurship, the underlying domains are distinctive. A consensus definition of strategic management developed by Nag, Hambrick, and Chen (2007, p. 944) states that "strategic management deals with the major intended and emergent initiatives taken by general managers on behalf of owners, involving utilization of resources to enhance the performance of firms in their external environment." Thus, though strategic management deals with managers, entrepreneurship deals with "individuals or groups of individuals, acting independently, or as part of a corporate system, who create new organizations, or instigate renewal within an existing organization" (Sharma and Chrisman 1999, p. 17). Though entrepreneurs can exist in large established organizations (often investigated under the umbrella of corporate entrepreneurship), the focus of our paper is on the most prevalent form of entrepreneurship, namely individuals acting independently (Chrisman and Kellermanns forthcoming). Entrepreneurship research in our focal domain focuses on organizations that (1) are typically smaller and newer (Carayannopoulos 2009; Carland et al. 1984); (2) are more reliant on interorganizational relationships (Chua et al. 2011; Wiklund and Shepherd 2009); and (3) do not yet have established reputations (Fischer and Reuber 2007). Moreover, entrepreneurs themselves differ from the general population (Zhao, Seibert, and Lumpkin 2009) and focus on aggressive growth (Carland et al. 1984).

Given the differences between entrepreneurial ventures and larger, more established organizations, it is likely that there are important differences involving how practicing entrepreneurs view resources and how they are viewed by the RBV. This suggests that for the RBV to continue to evolve within the domain of entrepreneurship, there might be a need to study whether different resources are needed by entrepreneurs to succeed (Alvarez and Busenitz 2001; Zhao, Seibert, and Lumpkin 2009). Recognizing this, there have been recent calls for the RBV to be contextualized (e.g., Siqueira and Bruton 2010)—particularly for entrepreneurship research. Yet, without an analysis of differences between the RBV and entrepre-

neurs' views on resources, there will be lingering ambiguity about potential boundary conditions and the contextualization of the RBV when applied to entrepreneurship research (Busenitz et al. 2003; Welter 2001). Our analysis of the RBV in the field of entrepreneurship therefore represents an "evocative study," which deals with "specific domains where general theoretical frameworks may be available, but operationalization of concepts and specification of linkages among the concepts are still unknown," and for which "we need approaches and techniques that fill the gaps between qualitative identification and quantitative verification, and that evoke the constructs and linkages particular to the specific domain" (Nelson et al. 2000, p. 482). In the next section, we will review prior attempts at defining resources, before outlining our derivation of a consensus definition.

Researchers' Resource Conceptualizations

Ever since Barney (1991, p. 110) defined resources as "all assets, capabilities, organizational processes, firm dimensions, information, knowledge, etc. controlled by a firm that enable the firm to conceive of and implement strategies that improve its efficiency and effectiveness," researchers have complained that "virtually *anything* associated with the firm can be a resource" (Priem and Butler 2001a, p. 32, emphasis in the original). If resources are considered to be an all-encompassing concept, however, resources become essentially meaningless as a way to explain organizational advantage and above-average performance (Conner 1991). For example, the conceptualization by Wernerfelt (1984, p. 172) of resources as "anything which could be thought of as a strength or weakness of a given firm" has been criticized as "subjective and vague, because individuals can differ in what characteristics they think of as a 'strength' or 'weakness'" (Bromiley and Fleming 2002, p. 324). Not surprisingly, this conceptual vagueness also translates into a plethora of conceptualizations (as we will outline further) and measurements (for an overview of resource measures, see Hoopes, Madsen, and Walker 2003). Accordingly, in his reflection on the 10 years since the publication of his seminal paper on the RBV, Wernerfelt (1995, p. 172) concludes that "'resources' remain an amorphous heap to most of us." That this critique is still valid can be seen, for instance, in Kraaijenbrink, Spender, and Groen's (2010, p. 359) recent review of the RBV literature, in which they summarize their assessment that "we are left puzzled about the RBV's core concept [of resources]." This problem is aggravated as the RBV was developed in the realm of strategic management research, albeit informed by economics (Barney and Arikan 2001), which is predominantly focused on larger, more established organizations. In sum, we do not yet have a clear understanding of and/or agreement on how resources are conceptualized, which is a significant shortcoming of a theory as influential as the RBV. In addition, we do not know if and how this conceptualization contrasts with those of practicing entrepreneurs, who are mostly active in smaller, less established organizations.

Practicing Entrepreneurs' Resource Conceptualizations

Though research has conceptualized resources in a variety of ways, the way practitioners actually view resources has virtually not been addressed. Very few empirical studies have attempted to elicit practitioners' perceptions of their resources. A rare exception in the context of established organizations is Stevenson (1976, 1984), who interviewed 50 managers in six companies regarding their strengths and weaknesses. He found an almost even distribution between organizational, personnel, marketing, and technical issues, with financial strengths and weaknesses having fewer references. He concluded, however, that "[d]efinitions of strengths and weaknesses generally applicable for whole organizations were not found" (Stevenson 1976, p. 68). In contrast to this open-ended approach, Hall (1992) specified 12 intangible resources and then asked CEOs in the United Kingdom to specify to which extent those resources made a contribution to the overall success in their business. He found that answers were surprisingly uniform across business types and focused on reputation and know-how.

Conceptualizations of resources in an entrepreneurial context are equally rare. Brush and colleagues (Brush et al. 1997; Greene, Brush, and Brown 1997) studied small business owners' relative favorability ratings of resource types (i.e., human, social, organizational, physical, and financial resources). Later, Lichtenstein and Brush (2001) tracked three ventures over a nearly one-year time frame and repeatedly asked which resources the ventures had been

acquiring or should have been acquiring at this stage in the company's development. They found that the most salient resources were mostly intangible.

Taken together, there is initial evidence suggesting that resources may have differential effects in small business and entrepreneurial context. Indeed, we know that entrepreneurs do not seem to follow the prescriptions of the RBV when they evaluate resources (Kemmerer et al. 2011); yet, we implicitly assume that entrepreneurs conceptualize resources the same way academics do. This is unwarranted, however, as recent research shows. Achtenhagen, Naldi, and Melin's (2010) study shows that entrepreneurs and scholars understand and conceptualize growth quite differently. Indeed, they suggest that different conceptualizations and measurement may have to be considered for different types of organizations. Such a potential incongruence between scholars and practitioners may be even more concerning in the realm of the RBV, as this theory is readily applied to an entrepreneurial context. Yet, we may arrive at false prescriptions, which likely would have more severe consequences for fledging businesses. Thus, without congruence, it remains unknown whether the findings of prior RBV studies have focused on resources that are considered important in entrepreneurial contexts, or whether the findings cannot be applied beyond the boundaries of the strategic management field. Accordingly, we investigate the following research question:

Research Question: What are the similarities and differences in the RBV's and practicing entrepreneurs' resource conceptualizations?

Methods

RBV's Resource Definitions

To identify a representative sample of how resources have been defined in the extant RBV—and to minimize subjectivity and arbitrariness—we built on the approach developed by Nag, Hambrick, and Chen (2007). Our goal was to capture a representative set of definitions; it was neither to be all-comprehensive, in the sense of including all articles on the RBV, nor to include tangential articles that reference the RBV. We thus excluded a number of articles examining specific types of resources without discussing the general concept, such as articles focusing exclusively on human or managerial resources (e.g., Castanias and Helfat 1991) or specific technological resources (e.g., Miller 2004). Though these specific resources are certainly worth studying, our goal here was to compile a representative list of generic resource definitions used in extant research.

We identified relevant articles with the following set of criteria (for a detailed overview on this process, please refer to Table 1): (1a) we performed a search of the EBSCO Host database for all published articles in research journals[1] that were identified as "influential" in the field of management by Podsakoff et al. (2005);[2] (1b) we also included articles from the EconLit database to adequately cover journals in this adjacent field; (2) we employed two filters for those articles that contain at least one primary keyword[3] in their title or abstract; and (3) for those that did not contain at least one of 16 additional keywords[4] in their title or

[1]By restricting our search to scholarly journal articles (as opposed to book chapters or unpublished works), we enhanced quality control because of the rigorous peer review process to which articles published in such journals are subjected prior to publication David and Han (2004).

[2]As our interest lies in identifying researchers' resource definitions, we excluded practitioner-oriented journals, such as *California Management Review*, *Harvard Business Review*, *Sloan Management Review*, and the *Journal of Vocational Behavior*. To further enhance the comprehensiveness of our sample, we also added the journals *Entrepreneurship: Theory & Practice* and *Organization Science*. Our results remained unchanged, however, with and without the inclusion of entrepreneurship journals.

[3]Following Newbert Newbert (2007), our primary key words were resource-based* and RBV* (the asterisk at the end of a search word allows for different suffixes).

[4]Our additional keywords also follow Newbert (2007) and include: competitive advantage, perform*, valu*, capability*, intangib*, heterogen*, rare*, imitab*, inimitab*, immob*, non-substitutab*, substitutab*, tangib*, Barney, competenc*, and organiz*.

Table 1
Summary of Selection Criteria[a]

Filter Type	Description	EBSCO Host Results	EconLit Results	Total
Substantive	Article must appear in one of the scholarly journals selected as relevant for our analysis	65,885		
Substantive	All articles with "resource-based*", "RBV*", or "RBT*" in title or abstract	322	188	510
Substantive	At least one of 16 keywords[b] must also appear in title or abstract	269	121	390
Substantive	Article must appear in a journal that has returned more than one item from the filters above	267 (2 sole pubs)	70 (51 sole pubs)	337
Substantive	Remaining abstracts read for substantive relevance	251 (16 excl.)	59 (11 excl.)	310
Substantive	Remaining full articles read for both substantive relevance and definition of terms "resource" or "resources"	93 (158 excl.)	26 (33 excl.)	119
Duplicates	Consolidating both databases by removing duplicate articles that appeared in both		(2 excl.)	117

[a]The selection filters used herein are adapted from those developed by David and Han (2004) and Newbert (2007).
[b]The 16 keywords are: competitive advantage, perform*, valu*, capability*, intangib*, heterogen*, rare*, imitab*, inimitab*, immob*, non-substitutab*, substitutab*, tangib*, Barney, competenc*, and organiz* Newbert (2007).

abstract, that is, we ensured substantive relevance of the articles; (4) we further eliminated articles that appeared in journals in which only one article appeared overall, which makes these articles more likely to be removed from the core tenets of the RBV (Newbert 2007); (5) we further verified the substantive relevance of all remaining articles by reading their abstracts; and (6) we consolidated results from the EBSCO Host and EconLit databases to eliminate duplicate articles. Our search process and the series of filters distilled a sample of 230 relevant articles. By reading through these articles in their entirety, we managed to extract 117 researcher definitions of resources (with the remaining 113 articles not providing any resource definitions).

We need to note that for analytical purposes, we extracted the definitions in their entirety. As we will describe in more detail in the results and discussion sections, the definitions contained both different dimensions *and* outcomes of resources. Though it was not our initial intent to capture these outcomes, analyzing researchers' resource definitions suggests that they are an integral part of resource definitions and we thus include them in our subsequent analyses.

Entrepreneurs' Resource Definitions

Given our research objective, we strived to identify practicing entrepreneurs who possessed deep knowledge about the resources needed to help an entrepreneurial venture

function. Thus, we did not choose our respondents on a random basis but instead targeted respondents who possessed such knowledge (Kumar, Stern, and Anderson 1993). Our sample consists of individuals currently or formerly enrolled in the FastTrac Planning program, a 2- to 4-month comprehensive entrepreneurship education program that teaches entrepreneurs business and leadership skills and provides them with networking opportunities. FastTrac classes are offered in 150 cities in 38 states through local organizations such as universities, business development councils, or chambers of commerce. The FastTrac Planning program our study focused on was administered directly by the Kauffman foundation and specifically targeted individuals in the start-up phase or with a young business to help them transform and grow their venture. As such, we assured that our participants ran entrepreneurial ventures and not nongrowth-oriented, small businesses as described in the literature (Carland et al. 1984). Of note, no RBV-related subjects were taught as part of the program, so it is unlikely that respondents' assessments would be subject to a social desirability bias, or a priming effect where respondents were cued (Podsakoff et al. 2003).

We conducted a number of formal pilot interviews with entrepreneurs or former entrepreneurs active in the Midwest region of the United States both to gain insights into entrepreneurs' conceptualizations of resources and to test and refine the wording of our survey. As part of a larger study, we then sent out 1,600 individual surveys (31 of which were not received) and handed out 33 additional surveys to FastTrac participants. The envelopes and cover letters used Kauffman Foundation logo and letterhead respectively, and the letter was sent out in the name of the manager of the national FastTrac program to further increase the perceived legitimacy of the mailing. Of 1,602 potential respondents, 41 individuals declined to respond. Two hundred forty-two at least partly filled out surveys, resulting in a response rate of 15.5 percent, and 202 usable definitions were obtained, leading to a final response rate of 12.55 percent, which is comparable with other recent studies on the RBV and on entrepreneurs (e.g., Chua et al. 2011; Ray, Barney, and Muhanna 2004; Sullivan and Marvel 2011; Ucbasaran, Westhead, and Wright 2009).

A percentage of 46.7 of respondents were female. The age range of respondents was: 11.4 percent between 25 and 34 years old; 51.8 percent between 35 and 49; 36.1 percent between 50 and 65; and .6 percent over 65. A percentage of 34.9 held a business or business-related degree. Not including their present business, an average respondent had founded 1.4 other businesses and had 14.4 years of work experience. A percentage of 20.3 of the ventures were active in retail, 44.5 percent in service, 1.6 percent in wholesale, 13.6 percent in manufacturing, 14.7 percent in construction, and 4.9 percent in other industries. The average respondents' venture had six employees (not including the respondent), and slightly more than half of the ventures were more than five years old. The focus of our sample is in line with the wider entrepreneurship literature, which focuses on small or new businesses (Shane and Venkataraman 2000). Table 2 provides additional characteristics of the ventures that are similar compared with other entrepreneurship studies (e.g., Haynie, Shepherd, and McMullen 2009).

Table 2
Survey Respondent Profile—Venture Characteristics

Stage of Venture	
Planning Stage	5.0 percent
<1 Year	5.0 percent
1–5 Years	33.8 percent
>5 Years	53.3 percent
No Longer Exists	2.9 percent
Industry	
Retail	20.3 percent
Service	44.5 percent
Wholesale	1.6 percent
Manufacturing	13.6 percent
Construction	14.8 percent
Other	4.9 percent
Number of Employees	
Range	0–110
Mean	6.0
Std. Dev.	11.7
Median	2.0
Proportion of Ventures with at Least 5 Employees	34.2 percent
Entrepreneurial Involvement	
Full-time	75.5 percent
Part-time	19.9 percent
No Longer Involved	4.6 percent

Table 3
Comparison of Early and Late Respondents

	Employees	No. of Ventures Founded	Gender	Involvement
Mann–Whitney *U*	6158	5761	6478	6559.5
Wilcoxon W	12599	12089	13618	13114.5
Z	−.238	−1.764	−.556	−.58
Asymp. Sig. (two-tailed)	.812	.078†	.578	.562

	Bus. Degree	Basis of Competition	Age	Venture Stage
Mann–Whitney *U*	6550	6669.5	5268.5	6588.5
Wilcoxon W	13690	13224.5	11709.5	13029.5
Z	−.416	−.248	−3.186	−.294
Asymp. Sig.	.677	.804	.001***	.769

†$p < .10$
*$p < .05$
**$p < .01$
***$p < .001$

We compared proportions and response rates for those characteristics for which information on the full sample was available. These analyses showed that women were disproportionately more willing to complete the survey ($p < .001$), which is in line with previous studies (Green 1996) and that there were some geographic effects of marginal statistical significance ($p = .06$); for instance, respondents with zip codes of 7xxxx were more than twice as likely to respond as those with a zip code of 0xxxx. To further mitigate concerns of sample bias, we conducted a test between early and late respondents, as late respondents are presumed to be more similar to nonrespondents (e.g., Kanuk and Berenson 1975). Our findings (reported in Table 3) showed that respondents only differ in age and marginally in the number of ventures founded.

The methodological strategy to elicit resource conceptualizations from our respondents was guided by the desire to preserve as much as possible the meanings and natural language of the respondents themselves. Conceptualizations of resources, however, are impossible to effectively study through revealed behavior. Similarly, revealing conceptualizations through extended narratives was infeasible because of time and resource constraints barring us from interviewing large numbers of respondents to obtain a decent-size sample of such narratives. Instead, we asked participants to think about their most important organizational resources, and then to answer the following survey question: "*If somebody asks you to briefly explain what you mean by the term 'resources' in the context of your venture, what would you answer?*" Furthermore, the area designated for the answer started with the prompt: "*Resources are . . . .*" The prompt was designed to make it easier for respondents to provide their resource conceptualizations.

Analyses

Our analytical method closely follows the procedure outlined by Nag, Hambrick, and Chen (2007) in their analysis of a consensus definition of the strategic management field. In particular, we performed two identical but separate analyses of researchers' and entrepreneurs' resource definitions. With the help of the computer-aided text analysis software Concordance (Watt 2004), we conducted a content analysis (Neuendorf 2002)

to identify the most frequently recurring, distinct dimensions and features of both researchers' and entrepreneurs' conceptualizations of resources. We chose to examine individual words rather than entire phrases, which minimizes researchers' biases of injecting *a priori* judgments as to the word combinations that might be sought out (Nag, Hambrick, and Chen 2007).

To make the large number of distinct words contained in the definitions analytically tractable, we restricted our analysis to those words that appeared three times or more among all the definitions (Nag, Hambrick, and Chen 2007). We also excluded proper nouns, prepositions, articles, and common descriptors such as "very," "much," and "many," and all very common verbs and adjectives, such as "get," "keep," "strong," and "high" which, by themselves, have no inherent or consistent meaning. We then re-read the identified root words within their original context to ensure that the meaning of the root words was similar across definitions in the same sample, and subsequently excluded all words that had ambiguous meanings across definitions.[5] And finally, we consolidated all variations of a root word—such as singular/plural, present tense/past tense, or variations of the same word, such as "bank," "banker," "banking"—and treated them collectively. This consolidation process led to 106 and 99 distinct root words researchers and entrepreneurs, respectively, used to define resources. These root words then formed the basis for imputing emergent resource definitions for both groups.

Though our overall approach was content analytic—focused on the reliable, quantitative identification of particular dimensions and features of the definitions—the way the emergent resource definitions were derived was more inductive and iterative hermeneutic (Forster 1999; King 1998). First, repeated reading of the list of root words enabled us to let tentative dimensions emerge from our two sets of definitions, based upon conceptual clusters of root words. In the entrepreneurial sample, for instance, the root words "knowledge," "skill," "information," and others were consolidated into the dimension "human capital." For the sake of parsimony, we wanted to keep the number of dimensions as small as possible, but we also needed to ensure that all root words assigned to a specific dimension were internally coherent. Finally, to maintain simplicity, we assigned any given root word to only one dimension, even though it might reasonably belong to other, additional dimensions.

After agreement on the dimensions was reached, two of the authors independently assigned root words to the dimensions. Inter-rater agreement between them was 92 percent and 90 percent (with associated Cohen 1960 kappa values of .92 and .89) for the research and entrepreneurial samples, respectively.[6] Consensus exists among the various guidelines for the interpretation of Cohen's kappa that a kappa of .8 or above indicates good to excellent reliability (Neuendorf 2002). This means that the dimensions identified here are captured in a way that allows for replication and is not merely spurious.

To statistically compare research and entrepreneurs' definitions, we performed a binary logistic regression analysis, where the predicted value represents the probability that a given definition is from the research (versus the entrepreneurial) sample. Thus, the dependent variable was coded "1" for all researcher definitions and "0" for all entrepreneurial definitions. Each of the dimensions represents one predictor variable and is coded "1" if a given

[5]In the practitioner sample, for example, the word "name" was used in the sense of "Marketing gimmicks—Who is the best at getting your name out" (respondent #10053); "copyright protected or trademarked technology or name" (respondent #12062); and "clients, productivity, and services to name a few" (respondent #13026).

[6]Cohen's kappa corrects for the role of chance agreement by scaling agreement in such a way that a kappa of 1 denotes perfect agreement and a kappa of 0 denotes agreement at chance level. More formally, Cohen's kappa $= \frac{PA_O - PA_E}{1 - PA_E}$, where PA_O represents proportion of inter-rater agreement observed and PA_E denotes the proportion of agreement expected by chance.

definition mentions one or more of the root words associated with each dimension and "0" otherwise.[7]

Results

Our two content analyses led to the emergence of 12 distinct dimensions, which together constitute the two resource definitions. To distill the two *consensus* resource definitions, we retained those dimensions for each perspective that were referenced in at least 20 percent of the definitions, or 24 and 40 times, respectively, in the research and entrepreneurial samples (Tables 4 and 5 provide details). In the researcher sample, this led to the exclusion of the dimensions "products/services" (16 references) and "sustainable" (11 references); in the entrepreneurial sample, we excluded the dimensions "organizational capital" (24 references), "ownership" (12 references), "goals" (26 references), and "competitive advantage" (5 references).

For the consensus definitions of resources, see Tables 4 and 5. Among researchers, the most referenced dimensions are human capital (280 references), creation (195 references), and firm (145 references), followed by physical capital (141 references) and assets (140 references). The most commonly referenced journal articles in resource definitions are Barney (1991), with 56 references, followed by Wernerfelt (1984) with 30 references, Grant (1991) with 19 references, Amit and Schoemaker (1993) with 15 references, and Penrose (1959) with seven references. Among entrepreneurs, the most referenced dimensions are creation (222 references), human capital (205 references), and firm (163 references), followed by relationship capital (149 references) and assets (115 references). Interestingly, both researchers' and entrepreneurs' consensus definitions also contain references to the *outcomes* associated with resources, such as products/services (47 references in the entrepreneurs sample), value/success (65 and 93 references, respectively, in the researchers and entrepreneurs samples), and competitive advantage (32 references in the researchers sample). With respect to our researcher sample, this resonates with previous theoretical treatments of the RBV that have cautioned against the potential for circular reasoning inherent in distinguishing resources from nonresources by their performance implications (e.g., Bromiley and Fleming 2002; Priem and Butler 2001a). It is remarkable, however, that the entrepreneurs in our sample, without being prompted, also included resource outcomes as part of their resource conceptualizations.

Though the two consensus definitions indicate a substantial overlap between both perspectives, the results from our binary logistic regression analysis also indicate a number of significant differences between researchers and entrepreneurs (see Table 6 for details). Our overall model is highly significant, explains 37 percent of variation in our resource definitions, and correctly categorizes slightly more than 81 percent of definitions. The significance level of the Wald statistic for each dimension determines its usefulness for classifying definitions into the researcher or entrepreneurial category. *Exp(B)* represents the ratio-change in the odds of a definition being associated with a researcher for a one-unit change in the predictor. When *Exp(B)* is less than 1, increasing values of the dimension correspond to increasing odds of the definition being part of our entrepreneurial sample (and decreasing odds of the definition being part of our researcher sample). Conversely, when *Exp(B)* is greater than 1, increasing values of the dimension correspond to increasing odds of the definition being part of our researcher sample (and decreasing odds of the definition being part of our entrepreneurial sample).

In particular, assets ($p < .001$), human capital ($p < .01$), organizational capital ($p < .01$), physical capital ($p < .05$), ownership ($p < .001$), and competitive advantage ($p < .001$) are statistically significant dimensions for classification and indicate researcher definitions. Conversely, the dimensions relationship capital ($p < .10$), products/services ($p < .05$), and value/success ($p < .05$) are also statistically significant dimensions but indicate entrepreneurial definitions.

[7]As a robustness test, we also used an alternative specification in which each predictor variable is a count of how many of the root words associated with each dimension are mentioned in a given definition. In this case, a predictor represents a dimension's *weight* for a given definition. The results remained substantively unchanged, however, so we present the results of the binary predictors instead.

Table 4
Researchers' Resource Definitions

Assets (140)	Human Capital (280)	Organizational Capital (90)	Financial Capital (35)	Physical Capital (141)	Relationship Capital (64)
Asset (55)	Capability (46)	Process (27)	Financial (30)	Physical (37)	Reputation (17)
Intangible (37)	Knowledge (40)	Routine (10)	Equity (5)	Technology (33)	Market (9)
Tangible (25)	Human (39)	System (10)		Equipment (17)	Relation (9)
Factor (10)	Skill (25)	Structure (8)		Plant (11)	Available (6)
Bundle (6)	Brand (14)	Culture (7)		Material (9)	Access (5)
Complex (4)	Information (14)	Planning (6)		Stock (9)	Contract (5)
Observable (3)	Competency (11)	Coordination (5)		Land (7)	Customer (5)
	Experience (8)	Procedure (5)		Location (6)	Network (5)
	Patent (8)	Team (5)		Geographic (5)	Loyalty (3)
	Employee (7)	Activities (4)		Machine (4)	
	Individual (7)	Reporting (3)		Building (3)	
	Ability (6)				
	Capacity (6)				
	Learn (6)				
	Intelligence (5)				
	Personnel (5)				
	Right (5)				
	Training (5)				
	Insight (4)				
	Judgment (4)				
	Legal (4)				
	License (4)				
	Worker (4)				
	Labor (3)				
Resources are. . .					
tangible or intangible assets—such as. . .					
	human capital,. . .				
		organizational capital,. . .			
			financial capital,. . .		
				physical capital,. . .	
					and relationship capital—. . .

Robustness Tests

To assess potential contingencies affecting our results, we performed two sets of robustness tests.[8] First, to determine whether there were any significant differences between the resource definitions of entrepreneurs, we performed several analyses of variance comparing all predictor variables from Table 6 for different venture stages (see Table 2 for venture stage categories), ventures' industries (see Table 2 for ventures' industries), and for whether or not an entrepreneur had a business degree. The results of these analyses, however, showed that there were no statistically significant differences with respect to resource definitions across venture stages, venture industries, and entrepreneurs with/without business degrees.

Second, we also compared the resource definitions of specialized entrepreneurship journals (i.e., *Entrepreneurship: Theory & Practice*, *International Entrepreneurship and Management*

[8]We thank an anonymous reviewer for suggesting these robustness tests.

Table 4
Continued

Ownership (81)	Firm (145)	Creation (195)	Value/Success (65)	Competitive Advantage (32)
Control (29)	Firm (84)	Use (38)	Value (16)	Competitive (15)
Own (17)	Organization (46)	Develop (17)	Efficient (12)	Advantage (13)
Tied (15)	Business (4)	Implement (17)	Effective (9)	Superior (4)
Semipermanently (8)	Collective (4)	Manage (17)	Improve (8)	
Possess (7)	Operation (4)	Input (15)	Economic (6)	
Internal (5)	Company (3)	Make (14)	Potential (5)	
		Enable (13)	Strength (5)	
		Production (10)	Performance (4)	
		Conceive (9)		
		Combine (7)		
		Result (6)		
		Source (6)		
		Utilize (5)		
		Achieve (4)		
		Deploy (4)		
		Transform (4)		
		Add (3)		
		Draw (3)		
		Generate (3)		
that are owned by. . .				
	a firm,. . .			
		and that enable the firm to create. . .		
			value/success	
				and a competitive advantage.

Journal, and *Journal of Business Venturing*) versus other academic journals and found that the only significant difference with respect to resource definitions was that the specialized entrepreneurship journals were more likely to emphasize "products/services" in their resource definitions ($p < .05$). Based on these analyses, we conclude that our samples' resource definitions remained robust across venture stages, industries, entrepreneurs' education, and types of journal.

Discussion

Because the RBV is becoming increasingly important within entrepreneurship but was developed in another field with a number of potentially important differences, we set out to better understand whether and to what extent the established RBV can be applied to entrepreneurial venture research. In doing so, we have investigated how resources as the fundamental tenets of the RBV are conceptualized both in research and entrepreneurial practice and have uncovered a number of similarities as well as a few key differences in researchers' and entrepreneurs' views.

Our study therefore improves our understanding of the nature of different dimensions of resources, each dimension's primacy to researchers and entrepreneurs, and how those resources are viewed to shape outcomes, which were an integral part of both researchers' and entrepreneurs' resource definitions. In particular, the resource dimensions extracted from research journals show some overlap with those offered by the practicing entrepreneurs, highlighting the importance of those resources to organizational functioning and performance. However, the relative importance that each group placed on each resource dimensions differed, and there were differences regarding the implications of resources for outcomes. Further, we discuss the key similarities and differences, outline implications, and describe areas for future inquiry.

Table 5
Practicing Entrepreneurs' Resource Definitions

Assets (115)	Human Capital (205)	Financial Capital (48)	Physical Capital (94)	Relationship Capital (149)
Thing (26)	People (48)	Money (22)	Tool (21)	Customer (20)
Tangible (25)	Knowledge (23)	Financial (13)	Equipment (18)	Supply (18)
Intangible (22)	Information (15)	Bank (8)	Material (16)	Client (17)
Asset (14)	Skill (14)	Cash (5)	Technology (16)	Market (11)
Item (13)	Experience (13)		Physical (6)	Relation (11)
Component (8)	Idea (11)		Computer (5)	Available (10)
Element (7)	Ability (9)		Building (4)	Network (10)
	Employee (8)		Machine (4)	Access (9)
	Individual (7)		Office (4)	Contact (6)
	Creativity (6)			Community (5)
	Human (6)			Sale (5)
	Staff (6)			Association (4)
	Talent (6)			Contract (4)
	Capability (5)			Outside (4)
	Concept (5)			Partner (4)
	Education (5)			Referral (4)
	Intellectual (4)			Sell (4)
	Labor (4)			Advice (3)
	Learn (4)			
	Personnel (3)			
	Training (3)			

Resources are. . .
tangible or intangible assets—such as. . .
human capital,. . .
financial capital,. . .
physical capital,. . .
and relationship capital—. . .

Similarities

Both researchers and practicing entrepreneurs conceptualized tangible and intangible assets as key components of resources. In addition, both defined resources in terms of human, financial, physical, and relationship capital and defined these assets as a necessary, but not sufficient condition for organizational advantages. Both researchers' and entrepreneurs' conceptualizations further suggest that it may not be resources themselves, but the leverage of such resources, that is important for organizational advantages (indicated by the emphasis both groups place on the dimension "creation"). So far, however, only very few studies have empirically investigated how resource use influences the resource–performance relationship (for example, see Eddleston, Kellermanns, and Sarathy 2008 and Sirmon, Gove, and Hitt 2008; see also Sirmon, Hitt, and Ireland 2007 for a theoretical treatment). Moreover, the processes of leveraging resources may be different in the realm of strategy and entrepreneurship, which only future research would be able to examine. Related to that argument, both researchers and entrepreneurs stressed the multidimensionality of resources (tangible versus intangible; human, financial physical, and relationship capital; etc.) (e.g., Brinckmann and Hoegl 2011; Clarysse, Bruneel, and Wright 2011). As these resources likely do not only have main but also joint outcome effects (Powell and Dent-Micallef

Table 5
Continued

Firm (163)	Creation (222)	Products/Services (47)	Value/Success (93)
Business (98)	Use (39)	Product (26)	Success (40)
Venture (26)	Make (25)	Service (21)	Profit (18)
Company (22)	Help (19)		Growth (11)
Operation (7)	Provide (16)		Value (10)
Firm (5)	Run (12)		Effective (4)
Organization (5)	Contribute (10)		Improve (4)
	Source (10)		Vital (3)
	Develop (9)		Wealth (3)
	Necessary (9)		
	Draw (8)		
	Support (8)		
	Create (7)		
	Operate (7)		
	Achieve (6)		
	Add (5)		
	Generate (5)		
	Foundation (4)		
	Manage (4)		
	Obtain (4)		
	Carry (3)		
	Combine (3)		
	Production (3)		
	Rely (3)		
	Result (3)		
which allow a firm. . .			
	to create. . .		
		products and/or services. . .	
			in its pursuit of value/success.

1997), future research might want to investigate such resource interactions.

An important implication of these similarities is that, broadly speaking, the main tenets of the RBV are representative of entrepreneurial practice. However, we also found germane differences regarding the relative weight that is placed on different dimensions of resources and how they enable the creation of outcomes, which suggests the necessity of contextual or boundary conditions when leveraging the RBV in entrepreneurship research (Busenitz et al. 2003). We will discuss these differences in the following sections.

Key Differences

Capital Resources. In defining resources, entrepreneurs put significantly less emphasis on human, organizational, and physical capital. Although human capital is an important resource (Crook et al. 2011), entrepreneurs may simply take human capital, which in our sample is most likely their own human capital, for granted and thus cognitively attribute less importance to it. Another potential explanation is that the entrepreneurs view themselves—rightly or wrongly—as the key resources of their firms. If this is the case, future research might want to separate the entrepreneur's from

Table 6
Binary Logistic Regression Analysis

Researcher versus Entrepreneurial Resource Definitions

Dimension	References in Researcher Sample (%)	References in Entrepreneurial Sample (%)	Estimated Coefficient *(B)*	S.E.	*Exp (B)*
Constant			−2.72***	.51	.07
Assets	71	39	1.11***	.34	3.05
Human Capital	83	56	1.12**	.39	3.08
Organizational Capital	42	11	1.13**	.39	3.10
Financial Capital	27	22	.10	.39	1.11
Physical Capital	54	35	.71*	.33	2.04
Relationship Capital	41	44	−.59†	.35	.56
Ownership	44	7	2.12***	.43	8.32
Firm	85	69	.60	.39	1.82
Creation	70	69	−.42	.35	.66
Products/Services	9	17	−1.08*	.54	.34
Value/Success	37	41	−.71*	.34	.49
Competitive Advantage	15	3	3.20***	.67	24.57
χ^2 (chi square)		146.86***			
-2log-likelihood		271.53			
Pseudo-R^2 (Nagelkerke)		.37			
Sample Size		318			
Percentage of Definitions Correctly Classified		81.10			

†$p < .10$
*$p < .05$
**$p < .01$
***$p < .001$

employees' human capital in the venture and seek to better understand the performance implications of each type of human capital, and how each can be created and better managed by the entrepreneur. This suggests that work is needed that blends insights involving high-performance work practices and systems with the RBV (cf. Combs et al. 2006) and that helps to further understand how human capital is orchestrated within entrepreneurial ventures to enhance performance (Sirmon et al. 2011).

Interestingly, entrepreneurs also put less emphasis on organizational and physical capital. Such a reduced focus on these dimension of resources seem to be justified in light of the recent findings by Newbert (2007) and Crook et al. (2008), which found only partial support for the relationships between physical assets and organizational advantages. In a hypercompetitive world, such assets are sometimes viewed as limiting flexibility, and thus, as detrimental to organizational advantages (Mosakowski 2002). Another potential explanation for these findings is that the lack of entrepreneurs' emphasis on human, organizational, and physical capital is compensated by their reliance on contracted resources, which we will discuss further.

Relationship Capital versus Ownership. The traditional RBV—and most of our researcher definitions (e.g., Amit and Schoemaker 1993; Barney 1991; Wernerfelt 1984)—imply that resources are owned or at least controlled by the firm. Entrepreneurs, in contrast, tend to emphasize the importance of relationship

capital—such as contractual relations with suppliers and partners—which might be able to substitute, or at least complement, the firm's own resource base (Poppo and Zenger 1998). The idea of relationship capital as part of firms' resource base also resonates with more recent theoretical developments, such as the relational view (Dyer and Singh 1998) and studies on interfirm collaborations (Gulati 1999), which suggest that "firms essentially use alliances to gain access to other firms' valuable resources" (Das and Teng 2000, p. 33).

A key implication for future inquiry is to recognize that entrepreneurial ventures tend to be more reliant on relationships (i.e., other firms) and that these relationships represent important strategic resources that are extensions to entrepreneurial ventures. Given this, future RBV-based inquiry within entrepreneurship should not only investigate the resources that are "controlled by a firm" (Barney 1991, p. 110) but recognize that ownership or control of resources is not a necessary condition for organizational advantages (Wiklund and Shepherd 2009). In short, for entrepreneurial ventures, there is a weaker condition of resource accessibility. Future research might seek to shed light on the extent to which accessibility—which establishes the right to leverage other firms' resources—allows entrepreneurial ventures to capture their associated benefits, and the extent to which they are appropriated by the actual resource owners (Dyer and Singh 1998). These differences in the emphasis of relationship capital suggests the intersection between the RBV and the relational view (Dyer and Singh 1998) as a fruitful area for future inquiry in entrepreneurship research. Though recent research has generated some insights for larger, more established organizations (e.g., Schreiner, Kale, and Corsten 2009), our results suggest that relational resources might matter even more and look different in an entrepreneurship context (see also Foss et al. 2008).

Resource Outcomes—Value, Success, and Competitive Advantage. As mentioned previously, it came as a surprise to us that not only researches' but also entrepreneurs' resource definitions, without being prompted to do so, contained resource-related outcomes as an integral part of their resource conceptualizations, albeit with a number of important differences.

Consistent with extant research (cf. Wiggins and Ruefli 2002), our entrepreneurs' definitions indicate that very few firms have a competitive advantage or outperform their peers. Although entrepreneurs' put more emphasis on resource-enabled value creation and success than researchers, entrepreneurs do not conceptualize resources in relation to their competition, which is a cornerstone of the idea of performance advantage (Barney 1991). Success in entrepreneurs' eyes therefore seems to be defined by sufficient levels of value creation and success, levels that can be achieved in a state of competitive parity (Hitt et al. 2011). In short, entrepreneurs define resource-related organizational advantages in absolute terms, and not relative to their competition. An important implication is that future entrepreneurship research might want to account for entrepreneurs' objectives and how they factor into the (resource-related) management of their ventures. For instance, future research might want to avoid asking entrepreneurs to compare their venture's performance to others and instead ask them about different metrics that more directly capture resource-related organizational advantages.

More broadly, these results also corroborate the argument that resource outcomes likely differ with the stage of the entrepreneurial venture, and thus the measured outcomes need to be contextualized with respect to the life cycle of the organization in order to provide meaningful results (Sirmon et al. 2011). For example, though the mere survival of the venture is important for start-up phases, when the entrepreneurial firm matures, other concerns, such as the pursuit of nonfinancial goals (Gómez-Mejía et al. 2007) or profit (Sirmon et al. 2011), might become increasingly important. In sum, our findings suggest the potential of a comprehensive treatment of resource outcomes, including nonfinancial outcomes, for the development of a RBV in the realm of entrepreneurship (for reviews of performance outcomes, see Shepherd and Wiklund 2009).

Resource Outcomes—Products and Services. Another important difference is that entrepreneurs emphasize more proximate outcomes of resources, such as products and services, in contrast to researchers' focus on more distant outcomes, such as value creation and competitive advantage. In this way, our study complements recent research that shows that entrepreneurs and scholars operationalized

growth very differently (Achtenhagen, Naldi, and Melin 2010). Specifically, our results suggest that finding potential uses for resources—in terms of improving product and service offerings—are viewed as essential for achieving organizational advantages. This is consistent with Ray, Barney, and Muhanna (2004), who asserted that measures of organizational advantages (e.g., returns on assets or stock prices) are overaggregated, and important intermittent outcomes (e.g., new products created) might be missed when left unmeasured. Ray, Barney, and Muhanna's (2004) theory suggests that firms could have a resource-based advantage in one area (e.g., marketing) and a disadvantage in another (e.g., human resources) and that the advantage and disadvantage could potentially offset each other when linked directly to measures of organizational advantages. A key implication for future inquiry is that entrepreneurship researchers need to link strategic resources to product and service outcomes, and then link those outcomes to dependent variables at the organizational level. Doing so should provide a more complete picture of resources' implications for organizational advantages by allowing researchers to capture evidence of important intermediate outcomes that are vital to the survival and prosperity of entrepreneurial ventures (Ray, Barney, and Muhanna 2004; Rosenbusch, Brinckmann, and Bausch 2011).

General Implications

The development of the RBV into a strong theory—for both the fields of entrepreneurship and strategic management—makes it necessary, although not sufficient, to have clearly defined variables (cf. Sutton and Staw 1995). Moreover, researchers' resource definitions should reflect how practitioners conceptualize resources and attempt to build their firms around them, that is, they should attain operational validity (Thomas and Tymon 1982). In her review of the RBV literature, however, Montgomery (1995, p. 257) concludes that the "characterization of a perfect form of a resource is very useful from both a theoretical and practical standpoint. At the same time, it is important to know something about the size of the gap between the idealized version of a form and what is seen in reality. This is where the resource-based literature falls dangerously short." With a content analysis of a comprehensive sample of researchers' resource conceptualizations, our study enables future researchers to build on the field's consensus definition of resources, and thereby represents an important step toward conceptual clarity. Moreover, our empirical comparison of researchers' and practicing entrepreneurs' definitions provides important insights into the theoretical versus practical view on what is arguably the most crucial building block of organizational advantages. In particular, our study subjects the RBV in the field of entrepreneurship to an epistemological analysis (Narayanan and Zane 2011), and thereby represents a first step in advancing both its empirical verification as well as its application in practice. Indeed, understanding how resources are conceptualized can help advance both discovery and creation theories (see Alvarez and Barney 2007).

On a fundamental level, entrepreneurs (i.e., individuals) and organizations are not congruent, particularly if the organization has evolved beyond the individual ownership stage (Bruyat and Julien 2000). As such, an RBV for entrepreneurship needs to recognize the individual decision-maker (see also Haynie, Shepherd, and McMullen 2009; Kemmerer et al. 2011). Alvarez and Busenitz (2001), for example, have noted that the boundary condition of the RBV in relationship to entrepreneurship needs to include the individual cognitive abilities of the entrepreneur. Indeed, it is the entrepreneur who creates benefits by using resources differently (Shane and Venkataraman 2000). This is reflected in our results, as tangible and intangible resources are emphasized quite differently by entrepreneurs and scholars. Similarly, the RBV in larger, more established organizations needs to more fully integrate the organizational context of the manager and their relationship with the owners of the organization (e.g., Nag, Hambrick, and Chen 2007).

Our study also supports the long-held assumption that entrepreneurship is driven by the pursuit of opportunities and does not require the actual ownership of the resources (Stevenson 2000; Stevenson and Jarillo 1990). This has implications for the core building blocks of the RBV, as resources that are not owned by the entrepreneurs may be easier to imitate and substitute, requiring the entrepreneurs to emphasize different processes than managers in larger, more established firms to maintain a resource-based advantage (see also Stevenson 1985); for example, economies of scale and vertical integration are staples of

larger, more established firms (Chandler 1977) but may not be equally feasible for fledgling start-ups.

Irrespective of their differences in emphases, it is further remarkable that both researchers and entrepreneurs included resource outcomes as integral parts of their resource definitions. Though this may fuel additional criticism of the RBV's tendency for circular of even tautological reasoning (e.g., Bromiley and Fleming 2002; Priem and Butler 2001a), the differences our study has uncovered in researchers' and entrepreneurs' definitions with respect to resource outcomes also suggest that the RBV for entrepreneurial firms needs to develop appropriate outcomes. Though, theoretically, the RBV focuses on competitive advantage, and our study supports this focus, entrepreneurial firms tend to focus more on actual value creation and profit. Ironically, the empirical side of the RBV has somewhat anticipated this theoretical development, by more directly focusing on performance rather than on competitive advantages (Crook et al. 2008).

Our research also provides valuable guidance for entrepreneurs. By eliciting resource definitions from entrepreneurs and contrasting them with academic definitions, we highlight potential blind spots in entrepreneurs' mental maps. Indeed, recent research has begun to question that entrepreneurs behave according to the normative prescriptions advanced by the RBV and has found, for instance, that entrepreneurs tend to overemphasize the resource attributes value and inimitability while largely neglecting nonsubstitutability and rareness (Kemmerer et al. 2011). Our study complements and extends these previous findings by identifying potential blind spots with respect to human, organizational, and physical capital resources, resource ownership, as well as competitive advantage versus products/services as resource outcomes. Though these blind spots are not necessarily detrimental per se—for example, not every resource has to be owned to create a competitive advantage (e.g., Dyer and Singh 1998)—entrepreneurs should be aware of all the attributes and outcomes associated with resources and evaluate them accordingly in order to make high-quality resource judgments and investment decisions.

Limitations and Conclusion

A first limitation of our study is that our sample of nascent/practicing entrepreneurs consisted mainly of individuals who did not have a formal business education, who were predominantly involved in the start-up of small businesses and who were being associated with the FastTrac program. Because of this, future research might investigate other groups of respondents in order to generalize our findings. Not only may the demographics of the entrepreneurs be important, but also the context in which entrepreneurship takes place. The start-ups our sample was comprised of and our study focused on can be classified as small businesses, which constitute the majority of entrepreneurial start-ups (Carland et al. 1984). Yet, an investigation of the differences between serial entrepreneurs or high-growth ventures (sometimes labeled "gazelles") compared with our respondent group may be insightful. Similarly, an investigation of how resources are defined in corporate venturing settings may be very useful. A second limitation is that despite our findings about the importance of certain dimensions of resources, recent work on the RBV suggests the need to look at how resources are managed (Sirmon, Hitt, and Ireland 2007; Sirmon, Gove, and Hitt 2008). Due to the nature of our research design, we could not investigate how the resource dimensions interact or how they are managed to shape performance; however, future research into this area seems warranted. A third limitation is that not all organizations have a purely financial focus. For example, family firms may focus on nonfinancial goals in addition to performance advantages such as economic value creation (Eddleston, Kellermanns, and Sarathy 2008), and these goals can further vary based on the life cycle stage the firm is in (Hoy and Sharma 2010). Thus, there might be other important outcomes—other than value creation—that entrepreneurial ventures are more concerned with but that we did not capture given our research methodology. Lastly, we need to comment on the fit of our logistic regression model. Though fit indices in logistic regression models are generally difficult to interpret (Pedhazur 1997), it has never been the intention of our study to maximize the correct classifications but merely to show what similarities and differences between practitioner and scholarly dimensions exist.

In conclusion, this study focused on decision-makers' conceptualizations of resources and their implications for organizational advantages. Our findings revealed a number of important

similarities and differences between researchers and practicing entrepreneurs and are in line with the general criticism that research and practice operate independent of each other (Rynes, Bartunek, and Daft 2001). The differences highlight the need for researchers to consider the uniqueness of the entrepreneurial venture context when applying the RBV's theoretical tenets. Doing so will require researchers to examine different resource dimensions and more intermediate outcomes, such as the creation of new products and services. If researchers continue to focus on distant performance advantages at the expense of more intermediate outcomes, researchers might miss exactly what is being created.

References

Achtenhagen, L., L. Naldi, and L. Melin (2010). "'Business Growth'—Do Practitioners and Scholars Really Talk About the Same Thing?," *Entrepreneurship Theory and Practice* 34(2), 289–316.

Alvarez, S. A., and J. B. Barney (2007). "Discovery and Creation: Alternative Theories of Entrepreneurial Action," *Strategic Entrepreneurship Journal* 1(1–2), 11–26.

Alvarez, S. A., and L. W. Busenitz (2001). "The Entrepreneurship of Resource-Based Theory," *Journal of Management* 27, 755–775.

Amit, R., and P. Schoemaker (1993). "Strategic Assets and Organizational Rent," *Strategic Management Journal* 14, 33–46.

Barney, J. (1991). "Firm Resources and Sustained Competitive Advantage," *Journal of Management* 17(1), 99–120.

Barney, J., M. Wright, and D. J. Ketchen (2001). "The Resource-Based View of the Firm: Ten Years After 1991," *Journal of Management* 27(6), 625–641.

Barney, J. B. (2001). "Is the Resource-Based 'View' a Useful Perspective for Strategic Management Research? Yes," *Academy of Management Review* 26(1), 41–57.

Barney, J. B., and A. M. Arikan (2001). "The Resource-Based View: Origins and Implications," in *The Blackwell Handbook of Strategic Management*. Eds. M. A. Hitt, R. E. Freeman, and J. S. Harrison. Oxford, UK: Blackwell Publisher Ltd, 124–188.

Bettis, R. A. (1991). "Strategic Management and the Straightjacket: An Editorial Essay," *Organization Science* 2(3), 315–319.

Brinckmann, J., and M. Hoegl (2011). "Effects of Initial Teamwork Capability and Initial Relational Capability on the Development of New Technology-Based Firms," *Strategic Entrepreneurship Journal* 5(1), 37–57.

Bromiley, P., and L. Fleming (2002). "The Resource-Based View of Strategy: A Behaviorist Critique," in *The Economics of Choice, Change, and Organizations: Essays in Memory of Richard M. Cyert*. Eds. M. Augier and J. G. March. Cheltenham, UK: Elgar Publishing, 319–336.

Brush, C. G., P. G. Greene, M. M. Hart, and L. F. Edelman (1997). "Resource Configurations Over the Life Cycle of Ventures," in *Frontiers of Entrepreneurship Research*. Eds. P. D. Reynolds, W. D. Bygrave, N. M. Carter, P. Davidsson, W. B. Gartner, C. M. Mason, and P. P. McDougall. Wellesley, MA: Center for Entrepreneurial Studies, Babson College, 315–329.

Bruyat, C., and P.-A. Julien (2000). "Defining the Field of Research in Entrepreneurship," *Journal of Business Venturing* 16, 165–180.

Busenitz, L. W., G. P. West, D. Shepherd, T. Nelson, G. N. Chandler, and A. Zacharakis (2003). "Entrepreneurship Research in Emergence: Past Trends and Future Directions," *Journal of Management* 29(3), 285–308.

Carayannopoulos, S. (2009). "How Technology-Based New Firms Leverage Newness and Smallness to Commercialize Disruptive Technologies," *Entrepreneurship Theory and Practice* 33(2), 419–438.

Carland, J. W., F. Hoy, W. R. Boulton, and J. C. Carland (1984). "Differentiating Entrepreneurs from Small Business Owners: A Conceptualization," *Academy of Management Review* 9(2), 354–359.

Castanias, R. P., and C. E. Helfat (1991). "Managerial Resources and Rents," *Journal of Management* 17(1), 155–171.

Chandler, A. D. (1977). *The Visible Hand: The Managerial Revolution in American Business*. Cambridge, MA: Belknap Press.

Chandler, G. N., and S. H. Hanks (1994). "Market Attractiveness, Resource-Based Capabilities, Venture Strategies, and Venture Performance," *Journal of Business Venturing* 9, 331–349.

Chrisman, J., and F. W. Kellermanns (forthcoming). "Entrepreneur," in *Blackwell Encyclopedia of Entrepreneurship Research*. Eds. M. Morris and D. Kuratko. Oxford: Blackwell Publishing.

Chrisman, J. J., A. Bauerschmidt, and C. W. Hofer (1998). "The Determinants of New Venture Performance: An Extended Model," *Entrepreneurship Theory and Practice* 23(1), 5–29.

Chrisman, J. J., J. H. Chua, and F. W. Kellermanns (2009). "Priorities, Resource Stocks, and Performance in Family and Non-Family Firms," *Entrepreneurship Theory and Practice* 33(3), 739–760.

Chua, J. H., J. J. Chrisman, F. W. Kellermanns, and Z. Wu (2011). "Agency Problems of Borrowed Social and Financial Capital: Resolution in New Ventures Through Family Involvement," *Journal of Business Venturing* 26(4), 472–488.

Clarysse, B., J. Bruneel, and M. Wright (2011). "Explaining Growth Paths of Young Technology-Based Firms: Structuring Resource Portfolios in Different Competitive Environments," *Strategic Entrepreneurship Journal* 5(2), 137–157.

Cohen, J. (1960). "A Coefficient of Agreement for Nominal Scales," *Educational and Psychological Measurement* 20(1), 37–46.

Combs, J. G., Y. Liu, A. Hall, and D. J. Ketchen (2006). "How Much Do High-Performance Work Practices Matter? A Meta-Analysis of Their Effects on Organizational Performance," *Personnel Psychology* 59, 501–528.

Conner, K. R. (1991). "A Historical Comparison of Resource-Based Theory and Five Schools of Thought Within Industrial Organization Economics: Do We Have a New Theory of the Firm?," *Journal of Management* 17(1), 121–154.

Crook, T. R., D. J. Ketchen, J. G. Combs, and S. Y. Todd (2008). "Strategic Resources and Performance: A Meta-Analysis," *Strategic Management Journal* 29(11), 1141–1154.

Crook, T. R., S. Y. Todd, J. G. Combs, D. J. Woehr, and D. J. Ketchen (2011). "Does Human Capital Matter? A Meta-Analysis of the Relationship Between Human Capital and Firm Performance," *The Journal of Applied Psychology* 96(3), 443–456.

Das, T. K., and B.-S. Teng (2000). "A Resource-Based Theory of Strategic Alliances," *Journal of Management* 26(1), 31–61.

David, R. J., and S.-K. Han (2004). "A Systematic Assessment of the Empirical Support for Transaction Cost Economics," *Strategic Management Journal* 25, 39–58.

De Carolis, D. M., Y. Yang, D. L. Deeds, and E. Nelling (2009). "Weathering the Storm: The Benefit of Resources to High-Technology Ventures Navigating Adverse Events," *Strategic Entrepreneurship Journal* 3(2), 147–160.

Dyer, J. H., and H. Singh (1998). "The Relational View: Cooperative Strategies and Sources of Inter-Organizational Competitive Advantage," *Academy of Management Review* 23(4), 660–679.

Eddleston, K., F. W. Kellermanns, and R. Sarathy (2008). "Resource Configuration in Family Firms: Linking Resources, Strategic Planning and Technological Opportunities to Performance," *Journal of Management Studies* 45(1), 26–50.

Fischer, E., and R. Reuber (2007). "The Good, the Bad, and the Unfamiliar: The Challenges of Reputation Formation Facing New Firms," *Entrepreneurship Theory and Practice* 31(1), 53–75.

Forster, N. (1999). "The Analysis of Company Documentation," in *Qualitative Methods in Organizational Research: A Practical Guide*. Eds. G. E. Symon and C. E. Cassell. London, UK: Sage, 147–166.

Foss, N. J., P. G. Klein, Y. Y. Kor, and J. T. Mahoney (2008). "Entrepreneurship, Subjectivism, and the Resource-Based View: Toward a New Synthesis," *Strategic Entrepreneurship Journal* 2(1), 73–94.

Gómez-Mejía, L. R., K. T. Haynes, M. Núñez-Nickel, K. J. L. Jacobson, and H. Moyano-Fuentes (2007). "Socioemotional Wealth and Business Risk in Family-Controlled Firms: Evidence from Spanish Olive Oil Mills," *Administrative Science Quarterly* 52(1), 106–137.

Grant, R. M. (1991). "The Resource-Based Theory of Competitive Advantage: Implications for Strategy Formulation," *California Management Review* 33(3), 114–135.

Green, K. E. (1996). "Sociodemographic Factors and Mail Survey Response," *Psychology and Marketing* 13(2), 171–184.

Greene, P. G., C. G. Brush, and T. E. Brown (1997). "Resources in Small Firms: An Exploratory Study," *Journal of Small Business Strategy* 8(2), 25–38.

Gulati, R. (1999). "Network Location and Learning: The Influence of Network Resources and Firm Capabilities on Alliance Formation," *Strategic Management Journal* 20, 397–420.

Hall, R. (1992). "The Strategic Analysis of Intangible Resources," *Strategic Management Journal* 13, 135–144.

Haynie, J. M., D. A. Shepherd, and J. S. McMullen (2009). "An Opportunity for Me? The Role of Resources in Opportunity Evaluation Decisions," *Journal of Management Studies* 46(3), 337–361.

Hitt, M. A., R. D. Ireland, S. M. Camp, and D. L. Sexton (2002). "Strategic Entrepreneurship: Integrating Entrepreneurial and Strategic Management Perspectives," in *Strategic Entrepreneurship: Creating a New Mindset*. Eds. M. A. Hitt, R. D. Ireland, S. M. Camp, and D. L. Sexton. Malden, MA: Blackwell, 1–16.

Hitt, M. A., R. D. Ireland, D. G. Sirmon, and C. A. Trahms (2011). "Strategic Entrepreneurship: Creating Value for Individuals, Organizations, and Society," *Academy of Management Perspectives* 25(2), 57–75.

Hoopes, D. G., T. L. Madsen, and G. Walker (2003). "Guest Editor's Introduction to the Special Issue: Why Is There a Resource-Based View," *Strategic Management Journal* 24(10), 889–902.

Hoy, F., and P. Sharma (2010). *Entrepreneurial Family Firms*. Upper Saddle River, NJ: Prentice Hall.

Ireland, R. D., J. W. Webb, and J. E. Coombs (2005). "Theory and Methodology in Entrepreneurship Research," in *Research Methodology in Strategy and Management*. Eds. D. J. Ketchen and D. D. Bergh. Bingley, UK: Emerald Group, 111–141.

Kanuk, L., and C. Berenson (1975). "Mail Surveys and Response Rate: A Literature Review," *Journal of Marketing Research* 22, 440–453.

Kemmerer, B., J. Walter, F. W. Kellermanns, and V. K. Narayanan (2011). "A Judgment-Analysis Perspective on Entrepreneurs' Resource Evaluations," *Journal of Business Research* 65, 1102–1108.

King, N. (1998). "Template Analysis," in *Qualitative Methods and Analysis in Organizational Research: A Practical Guide*. Eds. G. Symon and C. Cassell. London: Sage, 118–134.

Kraaijenbrink, J., J.-C. Spender, and A. J. Groen (2010). "The Resource-Based View: A Review and Assessment of Its Critiques," *Journal of Management* 36(1), 349–372.

Kumar, N., L. W. Stern, and J. C. Anderson (1993). "Conducting Interorganizational Research Using Key Informants," *Academy of Management Journal* 36(6), 1633–1651.

Lichtenstein, B. M. B., and C. G. Brush (2001). "How Do 'Resource Bundles' Develop and Change in New ventures? A Dynamic Model and Longitudinal Exploration," *Entrepreneurship Theory and Practice* 25(3), 37–58.

Miller, D. J. (2004). "Firms' Technological Resources and the Performance Effects of Diversification: A Longitudinal Study," *Strategic Management Journal* 25, 1097–1119.

Montgomery, C. A. (1995). "Of Diamonds and Rust: A New Look at Resources," in *Resource-Based and Evolutionary Theories of the Firm: Towards a Synthesis*. Ed. C. A. Montgomery. Norwell, MA: Kliver, 251–267.

Mosakowski, E. (2002). "Overcoming Resource Disadvantages in Entrepreneurial Firms: When Less Is More," in *Strategic Entrepreneurship: Creating a New Integrated Mindset*. Eds. M. A. Hitt, R. D. Ireland, S. M. Camp, and D. L. Sexton. Oxford, UK: Blackwell Publishing, 106–126.

Nag, R., D. C. Hambrick, and M.-J. Chen (2007). "What Is Strategic Management, Really? Inductive Derivation of a Consensus Definition of the Field," *Strategic Management Journal* 28, 935–955.

Narayanan, V. K., and L. Zane (2011). "Current Theoretical Debates in Management Research: Epistemological Analysis in Strategic Management," in *Challenges and Controversies in Management Research*. Eds. C. Cassell and B. Lee. New York: Routledge.

Nelson, K. M., S. Nadkarni, V. K. Narayanan, and M. Ghods (2000). "Understanding Software Operations Support Expertise: A Revealed Causal Mapping Approach," *MIS Quarterly* 24(3), 457–507.

Neuendorf, K. A. (2002). *The Content Analysis Guidebook*. Thousand Oaks, CA: Sage.

Newbert, S. L. (2007). "Empirical Research on the Resource-Based View of the Firm: An Assessment and suggestions for Future Research," *Strategic Management Journal* 28, 121–146.

Pedhazur, E. J. (1997). *Multiple Regression in Behavioral Research. Explanations and Predictions*. Fort Worth, TX: Harcourt Brace.

Penrose, E. T. (1959). *The Theory of the Growth of The Firm*. Oxford, GB: Blackwell.

Podsakoff, P. M., S. B. MacKenzie, J.-Y. Lee, and N. P. Podsakoff (2003). "Common Method Biases in Behavioral Research: A Critical Review of the Literature and Recom-

mended Remedies," *The Journal of Applied Psychology* 88(5), 879–903.

Podsakoff, P. M., S. B. Mackenzie, D. G. Bachrach, and N. P. Podsakoff (2005). "The Influence of Management Journals in the 1980s and 1990s," *Strategic Management Journal* 26, 473–488.

Poppo, L., and T. Zenger (1998). "Testing Alternative Theories of the Firm: Transaction Cost, Knowledge-Based, and Measurement Explanations for Make-or-Buy Decisions in Information Services," *Strategic Management Journal* 19, 853–877.

Powell, T. C., and A. Dent-Micallef (1997). "Information Technology as Competitive Advantage: The Role of Human, Business, and Technology Resources," *Strategic Management Journal* 18, 375–405.

Priem, R. L., and J. E. Butler (2001a). "Is the Resource-Based 'View' a Useful Perspective for Strategic Management Research?," *Academy of Management Review* 26(1), 22–40.

——— (2001b). "Tautology in the Resource-Based View and the Implications of Externally Determined Resource Value: Further Comments," *Academy of Management Review* 26(1), 57–65.

Ray, G., J. B. Barney, and W. A. Muhanna (2004). "Capabilities, Business Processes and Competitive Advantage: Choosing the Dependent Variable in Empirical Tests of the Resource-Based View," *Strategic Management Journal* 25, 23–37.

Rosenbusch, N., J. Brinckmann, and A. Bausch (2011). "Is Innovation Always Beneficial? A Meta-Analysis of the Relationship Between Innovation and Performance in SMEs," *Journal of Business Venturing* 26(4), 441–457.

Rynes, S. L., J. M. Bartunek, and R. L. Daft (2001). "Across the Great Divide: Knowledge Creation and Transfer Between Practitioners and Academics," *Academy of Management Journal* 44(2), 340–355.

Schreiner, M., P. Kale, and D. Corsten (2009). "What Really Is Alliance Management Capability and How Does It Impact Alliance Outcomes and Success?," *Strategic Management Journal* 30, 1395–1419.

Shane, S., and S. Venkataraman (2000). "The Promise of Entrepreneurship as a Field of Research," *Academy of Management Review* 25(1), 217–226.

Sharma, P., and J. J. Chrisman (1999). "Toward a Reconciliation of the Definitional Issues in the Field of Corporate Entrepreneurship," *Entrepreneurship: Theory & Practice* 23(3), 11–27.

Shepherd, D., and J. Wiklund (2009). "Are We Comparing Apples with Apples or Apples with Oranges? Appropriateness of Knowledge Accumulation Across Growth Studies," *Entrepreneurship Theory and Practice* 33(1), 105–123.

Siqueira, A., and G. D. Bruton (2010). "High-Technology Entrepreneurship in Emerging Economies: Firm informality and Contextualization of Resource-Based Theory," *IEEE Transactions on Engineering Management* 57(1), 39–50.

Sirmon, D. G., M. A. Hitt, and R. D. Ireland (2007). "Managing Firm Resources in Dynamic Environments to Create Value: Looking Inside the Black Box," *Academy of Management Review* 32(1), 273–292.

Sirmon, D. G., S. Gove, and M. A. Hitt (2008). "Resource Management in Dyadic Competitive Rivalry: The Effects of Resource Bundling and Deployment," *Academy of Management Journal* 31(5), 919–935.

Sirmon, D. G., M. A. Hitt, R. Duane Ireland, and B. A. Gilbert (2011). "Resource Orchestration to Create Competitive Advantage: Breadth, Depth, and Life Cycle Effects," *Journal of Management* 37(5), 1390–1412.

Stevenson, H. H. (1976). "Defining Corporate Strengths and Weaknesses," *Sloan Management Review* 17(Spring), 51–68.

——— (1983). *A Perspective on Entrepreneurship*. Boston, MA: Harvard Business School.

——— (1984). *Resource Assessment: Defining Corporate Strengths and Weaknesses*. Boston, MA: Harvard Business School Press.

——— (1985). "The Heart of Entrepreneurship," Harvard Business Review March–April, 85–94.

——— (2000). "Why Entrepreneurship has Won!," Coleman White Paper (USASBE Plenary Address).

Stevenson, H. H., and J. C. Jarillo (1990). "A Paradigm of Entrepreneurship: Entrepreneurial Management," *Strategic Management Journal* 11, 11–27.

Sullivan, D., and M. Marvel (2011). "How Entrepreneurs' Knowledge and Network Ties Relate to the Number of Employees in new SMEs," *Journal of Small Business Management* 49(2), 185–206.

Sutton, R. I., and B. M. Staw (1995). "What Theory Is Not," *Administrative Science Quarterly* 40, 371–384.

Thomas, K. W., and W. G. Tymon (1982). "Necessary Properties of Relevant Research: Lessons from Recent Criticisms of the Organizational Sciences," *Academy of Management Review* 7, 345–352.

Ucbasaran, D., P. Westhead, and M. Wright (2009). "The Extent and Nature of Opportunity Identification by Experienced Entrepreneurs," *Journal of Business Venturing* 24, 99–115.

Unger, J. M., A. Rauch, M. Frese, and N. Rosenbusch (2011). "Human Capital and Entrepreneurial Success: A Meta-Analytical Review," *Journal of Business Venturing* 26(3), 341–358.

Watt, R. J. C. (2004). "Concordance (3.2 ed) (software)," http://www.concordancesoftware.co.uk/ [accessed on 1 October 2012].

Welter, F. (2001). "Contextualizing Entrepreneurship-Conceptual Challenges and Ways Forward," *Entrepreneurship Theory & Practice* 35(1), 165–184.

Wernerfelt, B. (1984). "A Resource-Based View of the Firm," *Strategic Management Journal* 5(2), 171–180.

——— (1995). "The Resource-Based View of the Firm: Ten Years After," *Strategic Management Journal* 16, 171–174.

Whetten, D. A. (1989). "What Constitutes a Theoretical Contribution?," *Academy of Management Review* 14, 490–495.

Wiggins, R. A., and T. W. Ruefli (2002). "Sustained Competitive Advantage: Temporal Dynamics and the Incidence and Persistence of Superior Economic Performance," *Organization Science* 13(1), 82–105.

Wiklund, J., and D. Shepherd (2003). "Aspiring for, and Achieving Growth: The Moderating Role of Resources and Opportunities," *Journal of Management Studies* 40(8), 1919–1941.

Wiklund, J., and D. A. Shepherd (2009). "The Effectiveness of Alliances and Acquisitions: The Role of Resource Combination Activities," *Entrepreneurship Theory and Practice* 33(1), 193–212.

Zhao, H., S. E. Seibert, and G. T. Lumpkin (2009). "The Relationship of Personality to Entrepreneurial Intentions and Performance: A Meta-Analytic Review," *Journal of Management* 36(2), 381–404.