

Article

Entrepreneurial Resources, Decision-Making Logic and Organisational Change Readiness: Enhancing SME Sustainability in New Zealand

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Abstract: Entrepreneurs are the backbone of most small- and medium-sized enterprises (SMEs), yet they have received little attention regarding how they prepare for organisational change readiness (OCR), especially in the current uncertain business environment and the disruption of Industrial Revolution 4.0 (IR 4.0). This study sought to understand how entrepreneurs' decision-making logic (i.e., effectuation and causation) mediates the relationship between the different types of resources (i.e., financial and government resources, social capital) and OCR. A total of 119 participants (91 males), who were entrepreneurs, participated in this cross-sectional study. After controlling for age, gender, and education level, the study's results found that a positive relationship existed between the two types of resources and OCR, mediated by decision-making logic. A positive relationship was also found between both types of decision-making logic and OCR. These results highlight the significant impact of both entrepreneurs' social capital and financial and, government resources and decision-making logic on OCR.

Keywords: entrepreneurship; small- and medium-sized enterprises; organisational change readiness; decision-making logic; effectuation; causation; financial and government resources; social capital; resource-based view; Fourth Industrial Revolution; business sustainability; New Zealand



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1. Introduction

Small- and medium-sized enterprises (SMEs) globally make up approximately 90% of all businesses and contribute to over 50% of jobs (World Bank, 2019). Among members of the Organisation for Economic Co-operation and Development (OECD), SMEs make up 99% of businesses and contribute to around 70% of jobs (ILO, 2021), signifying the importance of the SMEs in providing jobs and in sustaining global economic development. As SMEs are typically more agile and able to change faster than larger businesses, the OECD views SMEs as having a unique opportunity to change the world of work by creating, adopting, and adapting to emerging technologies (OECD, 2023).

As populations grow and technological advancements increase, the sustainability of SMEs becomes crucial globally (ILO, 2021). Entrepreneurs, who own and manage SMEs, drive innovation and take significant personal risks (Hopp & Stephan, 2012). SMEs contribute 50–60% of gross value added in the OECD (ILO, 2019).

New Zealand (NZ)'s business landscape is unique, being one of the easiest countries to start a business in (OECD, 2020). SMEs in NZ employ 29% of the population and contribute over NZD 56 billion to GDP (MBIE, 2019). However, NZ SMEs lag in technology adoption compared to other OECD countries, risking further decline amid rapid technological

advancements (CPA Australia, 2023; OECD, 2022). This is concerning given their critical role in the NZ economy (Tongsuksai et al., 2023).

The flow-on effect of not adapting to new technological advancements such as artificial intelligence (AI) and automation will be a decrease in productivity and the risk of financial and employment loss should foreign competitors that are more technologically advanced and therefore productive and efficient enter the NZ market.

This will require high levels of adaptability and business resilience (Sitinjak et al., 2022) and entrepreneurs will need to prime their employees for change, building a climate that is open, and receptive to, regular changes to ways of work and implementation of new technologies. Despite the urgency in addressing the impact of IR 4.0 on organisational change readiness (OCR) and with over 50 articles available on the SCOPUS search platform, there is currently only one study focused on entrepreneurs (ref. Ślusarczyk, 2018). This highlights the importance of extending research on IR 4.0 and OCR to entrepreneurs, so they can better adapt to the current environment.

Prior research has found OCR to be a key factor influencing successful technology adoption by SMEs (Tongsuksai et al., 2023). With the high uncertainties faced by entrepreneurship, in addition to the presence of IR 4.0, Shepherd et al. (2015) have emphasised the importance of examining entrepreneurs' decision-making logic, as these define how they explore opportunities or decide to quit their businesses. De Winnaar and Scholtz (2020) also support the usefulness of entrepreneurs' decision-making logic, especially in the uncertain business environment we face today.

According to the resource-based view (RBV) (Lockett et al., 2009), the possession of resources alone does not provide a competitive advantage (Barney, 1991). Businesses need to also be able to effectively organise and leverage their resources for productive outcomes (Yin et al., 2021). To achieve this, the decision-making logic of the entrepreneur is important. The way they choose to set goals, obtain resources, and structure their business is all linked to the way that they make decisions. In other words, the current study argues that resources are followed by decision-making logic. Ultimately, these two factors impact the way employees view the change readiness of an organisation and how receptive they are to change (Armenakis et al., 1993).

Hence, the current research investigates how entrepreneurs use social, financial, and government resources and two different types of decision-making logic (i.e., effectuation and causation) to create change readiness in their business. The study hypothesised that OCR would allow entrepreneurs to better adapt their businesses to the changes that come about due to IR 4.0. Countries such as Australia, Ireland, and Estonia have been stated to have similar entrepreneurial characteristics including strong labour skills, a moderate level of innovation and competitiveness, and openness for business (Owen & Mason, 2019). The findings may help provide directions for these countries in managing OCR.

2. Literature Review

2.1. Social Capital, Financial, and Government Resources and OCR

Organisational change readiness (OCR) is defined in the current study as the state of a business when it is primed and ready for change (Holt et al., 2007). In this state, employees are primed to either support or resist change efforts (Armenakis et al., 1993). The past literature has focused on influencing employees to successfully move an organisation into a supportive state. However, an emerging body of literature has been studying the impact of teams and leaders on preparing employees for change (de Jong et al., 2023; Rafferty et al., 2013). The antecedents that make up OCR include an environment in which leaders communicate and create clarity, one thing that supports clear communication is being clear

on the decisions that are made and the logic behind these (McKay et al., 2013; Rafferty et al., 2013).

Traditionally, change research scholars have focused on large change projects, describing the readiness, adoption, and institutionalisation method as essential for successful change (Armenakis et al., 1993; Holt et al., 2007). While the original definition of readiness for change was a state that occurred prior to an episodic event, change scholars more recently have started to consider it as a general state into which a business primes employees (Bouckenooghe et al., 2009; Holt & Vardaman, 2013). This is due to rapid advancements in technology as part of IR 4.0 which are causing change at a faster rate than ever before. In addition, while the concept of change readiness previously focused on successfully navigating a singular change event, businesses now have multiple change events that can be happening concurrently (Holt & Vardaman, 2013).

Social capital is defined as 'the sum of the actual and potential resources embedded within, available through, and derived from, the network of relationships possessed by an individual or social unit' (Nahapiet & Ghoshal, 1998, p. 243). Social capital is an important part of business networking for entrepreneurs and has been found to impact business growth (Zhao et al., 2010). Social capital leads to socially supportive environments which have also been found to encourage innovation and therefore sustain a business over time (Hopp & Stephan, 2012).

The perception of available resources, including community, government, and financial support have been found to support nascent entrepreneur effort (Hopp & Stephan, 2012). Studies on external resources typically find that they have an indirect effect on new venture growth, continued innovation and socially supportive environments (D'Oria et al., 2021; Hopp & Stephan, 2012; Xu et al., 2024). Securing resources does not happen in a vacuum: it is not only resource availability but also the entrepreneur's ability to exploit these resources that leads to the success of the business (Wiklund & Shepherd, 2003; Xu et al., 2024).

In a small country like NZ, business relies considerably on relationships and the leveraging of social networks. Networks come in the form of family, business, community, and government ties (Chen et al., 2015). Intangible resources, such as information and support from family and friends, are a clear example of leveraging social networks and they have been found to impact the ongoing sustainability of a business (Kirkwood, 2009). Relationships with suppliers and customers, as well as support from other entrepreneurs, provides coaching, guidance, and the potential for new opportunity identification. Community ties provide a source of customers and also potentially employees (Pio, 2007b). Support from the community can also lead to opportunity identification, while ties with government officials can allow a greater understanding of the available support and how to utilise it (Chen et al., 2015).

Financial and regulatory resources have been found to have an impact on business growth (Hansen & Hamilton, 2011; N. Lee, 2014). Financial resources specifically have a significant impact on the ongoing success and growth of small businesses (Storey, 1994). While seed money is important to start a business, the ability to grow and sustain that business only comes with additional funding. Studies have found that financial constraints can significantly limit entrepreneurship while access to finance supports entrepreneurship (Ho & Wong, 2007; Wiklund & Shepherd, 2003).

Following the RBV, while financial capital is important in itself, it is not a source of sustained competitive advantage: it is what the entrepreneur does with the capital that makes it an advantage (Okoi et al., 2021). Financing can be used to create a competitive advantage through human capital, culture building, or exploration and exploitation of the market (Dollinger, 2008; Wiklund & Shepherd, 2003). For example, finance allows an

entrepreneur to hire employees that both fill the gaps in their own knowledge and support them in the growth of their business (Wiklund & Shepherd, 2003).

Governments can contribute to the ongoing sustainability of SMEs not only through the provision of finance but also through access to markets, investment in research, and development of training and technology support (Sitinjak et al., 2022). Having good government networks and support has been found to have an impact on business growth and supports the sustainability and resilience of SMEs (Sitinjak et al., 2022; Zhao et al., 2010). For example, in studying SMEs in Indonesia, Sitinjak et al. (2022) found that the ongoing resilience of businesses is dependent on government support to provide access to markets, capital, and technology.

As entrepreneurs running SMEs in NZ tend to prefer to retain equity and avoid debt, their rate of business growth tends to be slower (Mazzarol & Clark, 2016). Therefore, small business policies created by governments that focus on tax cuts can have a significant impact on SME sustainability and growth. If a business is bootstrapped with funds from the entrepreneur and their friends and family, this may cause instability should a financial situation change. Therefore, the entrepreneur's ability to access more stable financing, through avenues such as bank or venture capitalist funding and government grants, is likely to impact their decision-making when it comes to digitisation and technology adoption.

Social capital is important for entrepreneurs who want to sustain their business. It allows entrepreneurs to share knowledge, develop long-standing business relationships and negotiate loans from suppliers, all of which contribute to an SME's ongoing sustainability. Financial and government resources allow entrepreneurs greater freedom. Finance allows entrepreneurs to hire people who can support their knowledge gaps. Human capital is a source of sustained competitive advantage which is important. Government resources allow entrepreneurs access to knowledge, technology, and markets which they otherwise would not be able to access. The more resources an entrepreneur has, whether these be financial, government, or social, the greater their ability is to leverage these. Resources give entrepreneurs time and the ability to better prepare their business for ongoing changes. This leads to the following hypotheses:

Hypothesis 1 (a). *Social capital leads to a higher level of OCR.*

Hypothesis 1 (b). *Financial and government resources lead to a higher level of OCR.*

2.2. Social Capital, Financial and Government Resources and Decision-Making Logic

One predictor of business success and sustainability is the way in which entrepreneurs make decisions (Palmer et al., 2019; Rauch & Frese, 2000). Their ability to adapt to market demands and identify opportunities once their business has been launched is a key predictor of the ongoing sustainability of the business. In her seminal work, Sarasvathy (2001) described two different types of decision-making logic that entrepreneurs might use in starting a new business, namely, effectuation and causation. Research on entrepreneurs in SMEs has found that their type of decision-making logic strongly impacts the culture, strategy, and direction of the overall business (Beaver & Jennings, 2001; Puplambu & Kuada, 2005; Rauch & Frese, 2000). The way in which an entrepreneur assesses opportunities and acts on market information, including adopting new technologies, impacts OCR and, ultimately, the extent of the sustainability of their business.

Effectuation logic comprises the following four lower order dimensions: affordable loss over maximising expected returns, strategic alliances to eliminate future uncertainty, exploitation of contingencies rather than knowledge, and the controllable parts of an unpredictable future (Sarasvathy, 2001). Causation is a more traditional decision-making logic that has been followed and studied by marketing and management scholars (Sarasvathy,

2001). Causation logic involves setting a plan and executing it (Chandler et al., 2011). It is a prescriptive process that follows linear thinking where a goal is set, pathways are identified to achieve the goal, constraints (typically related to resources) are identified, and criteria for choosing between pathways are defined. (Sarasvathy, 2001). It is what is described as effect dependent, meaning the decision-maker is imagining possible effects of different paths and selecting between them (Sarasvathy, 2001).

Under effectuation logic, entrepreneurs leverage their social capital to expand networks and find potential shareholders (Sarasvathy, 2001; Van Mumford & Zetting, 2022). They reduce their costs by sharing equipment, human capital, and office space with other business owners (Fauchart & Gruber, 2011). Exploitation of contingencies is favoured by entrepreneurs using an effectuation process (Sarasvathy, 2001). This involves the entrepreneur being flexible and adapting to contingent opportunities as they arise (Chandler et al., 2011) as opposed to following a set path. This flexibility is especially valuable in starting a business, as it allows the entrepreneur to change plans and priorities based on new information and available resources.

Causation involves setting a goal and then working to achieve that goal by obtaining the available necessary resources. Under causation logic, an entrepreneur exploits knowledge. Entrepreneurs who follow causal logic make decisions based on the expected return (Liu et al., 2022; Yang et al., 2019). This includes using social capital in the form of leveraging networks with suppliers for favourable terms and analysing resources in both internal and external environments to assess their competitive position in the market (Futterer et al., 2018; Winborg & Landstrom, 2001).

Under causation logic, an entrepreneur is exploiting knowledge (Sarasvathy, 2001). Following a set plan requires having specific resources to input and execute the plan. While to some extent, this may be possible in new business creation, it can cause challenges if the entrepreneur needs to adapt their business plan to meet the changing market. For example, studies have found that causation is negatively associated with uncertainty and experimentation (Chandler et al., 2011; Yu et al., 2018), both of which have been identified as important parts of start-up survival (Castaño-Martínez et al., 2020; Chakma et al., 2024).

As a decision-making logic, it allows the entrepreneur to control the required inputs into their business and to plan what is needed from a financial perspective by understanding relevant government policy and using appropriate social and government networks to secure the necessary funding. This leads to the following hypotheses:

Hypothesis 2 (a). *Social capital leads to a higher level of effectuation decision-making logic.*

Hypothesis 2 (b). *Social capital leads to a higher level of causation decision-making logic.*

Hypothesis 2 (c). *Financial and government resources lead to a higher level of effectuation decision-making logic.*

Hypothesis 2 (d). *Financial and government resources lead to a higher level of causation decision-making logic.*

2.3. Decision-Making Logic and Organisational Change Readiness (OCR)

In relation to entrepreneurship, both effectuation and causation decision-making logic have typically been applied to setting up businesses (Chandler et al., 2011; Liu et al., 2022; Smolka et al., 2018). However, making decisions by effectuation or causation logic is likely to have a significant impact on the ongoing sustainability of a business. Relevant specifically to this study, the underlying logic of causation is that entrepreneurs can control the parts of the future that they can predict (Sarasvathy, 2001). The underlying logic of

effectuation is that entrepreneurs do not need to predict the future as some parts of it they can control through decision-making (Sarasvathy, 2001). From an OCR perspective, part of what primes change readiness and receptivity to change is regular change initiatives showing employees the business can adapt to different circumstances. As an effectuation decision-making logic is governed by the exploitation of contingencies, it seems likely this will prime employees for change. Conversely, a causation decision-making logic involves setting clear goals for which employees can aim, while being able to predict and prepare for upcoming changes is likely to create clarity and an openness to change.

This leads to the following hypotheses:

Hypothesis 3 (a). *Effectuation decision-making logic leads to a higher level of OCR.*

Hypothesis 3 (b). *Causation decision-making logic leads to a higher level of OCR.*

2.4. Decision-Making Logic as a Mediator Between the Relationship of Resources and OCR

While the importance of resources cannot be underestimated in the creation and ongoing success of businesses for entrepreneurs, it is not a direct contributor. Instead, it is the perception of, and belief in, what the entrepreneur can access that drives how the business is structured and their confidence in making risky decisions. These decisions then influence the growth and survival of the business leading to its success or failure. Furthermore, the entrepreneur's decision-making logic impacts their ability to leverage resources and how they structure their business, which is of significant importance for ongoing business sustainability (Wiklund & Shepherd, 2003).

Following the RBV, whichever decision-making logic an entrepreneur uses, the more resources they perceive that they have, the greater their ability to make decisions and implement change. Resource scarcity can be a form of stress for employees, leading to negative emotions and change behaviours. Therefore, the importance is placed less on the specific decision-making logic and more on having a process and adequate resources to drive this process.

Effectuation logic is suitable for an unpredictable environment as it requires entrepreneurs to react to changes in the market (Thein et al., 2023). Under effectuation logic, entrepreneurs will use their social network to create strategic alliances that give them, for example, pre-commitments to purchase, thus reducing uncertainty (Liu et al., 2022). Social networks can also allow entrepreneurs to share houses, employees, and other resources (Fauchart & Gruber, 2011). This can create comfort for employees that a business is flexible and able to adapt using resources around them as well as creating a sense of financial stability.

Causation logic is suitable for a predictable environment, where entrepreneurs integrate resources based on their pre-defined goal (Liu et al., 2022). This means they will seek to use their social network to, for example, share office space or equipment (Liu et al., 2022). They will also seek to make financial decisions based on what will give them the best return, such as hiring temporary workers (Liu et al., 2022). All these decisions are likely to create stability as there are not large investments in items such as property or a high permanent employee headcount that would have the potential to create strain on the entrepreneur and their business.

This leads to the following hypotheses:

Hypothesis 4 (a). *Effectuation decision-making logic mediates the relationship between social capital and OCR.*

Hypothesis 4 (b). *Causation decision-making logic mediates the relationship between social capital and OCR.*

Hypothesis 4 (c). *Effectuation decision-making logic mediates the relationship between government and financial resources and OCR.*

Hypothesis 4 (d). *Causation decision-making logic mediates the relationship between government and financial resources and OCR.*

3. Materials and Methods

3.1. Participants and Procedure

A total of 119 (men = 91, 76.5%) NZ entrepreneurs participated in this cross-sectional study. The average age was 31.78 with a standard deviation (SD) of 10.41. Most of the study's sample, (91.60%, n = 110) identified as NZ European, while 5.88% (n = 8) identified as Māori or Pacific Islander. Most participants had an undergraduate qualification (68.07%, n = 81).

After receiving ethics approval from the primary author's institution, participants were recruited using snowball sampling on the LinkedIn platform. The current study was limited to entrepreneurs who own their own business and employ between 6 to 49 employees. The study was further limited to people over the age of 18 who had either started or purchased a business. As between 20% and 30% of businesses fail within the first and second year ([U.S. Bureau of Labor Statistics, 2015](#)) and given the study's focus on understanding how entrepreneurs sustain their businesses after the initial startup phase, those with less than two years of business ownership were excluded.

3.2. Instruments

Six different scales were used. A 5-point Likert scale was used for each of the scales. Research has found that a 5-point Likert scale increases response rates and quality and reduces participant frustration ([Bouranta et al., 2009](#)). Each item was labelled to ensure consistency in responses. The labels were '1' = strongly disagree, '2' = disagree, '3' = neither agree nor disagree, '4' = agree, and '5' = strongly agree. To ensure participants understood that they were being asked to answer from the perspective of their business and to improve comprehension to reduce CMV throughout the survey 'my business. . .' was added, where relevant, as a precursor to items ([Podsakoff et al., 2003](#)).

A scale developed by [Chen et al. \(2015\)](#) was adapted to measure entrepreneurs' access to, and use of, social capital and their perception of the availability of financial and government resources. In all items used, specific reference to the creative industry were removed to make the questions more generalisable. For example, 'I actively participate in business communities of associations in creative industries' was changed to 'I actively participate in business communities relevant to my industry'. Additionally, some wording of the items was not relevant to the NZ context and was amended. For example, reference to 'government officials' was changed to be 'relevant people in government'.

A scale created and validated to measure the different types of entrepreneurial decision-making logic in starting a business was used to measure both effectuation and causation logic ([Chandler et al., 2011](#)). In their study, [Chandler et al. \(2011\)](#) measured the type of decision-making logic used by entrepreneurs in new venture creation; however, subsequent studies have successfully used items from this scale to evaluate both types of decision-making logic in ongoing business performance ([Roach et al., 2016](#); [Yu et al., 2018](#)).

On both the effectuation and causation logic measures, items were changed to the present tense as the current study sought to understand what entrepreneurs' decision-

making logic is rather than wanting them to reflect on how they created their business. For example, in the seven-item causation measure ‘we analysed long run opportunities and selected what we thought would provide the best returns’ was changed to ‘I analyse long run opportunities and select what I think will provide the best returns’.

To measure OCR, items from the Organisational Change Questionnaire–Climate of Change, Processes, and Readiness (OCQ–C, P, R) scale created by Bouckenoghe et al. (2009) were used. The scale, developed using four studies, was designed to be used to assess the internal context or climate of change (Bouckenoghe et al., 2009). The original scale measured three dimensions: process of change, climate of change, and readiness for change. As the current study sought to measure only OCR, it excluded the process of change measure as this was designed to assess how change is dealt with, rather than being a precursor to prepare for change which is what the climate of change and readiness for change scales are for.

4. Results

Table 1 shows the descriptive statistics, Cronbach’s alpha values, and bivariate correlation analysis for all variables after controlling for age, gender, and education level (demographic variables). Overall Cronbach’s alpha (α) value for each summed scale fell in the acceptable to excellent range (George & Mallery, 2016).

Table 1. Descriptive statistics, reliability, and bivariate analysis for study variables after controlling for demographic variables.

Variable	No. of Items	<i>M</i>	<i>SD</i>	α	1	2	3	4	5
1. Social Capital	12	3.69	0.68	0.89	-				
2. FG Resources	6	3.43	0.86	0.88	0.72 ***	-			
3. Effectuation	13	3.57	0.65	0.90	0.75 ***	0.55 ***	-		
4. Causation	7	3.50	0.80	0.89	0.65 ***	0.52 ***	0.82 ***	-	
5. OCR	17	3.67	0.68	0.92	0.92 ***	0.66 ***	0.75 ***	0.72 ***	-

*** $p < 0.001$.

Table 2 shows the multiple linear regression analysis used to test hypotheses 1 to 3. Analysis was run using the demographic variables, i.e., age, gender, and education level, the independent variables, i.e., social capital, financial, and government resources, effectuation logic, causation logic, and the outcome variables, i.e., effectuation logic, causation logic, and OCR.

Table 2. Regression analysis of demographic and independent variables on outcome variables.

DV		OCR					Effectuation					Causation				
Hypotheses	Variable	B	SE B	β	t	p	B	SE B	β	t	p	B	SE B	β	t	p
H1a, H2a H2b	Social capital	0.81	0.05	0.80	15.44	<0.001	0.62	0.05	0.72	12.02	<0.001	0.75	0.08	0.64	9.11	<0.001
	Age	0.01	0.00	0.14	2.94	0.004	0.01	0.00	0.26	4.75	<0.001	0.03	0.01	0.34	5.49	<0.001
	Gender	0.16	0.08	0.10	2.10	0.038	0.11	0.07	0.08	1.48	0.141	0.01	0.12	0.01	0.08	0.935
	Edu level	0.05	0.07	0.04	0.77	0.445	0.02	0.07	0.01	0.23	0.816	0.02	0.11	0.01	0.16	0.876
		R2 = 0.79 F(4,114) = 103.80, p < 0.001					R2 = 0.71 F(4,114) = 68.57, p < 0.001					R2 = 0.61 F(4,114) = 43.68 p < 0.001				
H1b, H2c, H2d	FG resources	0.52	0.06	0.66	9.34	<0.001	0.36	0.05	0.54	6.93	<0.001	0.48	0.08	0.52	6.41	<0.001
	Age	0.03	0.00	0.42	6.41	<0.001	0.03	0.00	0.50	6.78	<0.001	0.04	0.01	0.57	7.50	<0.001
	Gender	0.34	0.10	0.21	3.52	<0.001	0.26	0.09	0.20	2.94	0.004	0.18	0.13	0.10	1.40	0.166
	Edu level	0.07	0.10	0.05	0.77	0.441	0.06	0.09	0.05	0.69	0.492	0.04	0.12	0.03	0.31	0.753
		R2 = 0.62 F(4,114) = 47.14, p < 0.001					R2 = 0.61 F(4,114) = 43.68 p < 0.001					R2 = 0.50 F(4,114) = 28.31, p < 0.001				
DV		OCR					OCR									
Hypotheses	Variable	B	SE B	β	t	p	Variable	B	SE B	β	t	p				
H3a, H3b	Effectuation	0.89	0.07	0.75	11.95	<0.001	Causation	0.61	0.06	0.72	11.22	<0.001				
	Age	0.00	0.00	-0.04	-0.67	0.505	Age	-0.01	0.00	-0.09	-1.43	0.156				
	Gender	0.20	0.09	0.12	2.35	0.027	Gender	0.34	0.09	0.21	3.81	<0.001				
	Edu level	0.18	0.08	0.13	2.35	0.021	Edu level	0.27	0.08	0.17	2.95	0.004				
		R2 = 0.71 F(4,114) = 67.97, p < 0.001					R2 = 0.68 F(4,114) = 9.39, p < 0.001									

Note. DV = dependent variable; OCR = organisational change readiness; SE B = standard error bands; Edu level = education level; FG resources = financial and government resources.

4.1. Resources and OCR

Hypothesis 1 proposed that (a) social capital and (b) financial and government resources lead to higher levels of OCR. Hypothesis 1(a) predicted that a higher level of social capital leads to a higher level of OCR. The results showed that social capital was a significant positive predictor of OCR: for every one unit increase in social capital, a 0.81 increase in OCR was predicted ($B = 0.81$, $SE B = 0.05$, $\beta = 0.80$, $t = 15.44$, $p < 0.001$). Hypothesis 1(b) predicted that higher levels of perceived financial and government resources lead to a higher level of OCR. The results showed that perceived financial and government resources were a significant positive predictor of OCR: for every one unit increase in perceived financial and government resources, a 0.52 increase in OCR was predicted ($B = 0.52$, $SE B = 0.06$, $\beta = 0.66$, $t = 9.34$, $p < 0.001$). Therefore, hypotheses 1(a) and 1(b) were supported.

4.2. Resources and Decision-Making Logic

Hypothesis 2 proposed that social capital leads to higher levels of both types of decision-making logic, i.e., (a) effectuation and (b) causation. Further, it was proposed that financial and government resources lead to higher levels of both types of decision-making logic, i.e., (c) effectuation and (d) causation. The results showed that social capital was a significant positive predictor of effectuation logic, for every one unit increase in social capital, a 0.62 increase in effectuation logic was predicted ($B = 0.62$, $SE B = 0.05$, $\beta = 0.72$, $t = 12.02$, $p < 0.001$). For hypothesis 2(b), the results showed that social capital was a significant predictor of causation logic, for every one unit increase in social capital, a 0.75 increase in causation logic was predicted ($B = 0.75$, $SE B = 0.08$, $\beta = 0.64$, $t = 9.11$, $p < 0.001$). For hypothesis 2(c), the results showed that perceived financial and government resources were a significant positive predictor of effectuation logic, for every one unit increase in perceived financial and government resources, a 0.36 increase in effectuation logic was predicted ($B = 0.36$, $SE B = 0.05$, $\beta = 0.54$, $t = 6.93$, $p < 0.001$). For hypothesis 2(d), the results showed that perceived financial and government resources were a significant positive predictor of causation logic: for every one unit increase in perceived financial and government resources, a 0.48 increase in causation logic was predicted ($B = 0.48$, $SE B = 0.08$, $\beta = 0.52$, $t = 6.41$, $p < 0.001$). Therefore, hypotheses 2(a), 2(b), 2(c) and 2(d) were supported.

4.3. Decision-Making Logic and OCR

Hypothesis 3 proposed that both types of decision-making logic, i.e., (a) effectuation and (b) causation, lead to a higher level of OCR. The results showed that effectuation logic was a significant predictor of OCR, and for every one unit increase in effectuation logic, a 0.89 increase in OCR was predicted ($B = 0.89$, $SE B = 0.07$, $\beta = 0.75$, $t = 11.95$, $p < 0.001$). The results also showed that causation logic was a significant positive predictor of OCR, and for every one unit increase in causation logic, a 0.61 increase in OCR was predicted ($B = 0.61$, $SE B = 0.06$, $\beta = 0.72$, $t = 11.22$, $p < 0.001$). Therefore, hypotheses 3(a) and 3(b) were supported.

4.4. Mediation Analysis

Hypothesis 4 proposed that both types of decision-making logic, i.e., (a) effectuation and (b) causation mediate the relationship between social capital and OCR. Hypothesis 4 also proposed that both types of decision-making logic, i.e., (c) effectuation and (d) causation mediate the relationship between financial and government resources and OCR. Table 3 outlines the results.

Table 3. Mediation analysis: decision-making logic, resources, and OCR.

Variable	Effectuation				OCR				
	B	SE	<i>p</i>	β	B	SE	<i>p</i>	β	
Social capital	0.62	0.05	0.000	0.00	0.59	0.07	0.000	0.00	
Effectuation	-	-	-	-	0.35	0.09	0.000	0.00	
Age	0.01	0.00	0.000	0.00	0.00	0.00	0.212	0.00	
Gender	0.11	0.07	0.141	0.00	0.12	0.07	0.098	0.00	
Edu level	0.02	0.07	0.816	0.00	0.05	0.06	0.469	0.00	
$R^2 = 0.71$ $F(4,114) = 68.57, p < 0.001$				$R^2 = 0.79$ $F(5,113) = 103.80, p < 0.001$					
Variable	Causation				OCR				
	B	SE	<i>p</i>	β	B	SE	<i>p</i>	β	
Social capital	0.75	0.08	0.000	-0.01	0.60	0.06	0.000	0.00	
Causation	-	-	-	-	0.30	0.05	0.000	0.00	
Age	0.03	0.01	0.000	0.00	0.00	0.05	0.000	0.00	
Gender	0.01	0.12	0.935	-0.01	0.16	0.00	0.024	0.00	
Edu level	0.02	0.11	0.876	-0.01	0.05	0.06	0.024	0.00	
$R^2 = 0.61$ $F(4,114) = 43.67, p < 0.001$				$R^2 = 0.83$ $F(5,113) = 107.55, p < 0.001$					
Variable	Effectuation				OCR				
	B	SE	<i>p</i>	β	B	SE	<i>p</i>	β	
FG resources	0.36	0.05	0.000	-0.01	0.28	0.05	0.000	0.00	
Effectuation	-	-	-	-	0.66	0.08	0.000	-0.01	
Age	0.03	0.00	0.000	0.00	0.01	0.00	0.018	0.00	
Gender	0.26	0.09	0.004	-0.01	0.17	0.08	0.038	0.00	
Edu level	0.06	0.09	0.492	-0.01	0.03	0.07	0.660	0.00	
$R^2 = 0.53$ $F(4,114) = 32.35, p < 0.001$				$R^2 = 0.77$ $F(5,113) = 73.61, p < 0.001$					
Variable	Causation				OCR				
	B	SE	<i>p</i>	β	B	SE	<i>p</i>	β	
FG resources	0.48	0.08	0.000	-0.01	0.31	0.05	0.000	-0.00	
Causation	-	-	-	-	0.44	0.06	0.000	0.00	
Age	0.43	0.01	0.000	0.00	0.01	0.00	0.052	0.00	
Gender	0.18	0.13	0.166	-0.02	0.30	0.08	0.001	-0.01	
Edu level	0.04	0.12	0.753	-0.01	0.05	0.07	0.470	0.00	
$R^2 = 0.50$ $F(4,114) = 28.31, p < 0.001$				$R^2 = 0.76$ $F(5,113) = 70.73, p < 0.001$					

Note. OCR = organisational change readiness; SE = standard error; Edu level = education level; FG resources = financial and government resources.

Hypothesis 4(a) predicted that effectuation logic would mediate the relationship between social capital and OCR. After controlling for age, gender, and education levels, social capital was positively associated with effectuation logic: $a = 0.62, p < 0.001$, and effectuation logic was positively associated with OCR: $b = 0.35, p < 0.001$. A positive association was also found between social capital and OCR: $c = 0.59, p < 0.001$. A bootstrap confidence interval based on 5000 bootstrap resamples showed the indirect effect of the model was statistically significant and positive: $B = 0.22, BCa\ CI (0.09, 0.37)$. The direct effect of the model was also statistically significant and positive: $B = 0.59, BCa\ CI (0.45, 0.71)$. Following Hayes (2022) as a significant relationship existed between each of the variables,

and the bootstrapped confidence intervals of both the direct and indirect relationships did not pass through zero, hypothesis 4(a) was supported.

Hypothesis 4(b) predicted that causation logic would mediate the relationship between social capital and OCR. After controlling for age, gender, and education levels, social capital was positively associated with causation logic: $a = 0.75, p < 0.001$, and causation logic was positively associated with OCR: $b = 0.29, p < 0.001$. A positive association was also found between social capital and OCR: $c = 0.59, p < 0.001$. A bootstrap confidence interval based on 5000 bootstrap resamples showed the indirect effect of the model was statistically significant and positive: $B = 0.21, \text{BCa CI } (0.11, 0.34)$. The direct effect of the model was also statistically significant and positive: $B = 0.75, \text{BCa CI } (0.59, 0.92)$. Following Hayes (2022) as a significant relationship existed between each of the variables, and the bootstrapped confidence intervals of both the direct and indirect relationships did not pass through zero, hypothesis 4(b) was supported.

Hypothesis 4(c) predicted that effectuation logic would mediate the relationship between perceived financial and government resources and OCR. After controlling for age, gender, and education levels, perceived financial and government resources were positively associated with effectuation logic: $a = 0.36, p < 0.001$, and effectuation logic was positively associated with OCR: $b = 0.66, p < 0.001$. A positive association was also found between perceived financial and government resources and OCR: $c = 0.28, p < 0.001$. A bootstrap confidence interval based on 5000 bootstrap resamples showed the indirect effect of the model was statistically significant and positive: $B = 0.24, \text{BCa CI } (0.14, 0.36)$. A direct effect of the model was also statistically significant and positive: $B = 0.36, \text{BCa CI } (0.25, 0.49)$. Following Hayes (2022) as a significant relationship existed between each of the variables, and the bootstrapped confidence intervals of both the direct and indirect relationships did not pass through zero, hypothesis 4(c) was supported.

Hypothesis 4(d) predicted that causation logic would mediate the relationship between financial and government resources and OCR. After controlling for age, gender, and education levels, perceived financial and government resources were positively associated with causation logic: $a = 0.48, p < 0.001$, and causation logic was positively associated with OCR: $b = 0.44, p < 0.001$. Perceived financial and government resources were also positively associated with OCR: $c = 0.31, p < 0.001$. A bootstrap confidence interval based on 5000 bootstrap resamples showed the indirect effect of the model was statistically significant and positive: $B = 0.21, \text{BCa CI } (0.13, 0.31)$. The direct effect of the model was also statistically significant and positive: $b = 0.48, \text{BCa CI } (0.33, 0.63)$. Following Hayes (2022) as a significant relationship existed between each of the variables, and the bootstrapped confidence intervals of both the direct and indirect relationships did not pass through zero, hypothesis 4(d) was supported.

5. Discussion

To date, there has not been any research examining a link between entrepreneurship, decision-making logic, and OCR. The current study contributes to scant research on the combination of these topics and offers further data regarding entrepreneurs running SMEs in NZ, an under-researched area. This study specifically examined (1) the relationship between resources and OCR, (2) the relationship between resources and the different types of decision-making logic of entrepreneurs, (3) the relationship between an entrepreneur's decision-making logic and OCR, and (4) if different types of decision-making logic mediate the relationship between resources and OCR.

5.1. Resources and OCR

The findings support the RBV by showing that resources allow entrepreneurs to create competitive advantages. The importance of resources for OCR is supported by previous studies that have found entrepreneurs require a combination of mentorship and financial and regulatory support to sustain business and drive innovation (Agrawal et al., 2024; Chandler & Hanks, 1994). One of the imperfectly imitable competitive advantages a business can create is culture. By using both social capital and financial and government resources effectively, entrepreneurs create a culture of change readiness where employees perceive the business is both capable of making change and understand the value of the change.

The importance of social capital to entrepreneurs in NZ has been demonstrated in previous studies that have shown the importance of family ties in spousal roles on entrepreneurial motivation (Kirkwood, 2009) and the importance of both family and community ties to obtain capital, clients, and employees (Pio, 2007a). The importance of social capital has not only applied to entrepreneurs but organisations as well (M. C. C. Lee et al., 2024; M. C. C. Lee & Idris, 2017).

The perception of financial and government resources can be used to build a culture of change readiness as accessing these resources provides the entrepreneur the ability to more easily implement change. For example, understanding what financial support is available to an entrepreneur means they are more likely to access it. Financial support gives the entrepreneur the opportunity to expand their business through human capital which in turn leads to greater support for employees by, for example, hiring human resource managers who implement performance management systems. Having a performance system in place where employees receive regular feedback has been found to be important for motivation, communication, and ultimately the development of change readiness in a business (Rafferty et al., 2013). In addition, an understanding of the government support available means an entrepreneur is more likely to access things such as advice on how to digitise their business. In turn, this supports them to adapt their business to market changes.

The correlation analysis for hypotheses 1 showed that in comparison to perceived financial and government resources, social capital had a larger effect on organisational OCR. This may be attributed to the smaller population size and family nature of entrepreneurship in NZ. In NZ, with a smaller population size and over 50% of entrepreneurs coming from families of entrepreneurs (Hunter & Wilson, 2007), informal networks such as ties to other businesses and government networks are more likely to be used than formal financial or government resources. In turn, this may lead to a lack of awareness of, and need for, more formalised resources.

Another reason for the findings in hypothesis 1 may be the lack of focus of NZ government policy on the R&D of SMEs. In comparison to other countries in the OECD NZ spends significantly less on R&D as a proportion of gross domestic profit (GDP) (OECD, 2021). The OECD average spend on R&D as a proportion of GDP is 2.7%; in NZ, this figure sits at only 1.5% (OECD, 2021). Funding R&D grants is an important way of investing in SMEs and supporting entrepreneurs who may not have as much access to social capital, such as new migrant entrepreneurs who do not have strong family ties

In addition, policy intervention at a national level in NZ has restricted the power of local governments. Local governments are better placed to provide targeted support to entrepreneurs (Nel & Stevenson, 2014). As local governments in NZ are predominantly self-funded, unlike other countries in the OECD, the restriction in funds has resulted in less formalised support being available. Local governments are uniquely placed to offer support to entrepreneurs relevant to their specific area, for example, shared working space or networking events to allow local business owners to collaborate and exchange

knowledge. However, a lack of funding means that in small towns in NZ, entrepreneurship is often driven by private enterprise rather than local governments (Nel & Stevenson, 2014). Thus, there may be less government support for entrepreneurs than there is social capital driven by private enterprise on a local level.

5.2. Resources and Decision-Making Logic

Using resources effectively is an important part of entrepreneurial success (Chen et al., 2015; Guo et al., 2016). Therefore, having more resources allows greater decision-making abilities. For example, social capital can contribute to higher levels of effectuation logic by creating partnerships and pre-commitments (Chandler et al., 2011; Hubner et al., 2022). Perceived financial and government resources can contribute to higher levels of effectuation logic by providing incubators and R&D grants (Hubner et al., 2022). Both social capital and the perception of financial and government resources can lead to higher levels of causation logic as using this logic is driven by higher levels of resource availability overall.

The findings in hypothesis 2 are in line with a study by Guo et al. (2016) which examined new internet ventures and how entrepreneurs use different resource bundling strategies based on their decision-making logic. The study found that both types of decision-making logic contribute to new venture growth; what differs is how the entrepreneur views and uses resources, whether this be through pioneering resource bundling in the case of effectuation logic, or stabilising resource bundling in the case of causation logic. In conjunction with the findings of the current study, this suggests that entrepreneurs might use resources differently based on their decision-making logic but still be able to effectively sustain their business.

The support for hypothesis 2 also shows that the environment for entrepreneurs in NZ is supportive of either type of decision-making logic rather than encouraging entrepreneurs to adopt one or the other. This is in line with a previous study which looked at entrepreneurial ecosystems across Silicon Valley, Munich, and Singapore (Hubner et al., 2022). The study found that in Silicon Valley effectuation is used predominantly, in Munich causation logic is used predominantly, and in Singapore either effectuation or causation logic was used by entrepreneurs. This finding suggested that in Singapore, both types of resources, social capital and financial and government resources, are important for business success (Hubner et al., 2022). There are some significant differences between NZ and Singapore such as political systems and cost of living. However, both countries have a similar population size and a limited export footprint, both of which are likely to contribute to similar challenges and opportunities faced by entrepreneurs, which may suggest the reason for this finding.

As per Table 3, social capital had a larger effect on both types of decision-making logic than perceived financial and government resources. This finding provides support for the theory conceptualised by Chandler et al. (2011) that suggested that the subscale of effectuation logic, strategic alliances, may also apply to causation logic. Sarasvathy (2001) describes effectuation logic as being applied by entrepreneurs based on who they are, what they know, and who they know. Strategic alliances in the form of pre-agreements from suppliers for credit or exclusivity of product are therefore logically attributed to effectuation logic. However, strategic alliances may also be used by entrepreneurs applying a causation logic in that they may seek certainty in the form of pre-commitments, hence the larger effect size between social capital and causation logic.

5.3. Decision-Making Logic and OCR

The findings in hypothesis 3 are in line with studies that have found that the type of decision-making logic does not predict the success of a business; rather, either logic can

do so (Alzamora-Ruiz et al., 2021; Liu et al., 2022; Smolka et al., 2018). For example, in a study of 1453 entrepreneurs across 25 different countries, Smolka et al. (2018) found that both causation and effectuation logic were positively related to venture performance. In addition, research has found that both types of decision-making logic create successful innovation in technology industries (Alzamora-Ruiz et al., 2021).

Following the example of previous research, the current study treated effectuation and causation as different types of decision-making logic, suggesting an entrepreneur will adopt one or the other and use it for all business decisions (Chandler et al., 2011; Yang et al., 2019). Therefore, the individual causal relationships that effectuation and causation logic have on OCR were examined. However, as the findings show that both types of decision-making logic contribute to OCR, it can be speculated that if an entrepreneur can combine both types of decision-making logic this may strengthen the change readiness of their business. A growing body of literature has started to explore this; however, the results have been mixed (Alzamora-Ruiz et al., 2021; Smolka et al., 2018). For example, in a study of technology-based SMEs, Alzamora-Ruiz et al. (2021) found that using a combination of effectuation and causation is better than using one logic when it comes to process innovation. Conversely, the study found that for product innovation, effectuation logic was used first and then causation logic was used second, and that there was no support for combining these.

Therefore, whether a combination of both types of decision-making logic would create more readiness is unclear. A combination of both types of decision-making logic may allow entrepreneurs to show more flexibility. For example, using causation logic, entrepreneurs may seek to avoid unexpected changes and if a change becomes unavoidable switch to effectuation logic to exploit it (Alzamora-Ruiz et al., 2021). Conversely, the combination of approaches may cause uncertainty in employees, as it may create a changeable culture with less of a clear plan. For example, under causation logic more resources are used upfront to obtain goals, while effectuation logic requires fewer resources upfront (Alzamora-Ruiz et al., 2021). Combining these may create a push and pull effect in a business which is likely to create more uncertainty. Ultimately, this study concludes that as effectuation and causation are different types of decision-making logic it would be challenging for an entrepreneur to switch easily between them and may in fact create a culture of unrest where employees are trying to adapt to shifting priorities of the business potentially reducing OCR as a result.

5.4. The Mediating Effect of Decision-Making Logic on the Relationship Between Resources and OCR

This finding explains how entrepreneurs impact the positive relationship between resources and OCR. Resources are an important antecedent to high levels of OCR, they can help to give an employee confidence in the businesses' ability to adapt to change; however, following the RBV, it is the way the entrepreneur uses these resources that creates change readiness in their business. One way in which an entrepreneur identifies and uses resources is through their decision-making logic. Using either effectuation or causation logic, the entrepreneur effectively seeks out and uses resources that allow them to create an environment of change readiness. As decision-making mediates the relationship between resources and OCR, this suggests that resources alone are insufficient; what creates outcomes is the way an entrepreneur manages their resources (D'Oria et al., 2021; Xu et al., 2024).

In addition, this finding indicated that decision-making logic is important for effective resource management (Xu et al., 2024). Knowing that SMEs are typically resource poor, effective utilisation of limited resources via a decision-making logic is important. For example, social capital offers ties to business networks which can be advantageous as

a source of knowledge and advice; however, conflicting opinions or narrow viewpoints can also constrain a business. From an effectuation perspective, the entrepreneur starts with 'who I know' (Saravathy, 2001). If the entrepreneur's social capital is limited, or the advice they receive is not broad, this may impact their ability to effectively sustain their business (Yi et al., 2022). If an entrepreneur is applying causation logic and does not receive good advice from business ties, this may be a barrier to the ongoing sustainability of their business (Xu et al., 2024). Therefore, effectively using a decision-making logic when evaluating resources leads to higher levels of OCR as the entrepreneur is required to apply a level of scepticism to what is and is not a useful resource.

6. Limitations and Future Research

While the study has established the role of decision-making logic in the relationship between resources and organisational change readiness, the findings are limited to the NZ entrepreneurs. As such, the study can be replicated in other countries to provide support of the current findings.

As this was a cross-sectional study, there could be a common method variance issue (Tehseen et al., 2017). Hence, a longitudinal study is recommended as it allows for a better understanding of how an entrepreneur contributes to the change readiness of their business through a dynamic temporal change in the processes (Hopwood et al., 2022). A longitudinal study (ref. M. C. C. Lee et al., 2017; Syed-Yahya et al., 2022) could also expand the understanding of whether an entrepreneur's decision-making logic changes over time as their business develops or they react to different market factors. In addition, qualitative data collected as part of the longitudinal study would also allow researchers to clarify why entrepreneurs in NZ might perceive financial and government resources as less valuable than social capital.

As this study only obtained responses from the entrepreneurs, it would be beneficial to obtain responses from other parties such as managers or employees who are relevant to the business. Considering this would allow the literature to view OCR from a multi-dimensional perspective, providing further validation for the findings of the current study.

7. Practical Implications

This study highlights the importance of both social capital as well as perceived financial and government resources for entrepreneurs operating SMEs in NZ. Social capital is important as ties with government officials provide access to advice and guidance in navigating complex systems. Ties with communities create opportunities to build customer bases and employees. Business ties provide crucial advice and support to entrepreneurs. Formalised financial and government resources can support the development of social capital for entrepreneurs in NZ. For example, the creation of policies that fund incubators and shared working spaces in local communities would create more ways for entrepreneurs to informally network and build business and community ties. Education campaigns and information sessions regarding how to access financial resources and navigate government regulations would provide ways for entrepreneurs to better understand what is available to them and build networks with government officials.

It was found that social capital had a larger effect on both types of decision-making logic and OCR than perceived financial and government resource. The researchers have speculated that this may, in part, be due to the large portion of entrepreneurs who effectively 'hand down' entrepreneurship through family members. Given the lack of formalised financial and government support for entrepreneurs in NZ, for example, R&D grants, this may be creating a barrier to entry to entrepreneurship for those that do not have strong social capital, particularly family ties. Entrepreneurs without strong social capital are more

likely to be newer migrants who have fewer strong ties in local communities and family support. Therefore, to support the diversity of entrepreneurship in NZ creating policies that support building social capital is particularly important.

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References

- Agrawal, R., Samadhiya, A., Banaitis, A., & Kumar, A. (2024). Entrepreneurial barriers in achieving sustainable business and cultivation of innovation: A resource-based view theory perspective. *Management Decision*, *63*, 1207–1228. [\[CrossRef\]](#)
- Alzamora-Ruiz, J., del Mar Fuentes-Fuentes, M., & Martínez-Fiestas, M. (2021). Together or separately? Direct and synergistic effects of effectuation and causation on innovation in technology-based SMEs. *International Entrepreneurship and Management Journal*, *17*(4), 1917–1943. [\[CrossRef\]](#)
- Armenakis, A. A., Harris, S. G., & Mossholder, K. W. (1993). Creating readiness for organizational change. *Human Relations*, *46*(6), 681–703. [\[CrossRef\]](#)
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, *17*(1), 99–120. [\[CrossRef\]](#)
- Beaver, G., & Jennings, P. (2001). Human resource development in small firms: The role of managerial competence. *International Journal of Entrepreneurship and Innovation*, *2*(2), 93–101. [\[CrossRef\]](#)
- Bouckenoghe, D., Devos, G., & van den Broeck, H. (2009). Organizational change questionnaire—Climate of change, processes, and readiness: Development of a new instrument. *The Journal of Psychology*, *143*(6), 559–599. [\[CrossRef\]](#)
- Bouranta, N., Chitiris, L., & Paravantis, J. (2009). The relationship between internal and external service quality. *International Journal of Contemporary Hospitality Management*, *21*(3), 275–293. [\[CrossRef\]](#)
- Castañó-Martínez, M.-S., Galindo-Martín, M.-Á., Méndez-Picazo, M.-T., & Palacios-Marqués, D. (2020). Relationship between ambidexterity and entrepreneurial intensity. *Economic Research [Ekonomika Istrazivanja]*, *33*(1), 2410–2426. [\[CrossRef\]](#)
- Chakma, R., Paul, J., & Dhir, S. (2024). Organizational ambidexterity: A review and research agenda. *IEEE Transactions on Engineering Management*, *71*, 121–137. [\[CrossRef\]](#)
- Chandler, G. N., DeTienne, D. R., McKelvie, A., & Mumford, T. V. (2011). Causation and effectuation processes: A validation study. *Journal of Business Venturing*, *26*(3), 375–390. [\[CrossRef\]](#)
- Chandler, G. N., & Hanks, S. H. (1994). Market attractiveness, resource-based capabilities, venture strategies, and venture performance. *Journal of Business Venturing*, *9*(4), 331–349. [\[CrossRef\]](#)
- Chen, M.-H., Chang, Y.-Y., & Lee, C.-Y. (2015). Creative entrepreneurs' guanxi networks and success: Information and resource. *Journal of Business Research*, *68*(4), 900–905. [\[CrossRef\]](#)
- CPA Australia. (2023). *CPA Australia Asia-Pacific small business survey 2022–2023: New Zealand market summary*. CPA Australia.
- de Jong, J. P., Nikolova, I., & Caniels, M. C. (2023). Same pond, different frogs: How collective change readiness level and diversity associates with team performance. *Journal of Organizational Behavior*, *44*(2). [\[CrossRef\]](#)
- De Winnaar, K., & Scholtz, F. (2020). Entrepreneurial decision-making: New conceptual perspectives. *Management Decision*, *58*(7), 1283–1300. [\[CrossRef\]](#)
- Dollinger, M. J. (2008). *Entrepreneurship*. Marsh Publications.
- D'Oria, L., Crook, T. R., Ketchen, D. J., Jr., Sirmon, D. G., & Wright, M. (2021). The evolution of resource-based inquiry: A review and meta-analytic integration of the strategic resources–actions–performance pathway. *Journal of Management*, *47*(6), 1383–1429. [\[CrossRef\]](#)
- Fauchart, E., & Gruber, M. (2011). Darwinians, communitarians, and missionaries: The role of founder identity in entrepreneurship. *Academy of Management Journal*, *54*(5), 935–957. [\[CrossRef\]](#)

- Futterer, F., Schmidt, J., & Heidenreich, S. (2018). Effectuation or causation as the key to corporate venture success? Investigating effects of entrepreneurial behaviors on business model innovation and venture performance. *Long Range Planning*, 51(1), 64–81. [CrossRef]
- George, D., & Mallery, P. (2016). *IBM SPSS Statistics 23 step by step: A simple guide and reference* (14th ed.). Routledge.
- Guo, R., Cai, L., & Zhang, W. (2016). Guanxi dynamics and entrepreneurial firm creation and development in China. *Internet Research*, 26(2), 460–483. [CrossRef]
- Hansen, B., & Hamilton, R. T. (2011). Factors distinguishing small firm growers and non-growers. *International Small Business Journal*, 29(3), 278–294. [CrossRef]
- Hayes, A. F. (2022). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach* (3rd ed.). The Guilford Press.
- Ho, Y.-P., & Wong, P.-K. (2007). Financing, regulatory costs and entrepreneurial propensity. *Small Business Economics*, 28, 187–204. [CrossRef]
- Holt, D. T., Armenakis, A. A., Harris, S. G., & Feild, H. S. (2007). Toward a comprehensive definition of readiness for change: A review of research and instrumentation. In *Research in organizational change and development* (pp. 289–336). Emerald Group Publishing Limited.
- Holt, D. T., & Vardaman, J. M. (2013). Toward a comprehensive understanding of readiness for change: The case for an expanded conceptualization. *Journal of Change Management*, 13(1), 9–18. [CrossRef]
- Hopp, C., & Stephan, U. (2012). The influence of socio-cultural environments on the performance of nascent entrepreneurs: Community culture, motivation, self-efficacy and start-up success. *Entrepreneurship & Regional Development*, 24(9/10), 917–945. [CrossRef]
- Hopwood, C. J., Bleidorn, W., & Wright, A. G. (2022). Connecting theory to methods in longitudinal research. *Perspectives on Psychological Science*, 17(3), 884–894. [CrossRef]
- Hubner, S., Most, F., Wirtz, J., & Auer, C. (2022). Narratives in entrepreneurial ecosystems: Drivers of effectuation versus causation. *Small Business Economics: An Entrepreneurship Journal*, 59(1), 211–242. [CrossRef]
- Hunter, I., & Wilson, M. (2007). Origins and opportunity: 150 years of New Zealand entrepreneurship. *Journal of Management and Organization*, 13(4), 295–311. [CrossRef]
- International Labour Organization (ILO). (2019). *Small matters. Global evidence on the contribution to employment by the self-employed, micro-enterprises and SMEs*. Available online: https://www.ilo.org/sites/default/files/wcmsp5/groups/public/@dgreports/@dcomm/@publ/documents/publication/wcms_723282.pdf (accessed on 23 September 2023).
- International Labour Organization (ILO). (2021). *Internal and external factors for SME success. What EBMOs should know to promote more competitive enterprises*. ILO.
- Kirkwood, J. (2009). Spousal roles on motivations for entrepreneurship: A qualitative study in New Zealand. *Journal of Family and Economic Issues*, 30, 372–385. [CrossRef]
- Lee, M. C. C., & Idris, M. A. (2017). Psychosocial safety climate versus team climate: The distinctiveness between the two organizational climate constructs. *Personnel Review*, 46(5), 988–1003. [CrossRef]
- Lee, M. C. C., Idris, M. A., & Delfabbro, P. H. (2017). The linkages between hierarchical culture and empowering leadership and their effects on employees' work engagement: Work meaningfulness as a mediator. *International Journal of Stress Management*, 24(4), 392–415. [CrossRef]
- Lee, M. C. C., Sim, B. Y. H., & Tuckey, M. R. (2024). Comparing effects of toxic leadership and team social support on job insecurity, role ambiguity, work engagement, and job performance: A multilevel mediational perspective. *Asia Pacific Management Review*, 29(1), 115–126. [CrossRef]
- Lee, N. (2014). What holds back high-growth firms? Evidence from UK SMEs. *Small Business Economics*, 43(1), 183–195. [CrossRef]
- Liu, Y. L., Peng, X. B., & Huang, J. (2022). The impact of entrepreneurs' social identity and the mediation effect of the decision-making logic on the bootstrapping behavior of nascent ventures. *Revista Brasileira de Gestão de Negócios*, 24, 617–637. [CrossRef]
- Lockett, A., Thompson, S., & Morgenstern, U. (2009). The development of the resource-based view of the firm: A critical appraisal. *International Journal of Management Reviews*, 11(1), 9–28. [CrossRef]
- Mazzarol, T., & Clark, D. (2016). The evolution of small business policy in Australia and New Zealand. *Small Enterprise Research*, 23(3), 239–261. [CrossRef]
- McKay, K., Kuntz, J. R., & Näswall, K. (2013). The effect of affective commitment, communication and participation on resistance to change: The role of change readiness. *New Zealand Journal of Psychology*, 42(2), 29–40.
- Ministry of Business and Innovation (MBIE). (2019). *The New Zealand small business strategy*. Available online: <https://www.mbie.govt.nz/assets/the-new-zealand-small-business-strategy.pdf> (accessed on 23 September 2023).
- Nahapiet, J., & Ghoshal, S. (1998). Social capital, intellectual capital, and the organizational advantage. *Academy of Management Review*, 23(2), 242–266. [CrossRef]
- Nel, E., & Stevenson, T. (2014). The catalysts of small town economic development in a free market economy: A case study of New Zealand. *Local Economy*, 29(4–5), 486–502. [CrossRef]

- Okoi, C. I., Takon, S. M., Orok, A. B., Emori, E. G., & Owui, H. O. (2021). Entrepreneurship orientation and entrepreneurship culture and the performance of small and medium-scale enterprises in Calabar Metropolis–Nigeria. *Webology*, 18(2), 212–224. [CrossRef]
- Organisation for Economic Co-operation and Development (OECD). (2020). *Financing SMEs and entrepreneurs 2020*. Available online: https://www.oecd.org/en/publications/2020/04/financing-smes-and-entrepreneurs-2020_3ddd9917.html (accessed on 29 September 2023).
- Organisation for Economic Co-operation and Development (OECD). (2021). *Gross domestic spending on R&D*. Available online: <https://www.oecd.org/en/data/indicators/gross-domestic-spending-on-r-d.html> (accessed on 29 September 2023).
- Organisation for Economic Co-operation and Development (OECD). (2022). *OECD economic surveys: New Zealand 2022*. Available online: https://www.oecd.org/en/publications/oecd-economic-surveys-new-zealand-2022_a4fd214c-en.html (accessed on 29 September 2023).
- Organisation for Economic Co-operation and Development (OECD). (2023). *OECD SME and entrepreneurship outlook 2023*. Available online: https://www.oecd.org/en/publications/2023/06/oecd-sme-and-entrepreneurship-outlook-2023_c5ac21d0.html (accessed on 29 September 2023).
- Owen, R., & Mason, C. (2019). Emerging trends in government venture capital policies in smaller peripheral economies: Lessons from Finland, New Zealand, and Estonia. *Strategic Change*, 28(1), 83–93. [CrossRef]
- Palmer, C., Niemand, T., Stöckmann, C., Kraus, S., & Kailer, N. (2019). The interplay of entrepreneurial orientation and psychological traits in explaining firm performance. *Journal of Business Research*, 94, 183–194. [CrossRef]
- Pio, E. (2007a). Ethnic entrepreneurship among Indian women in New Zealand: A bittersweet process. *Gender, Work & Organization*, 14(5), 409–432. [CrossRef]
- Pio, E. (2007b). Inspirational cameos: Ethnic minority Indian women entrepreneurs in New Zealand. *Journal of Immigrant & Refugee Studies*, 5(1), 71–94. [CrossRef]
- Podsakoff, P. M., MacKenzie, S. B., Jeong-Yeon, L., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879–903. [CrossRef] [PubMed]
- Puplampu, B., & Kuada, J. (2005). Skills, structure and leadership: Critical variables in SME internationalization. In *Internationalization and enterprise development in Ghana* (pp. 129–194). Adonis and Abbey.
- Rafferty, A. E., Jimmieson, N. L., & Armenakis, A. A. (2013). Change readiness: A multilevel review. *Journal of Management*, 39(1), 110–135. [CrossRef]
- Rauch, A., & Frese, M. (2000). Psychological approaches to entrepreneurial success: A general model and an overview of findings. *International Review of Industrial and Organizational Psychology*, 15, 101–142.
- Roach, D. C., Ryman, J. A., & Makani, J. (2016). Effectuation, innovation and performance in SMEs: An empirical study. *European Journal of Innovation Management*, 19(2), 214–238. [CrossRef]
- Sarasvathy, S. (2001). Causation and effectuation: Toward a theoretical shift from economic inevitability to entrepreneurial contingency. *Academy of Management Review*, 26(2), 243–263. [CrossRef]
- Shepherd, D. A., Williams, T. A., & Patzelt, H. (2015). Thinking about entrepreneurial decision making: Review and research agenda. *Journal of Management*, 41(1), 11–46. [CrossRef]
- Sitintjak, I., Malau, A. R., & Silalahi, A. D. K. (2022, May 19–20). *Organizational ambidexterity and public policy support as determinants of business resilience among SMEs in Medan, Indonesia: Findings from regression and fsQCA*. 2022 7th International Conference on Business and Industrial Research (ICBIR) (pp. 389–394), Bangkok, Thailand. [CrossRef]
- Smolka, K. M., Verheul, I., Burmeister-Lamp, K., & Heugens, P. P. M. A. R. (2018). Get it together! Synergistic effects of causal and effectual decision-making logics on venture performance. *Entrepreneurship Theory and Practice*, 42(4), 571–604. [CrossRef]
- Storey, D. J. (1994). Understanding the small business sector. *Small Business Economics*, 7(6), 482–483. [CrossRef]
- Syed-Yahya, S. N., Noblet, A. J., Idris, M. A., & Lee, M. C. C. (2022). Examining the role of supervisory and co-worker safety support in mediating the relationship between safety climate and safety performance. *Safety Science*, 155, 105880. [CrossRef]
- Ślusarczyk, B. (2018). Industry 4.0: Are we ready? *Polish Journal of Management Studies*, 17(1), 232–248. [CrossRef]
- Tehseen, S., Ramayah, T., & Sajilan, S. (2017). Testing and controlling for common method variance: A review of available methods. *Journal of Management Sciences*, 4(2), 142–168. [CrossRef]
- Thein, K. S., Takahashi, Y., & Soe, A. T. (2023). The impact of action planning after causation–and–effectuation–based entrepreneurship education. *Behavioral Sciences*, 13(7), 569–588. [CrossRef]
- Tongsuksai, S., Mathrani, S., & Weerasinghe, K. (2023). Influential characteristics and benefits of cloud ERP adoption in New Zealand SMEs: A vendor’s perspective. *IEEE Access*, 11, 2395623979. [CrossRef]
- U.S. Bureau of Labor Statistics. (2015). *Business employment dynamics: Entrepreneurship and the U.S. economy*. Available online: https://www.bls.gov/bdm/entrepreneurship/bdm_chart3.htm (accessed on 11 October 2023).
- Van Mumford, J., & Zettinig, P. (2022). Co-creation in effectuation processes: A stakeholder perspective on commitment reasoning. *Journal of Business Venturing*, 37(4), 106209. [CrossRef]

- Wiklund, J., & Shepherd, D. (2003). Aspiring for, and achieving growth: The moderating role of resources and opportunities. *Journal of Management Studies*, 40(8), 1919–1941. [CrossRef]
- Winborg, J., & Landstrom, H. (2001). Financial bootstrapping in small businesses: Examining small business managers' resource acquisition behaviors. *Journal of Business Venturing*, 16(3), 235. [CrossRef]
- World Bank. (2019). *Small and medium enterprises (SMEs) finance. Improving SMEs' access to finance and finding innovative solutions to unlock sources of capital*. Available online: <https://www.worldbank.org/en/topic/smefinance> (accessed on 14 May 2024).
- Xu, S., Wu, X., He, J., Zhu, R., Morrison, A. M., & Xie, C. (2024). Turning entrepreneurial networks into business model innovation for start-ups. *Management Decision*, 62(4), 1395–1423. [CrossRef]
- Yang, X., Sun, S. L., & Zhao, X. (2019). Search and execution: Examining the entrepreneurial cognitions behind the lean startup model. *Small Business Economics*, 52(3), 667–679. [CrossRef]
- Yi, Y., Chen, Y., & Li, D. (2022). Stakeholder ties, organizational learning, and business model innovation: A business ecosystem perspective. *Technovation*, 114, 102445. [CrossRef]
- Yin, M., Hughes, M., & Hu, Q. (2021). Entrepreneurial orientation and new venture resource acquisition: Why context matters. *Asia Pacific Journal of Management*, 38(4), 1369–1398. [CrossRef]
- Yu, X., Tao, Y., Tao, X., Xia, F., & Li, Y. (2018). Managing uncertainty in emerging economies: The interaction effects between causation and effectuation on firm performance. *Technological Forecasting & Social Change*, 135, 121–131. [CrossRef]
- Zhao, X., Frese, M., & Giardini, A. (2010). Business owners' network size and business growth in China: The role of comprehensive social competency. *Entrepreneurship & Regional Development*, 22(7/8), 675–705. [CrossRef]

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