

CONCEPTUALISING SUPPLY CHAIN RESILIENCE WITHIN SOCIAL ENTERPRISES

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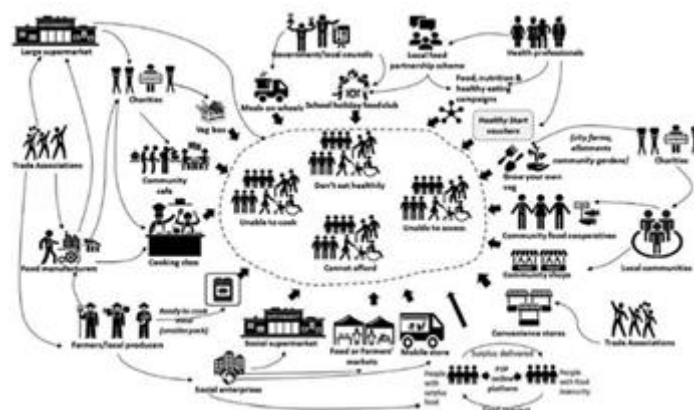
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INTRODUCTION

This research has sought to conceptualise supply chains resilience (SCRes) within a social enterprise (SE) context. It is conducted as part of a wider study into resilience within alternate food supply chain provision, which is outside of the traditional capitalistic exchange of money for food goods.

The UK is currently grappling with a food poverty crisis effecting approximately 8.4 million people, ranging from children to the elderly, including even those in employment (Sustain 2016; End Hunger UK 2019; The Trussell Trust 2019). Defined as “*the inability to afford, or to have access to, food to make up a healthy diet*” (Department of Health, cited in Sustain 2016, para. 9). An inability to access fresh, affordable food has led to increase in diet-related health problems, as well as social exclusion (Wrigley 2002; Food Research & Action Center 2017). This has resulted in the establishment of an extensive network of food provision initiatives throughout the UK (Figure 1). Largely provided by SEs and charities (Wang et al. 2018; End Hunger UK 2019).

Figure 1: UK Food Provision Services Network



Source: Wang et al. (2018)

The SE sector has grown both in prominence and importance as a force tackling pressing current issues, whether that be societal, environmental or economical (Peattie and Morley 2008). However, the sector is still relatively new, with almost half of SEs throughout the UK being less than 5 years old (42%), while 30% are 3 years old or less (Social Enterprise UK, 2019).

SE can be defined as those enterprises whose primary activity involves the trading of goods and services to achieving a primary social and / or environmental objective (Peattie and

Morley 2008). They often face challenges in acquiring a workforce with the necessary skills and values. Notably, skills in the areas of marketing, planning (Peattie and Morley 2008) and sales (Sodhi and Tang 2011), as well as compatible values of solidarity and a desire to part of something bigger (Peattie and Morley 2008; Patel and Mehta 2011; Von der Weppen and Cochrane 2012; Social Enterprise UK 2019). This is attributed to the financial restraints under which SEs often operate (Doherty et al. 2014), along with heightened job insecurity of the sector (Royce 2007). This has resulted in a heavy reliance on volunteers among SEs (Sharir and Lerner 2006; Royce 2007; Doherty et al. 2014), adding further challenges associated with managing a hybrid workforce (Molyneaux 2004; Royce 2007; Peattie and Morley 2008; Doherty et al. 2014). Challenges of hybridity stretch beyond the workforce, to the management of SEs as hybrid organisations, with both financial and social objectives (Seanor and Meaton 2008; Von der Weppen and Cochrane 2012; Doherty et al. 2014; Ebrahim et al. 2014; Zainon et al. 2014).

Given the emerging nature of the sector, coupled with the challenges it faces and the significant disruption caused by the COVID-19 pandemic, it is crucial that research be conducted into how social enterprise-led supply chains (SESCs) can become resilient. Resilience has been defined as organisations being able to “*prepare for unexpected events, respond to disruptions, and recover from them by maintaining continuity of operations at the desired level*” (Ponomarov and Holcomb 2009, p. 131). The need for this research is further supported by the positive correlation identified between the age of SEs and their likelihood of turning a profit (Social Enterprise UK, 2019). However, despite a wealth of literature and well-established theories in the field of SCRes, much of this is situated within a for-profit context. Therefore, an in-depth review of SCRes and SE literature was conducted so to extend the well-established theories of SCRes literature to the context of SEs.

METHODOLOGY / LITERATURE REVIEW

This research has adopted a network theory (NT) theoretical lens. NT considers the relationships between the social entities within a network (Walker et al. 2015), through examining how network structure and processes generate outcomes for a node, or even the entire network (Borgatti and Halgin 2011). In the context of this study, those outcomes generated are resilience capabilities. Given the interdisciplinary nature of this research, it is important to acknowledge how the application of NT differs between disciplines. In the context of supply chain management, this approach often consists of a focus on the relationships between suppliers, customers and manufacturers (Wellenbrock 2013). Within entrepreneurship literature, the focus is instead often on the relationships between the social entrepreneur and their family and friends (Surin and Wahab 2013).

A narrative methodological approach to the literature review was adopted here. This approach was adopted as opposed to a qualitative systematic one, which seeks to obtain all primary research on a topic (Green et al. 2006), due to the interdisciplinary nature of the principal study. Furthermore, a narrative approach was chosen due its appropriateness for discussing theory and context, with this paper looking to apply a well-established theory (SCRes) to an emerging context (SE) (Green et al. 2006).

However, as with a systematic approach, this narrative literature review was based upon focused questions (Green et al. 2006). Specifically, two sub-questions: (1) ‘How do supply chains create resiliency?’, (2) ‘What do successful social enterprises look like?’, and a single primary question: (3) ‘How can SESC become resilient?’. Allowing for the development of inclusion and exclusion criteria (Table 1) to support reliability and traceability. In addition to this, multiple databases were utilised and leading academics in the applicable fields were consulted (Green et al. 2006).

The literature review was conducted sequentially. This was due to the depth and relatively well-established nature of the SCRes literature, especially in comparison to that of the SE literature, which is still emerging. This saw a review of the SCRes literature firstly so to

establish a well-supported concept for SCRes, followed by a review of the SE literature in order to identify the key performance indicators (KPI) for SE success and how these compare with said SCRes concepts.

Table 1

<u>Criteria For Inclusion</u>	<u>Details</u>	<u>Total Papers</u>
Databases (D)	1. Google Scholar 2. Emerald Insight 3. Wiley Online Library	
Search terms	"supply chain resilience" / "resilient supply chains" + "building" / "creating" Total search strings (TSS) = 6	1,800 (6(TSS)x3(D)x100(Results based on relevance))
	"social enterprise" + "conceptualising" / "concept" / "success" / "failure" Total search strings (TSS) = 5	1,500 (5(TSS)x3(D)x100(Results based on relevance))
Applicability	<u>Title and Abstract Review</u>	
	Supply Chain Resilience - Literature illustrating concepts and components of SCRes were sought.	66
	Social Enterprise - Case studies into social enterprises were sought.	36
<u>Criteria for exclusion</u>		
Not Relevant	The scope of this literature review was the top 100 results for each database search based on relevance. Therefore those outside of the top 100 were dismissed.	
Duplicates	Duplicate results across databases were removed.	

FINDINGS

Despite the contrasting for-profit and not-for-profit contexts of the SCRes and SE literatures respectively, there was a clear evident overlap between them in regard to the concepts of SCRes and the structure and processes adopted by exemplar social enterprises.

Akin to that found throughout the SCRes literature, SEs capitalise on the networks in which they are embedded to develop the capabilities needed to demonstrate resilience. By collaborating with other nodes within their network, primarily through information sharing processes, often occurring informally, SEs are able to enhance visibility of their environment, in turn, facilitating joint relationship effort and joint knowledge creation (Scholten and Schilder 2015). SEs place considerably more reliance on the network nodes to build their resilience capability, through access to the much needed financial and human resources and joint risk sharing activities. This reliance can be attributed to an inability to pay the market rate for employees with the required expertise (Doherty et al. 2014), coupled with the unattractive nature of employment within the sector (Royce 2007).

To combat this, SEs often turn to the local community as a source of staff and volunteers, illustrating the importance of not only the local community as a node within a SE's network, but also the location of the SE itself within a network. Moreover, fellow SEs, academics and funding bodies represented crucial nodes within SESC's network as sources of funding support through highlighting funding opportunities and minimising application rejections, and therefore, funding gaps. The diversity of the sources of funding support utilised, illustrated the importance of weak ties within one's network as a source of novel information.

Through the network funding support illustrated above, there was evidence of reconfiguration, another prominent component of SCRes. While grant funding is integral to the covering of start-up costs among the SEs studied, long-term survival was dependent on a move away from relying on such funding, to that sourced from other income stream, predominantly through commercial activities.

This significant importance placed on collaboration is crucial to understand because, unlike many for-profit supply chains, the networks in which SEs are imbedded are significantly smaller in geographical scale and often tied to the location in which they reside. A location in which they are familiar. With such, there is increased importance placed on the location of a SE within the supply chain as a facilitator of collaborative activities, highlighting the importance of node centrality for SEs within SESC's.

Furthermore, SEs were seen to utilise redundancy as a source of flexibility through the undertaking of purposely broad job descriptions carried out by an in-house trained, multi-skilled workforce. In addition to this, flexibility was instilled among SEs through utilising minimalistic processes and delegated responsibility, again, akin to that within the SCRes literature.

In conclusion, these findings indicate that the well-established concepts of SCRes hold true within a SE context, however, given the financial and human resource constraints, SEs operationalise those concepts and principles differently. We found that SEs place much more emphasis on mobilising network resources and social capitals to build their own resilience capability. Our study also identifies the importance of the network in which a SE is situated, as well as its position in said network. Largely affecting how they build their resilience capabilities.

REFERENCES

Borgatti, S. P. and Halgin, D. S. 2011. On network theory. *Organization Science* 22(5), pp. 1168-1181. doi: 10.1287/orsc.1100.0641

- Doherty, B. et al. 2014. Social enterprises as hybrid organizations: a review and research agenda. *International Journal of Management Reviews* 16(4), pp. 417-436. doi: 10.1111/ijmr.12028
- Ebrahim, A. et al. 2014. The governance of social enterprises: mission drift and accountability challenges in hybrid organizations. *Research in Organizational Behaviour* 34, pp. 81-100. doi: 10.1016/j.riob.2014.09.001
- End Hunger UK. 2019. *UK food poverty now a public health emergency*. Available at: <http://endhungeruk.org/uk-food-poverty-now-public-health-emergency/> [Accessed: 02 August 2019].
- Food Research & Action Center. 2017. *The impact of poverty, food insecurity, and poor nutrition on health and well-being*. Available at: <https://frac.org/wp-content/uploads/hunger-health-impact-poverty-food-insecurity-health-well-being.pdf> [Accessed: 03 August 2019].
- Green, B. N. 2006. Writing narrative literature reviews for peer-reviewed journals: secrets of the trade. *Journal of chiropractic medicine*, 5(3), pp. 101-117. doi: 10.1016/S0899-3467(07)60142-6
- McLachlin, R. et al. 2009. Not-for-profit supply chains in interrupted environments: the case of a faith-based humanitarian relief organisation. *Management Research News* 32(11), pp. 1050-1064. doi: 10.1108/01409170910998282
- Melnyk, A. et al. 2014. Supply chain design: issues, challenges, frameworks and solutions. *International Journal of Production Research* 52(7), pp. 1887-1896. doi: 10.1080/00207543.2013.787175
- Molyneaux, D. 2004. Accountability and volunteers at social businesses: a role for ethical checklists. *Business Ethics: A European Review* 13(1), pp. 14-25. doi: 10.1111/j.1467-8608.2004.00345.x
- Patel, S. and Mehta, K. 2011. Life's principles as a framework for designing successful social enterprises. *Journal of Social Entrepreneurship* 2(2), pp. 218-230. doi: 10.1080/19420676.2011.592407
- Peattie, K. and Morley, A. S. 2008. *Social enterprises: diversity and dynamics, contexts and contributions*. Available at: <http://orca.cf.ac.uk/30775/1/SE%20Monograph%20Published.pdf> [Accessed: 30 June 2019].
- Ponomarov, S. Y. and Holcomb, M. C. 2009. Understanding the concept of supply chain resilience. *The International Journal of Logistics Management* 20(1), pp. 124-143. doi: 10.1108/09574090910954873
- Royce, M. 2007. Using human resource management tools to support social enterprise: emerging themes from the sector. *Social Enterprise Journal* 3(1), pp. 10-19. doi: 10.1108/17508610780000718
- Scholten, K. and Schilder, S. 2015. The role of collaboration in supply chain resilience. *Supply Chain Management: An International Journal* 20(4), pp. 471-484. doi: 10.1108/SCM-11-2014-0386
- Sharir, M. and Lerner, M. 2006. Gauging the success of social venture initiated by individual social entrepreneurs. *Journal of World Business* 41(1), pp. 6-20. doi: 10.1016/j.jwb.2005.09.004

- Sodhi, M. S. and Tang, C. S. 2011. Social enterprises as supply-chain enablers for the poor. *Socio-Economic Planning Sciences* 45(4), pp. 146-153. doi: 10.1016/j.seps.2011.04.001
- Sustain. 2016. *What is food poverty*. Available at: <https://www.sustainweb.org/foodpoverty/whatisfoodpoverty/> [Accessed: 05 August 2019].
- Surin, E. H. and Wahab, I. A. 2013. The effect of social network on business performance in established manufacturing small and medium enterprises (smes) in malaysia. *2013 4th International Conference on Business, Economics and Tourism Management (CBETM 2013)*. Jeju Island; South Korea, October 2013. CBETM. doi: 10.7763/IPEDR
- The Trussell Trust. 2019. *End of year stats*. Available at: <https://www.trusselltrust.org/news-and-blog/latest-stats/end-year-stats/> [Accessed: 02 August 2019].
- Von der Weppen, J. and Cochrane, J. 2012. Social enterprise in tourism: an exploratory study of operational models and success factors. *Journal of Sustainable Tourism* 20(3), pp. 497-511. doi: 10.1080/09669582.2012.663377
- Walker, H. et al. 2015. Theoretical perspectives in operations management: an analysis of the literature. *International Journal of Operations & Production Management* 35(8), pp. 1182-1206. doi: 10.1108/IJOPM-02-2014-0089
- Wang, Y. et al. 2018. An exploration of solutions for improving access to affordable fresh food with disadvantaged welsh communities. *European Journal of Operational Research* 268, pp. 1021-1039. doi: 10.1016/j.ejor.2017.11.065
- Wellenbrock, L. 2013. Theoretical basis of supply management: the network theory in supply management. *1st IBA Bachelor Thesis Conference*. Enschede; Netherlands, 27th June 2013. University of Twente, Faculty of Management and Governance. Available at: [Bachelor thesis Maike Wellenbrock s1136488.pdf \(utwente.nl\)](#) [Accessed: 30 January 2021].
- Wrigley, N. 2002. 'Food deserts' in british cities: policy context and research priorities. *Urban Studies* 39(11), pp. 2029-2040. doi: 10.1080/0042098022000011344
- Zainon, S. et al. 2014. Legitimacy and sustainability of social enterprise: governance and accountability. *Procedia – Social and Behavioral Sciences* 145, pp. 152-157. doi: 10.1016/j.sbspro.2014.06.022