
Abstract

This paper explores the two social enterprise methods for addressing autistic unemployment that were discussed in the 2022 Australian Senate Select Committee Inquiry on Autism report: supporting autistic people to start a social enterprise and supporting social enterprises that are autistic led. It is argued in the paper that given autistic unemployment has the characteristics of a wicked problem, addressing autistic unemployment through social enterprise requires a combined systems social entrepreneurship approach.

Traditionally there are two forms of systems social entrepreneurship that focus on addressing wicked problems such as autistic unemployment: the social innovation school of thought and the complexity approach. While these two system social entrepreneurship approaches are appropriate for addressing some of the complexities of autistic unemployment, it is argued in this paper that there is a need for a third participatory systems social entrepreneurship approach that supports autistic-led, but not owned, social enterprises. The commitments of critical systems thinking are drawn upon to highlight how the proposed new participatory systems approach, the social innovation school of thought, and the complexity social entrepreneurship approach can be combined and embedded into a solution ecosystem to better address autistic unemployment through social enterprise.

Introduction

Australian governments are displaying significant interest in autism: in March 2022 the Senate Select Committee Inquiry on Autism’s report was released, the Australian and South Australian governments are developing Autism Strategies (Humphries, 2022; South Australian Labor, 2022, p. 3) and the Senate Select Committee has recommended that the Australian Government develop a National Autism Employment Framework (Senate Select Committee Inquiry on Autism, 2022, xiv). This interest is due, in part, to autism being the most prevalent, and the fastest growing, primary disability type that is supported by the Australian National Disability Insurance Scheme (Senate Select Committee Inquiry on Autism, 2022, xxxiii).

The United Nations (2006, Article 27, p. 19) Convention on the Rights of Persons with Disabilities acknowledges the rights of persons with disabilities to work, and the United Nations Sustainable Development Goal 8 includes the aim of ‘decent work for all’ (United Nations, 2016, p. 23). Despite this recognition of the right to work, the unemployment rate for people with a disability in Australia is 10.3 per cent and the unemployment rate for autistic people is 34.1 per cent which is more than three times the rate for people with a disability (Australian Bureau of Statistics, 2018a). The Senate Select Committee Inquiry on
Autism has recognised that this high rate of autistic unemployment cannot be addressed by existing interventions due to the Australian Disability Employment Services having a lack of autism expertise (Senate Select Committee Inquiry on Autism, 2022, xiv) and generic disability services and strategies not catering to the specific sensory and communication challenges autistic people face (Senate Select Committee Inquiry on Autism, 2022, ix). While there are some successful autism-specific employment programs they are considered limited in their reach and to predominantly focus on ICT (Senate Select Committee Inquiry on Autism, 2022, xiv).

Autistic unemployment is a wicked problem with the multifaceted nature of autism contributing to its complexity. As it is a wicked problem, autistic unemployment cannot be effectively addressed by individual initiatives (Batty, 2007, p. 104) and instead requires a coherent solution ecosystem approach (Eggers and Muoio, 2015). This need to take a systems approach when addressing wicked problems is starting to be identified in Work Integration Social Enterprise (WISE) research. WISEs are ‘social enterprises that create employment or pathways to employment for those experiencing barriers to work’ (Joyce et al., 2022, p. 1).

Traditionally, there are two forms of systems social entrepreneurship that focus on addressing wicked problems, such as autistic unemployment. These are the social innovation school of thought which supports the development of systems aware interventions (Martin and Osberg, 2007) and the complexity approach which supports the transition of solution ecosystems of initiatives to new coherent system states that are more appropriate for addressing wicked problems (Goldstein et al., 2010).

The 2022 Australian Senate Select Committee Inquiry on Autism report does not discuss WISEs or systems social entrepreneurship approaches, however it does mention two potentially emancipatory approaches to social enterprise: supporting autistic people to start their own social enterprise and supporting social enterprises that are autistic led (Senate Select Committee Inquiry on Autism, 2022, pp. 281-282). Starting their own social enterprise is a favourable employment option for autistic people as it enables autistic individuals to control their work environment (Senate Select Committee Inquiry on Autism, 2022, p. 282) and it can eliminate the sensory sensitivities and social interaction that often cause autistic people distress in the workplace (Hayward, et al., 2019, p. 56). In addition, some autistic people have a preference to work from home and to have flexible work schedules (Klag et al, 2021, p. 496) which can be more easily accommodated through self-employment. Self-employment also enables autistic individuals to focus on their passions (Robson, 2022), and autistic individuals ‘often have extraordinary intense or specific interests’ (Grove et al., 2018, p. 768).

While the social innovation school of thought is a suitable approach for autistic social enterprise founders, it is not an appropriate approach for autistic led, but not owned, social enterprises. The need for autistic led social enterprises is starting to be recognised. For example, not having ‘beneficiaries’ in decision making positions is an identified weakness of the social enterprises sector: it has been said that social enterprises ‘are excluding the people they aim to help when making senior policy decisions’ (Holle, 2017). Focusing on autistic led social enterprises also supports the Senate Select Committee Inquiry on Autism report’s (2022, p. 73) recommendation to ‘increase the numbers of autistic people appointed to key positions in all organisations, including autism and disability-related organisations’.
Given this need for autistic individuals to be involved in leading social enterprises, a third systems social entrepreneurship approach is proposed in this paper that supports autistic led, but not owned, social enterprises. This new participatory systems social entrepreneurship approach combines the characteristics of the participatory governance dimension of the EMES social entrepreneurship approach with the social innovation school of thought approach.

The remainder of this paper illuminates how to address autistic unemployment through social enterprise. It firstly discusses wicked problems and how best to address them, before outlining how autistic unemployment is a wicked problem. Next, the two traditional systems social entrepreneurship approaches, and how they can support addressing autistic unemployment through social enterprise, are discussed. This is followed by describing the key features of the proposed new participatory systems social entrepreneurship approach. Then the paper discusses how the combination of the three systems social entrepreneurship approaches aligns to the commitments of critical systems thinking, and how their embedding into a solution ecosystem consisting of a social enterprise ecosystem and an autism community participation ecosystem can more effectively address autistic unemployment through social enterprise. The paper concludes by highlighting how this approach can be supported in practice by introducing the Centre for Autistic Social Entrepreneurship.

**Addressing wicked problems**

Wicked problems are complex social policy problems that cannot be successfully addressed with traditional linear, analytical approaches due to their characteristics (Rittel and Webber, 1973). These characteristics include: wicked problems have a multitude of underpinning causes, these causes have many interdependencies, different stakeholders have a different understanding of what the problem is and therefore different stakeholders have conflicting goals, wicked problems have no clear solution, attempts to address them often leads to unforeseen consequences due to their multi-causality and interdependency, they adapt: because of the interdependencies changes to one part of the problem can have unforeseen consequences for other parts of the problem, and they are context specific (Australian Public Service Commission, 2007).

Wicked problems cannot be effectively addressed by individual initiatives. This fact is supported by the Law of Requisite Variety or Ashby’s Law which states that “only variety can destroy variety” (Ashby, 1956). Ashby’s Law suggests that to control the variety of a system, such as all the causal factors and interdependencies underpinning a wicked problem, the approach for addressing the problem needs to have as much variety as the problem itself (Batty, 2007, p. 104). While individual initiatives do not have the requisite variety, a solution ecosystem of initiatives does. A solution ecosystem consists of all the initiatives in a geographical area that are addressing any of the interdependent causal factors that underpin a targeted wicked problem and all of the organisations that are partnering on those initiatives (Eggers and Muoio, 2015). Solution ecosystems are always place based due to wicked problems being context specific (Australian Public Service Commission, 2007).

The need to take such a systems approach when addressing wicked problems is starting to be identified in Work Integration Social Enterprise (WISE) research. Recent WISE research recognises WISEs as complex interventions whose effect depend on how each WISE interacts dynamically with participants, the systems it interconnects with and its environment.
It has been contended that for interventions ‘the most significant aspect of the complexity possibly lies not in the intervention per se (multi-faceted as it might be), but in the context or setting into which the intervention is introduced and with which the intervention interacts’ (Hawe et al, 2009, p. 269).

The wicked problem of autistic unemployment

According to the Diagnostic and Statistical Manual of Mental Disorders Fifth Edition (DSM-5), for a person to be considered autistic an individual must have persistent deficits in each of three areas of social communication and have at least two of four types of restricted, and repetitive behaviours (American Psychiatric Association, 2013). The areas of social communication are deficits in each of social-emotional reciprocity; nonverbal communicative behaviours used for social interaction; and in developing, maintaining, and understanding relationships (American Psychiatric Association, 2013). The restricted and repetitive behaviours are two of the following: repetitive motor movements, use of objects, or speech; insistence on sameness; restrictive and fixated interests; and hyper of hyporeactive to sensory input (American Psychiatric Association, 2013).

In addition to the permutations of the diagnostic criteria, many other factors influence the complexity of autism, and these combined and intertwined factors result in autistic unemployment being an extremely wicked problem. These factors include: every autistic person is different (Griffin, 2019, p. 184), autism consists of a nonlinear spectrum of characteristics (Amaze, 2021; Jack, 2022), autism has a high level of co-occurring medical conditions (ND Australia, 2021, p. 2), there are different models of autism (Anderson-Chavarria, 2021), and autism impacts on many areas of an autistic person’s life (Senate Select Committee Inquiry on Autism, 2022).

Every autistic person is different

There is a popular adage in the autism community which is attributed to Stephen Shore: “If you have met one person with autism, you have met one person with autism.” (Kurtz and Jordon, 2008, p. 1). When thinking about how to address autistic unemployment it is important to remember that adage, as care needs to be taken when generalising about autistic unemployment from personal accounts and research studies given the heterogeneity of autism (Benedict-Owen, 2015, p. 13).

Autism is a spectrum

The fact that no two autistic people are the same is in part due to autism being a spectrum of characteristics. While it is still common for the autism spectrum to be thought of as a linear scale from high to low functioning this is a misnomer: for example, research shows that intelligence is not a predictor of functional abilities (Alvares et al., 2020). A more accurate way to describe autism is in terms of a spectrum that consists of the many different traits that are found in diverse combinations in autistic individuals (Amaze, 2021, p. 5; Jack, 2022). Figure 1 depicts autism as a spectrum. It shows autism pie charts for two autistic individuals that have very different autistic traits and therefore experiences of being autistic: neither of these individuals is more or less autistic than the other (Jack, 2022).
Co-occurring Medical Conditions

In addition to the diagnostic criteria for autism, autistic people have a high number of co-occurring medical conditions (Senate Select Committee Inquiry on Autism, 2022, p. 16) which increases the wickedness of autistic unemployment. According to ND Australia (2021, p. 2) it is estimated that:

- 60-70% of autistic people are also diagnosed with ADHD
- Up to 40% of children with Down Syndrome are also autistic
- 30-40% of autistic children have an intellectual disability or developmental delays
- 30% of children with Cerebral Palsy are also autistic
- 20-30% of autistic people have epilepsy
- 4-5% of autistic children have Tourette syndrome and another 9-12% have tics

It is also estimated that between 50-70 per cent of autistic people experience mental health conditions, with anxiety and depression being the most common (St Vincent’s Health Australia, 2020, p. 4). The mental health conditions of autistic people are exacerbated due to poor physical health, their socio-economic status, and a lack of social supports (St Vincent’s Health Australia, 2020, p. 4).

Different models of Autism

The different models of Autism also increase its complexity, as people have different understandings of what autism is and how it should be responded to. These models include the charity, medical, social, and neurodiversity models.

The charity model relies extensively on emotional appeals of charity, and treats autistic people as helpless victims that require care and protection (Bhanushali, 2007, p. 2) that is...
provided by non-autistic people (Orsini & Smith, 2010, p. 43). In this view, autistic people
are the passive recipients of services (Orsini & Smith, 2010, p. 43).

The medical model identifies autism as a defect or deficit that has biological origins and
therefore to be within the person (Anderson-Chavarria, 2021, p. 7). It aspires for the
reduction of symptoms so that the autistic person can be as normal as possible (Kapp et al.,
2013, p. 59). Most of the support for framing autism within the medical model comes from
within the non-autistic community (Broderick and Ne’eman, 2008, p. 468), with parents and
professionals seeking treatments and cures for children and lay people expressing concerns
that the rising numbers of autistic people is an epidemic (Kapp et al., 2013, p. 60). Critics of
the medical model of autism argue that the medical model’s complete focus on a deficit-view
of autism without considering strengths has a significant negative impact on the identity
building of autistic individuals (Anderson-Chavarria, 2021, p. 9).

In the early 1980s, the disability rights movement advocated for a change from the medical
model to the social model of disability, which saw a separation of the terms impairment and
disability to convey different meanings: impairment was defined to be a physical or cognitive
difference, and disability was seen as a social construct that resulted in impaired people being
disadvantaged and disabled by their environment (Frauenberger, 2015, p. 58). In line with
this thinking, the social model of autism considers the disability associated with autism not to
be caused by the autistic person’s condition, but by the way that society perceives and
accommodates autistic people (Amaze, 2021, p. 6). In recent years, the social model has also
been criticised, as both the social and medical model are one-sided (person or society) and
they both ignore the experiences of autistic individuals (Frauenberger, 2015, p. 58).

In contrast to the other models, most of the support for framing autism within the
neurodiversity model comes from within the autistic community itself (Broderick and
Ne’eman, 2008, p. 468). The neurodiversity model is a disability rights model (Rivas, et al.,
2021, p. 2022) that was borne out of the autistic neurodiversity movement which formed in
the late 20th Century and is following a similar trajectory to the earlier gay rights movement:
with autistic adults meeting and mobilising, discussing common interests, and coming out as
autistic with pride (Dyck and Russell, 2020, p. 170). Autistic self-advocates within the
neurodiversity movement consider their autism to be inseparable from their identity and
therefore prefer identity-first language (autistic person) instead of person-first language
(person with autism) (Kapp, et al., 2013, pp. 59-60).

As a model of autism, the neurodiversity model perceives autistic individuals to possess a
complex combination of cognitive strengths and challenges, for example ‘difficulties in
understanding social nuances, filtering competing sensory stimuli, and planning the tasks of
daily living may be coupled with strengths in detailed thinking, memory, and complex pattern
analysis’ (Nicolaidis, 2012, p. 503). The neurodiversity model acknowledges the diversity of
human physical manifestations, considers there not to be a normal human brain or human
mind (Tomlinson and Newman, 2017, pp. 92-93) and is premised on ‘the idea that the human
brain can be wired in a variety of ways, none of them inherently superior’ (Antze, 2010, p.
318). Therefore, a neurodiverse model of autism does not see autism as being a disorder

A criticism of the neurodiversity model is that more-severely challenged autistic individuals
may not be able to advocate for themselves and therefore the model is only partially
representative of autism (Rivas et al., 2021, p. 195). In response to this criticism, autistic
activists have argued that co-occurring condition need to be acknowledged as being separate from autism itself, as the co-occurring conditions may require a lot more support and accommodations than autism (Des Roches Rosa, 2018).

Impact of autism on other areas of life

In addition to employment, being autistic can impact on many other areas of a person’s life, including educational attainment, housing, and interactions with support services (Senate Select Committee Inquiry on Autism, 2022). According to the Australian Bureau of Statistics (2018b) only 8.1% of autistic people have a Bachelor Degree or higher, compared to 16.1% of people with a disability and 31.2% of people without a disability; and autistic people are less likely to have an Advanced Diploma, Diploma or Certificate III or IV compared to people with a disability or those with no disability. For autistic people who do have a Bachelor Degree or higher qualification, the unemployment rate is still 34 per cent (Autism Spectrum Australia, 2021, p. 32).

The majority of autistic people in Australia, live at home with their parents until their parents die or are unable to support them (Autism Aspergers Advocacy Australia, 2021, p. 22). This is probably due to their financial situation given the high unemployment rate for autistic people. Findings from research undertaken by Autism Queensland (2021, p. 22) into the independent living of 69 autistic adolescents and adults found that 85.5 per cent lived in the family home, 5.8 per cent lived in a supported/group home, 5.8 per cent were living alone independently, 2.9 per cent were living with housemates independently, and 1.4 per cent were living independently with a partner.

Autistic people frequently need assistance with a range of activities, with approximately two in five autistic people (39.2%) requiring assistance with cognitive and emotional tasks at least once a day, and three in ten autistic people requiring assistance once a day with self-care (30.9%) and mobility (33.2%) (Australian Bureau of Statistics, 2018b). Table 1 provides further information on the assistance and frequency of assistance required by autistic individuals.

Table 1: Activity autistic person requiring assistance with, by frequency of assistance needed (Australian Bureau of Statistics, 2018b).

<table>
<thead>
<tr>
<th>Activity</th>
<th>Less than once a day (%)</th>
<th>At least once a day (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Property maintenance</td>
<td>5.2</td>
<td>2.1</td>
</tr>
<tr>
<td>Reading or writing tasks</td>
<td>10.9</td>
<td>4.6</td>
</tr>
<tr>
<td>Transport</td>
<td>9.1</td>
<td>6.0</td>
</tr>
<tr>
<td>Household chores</td>
<td>2.8</td>
<td>7.8</td>
</tr>
<tr>
<td>Meal preparation</td>
<td>0.0</td>
<td>11.3</td>
</tr>
<tr>
<td>Health care</td>
<td>22.1</td>
<td>19.2</td>
</tr>
<tr>
<td>Communication</td>
<td>19.5</td>
<td>23.8</td>
</tr>
<tr>
<td>Self-care</td>
<td>5.4</td>
<td>30.9</td>
</tr>
<tr>
<td>Mobility</td>
<td>17.1</td>
<td>33.2</td>
</tr>
<tr>
<td>Cognitive or emotional tasks</td>
<td>35.3</td>
<td>39.2</td>
</tr>
</tbody>
</table>
Current systems social entrepreneurship approaches

Traditionally there are two forms of systems social entrepreneurship that focus on addressing wicked problems such as autistic unemployment: the social innovation school of thought and the complexity approach. While both of these approaches advocate for a systems approach and recognise solution ecosystems, they have different ontologies (Snowden and Stanbridge, 2004) and are based on different intellectual traditions (Castellani, 2018).

The social innovation school of social entrepreneurship thought originated in the United States (Hoogendorn et al., 2010; Defourny and Nyssens, 2010). Bill Drayton, who coined the term social entrepreneurship (Sen, 2007), is considered to be its leading figure (Hoogendorn et al., 2010; Defourny and Nyssens, 2010). Dees, who has been credited with formulating the most commonly quoted definition of social entrepreneurship, is also associated with the social innovation school (Dees and Anderson, 2006). Dees (1998) defines social entrepreneurs as individuals who play ‘the role of change agents in the social sector, by:

• Adopting a mission to create and sustain social value (not just private value)
• Recognising and relentlessly pursuing new opportunities to serve that mission
• Engaging in a process of continuous innovation, adaptation, and learning
• Acting boldly without being limited by resources currently in hand; and
• Exhibiting a heightened sense of accountability to the constituencies served and for the outcomes created’ (Dees, 1998, p.4).

This definition from Dees (1998, p. 4), of ‘what is a social entrepreneur’, draws extensively on the scholarly entrepreneurship literature, incorporating the notion of value creation from Say, innovation and change agents from Schumpeter, pursuit of opportunity from Drucker, and resourcefulness from Stevenson. The social innovation school’s scholarly definition of social entrepreneurship is considered to be a broad and general meaning of social entrepreneurship with its focus being on innovative activity directed at achieving a social objective in either the private or non-profit sector, or across both sectors (Peredo and McLean, 2006; Wei-Skillern et al., 2007).

A systems view of reality underpins the social innovation school of social entrepreneurship, with social entrepreneurs taking direct action to transform systems (Martin and Osberg, 2007). Using systems thinking, these social entrepreneurs identify an opportunity in a non-optimum complex system where they can intervene in order to create a better future state (Martin and Osberg, 2007). This opportunity involves selecting and addressing a few of the underpinning causal factors of a target complex wicked problem: those that they consider will produce the greatest impact (Martin and Osberg, 2015). While these selected underpinning causal factors are treated as a simple or complicated problem that can be addressed with a traditional program logic (Zivkovic, 2021), there is acknowledgement that the problem is part of a larger complex wicked problem. Social entrepreneurs who follow a social innovation school approach see their initiatives and organisations as components of a solution ecosystem that is addressing a broader complex wicked problem (Zivkovic, 2021).

The social innovation school of thought would be a suitable social entrepreneurship approach for autistic individuals who want to establish a social enterprise, given this approach focuses on maximising social impact and contributing towards systems change. Many autistic people are passionate about creating systems change towards greater equality, fairness, and social justice (Baron-Cohen, 2013, p. 213). Taking the social innovation school systems approach to
social enterprise development, would also enable autistic social enterprise founders to have a
greater understanding of system dynamics, which would enable them to better contribute
towards strengthening a solution ecosystem for addressing autistic unemployment through
social enterprise, using a complexity approach to social entrepreneurship.

The introduction of a complexity approach to social entrepreneurship can be traced back to
2008 when the article “Complexity and Social Entrepreneurship: A Fortuitous Meeting” was
the same year, an International Conference on Social Entrepreneurship, Systems Thinking and
Complexity was held at Adelphi University, Garden City, New York.

The complexity approach to social entrepreneurship builds upon previous applications of
complexity science to leadership studies (Goldstein, et al., 2008). These complex systems
leadership theories consider leadership not to be held in a particular person or role but to be a
process embedded in all of the interactions amongst agents in a complex adaptive system
(McKelvey and Lichtenstein, 2007). Complex adaptive systems are collections of many
different agents/components that interact in nonlinear ways without an external supervisory
influence and show emergent behaviours that cannot be explained by analysing the behaviour
of the parts (Sturmberg et al., 2014). Solution ecosystems are complex adaptive systems as
they are collections of many different parts, such as people, institutions, and infrastructure;
they interact in nonlinear ways; cannot be controlled by an external supervisory influence;
and they show emergent behaviours, such as the emergence of coherent and adaptive
responses to addressing wicked problems that cannot be completely explained by studying
their component parts.

As a problem-solving approach, complex systems leadership theories do not focus on finding
the one way to solve a wicked problem, instead their focus is on providing a framework
within which stakeholders can learn, interact, and adapt to maximise their effectiveness in
addressing wicked problems (Geyer, 2003). Therefore, instead of creating interventions to
solve problems using cause and effect logic, social entrepreneurship from a complexity
perspective focuses on the creation of conditions for the components within a complex
adaptive system, such as the initiatives and the organisations partnering on initiatives in a
solution ecosystem, to transition coherently from their current state to a new and improved
state. These conditions include creating information rich social networks, establishing
situations that encourage the emergence of innovation, supporting self-organizing social
processes to occur, and encouraging networks that support resonance and synchronization
between diverse stakeholders (Goldstein, et al., 2008).

Complex systems leadership theories often represent such transitions as the emergence of a
new attractor from an original attractor through adaptive processes of change. An attractor
represents the stable patterns of a complex system (Svyantek and Brown, 2000) showing the
range of possible actions in the system set by their circular, nonlinear structure of beliefs,
actions and results that strengthen each other and act as a non-permeable barrier and attractor
(Goldstein, 1994). This emergence follows a well understood path: ‘a new order appears if
forces at play exert tension on the system; a small change, if amplified, leads to a
transformative process which, fuelled with the new imported resources and positively
reinforcing forces, leads to a new equilibrium’ (Thietart and Forgues, 2011). The complexity
approach is appropriate for transitioning solution ecosystems consisting of individual
initiatives addressing various aspects of autistic unemployment through social enterprise, to a
new coherent system state that more appropriately addresses the wicked problem of autistic unemployment.

**New participatory systems social entrepreneurship approach**

While the social innovation school of thought is a suitable approach for autistic social enterprise founders, it does not incorporate the participatory governance mechanism that would be required to support autistic led social enterprises that do not have autistic founders. To address this gap, this paper posits that a new participatory systems social entrepreneurship approach needs to be created that combines the characteristics of the participatory governance dimension of the EMES social entrepreneurship approach with the social innovation school of thought approach.

The EMES approach is Europe’s approach to social entrepreneurship. Europe’s approach is commonly referred to as the EMES approach after the EMES Research Network. The EMES Research Network was established in 1996 by scholars that came together to investigate the emergence of social enterprise within the European Union (Hoogendoorn et al., 2010). The acronym EMES is from the network’s original French name "EMergence des Enterprises Sociales en Europe" which was retained when the network decided to become a formal international association (Defourny, 2013).

Instead of a concise definition, the EMES European Research Network established eleven criteria in two subsets, four economic/entrepreneurial and five social criteria, to identify organizations that would probably be social enterprises in each of the 15 countries forming the EU at the time (Defourny & Nyssens, 2010): these criteria were considered to be an ideal-type of social enterprise in mainland Europe (Kerlin, 2006, p. 249). More recently these criteria have been shown as three subsets: a third participatory governance subset has been added that highlights the unique participatory characteristics of the EMES and European social entrepreneurship approach (Defourny & Nyssens, 2012; Kerlin, 2006, p. 249).

The participatory governance subset of the EMES approach signifies that in mainland Europe the concept of social entrepreneurship derived from the European collective tradition where the term ‘‘social’’ initially referred to the collective organisational form (Teasdale, 2012). This history is represented in the types of social enterprises generally associated with mainland Europe: associations, co-operatives, mutual organisations, and foundations (Hoogendoorn et al., 2010).

The EMES approach specifies three characteristics within the participatory governance subset: a high degree of autonomy, decision making power not based on capital ownership, and a participatory nature which involves various parties affected by the activity (Defourny and Nyssens, 2012, p. 78). The high degree of autonomy characteristic highlights that EMES social enterprises are formed by a group of individuals as an autonomous project, and that these individuals are responsible for governing the social enterprise (Defourny and Nyssens, 2012, p. 78). The criteria ‘decision making power not based on capital ownership’ indicates that for the EMES approach, decision-making voting power within the social enterprise is not distributed according to who owns capital shares; and the ‘participatory nature which involves various parties affected by the activity’ criteria highlight that users or customers are represented and participate in the social enterprise’s decision-making. (Defourny and Nyssens, 2012, p. 78).
By combining the EMES participatory dimension with the social innovation school of thought, the proposed new participatory systems approach will also enable autistic people that are leading social enterprises to have a greater understanding of system dynamics. This understanding will support these autistic leaders to become involved in the strengthening of solution ecosystems that are addressing autistic unemployment through social enterprise.

**Combining the three systems social entrepreneurship approaches**

The combination of the three systems social entrepreneurship approaches described in this paper to address autistic unemployment aligns to the commitments of critical systems thinking. Critical systems thinking has three commitments: critical awareness, systems pluralism, and emancipation (Midgley, 1996, p. 61).

A critical analysis of the strengths and weaknesses of the different systems social entrepreneurship approaches aligns with the critical awareness commitment of critical systems thinking (Watson and Watson, 2011, p. 68). This paper has contended that the social innovation school of thought systems social entrepreneurship approach is suitable for autistic self-employment through social enterprise, that a participatory systems social entrepreneurship approach is required for autistic-led social enterprise, and that a complexity social entrepreneurship approach is required to strengthen and transition the actors in a solution ecosystem from their current state of working to a new and improved state that is better able to address autistic unemployment through social enterprise.

Systems pluralism is the recognition that different systems methodologies need to be creatively employed together in a theoretically informed way (Jackson, 2019, p. 26). It has been argued in this paper that the proposed new participatory systems approach, the social innovation school of thought, and the complexity social entrepreneurship approach can be creatively combined to better address autistic unemployment through social enterprise, with both autistic individuals that take a social innovation school of thought approach to start a social enterprise, and autistic individuals that take a participatory systems social entrepreneurship approach to lead a social enterprise, contributing also to the strengthening of a solution ecosystem for addressing autistic unemployment through social enterprise that takes a complexity social entrepreneurship approach.

The critical systems thinking commitment of emancipation focuses on approaches that are ‘dedicated to human emancipation and seeks to achieve for all individuals the maximum development of their potential’ (Jackson, 1991, p. 141), as emancipation is the ‘the freeing of people (as individuals and groups) from those physical and human constraints which stop them carrying out what they would freely choose to do’ (Booth, 1991, p. 319). The combining of systems social entrepreneurship approaches to support autistic individuals to start and/or lead social enterprises strongly aligns to the emancipation commitment (Midgley, 1996, p. 61).

**The solution ecosystem’s ecosystems**

To address autistic unemployment more effectively through social enterprise, the three systems social entrepreneurship approaches described in this paper can be embedded into a
solution ecosystem for addressing autistic unemployment through social enterprise, that combines two traditionally separate ecosystems. The separate ecosystems are a social enterprise ecosystem and an autism community participation ecosystem.

Social enterprise ecosystems have many similarities with entrepreneurial ecosystems. An entrepreneurial ecosystem is ‘a set of interdependent actors and factors coordinated in such a way that they enable productive entrepreneurship within a particular territory’ (Stam and Spigel, 2018, p. 407). Actors are the people and organisations that are involved in entrepreneurial ecosystems, including entrepreneurs, investors, mentors, advisors, service providers, universities, and governments (Feld and Hathaway, 2020; Stam and Spigel, 2018, p. 407). Factors are the location-specific conditions that entrepreneurs operate in and the critical resources in a place (Feld and Hathaway, 2020, p. 60). These factors can be categorised as different forms of capital, such as intellectual capital, human capital, financial capital, network capital, cultural capital, physical capital, and institutional capital (Feld and Hathaway, 2020). The image shown at Figure 2 highlights the actors and factors of an entrepreneurial ecosystem.

![Figure 2: Entrepreneurial Ecosystem Actors and Factors](image)

Autistic social entrepreneurs that are starting and leading social enterprises require access to a range of social enterprise ecosystem actors that can support their entrepreneurial endeavours. Research has shown that there are limited support options that focus explicitly on supporting autistic entrepreneurs (Bennett and Gibb, 2022, p. 57) and that there is a need to combine opportunities for autistic social entrepreneurs to engage with actors in the general entrepreneurial ecosystem, with opportunities to bring together autistic social entrepreneurs who understand the specific challenges of autistic individuals starting or leading a social enterprise (Bennett and Gibb, 2022, p. 59). If the emancipation commitment of critical systems thinking is to be achieved, social enterprise ecosystem actors will need to develop the knowledge and skills to understand and support the diverse and complex facets of autism.
Taking a place-based approach that bring together diverse community service providers to support a specific cohort of people who are unemployed is well-recognised. Examples of this approach include the Youth Jobs PaTH Industry Pilot’s that ‘work collaboratively with, relevant entities to deliver the Industry Pilot’ (Department of Education, Skills and Employment, 2020, p. 40), and the National Youth Employment Body which aims ‘to facilitate collaborative efforts that enable young people to secure decent work while addressing industry needs for a diverse, adaptable workforce’ (Brotherhood of St Laurence, n.d.).

The Australian National Disability Insurance Agency recognises that an ecosystem approach is required to support the community and economic participation of autistic individuals (NDIS, 2022). Their approach entails the formation of a community participation ecosystem that includes the Australian National Disability Insurance Scheme, other government services, community supports, and informal supports (NDIS, 2022). The image shown at Figure 3 highlights the actors in this community participation ecosystem.

Figure 3: Community Participation Ecosystem (NDIS, 2022, p18)

Given that autism is the most prevalent primary disability type supported by the Australian National Disability Insurance Scheme (Senate Select Committee Inquiry on Autism, 2022, xxxiii), and the unemployment rate for autistic people is three times the rate for people with a disability (Australian Bureau of Statistics, 2018a), it is anticipated that National Disability Insurance Scheme providers and organisations involved in the proposed National Autism Employment Framework (Senate Select Committee Inquiry on Autism, 2022, xv) will be willing actors for a solution ecosystem that focuses on addressing autistic unemployment through social enterprise.

Centre for Autistic Social Entrepreneurship

The three commitments of critical systems thinking, and the two solution ecosystem ecosystems are informing the establishment of a Centre for Autistic Social Entrepreneurship in Australia. Inspired by the recognised benefits of autistic owned and autistic led social enterprises in the Australian Senate Select Committee Inquiry on Autism’s (2022) report, the Centre for Autistic Social Entrepreneurship will focus on developing the capability of the entire solution ecosystem for addressing autistic unemployment through social enterprise. Programs are being developed for autistic social entrepreneurs and intrapreneurs, individuals
working within social enterprise ecosystems and individuals working within autism community participation ecosystems (Centre for Autistic Social Entrepreneurship, 2022).

All of the Centre’s programs are being underpinned by evidence-based practice (Centre for Autistic Social Entrepreneurship, 2022). In addition to being informed by social entrepreneurship theory and autism research, these programs are aligning to good practice principles for autism interventions. These principles include being clear about meanings and the organisation of programs, providing visual supports, focusing on communication and sensory needs, enabling individualisation of the curriculum and teaching materials, and focusing training on the settings that autistic individuals need to engage in (Prior, et al., 2011, p. 128).

**Conclusion**

This paper has highlighted the significant government interest in autism and autistic unemployment in Australia, which in part is due to the high number of autistic people being supported by Australia’s National Disability Insurance Scheme (Senate Select Committee Inquiry on Autism, 2022, xxxiii) and the high levels of autistic unemployment in Australia (Australian Bureau of Statistics, 2018a). This interest has created a policy window for the Australian social enterprise sector to support autistic individuals who are interested in starting or leading social enterprises. By starting or leading social enterprises, autistic individuals will be better able to control or at least significantly influence their work environment, and they will be in a better position to pursue their passions.

Autistic unemployment is a wicked problem, with the multifaceted nature of autism contributing to this complexity. Given that autistic unemployment is a wicked problem, it is vital that a systems approach is taken.

In addition to the two traditional systems social entrepreneurship approaches of the social innovation school of thought and the complexity approach, this paper has proposed a third systems social entrepreneurship approach that includes a participatory governance dimension. The commitments of critical systems thinking have been drawn upon in this paper to highlight the validity of integrating the social innovation school of thought and the proposed new participatory systems change approach to social entrepreneurship with the complexity approach, in order to address autistic unemployment more effectively. It has also been shown how these systems social entrepreneurship approaches can be embedded into a solution ecosystem for addressing autistic unemployment that consists of a social enterprise ecosystem and an autism community participation ecosystem.

While this paper is predominantly conceptual in nature, it does introduce the Centre for Autistic Social Entrepreneurship which is putting these concepts into practice. Given the potential impact of the approach that has been outlined, and the current policy window, further research needs to be undertaken once the Centre implements its initiatives to determine the impact of the Centre in addressing autistic unemployment.
References


