#### FEATURE ARTICLE



# 'That connection with community... it is just a positive thing': Mentoring autistic adolescents participating in community coding programmes

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#### **Abstract**

**Introduction:** Little is known regarding the experiences of mentoring autistic adolescents. The aim of the study was to explore the process of mentoring autistic youth participating in community coding programmes through the perspective of mentors and facilitators.

**Method:** A descriptive qualitative research design was used involving focus groups or one-on-one interviews with mentors (n = 5) and facilitators (n = 5) volunteering at two community coding programmes in Western Australia and Victoria. Data were thematically analysed through an iterative process.

**Consumer and Community Involvement:** An autistic individual was involved in piloting the discussion guide for the semi-structured interviews.

**Findings:** Thematic analysis identified three primary themes, including (1) the mentoring process; (2) Mentor outcomes including sub-themes of development of mentor attributes, professional development and personal wellbeing and satisfaction; and (3) support needs and opportunities.

**Conclusion:** Practical supports and training within community coding clubs may aid mentors and facilitators in supporting the needs of autistic youth in the community.

## PLAIN LANGUAGE SUMMARY

In this project, we explored the views of mentors and facilitators of community coding clubs for autistic adolescents. The community clubs were run on Saturdays for 2–4 hours during school term time. A total of 10 participants (five mentors and five facilitators) agreed to meet with the research team to discuss their experiences. We found that mentors and facilitators needed support to develop their mentoring skills which helped them to grow, made them feel better and gave them a feeling of satisfaction. Our study showed the importance of understanding autism spectrum and supporting mentors and facilitators. We showed how mentoring programmes are an emerging

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approach that occupational therapists can engage with to better support autistic youth with their strengths and passions.

#### KEYWORDS

belonging, coding, community programmes, mentoring, strength-based approaches

## 1 | INTRODUCTION

This paper will use the identity-first language of 'autistic adolescents' because of the majority preference of those within the autistic community (Autism Cooperative Research Centre, 2022; Bury et al., 2023). The autism spectrum is a lifelong neurodevelopmental condition that can impact an individual's quality of life and functioning (Randall et al., 2016). In 2021, it was estimated that 1/100 children are diagnosed as autistic (Zeidan et al., 2022). The prevalence of autism diagnoses in Australia has increased in recent years, from 205,200 people in 2018 to 290,900 people in 2022, with the majority being adolescents and those under 35 years (Australian Bureau of Statistics, 2024). Autistic adolescents can experience difficulties across multiple areas of life, including wellbeing, social support, school environment and social acceptance (Rødgaard et al., 2021). Many autistic adolescents experience difficulties with communication, having decreased confidence and fewer positive social relationships leading to anxiety, rejection, depression and self-segregation (Kelly et al., 2018). In response to this, community-based programmes have been developed that support autistic youth in specific areas of their life, addressing social connections or other unmet needs (Wong et al., 2015).

Community-based programmes are designed to bring autistic adolescents with a shared culture, values and interests together to develop their social relationships, explore roles and promote engagement with likeminded people (O'Hagan et al., 2023). Focussed interest groups are a type of community-based programme engaging autistic youth by utilising common areas of interest that facilitate personal connection with peers (Jones et al., 2018, 2021; Müller et al., 2017). Science, technology, arts and mathematics (STEAM), and coding-specific clubs employ a strengths-based approach to target a range of goals such as vocational exploration, work experience and social connection through relationships with peers, mentors and facilitators (Jones et al., 2022a).

Building on previous research (Jones et al., 2021; Jones, Falkmer, Milbourn, Tan, et al., 2023; Jones, Milbourn, Falkmer, Tan, et al., 2023), Jones, Milbourn, Falkmer, Vinci, et al. (2023) examined autistic coding

# **Key Points for Occupational Therapy**

- Mentoring is a social process for autistic adolescents.
- Community coding programmes offer opportunities for autistic youth to engage in occupations, providing value, interest and autonomy, thus contributing to occupational wellbeing.
- Understanding the mentoring process may help occupational therapists to better support autistic individuals' passions and interests.

clubs to develop a theoretical framework for designing and delivering strength-based technology clubs. The framework was underpinned by three theoretical models of health: firstly, the wellbeing model PERMA (positive emotion, engagement, relationships, meaning and accomplishment) (Seligman, 2011); secondly, selfdetermination theory (Adams et al., 2017); and finally, the International Classification of Functioning, Disability and Health Children and Youth Version (World Health Organization, 2007). The new framework includes interests, values, autonomy and requirements (IVAR). Interests include suggestions for engaging autistic youth in areas of their focussed interest, values involve consideration of valuing autistic youth and their skillset from a strengths-based perspective, and autonomy encompasses the seeking of opportunities for autistic youth to make choices and decisions. Finally, requirements recommend the consideration of the social and physical environments where groups take place (Jones, Milbourn, Falkmer, Vinci, et al., 2023). The IVAR framework aligns with contemporary models of understanding occupation (Kielhofner, 2008) and occupational wellbeing (Milbourn et al., 2017, 2020; Saraswati et al., 2019).

Mentoring is the process of facilitating the development of another person (mentee), offering knowledge, advice, experience and guidance to support a mentees personal development (Shah, 2017; Sharma & Freeman, 2014). Facilitators also play a key role in the mentoring process, typically as organisers of the coding

programme. Facilitators have previous knowledge and experience providing guidance to mentors with motivation, understanding of mentee needs and the development of personal mentoring skills such as communication and confidence (Mason et al., 2022). Both mentors and facilitators use specific skills and strategies to develop the mentor-mentee partnership enabling them to succeed in their roles (Maker Castro & Cohen, 2021). The skills and strategies of a successful mentor include the ability to engage and develop personal connections, communicate appropriately, manage time, self-reflect and have a positive attitude towards the role (Maker Castro & Cohen, 2021). A person-centred approach may be used to implement, connect and build relationships with mentees, using appropriate empathy and self-disclosure (Goldner & Ben-Eliyahu, 2021). The mentors and facilitators of community programmes play a vital role in educating and encouraging growth among mentees, particularly autistic adolescents. Mentoring is a synergistic relationship, where both mentors and mentees benefit (Hamilton et al., 2016).

Mentors and facilitators often report that mentoring enhances their own sense of purpose and community, increases empathy and personal satisfaction, develops transferable skills such as interpersonal skills (Müller et al., 2017). Mentoring can facilitate career and educational development, including increased professionalism, job satisfaction, career efficacy, a greater sense of academic achievement and success, and increased motivation to study (Weiler et al., 2014). Negative mentoring experiences may include stress, frustration, disappointment, unclear roles and an inability to manage time effectively (Hamilton et al., 2016). Mentor programmes with structured activities and sufficient resources are beneficial to mentor success, reducing stress (Weiler et al., 2014). Adequate training and support from trusted facilitators contribute to the development of desired characteristics among mentors, improving confidence and self-efficacy as a leader and the quality of the mentoring relationship (Goldner & Ben-Eliyahu, 2021).

Building mentor awareness and knowledge of disabilities is a key when working alongside mentees who experience disabilities, furthering understanding of individual situations (Rockinson-Szapkiw et al., 2021). Limited literature exists describing the perspectives and experiences of mentors and facilitators working alongside autistic adolescents (Lee et al., 2020). Consequently, further research is required to extend knowledge about mentors and facilitators experiences. The aim of this study was to explore the process of mentoring autistic adolescents participating in community coding programmes through the perspectives of mentors and facilitators.

# 2 | METHODS

# 2.1 | Design

This study utilised a descriptive qualitative approach to describe the process of working alongside autistic adolescents in community coding programmes through the experiences of facilitators and mentors (Bradshaw et al., 2017; Doyle et al., 2020). This approach was chosen as it allowed for the production of rich descriptions of the mentoring experience (Magilvy, 2003). Focus groups and interviews were undertaken, facilitating deep conversations with mentors and facilitators exploring individual perspectives and experiences (Liamputtong, 2013) using the Consolidated Criteria for Reporting Qualitative Research (COREQ) (Tong et al., 2007). Ethical approval was obtained from the Human Research Ethics Committee (HREC) at Curtin University, with approval number HRE2017-0147. Study participation was voluntary, and participants could withdraw at any time without consequence. The participant information sheets were provided to outline study aims, procedures and relevant support services.

# 2.2 | Description of coding programmes

CoderDojo@Curtin (Perth, Western Australia) and the Reservoir Youth Gamers (Melbourne, Victoria) are both community coding programmes. The programmes provide a safe, inclusive environment for autistic adolescents to learn coding, incorporating an unstructured, casual learning environment for youth aged between 7 and 17 to build their skills in programming, problemsolving, creativity and social engagement. Programmes run throughout their respective school terms for 2-4 hours every Saturday, with mentors and facilitators running sessions and assisting mentees. Mentors described their role as communicating with stakeholders (parents and facilitators), setting up the environment, engaging mentees' interest and prompting mentee development in both coding and social areas. Mentors come from a range of backgrounds including students or professionals with technical expertise, health or education settings. Mentors were also professionals working with the autistic community, parents of neurodivergent children and other individuals identifying as neurodivergent. Facilitators played a key role in the coding groups, typically running and overseeing the group, including allocating autistic youth to the various coding group options and allocating them a mentor. Programmes like the one described are growing in popularity and are relevant to occupational therapy, given its focus on utilising

strengths and creativity as a therapeutic tool for change (Lee et al., 2023, 2024).

# 2.3 | Participants

Purposive sampling (Campbell et al., 2020) was used to recruit mentors and facilitators from coding clubs in Western Australia and Victoria via emails. The research team also attended coding club meetings online and on-site. Inclusion criteria was used to recruit mentors and facilitators who were over 18 years old, under 18 with parental consent, worked/attended for one term minimum and mentored at the identified locations. Those without access to video conferencing-compatible device, internet connection, or those not fluent in English were excluded.

## 2.4 | Data collection

Semi-structured focus groups and interviews were completed providing opportunities for collaborative discussions between participants (Liamputtong, 2013). The participants chose between online video conference focus groups or online one-on-one interviews, selecting a time that worked best for their schedule. Two facilitator focus groups (n = 5) and five mentor interviews (n = 5) (lasting between 45 minutes and 1 hour and 30 minutes, average 1 hour in length) were completed between March and May 2023. A discussion guide (Table 1) was used to generate answers to questions related to the process of mentoring for both mentors and facilitators. Prior to data collection, the discission guide questions were piloted with an autistic researcher who provided feedback on the suitability and phrasing of the questions. Suggestions such as the use of verbal prompts after each question were then incorporated. Interviews and focus groups were carried

**TABLE 1** Example interview topics and questions used to explore the mentoring of autistic adolescents.

Торіс	Example questions
Motivation for being a mentor	Why did you start mentoring? Why do you continue to mentor?
Experience of mentoring	How did you feel about mentoring at the start, and how does that compare to now? How would you describe your overall experience mentoring in the Coder Dojo programme?
Needs of mentors	What skills do you think make a good mentor? What supports are in place already for you, to assist mentoring?

out by CC who had no prior experience with the coding programmes and was a 4th year occupational therapy student undertaking a group honours programme.

# 2.5 | Data analysis

A transcription service was used to transcribe verbatim focus groups and individual interviews with additional manual spot-checking completed by LC, CC, SP and CW ensuring accuracy. NVivo 12 (Lumivero, 2023) was used to organise the coding of themes from transcripts and to record audit trails. Focus group and interview data were analysed using the six-step thematic analysis approach outlined by Braun and Clarke, detailing the experiences of participants (Maguire & Delahunt, 2017). These steps included (i) becoming familiar with the data, (ii) generating initial codes, (iii) searching for themes, (iv) reviewing themes, (v) defining themes and (vi) the write-up (Maguire & Delahunt, 2017). The data analysis process involved the research team re-reading the transcripts enabling familiarisation with the data. Data were then individually analysed using an open coding method to break down the data into smaller parts. Once this was completed, the research team collaboratively identified preliminary themes by grouping codes together into broader categories. These were then reviewed and modified according to the study's aim. Next, newly developed themes were defined, and relevant codes were allocated to each theme. Trustworthiness of data (Connelly, 2016) was ensured using a member checking process, including emailing participants a diagram of compiled responses and interpretation and inviting participants to provide feedback and confirm themes. Feedback was then implemented or followed up as needed.

Transferability was achieved by allowing contextual information to be included in interpretations and through purposive sampling ensuring that those recruited had in-depth experiences relating to the study. Dependability was strengthened by coding and re-coding data, triangulating and completing audit trails detailing the process of data collection, analysis and interpretation, as well as frequent researcher check ins. Confirmability was enhanced through triangulation and by researchers practicing reflexivity via journaling, documenting thoughts, and declaring preconceived opinions and biases related to the study (Connelly, 2016).

# 2.6 | Positionality statement

All authors are registered occupational therapists, part of a large university autism research group. All authors prescribe to a co-production philosophy, hence the collaboration with an autistic adult providing feedback on the study questions. BM and SG work as full-time university teacher and academic researchers having experience in both qualitative and quantitative research. BM and SG have previously caried out evaluation of strengths-based programmes for autistic adolescents and young adults in coding and digital arts. LC, CC, SB and CW were final year occupational therapy honours students who had undertaken 18 months of focussed research training.

## 3 | FINDINGS

Ten participants from two community coding programmes (Western Australia and Victoria) consented to participate in the study. Of the participants, five were mentors and five were facilitators. Of these, six participants were parents of children attending the programme, four participants had a background in technology and two participants had an educational background (Table 2). Pseudonyms were allocated ensuring participant privacy. The research team identified common themes of the mentoring process which included (1) the mentoring process, (2) mentoring outcomes (sub-themes including development of mentor attributes professional development, personal wellbeing and satisfaction) and (3) support needs and opportunities.

# 3.1 | Theme 1: The mentoring process

The experiences of mentors and facilitators (participants) reflected how mentoring was a social process. Throughout the mentoring process, mentors described how they continuously learned and grew based on their

TABLE 2 Descriptive data and demographic information.

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Variables	Data
Role	Mentor $(n = 5)$ Facilitator $(n = 5)$
Gender	Male $(n = 4)$ Female $(n = 6)$
Age range	18–30 years $(n = 3)$ 31–60 years $(n = 7)$
Background <sup>a</sup>	Parents of neurodivergent child/children $(n = 6)$ Technology and engineering background $(n = 4)$ Education background $(n = 2)$

Note: n: number of participants.

experiences with the community coding programme. The participants expressed how time significantly contributed to their development as a mentor, as one mentor noted: 'You get more from it than you think. You learn a lot about yourself. I make the time for it because it is more rewarding than working.' – Catherine Mentor.

As each mentor progressed in their role, they described how they felt more confident in their role and abilities. By attending the programme and teaching technology and social skills to autistic adolescents, mentor confidence and the ability to successfully mentor autistic adolescents in the coding programme increased. As Ryan (mentor) described 'being able to be a self-learner, self-teacher, being able to be adaptive to new things is very important.'

# 3.2 | Theme 2: Mentoring outcomes

The participants identified three sub-themes to describe the strategies and supports that enabled them to succeed as mentors or facilitators. This included development of mentor attributes, professional development, and personal wellbeing and satisfaction.

# 3.2.1 | Subtheme 1: development of mentor attributes

The participants described how they improved their interpersonal, leadership and technology skills, and their understanding of autism and neurodiversity increased through the process of being a mentor. The participants voiced how their experiences in their role working alongside autistic adolescents promoted the development of their knowledge and awareness of neurodiversity.

'I've also learned that those kids who are on the spectrum learn differently and in different ways within that as well.' –

Catherine (mentor)

The participants also expressed how they developed interpersonal skills from their mentor role. Interpersonal skills were described as skills that enable a person to successfully communicate, interact and build relationships with others such as active listening, clear speech and patience. As Ethan (mentor) stated 'I was learning what works with these kids... Mostly learning about, how to support the kids, what the needs are, what their interests are. I learned a lot about that, about the kids. Yeah, and what supports them best I guess.'

<sup>&</sup>lt;sup>a</sup>Participants may qualify for multiple background categories.

'Over the years, I've learned to just like, wait there and be comfortable. Do not really try to like to bring it anywhere, if it does not go anywhere. And there's no need to panic and run away from the situation.' –

William (Mentor)

The participants stated how their leadership skills improved through mentoring, enabling them to manage and guide autistic youth attending the programme. Leadership skills that improved included assertiveness, collaboration and open-mindedness. The participants also developed their confidence with public speaking, conflict resolution skills, managing mentee dynamics and adaptability to meet the needs of mentees.

'I've got better at public speaking. That was something I used to like really not be comfortable with, but now, I just do it.' –

Vanessa (facilitator)

Facilitators and mentors reported the need to stay up to date with current technology trends and gaining further technological knowledge and skills as a result of participating in the programme. As Harry (mentor) stated 'They'll soon see that it's actually very easy. If I'm gonna ask a kid who's never programmed before to do this thing, like, we can do it... So, I think beyond that, just trying out the software, sitting next to a kid and, you know, just trying to make the same thing that they're making.' Mentors and facilitators were not required to have any previous experience in technology to volunteer in the programmes, with some describing learning from or alongside mentees who used advanced technological language.

'In the scratch group, it's quite easy to pick up quite quickly. So, if you do not know much coding, or have not done coding at all before, you can still jump in with those kids that are just starting and do well.' –

Vanessa (Facilitator)

# 3.2.2 | Subtheme 2: professional development

The participants explained that an outcome of mentoring was exposure to new career opportunities in the technology field and working alongside autistic youth. The coding clubs provided an avenue for networking and provided mentors with opportunities to find placements, share contacts and discover new job opportunities. For

example, Grace (facilitator) explained how the facilitators hooked a mentor up with a local primary school for their school (teaching) education placement. A few participants expressed that, prior to mentoring, they did not have experience working with autistic youth but would like to continue to work with the autistic community professionally. Harry (mentor) described 'I just keep coming, and then if it's two and a half hours out of your Saturday, it's not that big a sacrifice.'

Mentors expressed how by working with community coding clubs they further developed technology skills which aided securing career opportunities. They explained that they were able to keep up to date with technology advances, learn new programmes and hear from different guest speakers which allowed them to gain industry knowledge.

'I've leveraged working in that program to get more jobs in the gaming industry.' –

Ryan (mentor)

The participants acknowledged that mentees were encouraged to progress into leadership roles with more responsibilities such as a peer mentor or facilitator. Some participants expressed that they originally were a parent of an autistic mentee and then progressed to become involved as a facilitator.

'From being a parent, I was invited, and volunteered at Coder Dojo ... eventually, I became, a facilitator at Coder Dojo as well.'

Vanessa (facilitator)

# 3.2.3 | Subtheme 3: personal wellbeing and satisfaction

Personal wellbeing and satisfaction were described as significant outcomes of participating in mentoring for both mentors and facilitators. These included feelings of personal satisfaction and a sense of community. Personal satisfaction was fostered by mentors and facilitators feeling as though they were positively impacting the mentees, either by seeing mentees progress with their technology or social skills, seeing mentees relax and belong in the group, or from seeing enthusiastic engagement. Mentors and facilitators described this as rewarding and a driver of their satisfaction. Many participants reported that this satisfaction had a positive impact on their mental health. Overall, being involved in something positive and bigger than themselves was highlighted as driving personal satisfaction.

'If you have a spare day to do that, over a long form of time, there's a lot to be gained like, within your own personal development, like I said, you know, spending time learning new things all the time is good for yourself being more technical, but it's also very rewarding to see that the positive changes that you help foster.' –

Ryan (mentor)

Mentors and facilitators defined a sense of community as connecting with others and feeling like they belong through forming relationships and being among similar people. The formation of peer relationships included mentor-mentor, mentor-facilitator and mentor-mentee relationships. Feelings of friendship characterised mentor-mentor and mentor-mentee relationships, with mentor-mentee relationships additionally described as resembling siblings. Mentor-facilitator relationships were described as more professional, with relationships built on respect and used to share professional opinions. The participants outlined that being among people who think similarly can promote a sense of community. This was particularly valued by mentors who had lived experience within the neurodiverse community.

'That connection with community and all being in this together really helped wellbeing, my personal well-being and my personal circumstances and mental health.' –

Grace (mentor)

The participants mentioned experiencing feelings of stress and anxiety during mentoring sessions. This was attributed to a lack of confidence and understanding of their role, high role demands and working alongside mentees with challenging behaviours such as sudden outbursts of emotion. As Catherine explained 'I get to mentor and help the other kids, sometimes the facilitator says "Catherine, just go and have some 'you' time and do what you need to do at the other end of the library" because sometimes I need headspace, and I just need timeout.' Additionally, mentors felt pressure around feeling a sense of personal responsibility for the mentees' experience, resulting in feelings of stress and anxiety.

'There's also a lot of stress and anxiety. Because the problem with me is I take it, not personally, but... I feel like it's all on me you know. I mean like if that kid has a sh\*t day, oh, that's on me or what could I've done better?' –

Ethan (mentor)

# 3.3 | Theme 3: Support needs and opportunities

The theme of supports needs and opportunities indicated how mentor satisfaction and success were founded on support from stakeholders. These opportunities included resources, training, emotional support, structure and role clarification. The participants expressed the importance of having technology resources for success in their role, observing that use of technology supported and increased mentee engagement. The participants described how technology was used as a tool to promote mentor–mentee and mentee–mentee relationships and leverage mentee–focussed interest (coding) for engagement.

'I think it's difficult when there is not new technology, in a room where you are trying to teach technology.' –

Ryan (mentor)

The participants reflected on how the community coding programmes provided training to mentors to perform their role. Vanessa explained how the programme had a training day for the mentors to demonstrate how to interact and what to expect when working with autistic youth. However, mentors highlighted the need for regular training to better help feeling prepared and confident in their role. This included a need for onboarding, conflict resolution training and getting feedback from allied health professionals.

'I feel like there should be more specific, like, little modules based around working with children who have autism and, what their sensitivities are, and what to expect.' –

William (mentor)

The participants discussed a perceived lack of understanding of their role when beginning mentoring. This changed over time, with the feeling of being more comfortable in their role growing as they progressed through the programme. Mentors explained how difficulties arose when there was a difference between how the programme was structured and stakeholders' expectations of the mentor role resulting in misunderstandings around role clarification. This included conflict of opinions on what the community coding programme was aiming towards the difference between being a mentor and a leader, and what a mentor's responsibilities were.

'At the start, I was just a bit stressed. I'm like, "Oh, what am I supposed to be doing?" – William (mentor)

## 4 | DISCUSSION

This study aimed to explore the process of mentoring autistic adolescents participating in community coding programmes through the perspective of mentors and facilitators. Findings indicated that mentors and facilitators of the community coding programmes experienced a range of outcomes, aiding their ability to support the needs of autistic mentees. Additionally, mentors and facilitators developed an understanding that mentoring is a social process of continuous learning and development that takes place over a period of time (Jones, Falkmer, Milbourn, Tan, et al., 2023; Weiler et al., 2014).

The participants from this study identified knowledge and skills that enabled mentors and facilitators to succeed in their roles. The implementation of empathy, interpersonal skills and flexibility were key components of being a successful mentor as they allowed mentors to better connect with the mentees. Empathy, flexibility and interpersonal skills are particularly important when working alongside autistic adolescents, ensuring autistic mentee needs are met (Wright & Meyer, 2017).

The participants highlighted the importance of knowledge of autistic identity as a mechanism for successful mentoring, allowing mentors to understand the needs of their mentees. In workplaces, a lack of knowledge may contribute to autistic individuals feeling misunderstood or unsupported (Dreaver et al., 2020). Scott et al. (2019) scoped the literature relating to employment and autistic individuals and found that employer environmental considerations facilitated enablers and barriers in the employment of autistic individuals, highlighting the need for interventions which focus on contextual factors. Occupational therapists have a unique appreciation for the intersectional complexities that influence where employment occurs and the impact of the environment on autistic individuals (Pfeiffer et al., 2018). Occupational therapists in the Australian context have scope to work with community organisations such as coding clubs to upskill its mentors and facilitators while providing support and pathways into further training and employment. For example, Scott et al. (2020) developed an autism specific work tool for employers that occupational therapists can use to upskill employers and community organisations to better support autistic individuals and their work colleagues.

A strategy participants identified as unique to working alongside autistic adolescents was leveraging mentee-focused interests to improve engagement among mentees. Mentors leveraging autistic adolescents' strengths and interests is a common approach utilised by mentors working alongside autistic youth (Müller et al., 2017). The participants identified that a key strategy of mentoring was tailoring and personalising their

mentoring style to provide person-first support to mentees. This finding is similar to the IVAR framework developed by Jones, Milbourn, Falkmer, Vinci, et al. (2023), which puts interests, values, autonomy and requirements at the centre when setting up person centred working relationships with autistic individuals. The IVAR framework is similar in focus (autonomy) to the five domains of occupational wellbeing, including contentment, competence, belonging, identity and autonomy (Milbourn et al., 2020).

Previous research suggests that reflexivity (Farias & Rudman, 2019) and personal reflection (Guy et al., 2020) on mentoring styles and potential changes can help to ensure a successful mentee-mentor partnership (Dreaver et al., 2020). The participants in the current study used similar reflexive and reflective approaches to develop their mentoring skills and knowledge. For occupational therapists and mentors, being able to adjust mentoring style, especially for autistic adolescents, is essential in ensuring positive mentoring outcomes (Lucas & James, 2018).

The participants identified how the structure of the programme successfully assisted them in their role. Strategies such as structured time and activities have been previously implemented in community programmes to ensure mentor support and promote positive outcomes such as personal growth and satisfaction (Weiler et al., 2014; Lucas & James, 2018). Previous research has highlighted the importance of training, supervision and support in mentoring programmes in improving outcomes for mentors (Hamilton et al., 2016). The participants of the current study directly working with autistic youth felt that they would benefit from further training or support. Strategies described in previous research to support mentors include weekly meetings with facilitators/supervisors to improve the quality and subsequent outcomes of mentoring (Hamilton et al., 2016). Other strategies included creating opportunities for open communication between mentors and facilitators around what approaches are working/not working during mentor sessions (Murthi et al., 2023). Programmes that allocate time to support their mentors and provide opportunities for feedback and open communication between mentors and facilitators have enabled mentor success (Kraiger et al., 2019). The findings from the current study identified the importance of mentors adapting their approach to be strengths-based and tailored to autistic adolescents. Building on the interests of autistic youth is crucial, putting strengths at the forefront of learning without prioritising deficits (Lee et al., 2020). As a profession, occupational therapy encourages health professionals to adapt their approach to people of different ages, genders, diagnoses, cultural backgrounds and levels of educational attainment within a variety of settings (Yu et al., 2018). The skills used by mentors and facilitators in

the current study have synergies with occupational therapy practice and how occupational therapists may adapt their approach in utilising strength-based approaches to support participation and engagement (Dunn, 2017).

## 4.1 | Future research and limitations

While this research is a smaller qualitative study, the depth of data collected and the rich description of the topic of inquiry provided an opportunity for the reader to judge the transferability of findings. Mentors from this study came from a range of backgrounds including STEAM education, and parents of neurodivergent children. A limitation included participants not coming from all regions of Australia. Limitations including the recruitment of participants from only two states can be rectified in future research including mentors from a variety of geographical locations, as well as a variety of ages, genders and roles, further improving transferability and generalisability. For example, the participants were excluded if they had not mentored for a minimum for one academic term. Additional limitations included the use of two data collection methods (one-to-one interviews and online focus groups) which could have yielded different responses (instead of offering face-to-face) and not interviewing autistic adolescents on their experiences being mentored. While feedback on the results was sought, further clarification of transcripts would have increased this studies trustworthiness.

## 5 | CONCLUSION

This study described the mentoring process as identified by mentors and facilitators from community coding programmes supporting autistic youth. Mentoring is a social process that resulting in the development of mentor attributes, professionalism, and increased personal wellbeing and satisfaction. These outcomes shape mentor support needs and opportunities. Mentors working alongside autistic youth in community coding programmes require ongoing support to facilitate their mentoring style and leverage focused interests. Understanding the nuisances of autistic strengths and skills through mentoring programmes has the potential to act as a conduit for engagement and may be beneficial knowledge for occupational therapy practice.

#### AUTHOR CONTRIBUTIONS

All authors contributed to the study concept and design, including ethics preparation, approval and recruitment. LC, CC, SP and CW were responsible for recruitment of participants. CC and CW facilitated and moderated the

focus groups and interviews with support from BM and SG. LC, CC, SP and CW conducted thematic analysis under the guidance of BM and SG. LC, CC, SG and CW refined the findings under the guidance of BM and SG. LC, CC, SP, CW, BM and SG prepared and revised the manuscript, reviewed and approved the final manuscript.

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#### CONFLICT OF INTEREST STATEMENT

The author(s) declared no potential conflicts of interest with respect to the research, authorship and/or publication of this article.

## DATA AVAILABILITY STATEMENT

Research data are not shared.

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