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INTELLECTUAL DISABILITY (R CONDILLAC AND L MULLINS, SECTION EDITORS)

Scoping Review of the Factors Influencing Compatibility of Autistic Roommates

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Abstract

Purpose of Review Roommate compatibility of adults on the spectrum with intellectual disabilities has been under-investigated. Following the PRISMA-ScR guidelines, this scoping review explored the current research on the factors that influence the compatibility of Autistic adults' roommates and their living arrangements.

Recent Findings Recently, literature has included the experiences and preferences of adults with intellectual disabilities in the arrangement of their living spaces. Factors that might inform compatibility were related to six domains (i.e., general house details, behavioural profile, sensory, lifestyle, health, and social interactions). Research also suggests that safety, choice, and culture should be considered.

Summary Although autistic adults with intellectual disabilities often live in community settings, no comprehensive assessment has been found to inform placement decisions that consider all relevant aspects of compatibility. This scoping review could be used to inform an assessment to guide placement decisions of prospective housemates and improve the transition process.

Keywords Group living · Roommate compatibility · Autism · Living arrangements · Transition planning

Introduction

In Canada, approximately 1 in 66 children and youth is diagnosed with autism spectrum disorder (ASD) [1, 2] and 50,000 reach adulthood each year [3]. Accordingly, there has been considerable growth in the residential sector for persons on the autism spectrum with intellectual disabilities[1] [4], and housing has evolved from institutional to community-based housing models [5]. In group homes in community settings, adults usually have multiple roommates [5]. Longtin and colleagues [6] recently identified gaps in the transition to community living as persons with an intellectual disabilities felt a lack of accommodations and planning. Research suggests the need to consider roommate compatibility when planning living arrangements for people on the autism spectrum [7]. However, Emerson and Hatton [8] found that 53% of persons with an intellectual disability were not involved in decisions about where they live, and 67% had no say in their roommates. McCarron and colleagues [9] found that consideration for roommate compatibility positively impacts a person's quality of life.

Compatibility is a broad and complex relationship dynamic that multiple variables can influence. Two of these elements are roommate compatibility and the fit between the person and their environment [10]. Within these elements, the literature suggests that general house details [11], behavioural profile [8], sensory [12], lifestyle [11], health [13], and social interactions [14] influence compatibility.

To understand the dynamic interplay of these areas, we conceptualized compatibility consistent with a biopsychosocial approach to challenging behaviour [15]. According to Griffith and colleagues [16], challenging behaviour (e.g., self-injuries, property destruction, and aggression) is culturally abnormal behaviour that jeopardizes the safety of the person or others and can result in limited

[1] In recognition of the differences in preference among the autism community, we used identity-first (autistic) and "on the spectrum" in an attempt to avoid using ableist language (Bottema-Beutel et al., 2020).

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community engagement. A biopsychosocial approach to challenging behaviour allows systematic consideration of the dynamic interplay of biological, psychological, and social/environmental influences [15, 17]. Challenging behaviours are considered potential outcomes or predictors of incompatibility. For example, incompatible roommates may be dissatisfied with their living arrangements due to a conflict in perceived cleanliness resulting in aggression. A thorough assessment of each factor and its interactions can identify the potential sources of incompatibility between roommates [15].

Residential placement decisions can be aided with reliable assessments [10], although few measures have been developed in this area [10, 18, 19]. Faso and colleagues [18] investigated the associations between autism-related traits and future roommate relationship outcomes. Thirteen college roommates completed a self-rating assessment called the broad autism phenotype questionnaire (BAPQ). The BAPQ consists of 36 questions across three subscales related to the characteristics of autism, including social aloofness (e.g., limited interest in social interactions), pragmatic language abnormalities (e.g., difficulty communicating effectively in conversation), and rigid personality (e.g., a strong preference for routine). Faso and colleagues [18] concluded that participants with similar preferences in aloofness or social motivation facilitate relationship satisfaction. These results indicate the importance of pairing people on the autism spectrum with similar personality profiles. However, the BAPQ has a limited scope as the assessment does not address the person's compatibility with their environment, nor does it consider the unique characteristics and needs of persons with intellectual disabilities.

Despite recognizing the value of determining roommate compatibility, no comprehensive assessment has been conducted that considers all relevant factors influencing compatibility for people on the autism spectrum with intellectual disabilities. Kerry's Place Autism Services (KPAS) has developed a comprehensive assessment called the Group Home Living Compatibility Assessment Tool (GCAT). The GCAT was developed to predict the compatibility of potential roommates based on factors related to a person's lifestyle and preferences. The GCAT measures compatibility across the six domains. Preference ratings of each person are compared to potential housemates to improve the process of determining compatibility, increase a person's quality of life, and improve the determination of staff ratios. The GCAT also aims to decrease housemate conflicts and the number of moves in a person's life. To be effective, it was essential to ensure that the GCAT includes all relevant areas in the literature. To identify any gaps in the GCAT, this scoping review examined the current research on the factors that influence the compatibility of Autistic adult roommates.

Methods

A scoping review is an evidence synthesis method that systematically and transparently selects and summarizes a body of research on a concept [20]. The Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) [21] was used to structure this review. The process involved determining the eligibility for sources, developing the electronic search strategy, screening resources, charting data, and synthesizing results. Although there was no registered protocol for this review, following the PRISMA-ScR guidelines was intended to improve the quality and transparency of this scoping review [21].

Eligibility Criteria

This review focused on (a) transitional-aged youth (16 years old and above) and adults (b) who are on the spectrum and may have intellectual and/or developmental disabilities (c) living within community-based settings (e.g., home environment, community living, and group homes). We included resources with a range of evidence (e.g., systematic reviews/meta-analysis, non-systematic reviews, case studies/reports, randomized controlled trials and controlled trials, qualitative, quantitative, and correlational studies) and publication types (e.g., journal articles, research in progress, dissertations, thesis, and book chapters).

We included resources that incorporated the perspectives of the caregivers and family members, as they are valuable in determining preferred living arrangements and potential roommate compatibility [22]. Resources were excluded if they (a) included school, hospital, detention centres, institutions, and vocational settings; (b) focused on only psychiatric or physical disabilities or (c) medical or genetic conditions; (d) children under the age of 16; (e) focus on the transition from child supports to adults supports that does not include housing; or (f) romantic compatibility.

Search Strategy

The authors and a Brock University librarian determined the databases and included Web of Science, PsycINFO, and Google Scholar.[2] Although Google Scholar should not be used as a standalone search due to challenges with replicability, lack of controlled vocabulary, and issues of scoping coverage [23, 24], it is highly sensitive as it can

[2] Although ProQuest Nursing and Allied Health are also relevant databases, they were omitted because they did not generate any relevant results from the initial title and abstract reviews.

produce a high volume of resources [24], which is relevant given the unique focus of the scoping review.

We also established the search strategies and selection criteria (Table 1) with the Brock University librarian. The key areas included variations of the following terms: "compatibility," "autism," "roommates," "transition planning," and "living arrangements." Each term was searched as an Index Term to ensure relevant synonyms were included. To reflect the research objectives, three search permutations of the keywords were conducted in September 2021, including (a) compatibility, autism, and roommates; (b) compatibility, autism, and living arrangements; and (c) compatibility, autism, and transition planning.

Resource Screening

All identified references were exported to the systematic review software, Covidence [25]. We also included resources that were located as part of a brief literature review conducted as background for a larger research project. In Covidence, the first author and a research assistant examined resource titles and abstracts independently (Kappa = 0.33). The low intercoder agreement likely occurred because of the unique and detailed focus of the scoping review. Few resources clearly identified if they were exampling aspects of compatibility within the title or the abstract. Accordingly, the first author and a research assistant continued to review all resource titles and abstracts independently (instead of a subsample of resources). All disagreements were addressed at weekly meetings that included the second author. Resources were carried forward for full-text review when it was unclear if the resources met inclusion criteria from the title and abstracts. Resources without abstracts were included for further full-text review unless the title indicated exclusion criteria. The same process was applied to the full-text review. When resources identified any relevant assessments, the assessments were located, recorded, and included.

Data Charting

The first author developed the data extraction form in Covidence and reviewed it with the second author and research assistant. The first author calibrated the form with the first ten resources. The first author and a research assistant independently charted the items from eligible resources and compared answers for accuracy. Resource characteristics included the first author, publication date, country of publication, research design, and participant characteristics (e.g., age and diagnosis).

Table 1 Search terms

Term	APA PsychNET Search terms	Web of Science Search terms	Google Scholar Search terms
Compatibility	Compatib*	Compatib*	"Compatibility"
Autism	Autis* OR "Developmental Disab*" OR "Intellectual Disab*" OR "People with Disab*" OR "Learning Disab*" OR "Cognitive Disab*" OR "Mental Disab*"	Autis* OR "Developmental Disab*" OR "Intellectual Disab*" OR "People with Disab*" OR "Learning Disab*" OR "Cognitive Disab*" OR "Mental Disab*"	"Autism" OR "Developmental Disability"
Roommates	Roommates OR Housemates OR Cohabitation OR "Flat mates" OR "Group living" OR "Group home" OR "Com* living" "R "con* living"	Roommates OR Housemates OR Cohabitation OR "Flat mates" OR "Group living" OR "Group home" OR "Com* living" "R "con* living"	"Roommates" OR "Cohabitation"
Transition planning	"Transition planning" OR "community living" OR "transition"	"Transition planning" OR "community living" OR "transition"	"Transition planning" OR
Living arrangements	"Living arrangements" OR "living environment" OR "hous*" OR "residen*" OR "apartment" OR "home" OR "accommodations"	"Living arrangements" OR "living environment" OR "hous*" OR "residen*" OR "apartment" OR "home" OR "accommodations"	"Living arrangements"

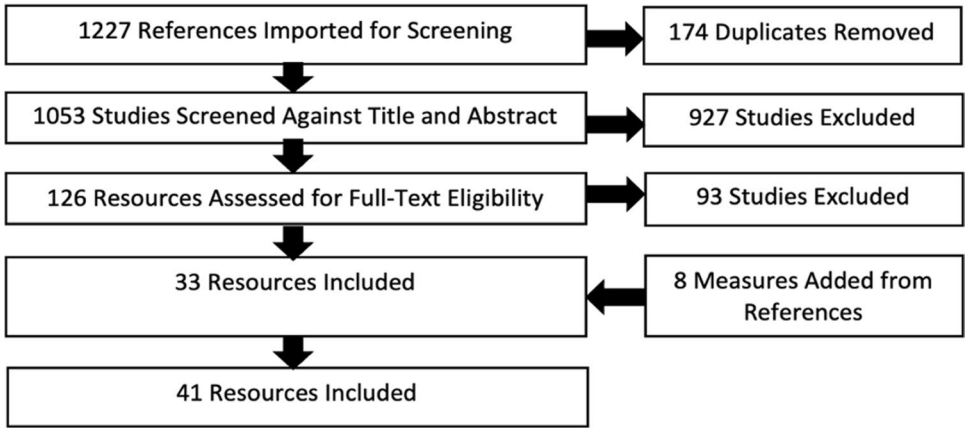

Fig. 1 PRISMA flow chart

Synthesis of Results

Following data charting, a content analysis [26] was conducted. The first step involved preparing the data in written form and uploading all relevant resources to MAXQDA software 2020 [27]. The next step was to define the unit of analysis. The unit of analysis ranged from a paragraph to a word depending on the context used in the resources. For example, a sentence was enough to capture relevant information in one text, but a paragraph was required in another. The third step was to develop a coding scheme. Both inductive and deductive coding processes were used using the predetermined GCAT domains [28]. The first author coded all 41 eligible resources [29]. Afterwards, a research assistant coded 30% of the resources (Kappa = 0.61).

The predetermined categories were the eight domains in the GCAT with associated subdomains, including general house details (e.g., preferences for urban living and needing bolted furniture), health needs (e.g., restricted access to water, being a light sleeper, and ability to follow requests), sensory preferences (e.g., light, temperature, and smell), lifestyle (e.g., comfort with animals and preference to be busy), social interaction (e.g., willingness to have visitors), and behavioural profile (e.g., comfort with others touching your stuff and engaging in verbal and physical aggression). As new areas influencing compatibility were uncovered in the resources, they were added to the codes as part of the inductive analysis.

Some resources referenced the compatibility factors but associated them with different domains or categories than our coding system. Differences in terminology were resolved by examining the resource content and relevant paragraphs to establish consensus during meetings with the research team. For example, Bruininks and colleagues [30] outlined cleaning as adaptive behaviour, and Gaudion [31] suggested that wanting a tidy environment is a preference or lifestyle. For this scoping review, cleaning and self-care skills were considered behaviours and a preference for cleanliness in the environment is considered a general house detail.

Results

Selection of Evidence

The database searches resulted in 1227 resources after removing 174 duplicates (see PRISMA flow diagram, Fig. 1). Titles and abstracts review determined that 927 resources were irrelevant. One hundred and twenty-six resources were carried forward for full-text review. We excluded 93 resources because they (a) did not directly focus on roommate compatibility or living arrangement ($n = 80$), (b) included the wrong population ($n = 5$) or setting ($n = 4$), (c) did not provide a full review (i.e., conference presentation) ($n = 2$), or (d) was a duplicate not removed by Covidence ($n = 1$). Thirty-three resources were included for extraction, and eight assessments were added [8, 27, 30, 32–36], for a total of 41 resources included in this scoping review.

Characteristics of Evidence

Most resources were published in the USA ($n = 20$), followed by the UK ($n = 5$), and Ireland ($n = 5$) (see Table 2). The populations represented were adults on the autism spectrum ($n = 8$), intellectual/developmental disabilities ($n = 15$), or adults with disabilities (not otherwise specified) ($n = 5$). The most common research designs were cohort ($n = 7$), mixed-methods ($n = 7$), and non-systematic review or book chapter ($n = 6$).

Four decades were represented (ranging from 1980 to 2020). In the 1980s, resources were focused on determining and measuring resident life satisfaction ($n = 3$). In the 1990s, more resources targeted the movement toward community inclusion and developing daily living skills ($n = 7$). Entering the 2000s, more research emerged ($n = 15$) and was related to satisfaction with community living, friendship, housing options, and barrier-free housing designs. The purpose of resources shifted in the 2010s ($n = 14$) towards actively seeking and implementing the opinions of adults with intellectual disabilities and determining the best housing options.

Table 2 Outcomes of the research roommate compatibility

Study	Research design	Country	Population	Domain						
				General house detail	Health needs	Sensory	Lifestyle	Behaviour profile	Social interaction	Additional
Atsmon et al., 2019 [42]	Book chapter/non-systematic	Israel	ASD	X		X				X
Autism Speaks 2011 [43]	Expert opinion	USA	ASD	X			X	X		X
Baron-Cohen & Wheelwright 2003	Cohort study	UK	ASD						X	
BC Non-Profit Housing Association 2009 [32]	Qualitative	Canada	ASD	X						
Bigby et al., 2015 [33]	Mixed methods	Australia	DD	X				X		
Brand 2010 [53]	Qualitative	UK	ID			X	X	X		X
Brown & Dunn 2002 [34]	Test/measure	USA	N/A	X		X	X			
Bruininks et al., 1996 [30]	Test/measure	USA	N/A					X	X	
Burnett 1989 [59]	Cohort study	Australia	ID	X					X	
Emerson & Hatton 2008 [8]	Book chapter/ non-systematic	UK	LD						X	X
Faso et al., 2016 [18]	Cross sectional	USA	US						X	
Gadd 2020 [48•]	Qualitative	Ireland	ID				X	X		
Gaudion 2015 [31]	Case series	UK	ASD	X		X	X	X	X	
Green 2011 [39]	Mixed methods	USA	ID					X	X	
Hatton et al., 2001 [60]	Cross sectional	UK and Ireland	ID				X	X		
Heal & Chadsey-Rusch 1985 [61]	Cross sectional	USA	DD	X						
Kerman 1997 [58]	Cohort study	USA	LD					X	X	
Kilroy et al., 2015 [40]	Qualitative	Ireland	ID	X				X	X	
Kinnaer et al., 2016 [12]	Case series	Belgium	ASD	X		X	X			X
Kreinbrook 2007 [46]	Case report	USA	DNS	X	X		X			
Lakin & Stancliffe 2007 [62]	Book chapter/non-systematic	USA	ID/DD	X	X					X
Mathai & Taylor 1985 [47]	Cohort study	UK	DNS		X		X	X	X	
McCarron et al., 2019 [9]	Systematic review/meta-analysis	Ireland	ID					X		
McCarron et al., 2018 [41]	Systematic review/meta-analysis	Ireland, UK, and Australia	ID					X		
Mendelson & Aboud 1999a [36]	Test/measure	N/S	DNS				X			
Mendelson & Aboud 1999b [37]	Test/measure	N/S	DNS					X	X	
Mitchell & Fletcher 2012 [35]	Test/measure	USA	DD		X			X		
O'Doherty et al., 2016 [22]	Case series	Ireland	ID	X						
Posthill & Roffman 1991 [63]	Mixed methods	USA	LD						X	
Raphael et al., 1996 [54]	Mixed methods	Canada	DD							X
Rourke et al., 2004 [49]	Mixed methods	Ireland	ID				X	X		X
Sebastian 1999 [55]	Mixed methods	USA	ID				X			X
Stancliffe & Lakin 2007 [64]	Book chapter/non-systematic	USA	DD	X						X
Stavanovic 2020 [52•]	Case report	Italy	ASD	X		X			X	X

Table 2 (continued)

Study	Research design	Country	Population	Domain						
				General house detail	Health needs	Sensory	Lifestyle	Behaviour profile	Social interaction	Additional
Steele & Ahrentzen 2016 [45]	Book chapter/non-systematic	USA	ASD	X		X				X
Williamson 2006 [57]	Book chapter/non-systematic	Australia	DNS				X		X	X
Wiltz 2003 [38]	Cohort study	USA	ID/DD					X	X	
Wiltz 2005 [50]	Mixed methods	USA	ID				X		X	
Wiltz & Kalnins 2008 [51]	Cross sectional	USA	ID				X	X	X	
Wiltz & Reiss 2003 [19]	Cohort study	USA	ID		X			X		
Wisconsin Department of Health n.d [65]	Cohort study	USA	DD		X			X		

population acronyms — disability not specified (DNS), autism spectrum disorder (ASD), developmental disability (DD), intellectual disability (ID), learning disability (LD)

Finally, only two resources were published in the 2020s ($n=2$), and they focused on the value of designing inclusive spaces with autistic adults to meet quality standards in living arrangements.

Results of Individual Sources

All resources included at least one domain, and 13 resources contributed to additional suggestions for compatibility of roommates or living environments (see Table 1).

Factors of Compatibility

Behavioural Profile The behavioural profile domain was identified in 20 resources and was the greatest represented influence on roommate compatibility in this scoping review. Fifteen subdomains were identified, including (a) adaptive, (b) aggression, (c) attention-seeking, (d) cleaning skills, (e) destruction, (f) disruption, (g) frustration, (h) hurtful to others, (i) repetitive, (j) ritualistic, (k) self-injury, (l) stealing, (m) uncooperative, (n) holding grudges, and (o) wandering. Helpfulness was measured in a friendship rating scale, roommate friendship rating scale, and an independent behaviour scale [30, 37, 38]. Green [39] found that roommates who were rated highly by peers in their willingness to help were perceived as more popular. Regarding disruptive behaviours, several resources suggested that housemates were affected by the noise disturbances or self-injurious behaviour of others [9, 40, 41].

General House Details General house details were identified in 16 resources. Subdomains included (a) accessibility, (b) layout, (c) location, (d) outdoor space, (e) space, and (f) tidiness. A sequential and organized layout (design of furniture and decorations within a room) was important for compatibility with a living environment [12, 31, 42]. Living arrangements should be predictable and organized to fit with their daily routine [12, 31, 42]. To achieve this aim, Atsmon and colleagues [42] recommend that visuals are used throughout the home and that sensory preferences be considered, suggesting an overlap between general house details and sensory preference domains. Adhering to a sensory preference typically involves changing the environment [31, 42]. Moreover, the subdomain of location included proximity to essential services (hospital, transportation, or groceries), neighbourhood (rural or urban), and structure type (house or condominium) [44–46]. Similarly, O'Doherty and colleagues [22] found that family members of adults with intellectual disabilities rated location and the property as important to community participation and satisfaction.

Health The health domain had the fewest factors impacting compatibility ($n=6$), with three subdomains endorsed: (a)

mental health, (b) physical health, and (c) sleep. Physical health considerations were vision and hearing [35]. For mental health, Wiltz and Reiss [19] found that anxious people tend to be more incompatible with other housemates. For sleep, an overlap was found between sleeping and the health and behavioural domains [46, 47]. Sleeping was frequently associated with behavioural disruptions [9, 40]; however, we kept sleeping in the health domain as sleep is a universal need rather than a behaviour [46].

Lifestyle The lifestyle domain was noted in 12 resources and included (a) culture, (b) interests, (c) pets, and (d) roommate preferences subdomains. Several resources suggest that roommates are more compatible when they have similar age, ability, gender, and prior knowledge of each other [43, 48*,49]. Similarly, some resources suggest that roommates prefer people with similar personalities [50, 51]. A clear overlap exists with a preference for similar personalities, interests, and sociability (see social interactions). When investigating pet preference, Autism Speaks [43] asked people to consider if they want or have a pet before moving. However, details of how wanting or having a pet impact compatibility were not explicitly addressed.

Sensory The sensory domain was addressed across seven resources. Nine subdomains were identified including (a) food texture, (b) movement, (c) sensory space, (d) smell, (e) sound, (f) temperature, (g) touch, (h) transition, and (i) visual. Visual stimuli considerations include colours, lighting, and too many decorations [3, 12, 31]. The sound stimuli considerations include household noises, loud sounds, music, and conversation sounds [31, 42]. The high prevalence of disruptive behaviour and sound sensitivities suggests carefully considering an individual's preference or tolerance of sounds. Some examples of how sensory preferences for sounds are collected include asking if the individual avoids loud sounds, is attracted to loud sounds, or is sensitive to household sounds like a vacuum [31].

Social Interaction The social interaction domain was discussed in 17 resources and included seven subdomains of (a) communication, (b) conflict resolution, (c) offensive, (d) privacy, (e) sociability, (f) trust, and (g) understanding. Sociability was described by Wiltz & Kalnins [51] as a person's preference to be social with others. Wiltz and Kalnins [51] established that preference for sociability was linked to roommate compatibility, for example, roommates who dislike being social are likely to be compatible. For privacy, Stavanovic [52*] was the only resource that placed privacy into a larger category of social interaction. Most references to privacy suggest that it is lacking within current housing options, and to achieve a successful living arrangement, people should have access to privacy from others [8, 40]. Finally, investigating conflict resolution skills involved asking people if they were comfortable saying sorry if they had made a mistake, being able to compromise, and could talk about personal problems [32, 38, 50]. Wiltz [50] noted that conflict and fighting were prevalent across incompatible roommate pairs. Therefore, the ability to solve conflicts is useful for roommates and friends.

Additional Domains Two domains, safety and choice and control, were added based on the outcomes and suggestions of the resources. Safety included two subdomains of (a) access and (b) durability. Safety overlapped with both general house details and health domains. Safety was emphasized as crucial for a person's and their environment compatibility. The subdomain of access was initially included in the health domain but placed in the literature as a safety consideration, including restricting access to water, sinks, refrigerators, stairs, and having lockable cabinets [12, 45, 53]. Durability was another safety subdomain that included designing sturdy environments, securing cabinets, and having easily cleaned surfaces [12, 53]. Keeping a durable environment helps maintain a predictable environment and keeps cleaning and tidiness manageable [12]. Because access and durability were widely discussed in the literature as safety [12, 45, 53], it is recommended that the health domain be renamed health and safety and include access and durability subdomains.

The choice and control domain were mentioned as necessary elements of a quality environment [54]. Choice and control represent an overarching domain, which should be reflected within each domain and area. Ensuring control and choice across all domains will increase satisfaction with living arrangements [54, 55].

Discussion

Summary of Evidence

We reviewed current research on adults on the autism spectrum living in the community to identify factors that influence compatibility between roommates and their living arrangements. A deductive and inductive content analysis was conducted on 41 resources. Current literature supports the need for consideration of roommate compatibility when establishing or transitioning autistic adults living arrangements [9, 40, 41]. However, there is a gap between this concept and the practice of predicting roommate compatibility. More recently, it appeared that the literature actively includes the experiences and preferences of adults on the spectrum with intellectual disabilities in the arrangement of their living spaces.

Each of the domains was supported by the literature (i.e., behavioural profile, general house details, sensory, lifestyle, social interaction, and health) before determining a placement. The behavioural profile and social interaction were the most endorsed domains in the literature, and the health and lifestyle domains were the least supported. The limited support of the lifestyle and health domains suggests that they have been researched the least and require more research in the future. Within the biopsychosocial approach, the lifestyle domain can be considered part of the social area and health can be biological. Using a holistic biopsychosocial approach to compatibility can help us equally consider each area when planning the living arrangements of adults with intellectual disabilities. More research on how the health and lifestyle preferences of roommates influence their compatibility with roommates and living arrangements is needed. Despite the evidence that compatibility with roommates and living arrangements is valuable, little guidance was provided as to how to measure or predict potential roommate compatibility. With this, more research is necessary to assess what relevant factors influence compatibility with roommates and living arrangements. That is, although compatibility factors were identified, we cannot determine how much each area may inform compatibility. Future research should examine the degree to which each factor influences compatibility.

According to Woolford and colleagues [56], it is essential to consider the dignity of risk (DoR) when arranging living environments. The DoR principle states that personal growth and dignity can be achieved by taking risks in their daily life [56]. The additional domain of choice and control can contribute to providing DoR in a person's living arrangements. Choice and control can be provided by allowing the choice of who you live with or where you live. Choice can also include choosing what activities you do in a day (lifestyle), how you decorate your room (general house details), what food you eat (sensory), or how often you interact with other people (social). The balance of providing choice and maintaining safety depends on the specific person and living arrangements and should therefore be considered individually [56]. The additional domains of choice and control and safety both require an understanding of the person and living arrangement to achieve a safe environment and DoR.

Limitations

There are a few limitations regarding this scoping review that warrant consideration. According to Zhang and Wildemuth [29], the coding scheme should be tested during a content analysis, where one researcher is intended to test the coding scheme for clarity and consistency by sampling the first ten resources. It would have been valuable to have the coding scheme reviewed by an additional researcher prior to coding the sources. Due to time constraints, this process was completed after the first author reviewed the coding system with the research assistant. However, a high degree of agreement was found (Kappa = 0.61).

Another limitation was the ambiguity across compatibility factors. As mentioned, different sources had different labels or areas for behaviours and preferences. These differences made it challenging to ensure transparent coding and decision-making. To mitigate this challenge, each decision regarding where to locate the compatibility factor was supported by the literature and outlined in the results of the individual sources section. Similarly, the terminology for compatibility also varied, and compatibility was often inferred. For example, Green [39] stated that residents rated as helpful were perceived as more popular and rated highly by other residents. While the term compatibility was not used, it could be inferred that a higher rating of helpfulness from the residents would suggest greater compatibility with other potential roommates. Overall, each instance of ambiguity or inference was discussed between researchers and based on the context of the source. These discrepancies may have influenced the low intercoder agreement during the screening process (Kappa = 0.33). Each title and abstract were screened by the first author and research assistant independently. All disagreements were addressed at weekly meetings that included the second author. Another limitation was that the factors were identified, but we cannot determine how much each area may directly inform compatibility. Future research is necessary to understand to what degree each factor impacts compatibility.

Based on the results of the scoping review, some suggestions are made to improve the clarity of the GCAT domains. The overlaps between general house details and sensory, social interaction and sensory, and behaviour and privacy need to be addressed. Several areas not included in the GCAT were reported to impact roommate compatibility, including helpful behaviour [30], disruptive behaviour [39], self-injurious behaviour [9], holding grudges [19], tidiness [31], mental health [19], culture [57], communication [58], and conflict resolution [50]. Consideration of these new additions to the GCAT may improve its ability to predict roommate compatibility. These areas and suggestions could guide the development of a second version of the GCAT.

Conclusion

Assessing the compatibility of Autistic roommates with intellectual disabilities will allow them more control and input when determining housemates and living arrangements. As a population with limited input regarding their living options, including their preferences and needs in deciding living arrangements and potential roommates are essential. When the compatibility of roommates is considered before moving, adults with intellectual disabilities can have a higher quality of life [9, 40].

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Declarations

Conflict of Interest The authors declare no competing interests.

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